Management Plan: Old Redding Complex

Local Wildlife Site

April 2010 – March 2015 (Revised July 2010)

London Borough OF Harrow

January 2010

Contents:

1. Description

1.1 General

Location and Access

1.1.1 The site described here (i.e. Old Redding Complex) lies south of the Hertfordshire boundary and west of Common Road (A409) - its area totals 32 ha. Most of the site is north of Old Redding with only Parish Fields and Weald Wood to the south. The greater part of the Complex comprises Harrow Weald Common (18 ha). The National Grid reference is TQ 144 928 (to the centre of the site).

The site is accessible from a number of points and is generally unfenced next to roads. An extensive network of paths affords access to the majority of the area which remains open at all times. Two formal footpaths cross the site: the London LOOP and the Bentley Priory Circular Walk.

Status

1.1.2 Harrow Weald Common itself is split into three areas (Figure 2): the main section west of Common Road, a smaller part north of Old Redding, and to the south of the road Parish Fields. All three sections are registered in Harrow as Common Land (ref: CL36).

English Heritage has designated Grim's Dyke (Figure 5) as a Scheduled Monument (ref: L063). This together with Grim's Dyke Open Space and Levels Wood is Grade II listed in the English Heritage Register of Parks and Gardens (ref: 2268). Natural England recognises Weald Wood as ancient woodland (i.e. one that dates back to before 1600).

The Mayor of London has designated the entire area as a Site of Metropolitan Importance for Nature Conservation (M066). The site is shown within the Green Belt in the London Borough of Harrow Unitary Development Plan (Adopted 2004). It is also shown as lying at the southern edge of the Watling Chase Community Forest.

Ownership and Tenure

1.1.3 The three sections of Harrow Weald Common proper are not owned by anybody however they were placed under the protection of L B Harrow via the provisions of Section 9 of the Commons Registration Act 1965. Under the 1899 Metropolitan Commons (Harrow Weald) Supplemental Act a board of Conservators was set up to manage the Common. The practical side of this function is now conducted by Harrow Council on behalf of the Conservators.

Grim's Dyke Open Space, City Open Space, Level's Wood and Weald Wood are wholly owned and under the management of Harrow Council.

Map Coverage

1.1.4 OS 1:50 000 sheet no. 176, OS 1:10 000 sheet no. 19SE, British Geological survey sheets no 256.

Survey information

1.1.5 1984/5 GLEU Habitat Survey, 2003 GLA Borough Habitat Survey, 2009 Vascular Plant Survey of Harrow Weald Common – Denis Vickers and John Dobson.

1.2 Physical

Geology and Soils

1.2.1 Virtually the entire site was once situated on glacial pebble gravels. However, extensive quarrying of this material, particularly in the 19th century, means that much of Old Redding Complex is now seated directly upon the once underlying strata, London clay.

Typography

1.2.2 Old Redding Complex is situated on a ridge of high ground overlooking the west of London. The maximum elevation of 146 m is reached aside Common Road to the north-east of the area. The land falls away to the north by up to 15 m and to the west by 30 m.

The surface of the Complex is characterised by a series of north-west orientated drainage ditches and an undulating landscape comprising ridges and hollows which are a constant reminder of past quarrying activities. Raised banks, tend to be composed of freer draining acid soils whereas clayey hollows often retain water and harbour plants of wetter conditions e.g. rushes and sedges.

At the north-western margin is the Grim's Dyke (or Ditch) an ancient earthworks partly filled with water. To the west is a deep but now waterless depression, representing, the old Gilbert's Lake.

Hydrology

1.2.3 The Complex is drained via a series of ditches which run south-east to north-west across Harrow Weald Common. These eventually link to drains which flow into the River Pinn.

1.3 Historical

The name *Weald* (Old English in origin), signifies woodland. It is first mentioned in historical literature as *Waldis* in 1303 and later *Welde* in 1382. The name *Harrow Weald* does not appear until 1553. Then the whole ridge between Bushey and Greenhill was but a small part of the great Forest of Middlesex – a mosaic of woodland, heathland and

pasture. By 1759 the area covered by Harrow Weald Common stood at about 300 ha. Its area had roughly halved from its earlier extent due to various Enclosure Acts. By 1938 its area stood at just 18 ha at which it has remained (more or less) to this day.

In the 19th Century gravel was extracted from the Common to its lasting detriment. This was used in the construction and surfacing of roads in the locality. Gravel winning was just one of the rights of Commoners which also included pannaging (the practice of turning out domestic pigs in a wood or forest, in order that they may feed on fallen acorns or beechmast) and turbary (the right to cut peat turf, on a common, for fuel). It is known that pigs had been released onto the Common since Domesday (1086 AD). In 1886 there was an attempt made to gain Parliamentary consent for the remaining common land to be privately sold as it was now of diminishing value for gravel extraction. However, there was strong opposition from local people which was supported by dramatist William Gilbert who owned Grim's Dyke (house and gardens) which itself had previously been part of the Common. Nevertheless gravel extraction continued unfettered over the following 10 years or so. The condition of Harrow Weald Common rapidly worsened so much so that it became unsafe for visitors. In 1899 protests led to the land being protected under the Metropolitan Commons (Harrow Weald) Supplemental Act. As a result most commoners' rights were extinguished. In order to manage the Common a Board of Conservators and series of byelaws were established which still exist today.

To the north-west of the house and gardens there remains an impressive bank and parallel ditch; this is the Grim's Dyke (a Scheduled Ancient Monument – Figure 5). The purpose and exact date of its construction is unknown but is likely to be late Iron Age, possibly around 300 BC. The eastern section of this ancient linear earthwork was lost with enclosures and gravel extraction works on the Common.

1.4 Biological

Vegetation

1.4.1 Introduction: To facilitate description the site has been divided into seven compartments on the basis of different ownership, past management and type of vegetation present. These are:

1) Main Common
2) Western Common
3) Parish Fields (part of Common)
4) Weald Wood
5) Grimsdyke Open Space
6) Levels Wood
7) City Open Space

Areas of particular interest within a given compartment are identified via a lower case letter. Compartment numbers and letters are referred to on Figure 2. Appendix 1 gives a full list of vascular plant species for the site (including historical records), on compartment by compartment bases. This quotes both scientific and common names[†].

1) Main Common:

Generally this area is covered in dense woodland: beech, pedunculate oak and downy birch dominates the canopy. Other trees include sweet chestnut, hornbeam, yew and rowan. In places, there is a dense shrub layer present largely comprising holly. Large parts of the woodland floor are clothed in bramble and bracken. Other species include ivy, honeysuckle, male fern and broad buckler fern.

Aside Common Road the species mentioned above are joined by a number of non-native species including young Norway maple, sycamore and snowberry (a).

The north-east end of the compartment (b) has little ground flora or shrub layer. The most common trees here are beech, pedunculate oak, downy birch and rowan.

A series of drains cross the footpath and leave the site at its north-western edge (c). It is here patches of acid grassland dominated by common bent, red fescue and in places purple moor-grass appear either side of the path. This was the last known location that heather was recorded on the Common.

North-east of the cottages near Grim's Dyke is a boundary ditch at the edge of the footpath (d). Some uncommon plants occur here including wood anemone, hard fern which is probably at the limit of suitable habitat conditions, and wood horsetail which is only common in northern and western Britain.

Aside the geological SSSI several drains emerge (e). The tree canopy is rather dense in this location but nevertheless a little lesser spearwort occurs – this plant is notable in Greater London.

2) Western Common:

The tree composition of this area is similar to Compartment 1 with beech, pedunculate oak and downy birch all well represented in the canopy. Sweet chestnut and rowan are possibly a little more frequent. Other species include yew ash and hornbeam. Holly is a slightly less prominent in the shrub layer, its place being taken by bramble, with some hawthorn, garden privet and cherry laurel. A large part of the ground flora is dominated by bracken (and young bramble). Other

[†] Common names alone have been used for species throughout this document except where they do not appearing in Appendices 1 or 2 (or where there is no English equivalent) in such cases, the scientific name is also quoted.

components include honeysuckle, male fern, broad buckler fern, ivy and soft rush. In the few places that the canopy is more open other wildflowers and grasses are noticeable e.g. foxglove, garlic mustard, bulbous buttercup, common bent and red fescue.

3) Parish Fields:

This area has formed on noticeable less acidic soil than the other compartments. The vegetation is a mosaic of woodland, scrub, tall herbs and grassland. Canopy trees chiefly comprise pedunculate oak, beech, ash and downy birch. In the shrub layer, the abundant holly is joined by hawthorn, elder, and bramble. The latter three examples together with a few gorse plants also form areas of scrub. Bracken, ivy and young bramble are the most frequent components of the woodland ground flora.

Glades occur aside the main footpath (a) as well as bramble, extensive areas covered in grasses and tall herbs are present. Common bent, meadow foxtail, cock's-foot and Yorkshire fog are well represented as is rosebay willowherb, creeping thistle, stinging nettle, creeping buttercup, garlic mustard and germander speedwell.

Next to the Old Redding roadside fence (b) there is a belt of dense young ash freely regenerating.

4) Weald Wood:

This is an area of ancient woodland chiefly comprising old oak standards and hornbeam. The oaks are a mixture of pedunculate and sessile oaks and the hybrid *Quercus* x *rosacea*. Some of the hornbeam appears as old coppice particularly as a boundary feature aside Old Redding. Additionally, there is one particularly fine and ancient specimen of coppiced beech deep within the woodland itself. Other tree species include downy birch, ash and rowan. A woody understorey is present which includes holly, hazel, hawthorn, elder and bramble. The ground flora of the woodland chiefly comprises ivy, bracken and young bramble. Where the woodland canopy is less dense other species of plant become more conspicuous components, e.g. common bent, enchanter's-nightshade, foxglove, wood avens, ground ivy, honeysuckle, wood dock and red campion. Native bluebell is well distributed.

