

The Royal Borough of Kensington and Chelsea
Borough Ecological Survey 2002



Steven Will
London Conservation Services
May 2003

The Royal Borough of Kensington and Chelsea Borough Ecological Survey 2002

Borough Ecological Report

Contents	Page
1 Introduction	1
2 Method	3
3 The Royal Borough – physical geography, land use history and habitats.	5
4 Sites of Nature Conservation Importance – definitions.	11
5 Current and proposed Sites of Nature Conservation Importance	13
6 Change Analysis	49
7 Nature Conservation, Biodiversity and the Town Planning Process	52
8 Storage and Dissemination of the 2002 Borough Ecological Survey	56
9 Raising Public Awareness and Consultation	59
10 Conclusions	60
References	
Appendices	

1. Introduction

1.1 Background

- 1.1.1 In January 2002, London Conservation Services were commissioned to undertake a survey of open spaces and habitats for the Royal Borough of Kensington and Chelsea.
- 1.1.2 The purpose of the study was to ensure that the existing site of nature conservation importance (SNCI) designations remain consistent with the current Greater London Authority (GLA) criteria for habitat designations, to identify any potential new designations and to analyse the changes which have occurred since the previous survey.
- 1.1.3 The contract specified eight objectives;
- a) To review the existing designations for Sites of Nature Conservation in the Royal Borough of Kensington and Chelsea.
 - b) To undertake a detailed habitat survey of each of the 23 SNCIs and additional sites outlined by the Ecology Service.
 - c) To undertake a detailed habitat survey of all open spaces over 0.25 ha (excluding individual private gardens).
 - d) To collate and interpret the survey data to compile new habitat records and maps for the sites that are surveyed.
 - e) Review and incorporate the existing information that has been recorded in previous habitat and species surveys.
 - f) Confirm or recommend a new designation for each of the sites included in the survey using the GLA/LEU criteria.
 - g) Identify any new habitat linkages, corridors, chains or islands that are notable and make reference to any sites of strategic importance, particularly those that may have importance beyond the boundary of the Royal Borough of Kensington and Chelsea.
 - h) Undertake an analysis of change of the Borough by comparison of the habitat information of the previous survey in 1993.

1.2 Context

- 1.2.1 The Greater London Authority have devised detailed methods for appraising the Capital's wildlife habitats and classifying their importance for nature conservation. The best sites for wildlife are classified as Site of Nature Conservation Importance (SNCI's). The basis for designations are explained in Section 3. This system has recently been further strengthened through its

inclusion in the Mayors Biodiversity Strategy (July 2002) and has been tested over 20 years use. It includes a 10 year rolling programme to survey and record each of the London Borough's wildlife habitats in a consistent manner. Royal Borough of Kensington and Chelsea was last fully surveyed under these methods in 1993 by the London Ecology Unit (which now forms part of the Greater London Authority), and this resulted in the designation of 23 SNCI's. These have subsequently been incorporated into the Borough's 1995 Unitary Development Plan.

1.3 London Wildlife Trust and London Conservation Services

- 1.3.1 The Wildlife Trusts are a national network of environmental charities, working to protect wildlife and natural places in both town and country. Through the care of more than 2,500 nature reserves and with over 366,000 members nationwide, the Wildlife Trusts are one of the major national forces working to safeguard the environment for future generations.
- 1.3.2 The London Wildlife Trust fights to sustain and enhance London's natural heritage to create a city richer in wildlife. The Trust achieves this through community involvement, land management (the Trust cares for 60 nature reserves across Greater London), communication, campaigning and education.
- 1.3.3 London Conservation Services is the wholly owned trading company of the London Wildlife Trust. London Conservation Services carries out work in most areas of nature conservation and wildlife management; such as practical management for nature conservation, advice on management of wildlife, ecological surveys, environmental education and landscape design incorporating ecological improvements and safeguards. It is able to call on the wide range of expertise of the London Wildlife Trust staff and many other professional ecologists and freelance professionals in the London area and beyond.
- 1.3.4 Steven Will graduated with a 2.1 (Honours) degree in Applied Biology from Leeds University in 1993. The course was geared towards ecology and botany. Strong personal interest and post graduation volunteer conservation work with Cambridgeshire Wildlife Trust, Royston Heath Conservators and Flora and Fauna International has greatly enhanced Steven's field survey and botanical identification skills. Particular emphasis has been placed on urban ecology, from studying the conurbations of West Yorkshire to a second degree in Town Planning, graduating from South Bank University, London with a Masters degree in March 2002. Steven has five years of experience working in the local authority sector as a strategic planner and sustainability policy officer. Recent employment with London Wildlife Trust has included managing the Habitat Survey database for the 2001 Habitat Surveys.