5) Grim's Dyke Open Space:

This compartment is in two parts 'a' to the west and 'b' to the east. The grounds of the Grim's Dyke Hotel lie to the north and virtually dissect the two sections which are connected only by the London LOOP. For the purposes of this management plan these areas are treated single compartment.

The Open Space is part of the old gardens associated with Grim's Dyke House and as such is home to an array of more exotic species. Growing along side these are many native plants, some of which have colonised the area.

Most of the area is covered in woodland. Larger native species of trees include downy birch, beech, pedunculate oak, ash, hornbeam and Scots pine. Larger non-native trees such as deodar cedar, Wellingtonia, horse-chestnut, sweet chestnut and purple beech occur intermingled with the native species. Smaller trees and components of the woodland shrub layer include (native species) hazel, hawthorn, grey willow, elder, rowan, yew, elm, gorse and holly; and (non-native) apple, broad-leaved bamboo, cherry laurel and rhododendron. The last two examples together with holly are particularly abundant. Bracken and bramble are the most frequent constituents of the ground flora. In places these species are joined by ivy, honeysuckle, enchanter's-nightshade, broad buckler-fern, male fern, red fescue, creeping buttercup, wood dock, hedge woundwort and wood sage. Segregated patches of stinging nettle and angelica are also present. Native bluebell appears well distributed throughout the area.

Gilbert's Lake (a) was once filled with water and had a rich aquatic and marginal flora. Since the early 1980s the water has dried out and the 'lake' is succumbing to succession only a little marshy ground is retained throughout the summer. Grey willow scrub and young alder cover much of the area. Beds of yellow iris are plentiful in places this is joined by reed sweet-grass, soft rush, bittersweet and great willowherb. Barer areas have a peppering of hairy bittercress. Around the old lake's edges are dense rhododendrons, and odd specimens of royal and sensitive ferns.

The central and western section of Grim's Dyke (b) is largely under tree cover and is dry throughout the warmer months of the year. The most common trees species are beech and oak. There is usually no understorey - the bed of the ditch is covered in leaf litter. The northern banks of the Grim's Dyke are more densely vegetated - bracken and bramble are common. Isolated specimens of yellow loosestrife, a patch of great wood-rush and a number of lily-of-the-valley plants occur (see Figure 3). All three of these species are uncommon in Greater London. The eastern part of the Dyke around the bridge is filled with water. It contains a number of wetland species including exotics and soft rush. Soft shield fern and lady fern occur here – both are uncommon within Greater London. There is also a stand of Japanese knotweed – this weed species is notifiable under the Wildlife and Countryside Act 1981 (and amendments).

6) Levels Wood:

This wood has the hallmarks of being ancient but not listed in the NCCs Inventory of ancient woodland. It is depicted on the 1864 OS

map as woodland but at 1.3 ha it is below the current size threshold for inclusion in the inventory (i.e. 2 ha). Sessile oak standards of some antiquity are present as well as substantially-sized specimens of beech and hornbeam (some of which show signs of coppicing). Other trees include some large downy birch and rowan. Ground flora is sparse at the western end of the wood. Some bracken is present and two significant patches of great wood-rush. The latter example is not only notable within Greater London but an indicator of ancient woodland.

The shrub and ground layers increase as the western end of the wood is approached. In the south-eastern corner is a large stand of Japanese knotweed and aside it heaps of garden refuse originating from the Hotel.

7) City Open Space

This parcel is quite unusual in that it is dominated by ash. Some other trees are present including downy birch, hornbeam, oak and yew. The shrub layer comprises hazel, hawthorn, holly, wild privet, cherry laurel, bramble, elder and English elm. The ground flora is dominated by ivy, Male fern, hairy brome, and wood avens. Ground ivy and stinging nettle are also present. The understorey is densest where more light penetrates the canopy. The shrub layer is also becoming increasingly dense in these places limiting the growth of ground flora.

Fauna

1.4.2 The following information was gathered via the NBN Gateway (see references) and includes all records submitted over the last 10 years (1999-2009) which fall within or overlap Harrow Weald Common Nature Reserve as it is termed (i.e. the Old Redding Complex) at a resolution of 1 km. Data gathered from this source is reproduced in Appendix 2. This quotes scientific and common names for species. Additional information was gathered from the London BAP – Review of Priority Species [GLA, 2008], on site observations and personal communication.

42 species of bird are recorded for Harrow Weald Common. Not surprisingly most of these are familiar garden and woodland birds. However there are some Species of Conservation Concern (SCC) and/or Biodiversity Action Plan (BAP) priority species present: bullfinch, hedge accentor, song thrush and lesser spotted woodpecker (UK BAP and LBAP Priority species); kestrel, swallow, firecrest, goldcrest, barn owl and green woodpecker (amber listed SCC).

With the exception of birds only a handful of other vertebrates are noted i.e. red fox, grey squirrel, common shrew, rabbit, grass snake, adder and common frog. Records of great crested newt are probably from beyond the site's boundary – a detailed survey is required to confirm whether present or not. The author has seen muntjac deer on site.

Similarly, 10 species of butterfly are recorded for the Common. Most are frequent and well distributed in Greater London. Speckled wood is particularly abundant. Of note though is the white admiral which is a UK and London BAP Priority Species.

Nine species of Odonata (dragonflies and damselflies) are recorded. None are notable in a local/Greater London context. Most frequently seen is the Southern hawker.

Only two species of Orthoptera are noted i.e. field grasshopper and Roesel's bush-cricket. The latter species is classed as Nationally Notable (Nb). It was once only really common in the East Thames Corridor but in recent years its population in the south-east of England has greatly increased possibly driven by climate change.

A nationally notable saproxylic hoverfly (*Volucella inflata*) is also known from the Common (pers. com. John Dobson).

1.5 Ecological Relationships

The soils derived from the Pebble Gravel and to a lesser extent Claygate Beds found on parts of the site e.g. raised banks are generally free draining of low pH and poor in nutrients. Following the clearance of the wildwood the resulting semi-natural vegetation over much of the Common would have been maintained as rough pasture supporting plant communities with a high proportion of calcifuge species i.e. heathland.

Stands of heather (*Calluna vulgaris*) and perhaps bell heather (*Erica cinerea*) and bilberry (*Vaccinium myrtillus*) would have been interspersed with acidic grassland of bents, fescues, wavy hair-grass (*Deschampsia flexuosa*), tormentil, heath bedstraw and sheep's-sorrel. Bracken, gorse and broom (*Cystisus scoparius*) would have also been common. Stream courses and localised boggy areas would have supported wet heath grading into *Sphagnum* bog, with purple moor-grass, cross-leaved heath (*Erica tetralix*), rushes and tufted hair-grass. Scattered groves of aspen, birch and willow are likely to have been a significant feature of the Common. Some of these species still occur in glades and more open canopied areas and in the vicinity of wetlands.

The former heathland has now been completely replaced by secondary woodland dominated by beech, downy birch and pedunculate oak. Small patches of acid grassland still occur where enough light penetrates the woodland canopy. To complicate matters, over large areas of the Common, Pebble Gravels and Claygate Beds have been removed through past quarrying. In these places London Clay prevails. Soils are low pH and tend to be waterlogged. The damp,

shady conditions have led to some of these areas being clothed in mosses, liverworts and ferns.

Habitat succession has inevitably brought about successional changes in the Common's fauna too. Historical records for Harrow Weald Common are not available however; the avifauna will probably have increased in diversity and individual species populations. At nearby Stanmore Common some specialised species associated with heathland with scattered trees are known to have occurred in the past and become extinct. These include red-backed shrike, nightjar, woodlark and stonechat. The disappearance of nightingale and wood warbler is probably linked with national declines. The birds currently present constitutes a community of generalised woodland and woodland edge species.

The invertebrate community has also changed with fluctuations in the extent of various habitats. The more important moth and fly species recorded in the past would have been associated with grass-heath and bog. More invertebrates associated with areas with standing and fallen dead wood habitats would now be expected. Additionally, the comparatively open aspect of the past Common would have been attractive to a variety of butterfly species e.g. small heath, common blue, Essex skipper, gatekeeper, large skipper, small skipper and wall brown. Today, butterfly numbers are down with only the speckled wood being truly common. Over the past 120 years developments on the Common have seen the building of the Gilbert's Lake and more recently its silting up and succumbing to succession. This would have undoubtedly led to an initial increase in species and numbers of Odonata breeding on site and subsequently a decrease in population sizes as available suitable habitat diminished. There chief feature which supports the reproduction of dragonflies and damselflies is now the eastern end of the Grim's Dyke.

2. Analysis and Establishment of Management Aims

2.1 Evaluation of Important Features

Shady damp ditches

A number of regionally uncommon species of plants are recorded including:

Wood horsetail	Yellow loosestrife
Soft shield-fern	Lesser spearwort
Scaly male-fern	Great woodrush
Great horsetail	Lily-of-the-valley
Hard fern	Slender St John's-wort
Lady fern	Trailing St John's-wort

Relict acid grassland
Includes small area's dominated by purple moor-grass (also a notable species in London). Acid grassland is a London Biodiversity Action Plan Priority Habitat and included in the Harrow BAP under 'Grassland'.

Ancient woodland
The Old Redding Complex (as the wider Harrow Weald Common area is referred to) includes two areas of ancient woodland; Weald Wood and Levels Wood. Ancient woodland (not converted to plantation) only accounts for 1.57% (205,000 ha) of the surface area of England and about 1.6% (2,500 ha) of the surface of Greater London. Ancient woodland and the ancient trees it contains are a valuable biodiversity resource both for diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The native bluebell, a UK Species of Conservation Concern, has its stronghold in the UK within ancient woodland.

Dead wood
Dead wood of all types, but particularly standing is a valuable habitat and asset for a variety of fauna. For example, woodpeckers, nuthatch and treecreeper are often dependent on this resource for foraging and nesting. Additionally, many insects including Nationally Scarce species such as *Volucella inflata* (a hoverfly) are associated with dead wood. Many species of fungi are completely dependent on dead wood.

Marsh
The old Gilbert Lake is succumbing to succession and is now a marshy area with marginal species and developing woodland of willow shrubs and young alder trees. Also present are a number of specimens of waterlogged fallen

timber. Little is currently known of the fauna of this area. Common frog is known from here (a Harrow BAP species). However, a number of insects associated with this type of wetland could be expected. Marsh of any description is not a common habitat in Harrow or Greater London.

Standing water
The eastern end of Grim's Dyke is the only area of near permanent standing water on the Common. It supports a number of marginal species of plant, some Odonata and a number of common waterfowl.

Ivy-clad trees
Ivy is a valuable resource during the autumn and winter months providing a late source of nectar for insects and foraging and shelter for birds at a time of year when deciduous trees are dormant.

Secondary woodland
The secondary woodland of the Common with its stands of beech, oak and other trees is of borough significance in Harrow and supports a variety of birds and invertebrates. It gives rise to the dead wood and shady damp conditions of many ditches which is important to regionally uncommon plants (mentioned above). However, unchecked succession will see all but the deadwood habitat disappear.

Grim's Dyke
Not so much an ecological feature but part of an ancient earthwork of some magnitude and major importance, now a Scheduled Monument. Special nature conservation techniques are required in order to retain biological and archaeological integrity.

2.2 Site Potential

Management presents an opportunity to enhance habitat diversity by gaining more open and woodland edge habitats in selected places. This would stabilise and increase the size of individual populations of rarer plant, invertebrate and bird species, thereby lessening their vulnerability to local extinction through the eventual maturation of woodland. Opening up suitable parts of the woodland will present an opportunity for the emergence of dormant ground flora.

The control of damaging or potentially invasive plant species in the woodland e.g. sycamore, rhododendron and cherry laurel is essential. As Japanese knotweed is also present at Grim's Dyke and Levels Wood, it is necessary to keep these species from increasing at the expense of less competitive, native wildflowers. Moreover, bracken, bramble and holly also presents a problem with large swathes of field/shrub layers dominated with just these species. Although their complete removal is not desirable, their dominance is at the expense of a rich assemblage of other species. The marshland of Gilbert's Lake is succumbing to succession with invasive alder and willow shrubs which must be controlled if this marshy area is to be maintained.

The selective removal of trees for management purposes and via natural losses presents opportunities to provide standing and fallen dead wood habitat for specialist flora and fauna.

There is also potential to upgrade the use of the Common as a recreational and educational facility through improved and appropriate interpretation. This should not particularly aim to increase the number of visitors using the site at any one time. Higher numbers would increase disturbance to wildlife and detract from the Common's 'countryside' feel which is increasingly hard to find in Greater London. To guard against this sanctuary zones could be established where access would be discouraged. Interpretational improvements could include a subtle way-marked nature trail and leaflet.

The relaunch of a 'Friends of' group could be encouraged, who would assist in management, biological recording and monitoring; the latter examples being essential to assess and make adjustment to the management programme.

2.3 Management Objectives

Management at Harrow Weald Common should reflect targets set in the UK and local BAPs. Additionally, it should aim to enhance and maintain the general qualities of existing habitats whilst re-establishing others, appropriate to the site, and promote their appreciation by the public. This should be achieved via:-

- Prioritising the maintenance and steady expansion of selected open areas;
- Control of holly;
- Restoration of BAP habitats e.g. heathland/acid grassland on suitable open areas, if applicable;
- Ensuring an adequate quantity of dead wood microhabitats, both standing and fallen;
- Controlling damaging invasive plants including cherry laurel, rhododendron, Japanese knotweed and sycamore;
- Controlling the scrub invasion of Gilbert's Lake;
- Maintaining ivy-clad trees;
- Undertaking specific conservation measures for rare plant and invertebrate species (where localities are known);

- Undertaking specific conservation measures on the Grim's Dyke Ancient Monument;

- Maintaining open areas of vegetation in Parish Fields (Compartment 3);

- Removal of litter and fly-tipping as and when required;

- Maintaining a mosaic of wet to dry habitats to maximise biodiversity throughout the site by careful ditch management and the creation of small drainage ponds;

- Maintaining wildlife sanctuary areas from which visitors would be discouraged access, and elsewhere;

- Improving safety standards, access and interpretive facilities, to encourage recreational and educational use and the biological recording of the site.

2.4 Management Constraints

Occasionally, visitors to the site may feel that clearance of certain areas of scrub and secondary woodland is unnecessary or misguided. This should be viewed as an opportunity to involve users in decision making through invitation to published meetings, where management aims can be discussed and priorities set. During actual management, explanatory signboards and a ready spokesperson can be effective in gaining the confidence of the site users.

Woodland management, be it coppicing, singling or thinning, is a repetitive process and disposal of timber each time it is cut may become a problem. Although a certain proportion of timber can be used on site e.g. left in situ, stacked to provide dead wood microhabitat piles; or used in fencing, bridges or the production of rustic seating etc – regular outlets for coppiced beech, oak, birch and other timber may have to be investigated.

Grim's Dyke is a Scheduled Ancient Monument therefore its management needs to complement and help maintain this status and thus must be agreed with English Heritage.

The current economic climate means that the rate of progression of some management projects will be linked to securing external funding from bodies such as SITA Trust, Heritage Lottery Board and Natural England.

3. Management Prescription

3.1 Recommended Action

3.1.1 Control of Holly

[Compartments 1 and 2] Up to 2,000 $m^{2‡}$ of the Common should be cleared of holly each year. Two plots should be selected which are not in the vicinity of uncommon plant species (which are identified in Figure 3) i.e. no greater than 1,500 m^2 from compartment 1 and 500 m^2 from compartment 2. Holly should be cut-back near to the ground between November and February and the stumps painted with Timbrel herbicide. Brashings arising can be used as suggested below (3.1.2). The following year, where bracken becomes dominant this should be controlled by cutting late July (a process that will need to be repeated each year). Subsequently, this process should be repeated on adjoining plots of land.

3.1.2 Acid grassland/Heathland Restoration Project

[Compartment 1] The first stage of this project (undertaken by Natural England) is to identify sites where it is felt there is some potential to restore or create heathland/acid grassland. Natural England has carried out a mapping exercise to identify sites that are likely to have the right underlying geology to support these habitats (as well identifying sites that already support some heathland and/or acid grassland). A surveyor would be contracted to take some soil samples from the sites which would be used to determine the viability of the land to support these habitats.

The next stage would be for an ecologist to carry out a walkover survey to establish whether or not it would be ecologically viable to carry out some restoration work. This will also require further soils samples to be taken.

If acid grassland/heathland restoration is undertaken initial work would be funded by an application to the SITA Trust or other funding body. There would, of course, be a need for subsequent ongoing management. The obvious mechanism for funding this would be Natural England's Higher Level Stewardship (HLS) scheme.

3.1.3 Dead wood

[Compartments 1 to 7] Any standing dead and fallen trees should be left *in situ* (other than in the re-established heathland area). Brashings can be chipped and removed from site (this could be possibly used to produce green energy via wood-fuelled boilers) or used to block unwanted desire lines (3.1.12). More substantial timber could be stacked in suitable locations within woodland areas to create dead wood microhabitat piles.

‡ $2000m^2 \equiv 1.05\%$ 0f the area of the Common (approx. ¼ area of a football pitch) – the aim is to reduce the domination of the understorey by holly and introduce diversity in this habitat.

3.1.4 Controlling damaging invasive species

[Compartments 1 and 2 – adjacent to roads] Mature and early mature sycamore, Norway maple and other invasive alien species should be cut-down and the stumps treated with Timbrel as part of the attempted eradication programme. All younger specimens should be hand pulled whenever discovered. All work to be conducted November to February.

[Compartment 3] Young ash is becoming a problem adjacent to the roadside and should be treated as above. If too large to pull the cutting-back and spot application of Timbrel should be considered. All work to be conducted November to February.

[Compartment 5] Cherry laurel and rhododendron dominate the shrub layer here. These species should be cut-back and the stumps treated with Timbrel. Work should be undertaken over the winter period. Keeping footpaths unobstructed should be a priority. Additionally, the aim should be to remove these plants from up to 2,000 m^{2*} of woodland floor per year. If appropriate replanting with native species can be contemplated particularly yew, hazel, hawthorn, field maple and dog rose.

[Compartments 5 and 6] There are currently two small clumps of Japanese knotweed west of the bridge crossing Grim's Dyke and one extensive area to the south-east of Level's Wood. This weed (notifiable under the Wildlife & Countryside Act 1981) must be treated with glyphosate herbicide – spraying in May/June and again July/August (or if by glyphosate injection late in summer or early autumn) and in subsequent years as required. At Grim's Dyke as there are uncommon ferns nearby caution must be exercised to ensure only the target species is treated.

3.1.5 Controlling the scrub invasion of Gilbert's Lake

[Compartment 5] The margins should be subjected to staggered clearance of rhododendron and other invasive alien species over the five year span of this management plan. Willow and young alder growing on the Lake's now marshy surface, should be similarly removed. Pulling on saplings is the preferred method of removal but larger specimens may require cutting and the stumps treated with herbicide (as detailed above). Mature alder should remain *in situ.*

3.1.6 Maintaining Ivy-clad Trees

[Compartments 1 to 7] Ivy should not be cut-back or cleared from trees unless it can be demonstrated that it is likely to cause instability during windy conditions which may lead to tree fall. Managers and users must be informed about the importance of ivy at every appropriate opportunity.

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* $2{,}000m^2 \equiv 2.6\%$ of compartment 5 (about ¼ the area of a football pitch)

3.1.7 Specific conservation measures for rare species

[Compartment 1] A series of small glades of between 500 to 1,000 m^2[§] should be opened up in the woodland [Figure 3] along the drainage ditches in order to create conditions suitable for uncommon ferns and other rare species and stimulate the growth of ground flora. This will involve the general clearance of all tree/shrubs species with a girth of less than 180 cm (at 1.4 m height)[**] and all birch regardless of diameter. All trees and shrubs should be removed with chainsaw or brush-cutter (as applicable). This work should be undertaken in the months of January and February and stumps painted with Timbrel herbicide immediately after cutting.

[Compartments 1 to 7] Where there are existing populations of rare ferns (for example) expert advice should be sought to optimise growth conditions for these species.

[Compartments 1 to 7] There must be no use of herbicide in the vicinity of rare plant species identified in Figure 3 except under supervision of a suitably qualified ecologist.

3.1.8 Undertaking specific conservation measures on Grim's Dyke Ancient Monument (Figure 5)

[Compartment 5] Natural debris should be removed from ditch and banks and dead wood stacked in piles; if necessary the excess should be chipped and taken off site. Understorey scrub should be cut-back in agreed areas to improve access and visibility of structures. Saplings and trees in poor condition should be removed or thinned in dense areas, improving visibility, access and ground flora conditions. All tree and scrub removal work should be undertaken between November and February. Timber so removed should be stacked in piles and brash chipped and removed from site. All Non-native invasive species should be cut-back and treated with herbicide (as 3.1.4). Bracken should be cut twice each season, about mid-June when the bracken is 50-75cm high and again six weeks later.

3.1.9 Maintenance of open vegetation areas in Parish Fields and City Open Space

[Compartments 3 and 7] Areas of open vegetation aside the main footpaths are succumbing to succession. Regular strimming is recommended in late August-Early September to maintain biodiversity.

3.1.10 Removal of fly-tipping and litter

[Compartments 1 to 7] Regular removal of rubbish must be undertaken throughout the site – for larger items, the help of the local authority should be enlisted.

The hotel gardeners must be dissuaded from using part of Level's Wood as a place to deposit garden waste. This can lead to a nitrification of soil, introduction of alien species and dilution of gene pool regarding indigenous

[§] 1,000m^2 ≡ 0.7% of Compartment 1 (<1/10 the area of a football pitch)

[**] A tree of this size is most probably more than 140 years old – old trees are particularly valuable assets for wildlife and the veteran trees of the future.

species which are closely related to garden varieties (e.g. native bluebell and Spanish bluebell).

3.1.11 Ditch maintenance

[Compartments 1 to 7] Clear drainage ditches of accumulated leaves and debris in order to keep the system running a minimum 600 mm/year. In addition, clear blocked culverts and create drainage ponds. Work to be undertaken in May, July and October. Rare plants occur within or at the side of some ditches (Figure 3) – there should be no clearance in these locations unless agreed with a suitably qualified ecologist.

3.1.12 Access, recreation and interpretation

[Compartments 1 to 7] A tree risk assessment should be conducted 1 x year, in October and March or after major storms, particularly along formal routes (London LOOP, Bentley Priory Circular Walk and new Harrow Weald Common nature trail). Tree work should be undertaken as required. Along footpaths regular cutting-back of overhanging (or otherwise encroaching) vegetation will be required to maintain clear access. Damaged bridges, steps, boardwalks and other similar items should be repaired as and when required in order to maintain public safety. There should be a 'Nip and Tuck' patrol by Council staff to pick up repairs and potential public safety issues, conducted on a weekly basis. In addition, to facilitate access, dressing of footpaths should be undertaken on yearly bases. Materials used for this purpose should not be alkaline in nature (e.g. limestone or concrete) in order to protect valuable acid habitats.

By carefully managing desire lines and other generally unwanted footpaths within the woodland by blocking with dead-hedges (using timber and brashings generated by woodland management), it should be possible to deter people from entering and disturbing sanctuary zones which might be established in Compartments 1 and 2. It will not be feasible to deny access totally here; instead, management should aim to minimise the number of visits by channelling them elsewhere. Sanctuary areas should be no greater than 2500 m^{2}[††] and located away from formal footpaths towards the compartment centre.

A nature trail incorporating a range of habitats (but not entering the sanctuary areas) is being designed. This will be waymarked with interpretation via a map and information presented on signboards at entrances and on a leaflet available from council outlets, etc. This will include a brief section on the decision making role of the Conservators who need to approve this plan. The leaflet should also form part of an interpretive pack made available to local schools which would encourage them to use the site in conjunction with visits to other important sites including Bentley Priory Open Space and Stanmore Common.

[††] Roughly 1/3rd the area of a football field

3.1.13 Local Nature Reserve Declaration
[Compartments 1 to 7] The site is of considerable importance for wildlife and until 1987 it qualified for notification as a SSSI. Given this importance and the site's proposed management It seems appropriate to declare The Old Redding Complex (all or part) as a Local Nature Reserve. This would take place under Section 21 of the National Parks and Access to Countryside Act 1949 and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006. Initially, the legal position of Council and Conservators needs to be clarified – thus advice from Natural England should be sought.

The site would gain additional statutory protection from development and incompatible recreational functions and other pressures. LRN status may also help in the attraction of financial grants towards positive management (e.g. Higher Level Stewardship).

3.1.13 Volunteering/Friends of group
Voluntary labour will be an essential resource in undertaking many of the recommended management projects. Regularly held work days, well-led and with clear objectives in mind, would attract a regular group of volunteers dedicated to the Common's conservation. These could enlist the help of BTCV and Council park's staff for specific tasks. Local naturalists are likely to be amongst this group, who could progress biological recording of the Common and monitor the effects of management on this site's flora and fauna.

To assist in the recruitment of volunteers the Conservators need to:

- Enlist help of local naturalist and wildlife groups e.g. Harrow Heritage Trust (and Harrow Nature Conservation Forum), Harrow Natural History Society, London Natural History Society, London Wildlife Trust, Herts and Middlesex Wildlife Trust, Butterfly Conservation, local bat groups (London and Herts & Middlesex), RSPB etc.;
- Arrange an inaugural meeting of representatives of these groups and the wider public;
- Have a regular meeting place available for use by Friends/volunteers e.g. room in community centre, church hall, room in local public house (not civic buildings – some people find these too formal or intimidating).;
- Hold regular events on site e.g. history and wildlife walks and talks, involvement by local naturalists e.g. fungi forays, bat walks, bird walks, invertebrate and minibeast events;
- Publicise Harrow Weald Common using local press, leafleting, newsletter distribution, preparation/display of mobile interpretation boards at local shows and fairs.

3.2 Five-Year Management Plan: Schedule and Summary of Projects

Compartments							Project	Stage	Notes	Priority	Year					Timing	Para
1	2						Control of Holly		Cutting-back stump treatment	1	1					Nov-Feb	3.1.1
									Bracken cutting			2				Mid-July	
									Cutting-back stump treatment			2				Nov-Feb	
									Bracken cutting				3			Mid-July	
									Cutting-back stump treatment				3			Nov-Feb	
									Bracken cutting					4		Mid-July	
									Cutting-back stump treatment					4		Nov-Feb	
									Bracken cutting						5	Mid-July	
									Cutting-back stump treatment						5	Nov-Feb	
1							Acid Grassland/Heathland Restoration Project		Feasibility study	2	1						3.1.2
									Heathland restoration?								
1	2	3	4	5	6	7	Maintaining supply of dead wood			1	1	2	3	4	5	As arises	3.1.3

1							Controlling damaging invasive species	controlling sycamore, Norway maple and other roadside invasives	Cutting-back stump treatment	2	1					Nov-Feb	3.1.4
												2					
													3				
														4			
															5		
	2						Controlling damaging invasive species	controlling sycamore, Norway maple and other roadside invasives	Cutting-back stump treatment	2	1					Nov-Feb	3.1.4
												2					
													3				
														4			
															5		
		3						Control of young ash	Cutting-back stump treatment	3	1					Nov-Feb	3.1.4
												2					
													3				
														4			
															5		
				5				Control of cherry laurel and rhododendrons	Cutting-back stump treatment	2	1					Nov-Feb	3.1.4
												2					
													3				

																4			
																	5		
									Replanting native species (Costs = labour & plants)	3		2			4		Nov-Feb	3.1.4
				5				Japanese knotweed	glyphosate treatment	1	1						May-Jun	3.1.4
									Reapplication of glyphosate		1						Jul-Aug	
									glyphosate treatment			2					May-Jun	
									Reapplication of glyphosate			2					Jul-Aug	
					6				glyphosate treatment	1	1						May-Jun	3.1.4
									Reapplication of glyphosate		1						Jul-Aug	
									glyphosate treatment			2					May-Jun	
									Reapplication of glyphosate			2					Jul-Aug	

				5			Controlling scrub on Gilbert's Lake	staggered clearance of scrub	Cutting-back stump treatment	2	1					Nov-Feb	3.1.5
												2						
													3					
														4				
															5			
1	2	3	4	5	6	7	Maintaning ivy-clad trees		Inform managers and users	3	1	2	3	4	5	As arises	3.1.6
1							Specific conservation measures for rare species	Create series of glades	Cutting-back stump treatment	2		2				Jan-Feb	3.1.7
													3					
														4				
															5			
1	2	3	4	5	6	7		Seek expert advice on optimum conditions for fern proliferation		1	1	2	3	4	5		3.1.7
1	2	3	4	5	6	7		No use of herbicide where there are existing populations of rare plants			1	2	3	4	5		3.1.7

				5			Specific conservation measures for Grim's Dyke Ancient Monument		Cutting-back stump treatment	1	1					Nov-Feb	3.1.8
												2						
													3					
														4				
															5			
		3					Maintenance of open areas of vegetation		Strimming of glades aside main pathway	1	1	2	3	4	5	late Aug-mid Sep	3.1.9
7									Strimming of glades aside main pathway	1	1	2	3	4	5		3.1.9
1	2	3	4	5	6	7	Removal of fly-tipping and litter			1	1	2	3	4	5	As arises	3.10
1	2	3	4	5	6	7	Ditches maintenance	Clearance of accumulated leaves and debris and blocked culverts to 600mm	Clearance to keep system running 600m/year	1	1	2	3	4	5	May, Jul and Oct	3.11
1	2	3	4	5	6	7			Vegetation control 3 passes May, July and October	1	1	2	3	4	5		3.11

1	2	3	4	5	6	7	Access, recreation and interpretation	Maintaining/improving footpaths (path dressing)			1	2	3	4	5	As arises	3.12
1	2	3	4	5	6	7		'Nip and Tuck' regular patrols to identify potential problems and maintain a reassuring presence for the public	1	1	1	2	3	4	5	Weekly	3.12
1	2	3	4	5	6	7		Repairs such as bridges, fences, gates, benches etc an allocation of 3 hours/ month is allocated for the playground/handyman team	1		1	2	3	4	5	Monthly	3.12
1	2	3	4	5	6	7		Tree risk assessment		1	1	2	3	4	5	Yearly	3.12

1	2	3	4	5	6	7		Remove dead wood from main paths		1	1	2	3	4	5	As arises	3.12
1	2							Creating sanctuary zones		3	1	2	3			Winter	3.12
1	2	3	4	5	6	7		Nature trail and interpretation		1	1	2	3	4	5		3.12
1	2	3	4	5	6	7	Local Nature Reserve Declaration	Investigation/clarification of feasibility		2	1						3.13
								Designation all/part of site		3		2					
1	2	3	4	5	6	7	Volunteering		Maintenance & biological recording	2							

Comp.=Compartment
Para.=Paragraph
Priority: 1=high, 2=Medium, 3=Low
Management Plan period 5 years from April 2010 to March 2015

4.0 References

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Lily D 2005, *Spray treatment of bracken Pteridium aquilinum using Asulox herbicide at Blackhill, Dorset, England.* Conservation Evidence (2005) **2**, 103-104

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JNCC (http://www.jncc.gov.uk/page-2906) Birds – Amber list, Species of Medium Conservation Concern

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Mayor of London 2002,*Connecting with London's Nature – The Mayor's Biodiversity Strategy: Appendix 4 Open space and habitat survey for Greater London* **(**http://www.london.gov.uk/mayor/strategies/biodiversity/docs/strat_full.pdf)

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Stace, C 1997**,** *New Flora of the British Isles*. Cambridge.

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Maps and Plans

Figure 1: Harrow Weald Common, Location

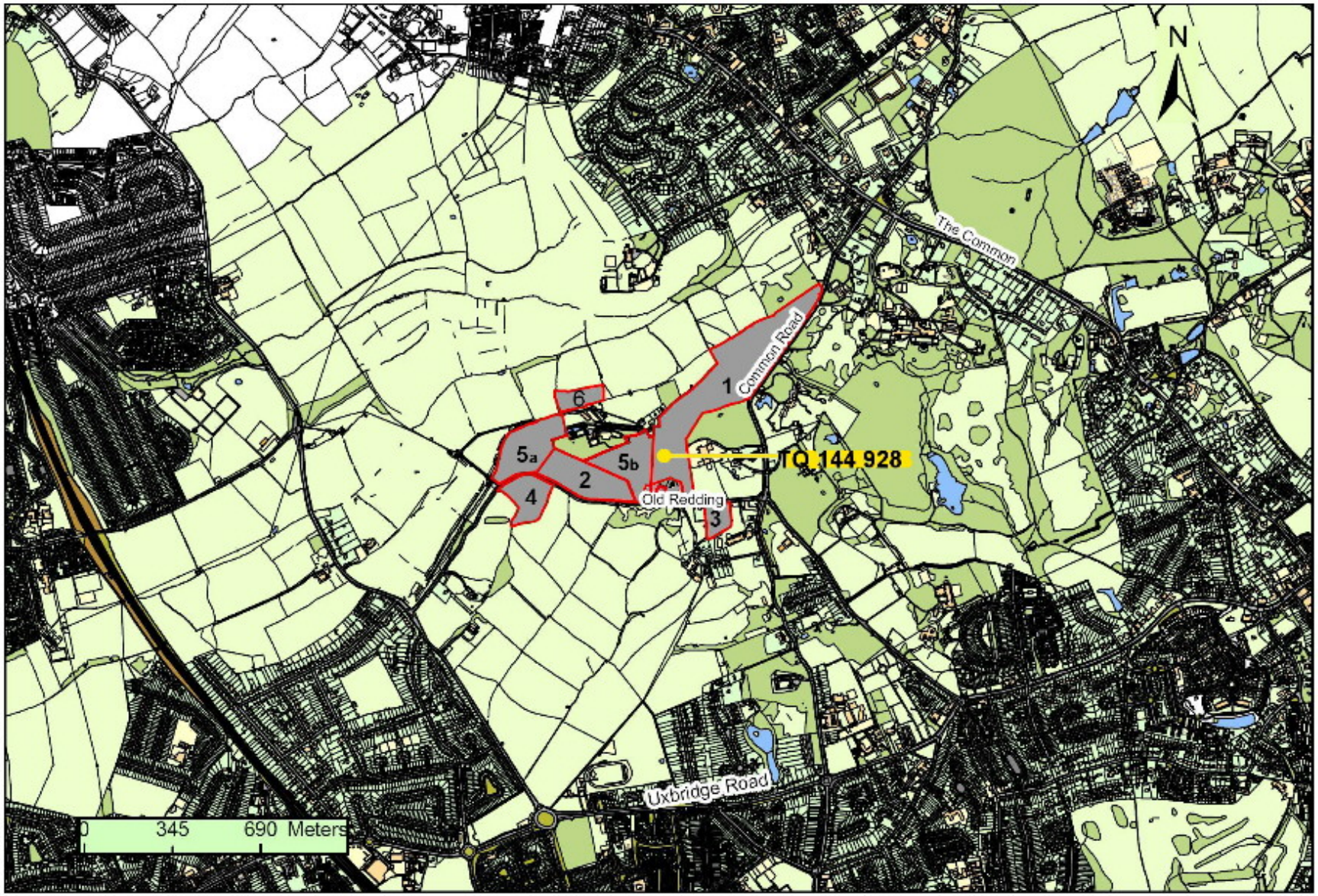

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Figure 2: Compartments and points of interest

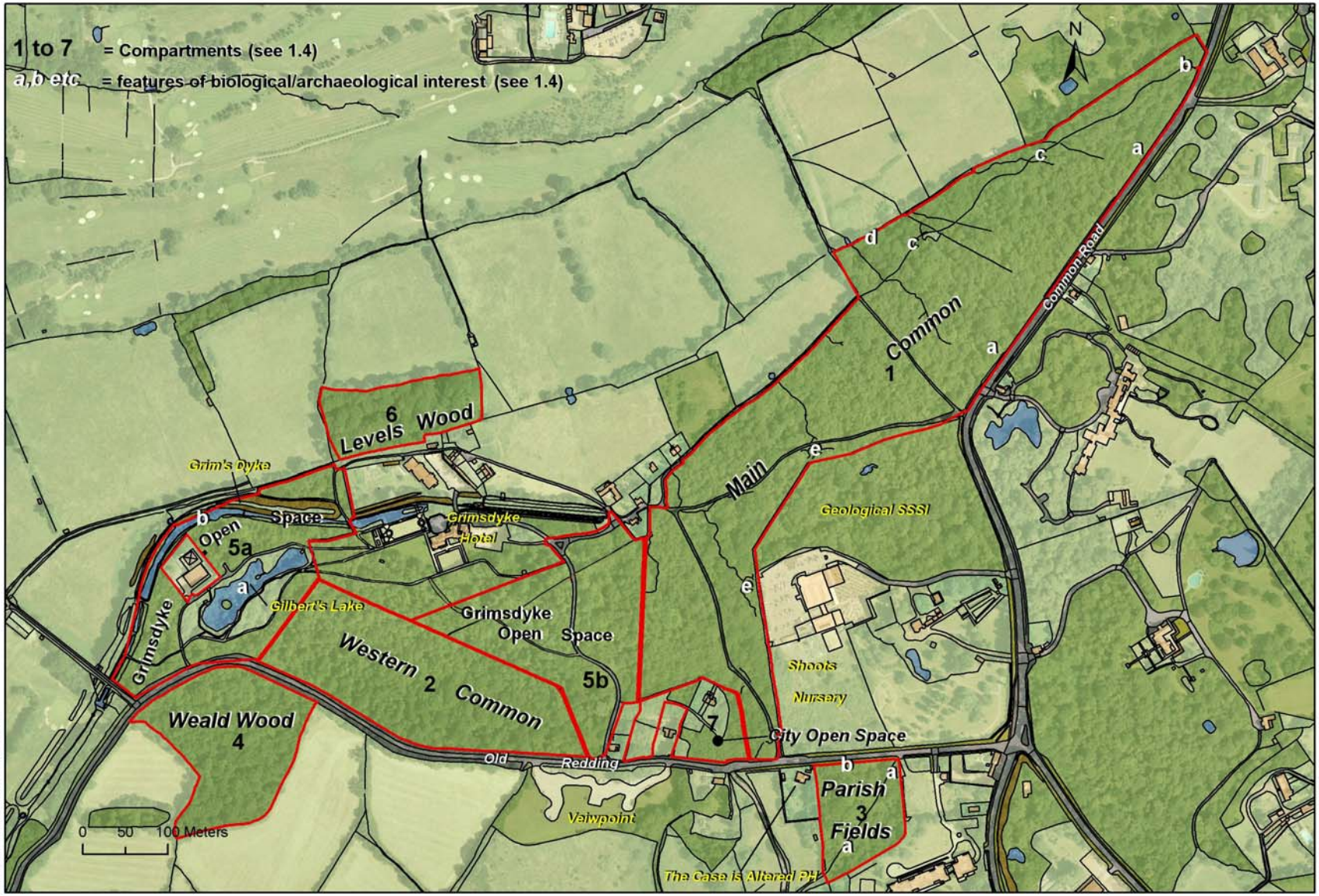

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Figure 3: Desired state/Management

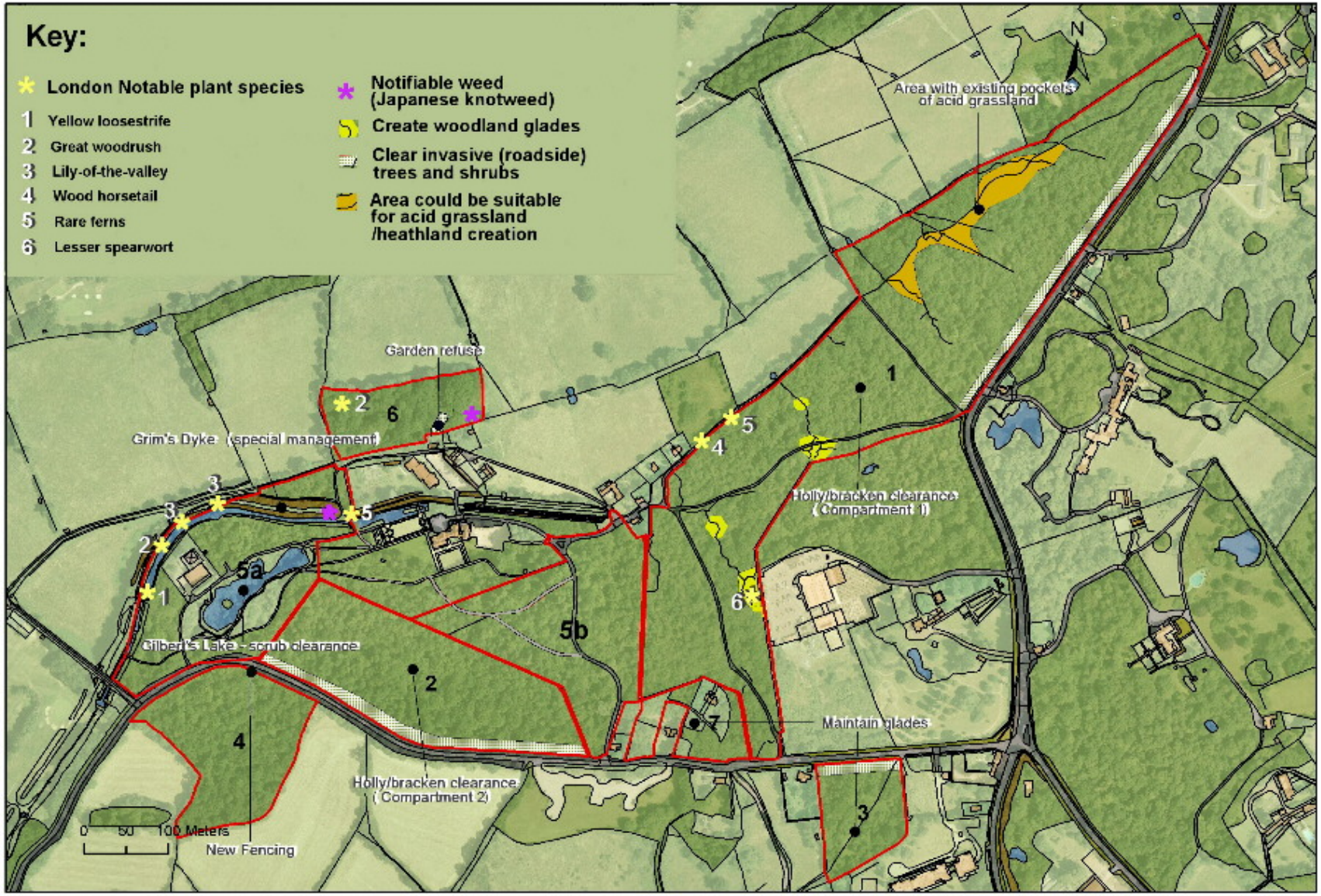

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Figure 4: proposed nature trail

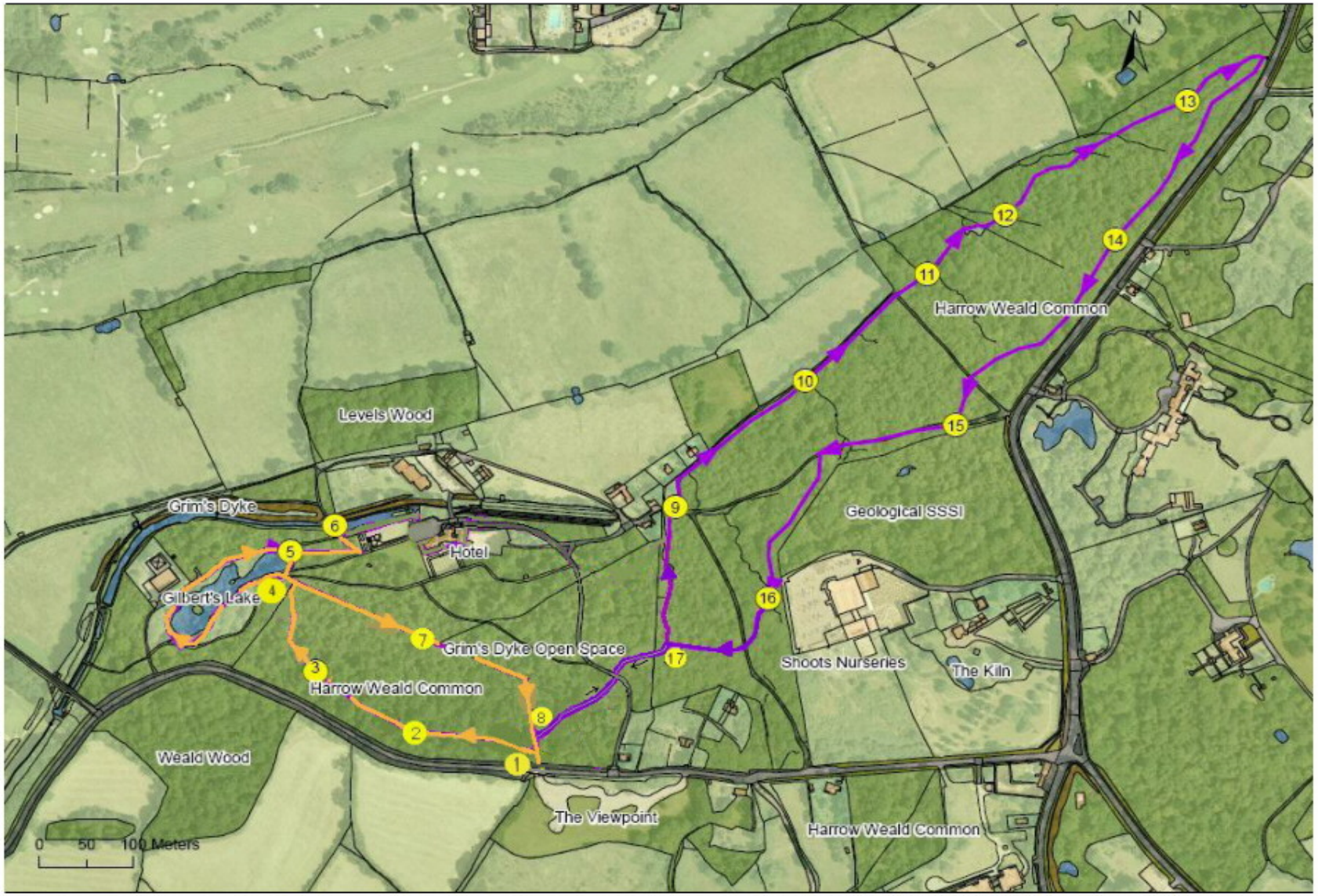
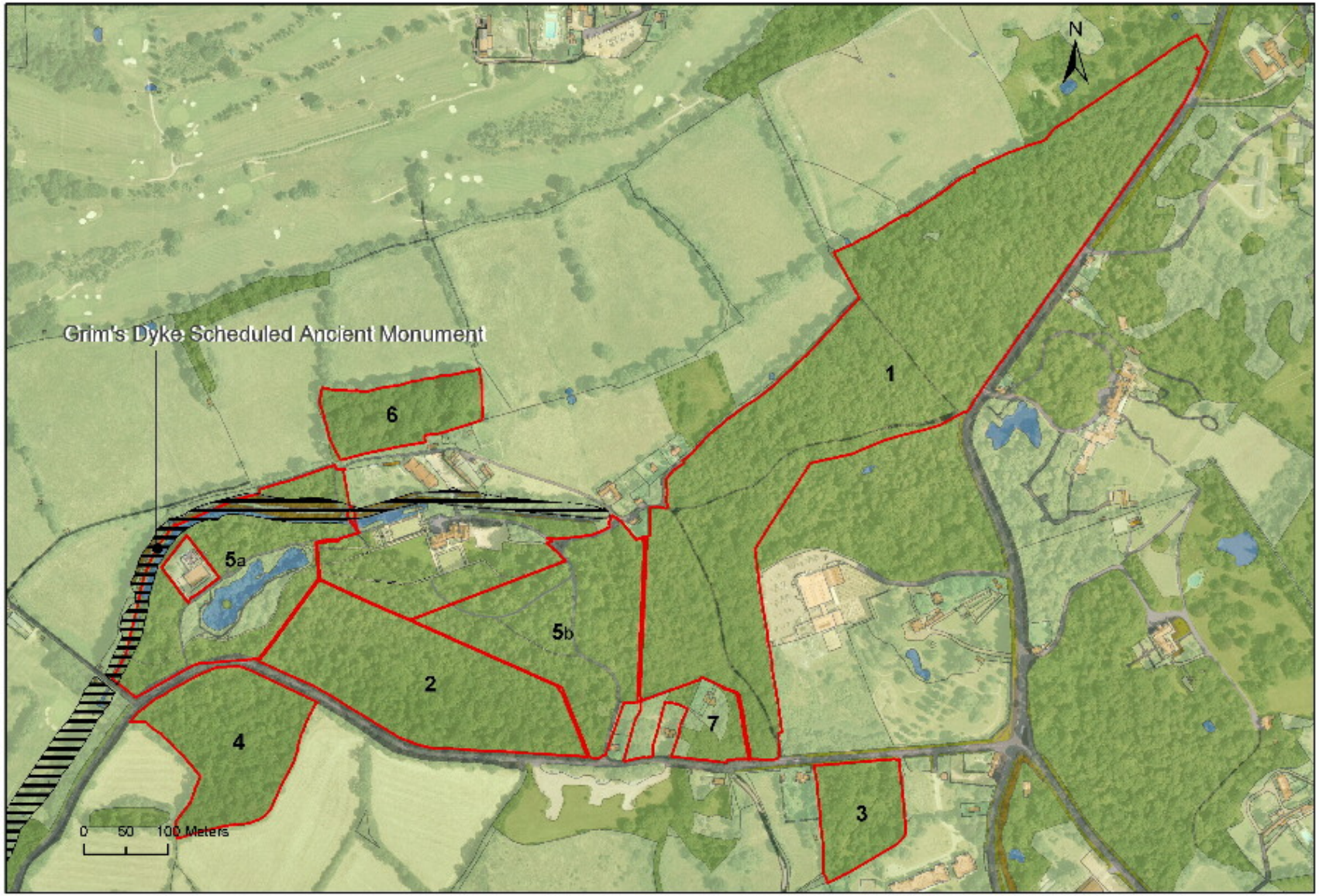


Figure 5: Grim's Dyke Scheduled Ancient Monument



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Appendix 1: Vascular Plant List

Common Name	Scientific Name	Compartment 1		Compartment 2		Compartment 3		Compartment 4		Compartment 5		Compartment 6		Compartment 7	
		Qualifier	DAFOR	Qualifier	DAFOR	Qualifier	DAFOR	Qualifier	DAFOR	Qualifier	DAFOR	Qualifier	DAFOR	Qualifier	DAFOR
Field maple	Acer campestre													T	R
Norway maple	Acer platanoides	SE	R			CY	O								
Sycamore	Acer psudoplatanus	SYT	F	SYT	O					Y	O				
Horse-chestnut	Aesculus hippocastanum	S	R			Y	R	T	R	YT	O				
Common bent	Agrostis capillaris				F	C	F		F		O				
Creeping bent	Agrostis stolonifera	EC	F		O										
Bugle	Ajuga reptans														
Garlic mustard	Alliaria petiolata	EC	O	E	R	E	O								
Ramsons	Allium ursinum														
Alder	Alnus glutinosa									W	O				
Meadow foxtail	Alopecurus pratensis						O								
Wood anemone	Anemone nemorosa														
Wild angelica	Angelica sylvestris									C	O				
Cow parsley	Anthriscus sylvestris	EC	O												
Lady fern	Athyrium filix-femina									CW	R				
Columbine	Aquilegia vulgaris	GE	R												
Strawberry tree	Arbutus unedo									T	R				
Mouse-tail plant	Arisarum proboscideum														
False oat-grass	Arrhenatherum elatius				R		O		R						
Lords and ladies	Arum maculatum						R								
Silver birch	Betula pendula		R		R				R		R				
Downy Birch	Betula pubescens	SYT	F	T	F	YT	O	SYT	F	YT	F		R		R
Hard fern	Blechnum spicant	N. ditch	R												
False brome	Brachypodium sylvatica		O								O				F
Hairy brome	Bromopsis ramosa		O				O								
Starwort	Callitriche sp														
Heather	Calluna vulgaris														
Large bindweed	Calystegia silvatica		R												
Wood bittercress	Cardamine flexuosa									W	F				
Hairy bittercress	Cardamine hirsuta														
Lady's smock/cuckoo flower	Cardamine pratensis														
Pendulous sedge	Carex pendula										O				

Remote sedge	Carex remota										R				
Hornbeam	Carpinus betulus	YT	F	YT	O			YT	F		R	YT	O	T	O
Sweet chestnut	Castanea sativa	SYT	O	ST	O					SYT	O				
Deodar cedar	Cedrus deodara									T	O				
Common mouse-ear	Cerastium fontanum						R								
Rosebay willowherb	Chamerion angustifolium		R			C	F								
Enchanter's-nightshade	Circaea lutetiana		F						O		F				
Creeping thistle	Cirsium arvense						F								
Marsh thistle	Cirsium palustre														
Pignut	Conopodium majus														
Lily-of-the-valley	Convallaria majalis									C	O				
Lesser swine-cress	Coronopus didymus														
Swine-cress	Coronopus squamatus														
Hazel	Corylus avellana		O				O		O		O		O		O
Cotoneaster	Cotoneaster sp.	S	R												
Midland hawthorn	Crataegus laevigata		R												
Hawthorn	Crataegus monogyna		O		O		F	S	R		F		R		O
Hybrid hawthorn	Crataegus x macrocarpa										R				
Cock's-foot	Dactylis glomerata		R		O		O		R						
Tufted hair-grass	Deschampsia cespitosa										R				
Wavy hair-grass	Deschampsia flexuosa														
Foxglove	Digitalis purpurea				O				O						
Spring whitlowgrass	Draba verna														
Scaly male-frn	Dryopteris affinis														
Broad buckler-fern	Dryopteris dilatata		R		R		R		R		R				
Male fern	Dryopteris filix-mas		O								O		R		O
Canadian pondweed	Elodea canadensis														
American willowherb	Epilobium ciliatum		R												
Great willowherb	Epilobium hirsutum		O							W	F				
Broad-leaved willowherb	Epilobium montanum	C	F								F				
Hoary willowherb	Epilobium parviflora														
Square-stemmed willowherb	Epilobium tetragonum														
Broad-leaved helleborine	Epipactis helleborine														
Common horsetail	Equisetum arvense									CW	O				
Wood horsetail	Equisetum sylvaticum	N. ditch	R												
Great horsetail	Equisetum telmateia														
Petty spurge	Euphorbia peplus					EC	O								

Beech	Fagus sylvatica	SYT	A	T	F	YT	O			YT	F	T	F		
Copper beech	Fagus sylvatica purpurea									T	R				
Japanese knotweed	Fallopia japonica									CW	O		F		
Red fescue	Festuca rubra	CE	F		F						F				
Ash	Fraxinus excelsior	SYT	O	YT	O	SYT	F		O	YT	O	T	O	T	D
Cleavers	Galium aparine	F	R												
Heath bedstraw	Galium saxatile	C	R	C	O										
French crane's-bill	Geranium endressii	G	R		R										
Herb robert	Geranium robertianum	E	O		R				R		O				
Herb bennet (wood avens)	Geum urbanum		F		O		O		O						F
Ground ivy	Glechoma hederacea	EC	O				O		R						O
Floating sweet-grass	Glyceria fluitans														
Ivy	Hedera helix		F		O		A		O		F				D
Hogweed	Heracleum sphondylium										O				
Hawkweed	Hieracium Sec.-Sabauda		R												
Yorkshire fog	Holcus lanatus						F		F						
Wall barley	Hordeum murinum			F	R										
Bluebell	Hyacinthoides non-scripta		O						F		O				
Pennywort	Hydrocotyle vulgaris														
Trailing St. John's-wort	Hypericum humifusum										R				
Slender St. John's-wort	Hypericum pulchrum		R												
Common cat's-ear	Hypochaeris radicator						R								
Holly	Ilex aquifolium	SYT	A	SYT	F	YST	A		F		A	SYT	F		F
Indian balsam	Impatiens glandulifera		R												
Yellow iris	Iris psudacorus									W	O				
Bulbous rush	Juncus bulbosus														
Soft rush	Juncus effusus		O		O				O	W	F				
Heath rush	Juncus squarrosus														
Yellow archangel	Lamiastrum galeobdolon														
Nipplewort	Lapsana communis										R				
Garden privet	Ligustrum ovalfolium	E	R		R								R		R
Common Privet	Ligustrum vulgare														O
Perenial rye-grass	Lolium perenne			F	R										
Honeysuckle	Lonicera periclymenum		O		F				F		F		R		
Bird's-foot trefoil	Lotus corniculatus										O				
Honesty	Lunaria annua					CC	O								

Great wood-rush	Luzula sylvestris											C	F		
Skunk cabbage	Lysichiton americanus														
Yellow loostrife	Lysimachia vulgaris									W	O				
Apple	Malus domestica									C	O				
Crab apple	Malus sylvestris														
Water mint	Mentha aquatica														
Bogbean	Menyanthes trifoliata														
Purple moor-grass	Molinia caerulea	EC	F												
Wall lettuce	Mycelis muralis				R										
Green water-cress	Nasturtium officinale														
White water-lily	Nymphaea alba														
Sensitive Fern	Onoclea sensibilis									W	R				
Royal fern	Osmunda regalis									W	R				
Wood sorrel	Oxalis acetosella	N. ditch	R												
Green alkanet	Pentoglittis sempervirens														
Redshank	Persicaria maculosa														
Hart's-tongue fern	Phyllitis scolopendrium	N. ditch	R								R				
Scot's pine	Pinus sylvestris									T	O				
Great plantain	Plantago major	F	O			E	R								
Annual meadow-grass	Poa annua	CE	O	F	O										
Rough meadow-grass	Poa trivialis						O								
Solomon's-seal	Polygonatum x hybridum									C	O	C	O		
Knotgrass	Polygonum aviculare			F	R										
Soft shield-fern	Polystichum setiferum										R				
Aspen	Populus tremula			Y	R					STYC	O				
Broad-leaved pondweed	Potamogeton natans			Y	R										
Tormentil	Potentilla erecta														
Self-heal	Prunella vulgaris										R				
Cherry laurel	Prunus laurocerasus		O		O				O		A	C	O		F
Portugal laurel	Prunus lusitanica														R
Bracken	Pteridium aquilinum		A		A	C	F		D		A		F		
Sessile oak	Quercus petraea								F			T	D		
Pedunculate oak	Quercus robur	YT	F	YT	F	YT	F		F	SYT	F	YT	O	T	R
Hybrid oak	Quercus x rosacea								F						
Bulbous buttercup	Ranunculus bulbosus			E	R		R								
Lesser spearwort	Ranunculus flammula	W	R												
Great spearwort	Ranunculus lingua														

Creeping buttercup	Ranunculus repens		O				F				F				
Rhododendron	Rhododendron sp.										A				
Current	Ribes sp.										R	C	O		
Field rose	Rosa arvensis		R												
Dog rose	Rosa canina														
Bramble	Rubus fruticosus agg.		A		A		A		D		A		F		F
Raspberry	Rubus idaeus														
Monk's-rhubarb	Rumex alpinus														
Clustered dock	Rumex conglomeratus		R				R								
Curled dock	Rumex crispus				O						O				
Wood dock	Rumex sanguineus		O				O		O		F				
Grey willow	Salix cinerea				R		R			W	F				
Elder	Sambucus nigra	CE	R		R		F		R		O		O		O
Broad-leaved bamboo	Sasa parlmata										R				
Hoary ragwort	Senecio erucifolius						R								
Common ragwort	Senecio jacobaea						O								
Giant redwood/Wellintonia	Sequoiadenron giganteum									T	O				
Red campion	Silene dioica								O		R				
Bittersweet	Solanum dulcamara	E	R		O				R	W	F				
Rowan	Sorbus aucuparia	SYT	F	SYT	O	Y	R	SYT	O	SYT	F	SYT	F		
Branched bur-reed	Sparganium erectum														
Hedge woundwort	Stachys sylvatica		O				O		O		O				
Bog stitchwort	Stelaria alsine														
Lesser stitchwort	Stellaria graminea														
Greater stitchwort	Stellaria holostea				O				O						
Chickweed	Stellaria media			F	O										
Snowberry	Symphoricarpos albus	CE	O												R
Black bryony	Tamus communis		R								R				
Dandelion	Taraxacum sp.		R			E	R				R				
Yew	Taxus baccata	SYT	O	YT	O	SYT	O			Y	O			YT	O
Wood sage	Teucrium scorodonia		O								O				
Field penny-cress	Thlaspi arvense														
Lesser yellow trefoil	Trifolium dubium														
Lesser reedmace	Typha angustifolia														
Great reedmace	Typha latifolia														
Gorse	Ulex europaeus				R	C	O				R				
English elm	Ulmus procera		O								O				O
Stinging nettle	Urtica dioica	EC	F				F		O	C	F		O		F

Germander speedwell	Veronica chamaedrys						F								
Thyme-leaved speedwell	Veronica serpyllifolia														
Tufted vetch	Vicia cracca						R								
Hairy tare	Vicia hirsuta														
Bush vetch	Vicia sepium														
Smooth tare	Vicia tetraspermum														

Compartments:
Compartment 1 = Main part of Common
Compartment 2 = Western Common
Compartment 3 = Parish Fields
Compartment 4 = Weald Wood
Compartment 5 = Grim's Dyke Open Space
Compartment 6 = Levels Wood
Compartment 7=City Open Space

DAFOR:
D=Dominant
A=Abundant
F=Frequent
O=Occasional
R=Rare

Qualifiers:
E=Edge
C=Clumped
S=Sapling
Y=Young tree
T=Mature tree

Species with no DAFOR score (in any column) = historical records

Appendix 2: NBN Species list (see footnote)

Group	Common Name	Species Name
Mammals	Eurasian Common Shrew	*Sorex araneus*
	Red Fox	*Vulpes vulpes*
	European Rabbit	*Oryctolagus cuniculus*
	Eastern Grey Squirrel	*Sciurus carolinensis*
Birds	Great Crested Grebe	*Podiceps cristatus*
	Grey Heron	*Ardea cinerea*
	Mallard	*Anas platyrhynchos*
	Greater Canada Goose	*Branta canadensis*
	Mute Swan	*Cygnus olor*
	Common Moorhen	*Gallinula chloropus*
	Black-headed Gull	*Larus ridibundus*
	Eurasian Sparrowhawk	*Accipiter nisus*
	Long-tailed Tit	*Aegithalos caudatus*
	Mandarin Duck	*Aix galericulata*
	Little Owl	*Athene noctua*
	Common Buzzard	*Buteo buteo*
	Eurasian Treecreeper	*Certhia familiaris*
	Rock Pigeon	*Columba livia*
	Carrion Crow	*Corvus corone*
	Great Spotted Woodpecker	*Dendrocopos major*
	Lesser Spotted Woodpecker	*Dendrocopos minor*
	Common Kestrel	*Falco tinnunculus*
	Chaffinch	*Fringilla coelebs*
	Eurasian Jay	*Garrulus glandarius*
	Barn Swallow	*Hirundo rustica*
	Great Tit	*Parus major*
	Firecrest	*Regulus ignicapilla*
	Goldcrest	*Regulus regulus*
	Wood Nuthatch	*Sitta europaea*
	Tawny Owl	*Strix aluco*
	Blackcap	*Sylvia atricapilla*
	Common Whitethroat	*Sylvia communis*
	Winter Wren	*Troglodytes troglodytes*
	Redwing	*Turdus iliacus*
	Common Blackbird	*Turdus merula*
	Song Thrush	*Turdus philomelos*
	Barn Owl	*Tyto alba*
	European Robin	*Erithacus rubecula*
	Common Chiffchaff	*Phylloscopus collybita*
	Willow Warbler	*Phylloscopus trochilus*
	Black-billed Magpie	*Pica pica*
	Green Woodpecker	*Picus viridis*
	Hedge Accentor	*Prunella modularis*
	Common Bullfinch	*Pyrrhula pyrrhula*
	Blue Tit	*Cyanistes caeruleus*
	Crested Tit	*Lophophanes cristatus*
Reptiles	Adder	*Vipera berus*
	Grass Snake	*Natrix natrix*

Amphibians	Common Frog	*Rana temporaria*
	Great Crested Newt	*Triturus cristatus*
Butterflies	Large Skipper	*Ochlodes faunus*
	Large White	*Pieris brassicae*
	Small White	*Pieris rapae*
	Comma	*Polygonia c-album*
	Red Admiral	*Vanessa atalanta*
	White Admiral	*Ladoga camilla*
	Common Blue	*Polyommatus icarus*
	Meadow Brown	*Maniola jurtina*
	Speckled Wood	*Pararge aegeria*
Odonata	Azure Damselfly	*Coenagrion puella*
	Migrant Hawker	*Aeshna mixta*
	Broad-bodied Chaser	*Libellula depressa*
	Large Red Damselfly	*Pyrrhosoma nymphula*
	Common Blue Damselfly	*Enallagma cyathigerum*
	Brown Hawker	*Aeshna grandis*
	Southern Hawker	*Aeshna cyanea*
	Black-tailed Skimmer	*Orthetrum cancellatum*
	Common Darter	*Sympetrum striolatum*
	Aeshna dragonfly	*Aeshna*
Orthoptera	Roesel's Bush-cricket	*Metrioptera roeselii*
	Field Grasshopper	*Chorthippus brunneus*

The above information was gathered via the NBN Gateway and includes all records submitted over the last 10 years (1999-2009) which fall within or overlap Harrow Weald Common at a resolution of 1 km