2. Methods

The site survey work followed the standard GLA method as reproduced in full at Appendix 1. A brief summary is provided below;

2.1 Site selection

- 2.1.1 A combination of aerial photographs and large-scale raster maps were used to select the sites to be surveyed. All vegetated areas over 0.25 hectares (excluding private gardens) were identified and marked on a series of site selection maps. The identified sites were then visited in turn and if they fulfilled the criteria on the ground, surveyed. Occasionally additional sites were identified by the surveyor while out in the field and these were included in the survey. A number of other sites were surveyed at the request of Royal Borough of Kensington and Chelsea officers.
- 2.1.2 Each site is made up of one or more parcels. A parcel is an area of generally similar habitat within a site which is used to break down and simplify survey and reporting for larger or more complex sites.

2.2 Survey visits

- 2.2.1 The identified areas were visited by the surveyor between June and early October 2002, each site being visited on one or more occasions. All publicly accessible and private sites where it had been possible to arrange access, were surveyed in detail. Private sites where no access could be arranged were surveyed from adjoining land.
- 2.2.2 1:2,000 scale maps were used in the field to record different habitat types for each site. Standard GLA recording forms (part of Appendix 1) were completed for each site, collecting data on a range of issues including access, land use, weather conditions, ownership, habitat types, species richness, threats and disturbances and nature conservation. Field notes were also made indicating the basic structure of the site, dominant plant species found and other species which may have been recorded. A full species list of the plant was recorded for the more complex or important sites with the exception of those with an extremely diverse planted flora not relevant to the general ecological perspective of the survey. Additionally, a number of digital photographs were taken of each site visited.

2.3 Desk study and data presentation

- 2.3.1 The information on the 1:2,000 scale field maps was transferred to 1:2,000 scale landline maps, indicating different habitat types by way of colours and patterns following the Joint Nature Conservation Committees 'Handbook for Phase 1 Habitat Survey' manual (JNCC 1993/2000).
- 1.3.2 The basic site, parcel and access data was transferred to a 1:10,000 scale landline map. All of the map-based data was then digitised and is included on

a CD-Rom in MapInfo GIS format. The data recorded on the survey forms was entered onto a Recorder 2000 database.

- 1.3.3 The data collected during the survey was supplemented with data from previous surveys and other published information to produce this report. Changes observed between the 1993 and 2002 surveys was analysed and reported. Recommendations on the storage and dissemination of the information gathered are also included along with a section looking at possible mechanisms of raising public awareness about wildlife and nature conservation in the Borough and proposals for consultation. Finally, the wider picture is examined through links to the town and country planning process and implications for biodiversity strategies.

3. The Royal Borough – physical geography, land use history and habitats.

3.1 Background

- 3.1.1 Royal Borough of Kensington and Chelsea lies immediately to the west of the City of Westminster in inner London with the Borough's eastern boundary lying just over one mile from Oxford Circus and 2.7 miles from St Paul's Cathedral. Royal Borough of Kensington and Chelsea is the smallest London Borough covering approximately 2,000 hectares while also being the most densely populated with a population of 150,000 residents and 30,000 visitors staying each night.
- 3.1.2 In the Boroughs 1992 Open Space Survey, Royal Borough of Kensington and Chelsea came out with the second lowest open space: total Borough land area ratio (2.8% compared with a Borough average of 11.1%) and the lowest open space: population ratio with 3,867 people per hectare of open space.
- 3.1.3 Despite these statistics, Royal Borough of Kensington and Chelsea is fortunate to have a number of excellent open spaces and wildlife habitats – from the well known sites such as Holland Park and Kensington Gardens to the smaller but also valuable sites including The Chelsea Physic Gardens and Meanwhile Gardens.
- 3.1.4 The historic quality of much of the Boroughs townscape is reflected in the fact that 70% of the Borough's area is covered by Conservation Area designations. The Borough Council consider that Kensington and Chelsea is primarily a residential area and place great weight on residential amenity. This is summed up by the overall aim of the Borough's Unitary Development Plan;
- “TO MAINTAIN AND ENHANCE THE CHARACTER AND FUNCTION OF THE ROYAL BOROUGH AS A RESIDENTIAL AREA AND TO ENSURE ITS CONTINUING ROLE WITHIN THE METROPOLITAN AREA AS AN ATTRACTIVE PLACE TO LIVE AND WORK”
- and Policy Strat 1;
- “TO GIVE PRIORITY TO THE PROTECTION AND ENHANCEMENT OF THE RESIDENTIAL CHARACTER AND AMENITY OF THE ROYAL BOROUGH”.
- 3.1.5 The pattern of built development, its high density and also its high quality in many parts, has greatly influenced the urban ecology of the borough. This is particularly noticeable in the relative stability of the built environment and the fact that many of the current Sites of Nature Conservation Importance can trace their origins back hundreds of years, as more fully detailed in section 3.3.

3.2 Physical geography

- 3.2.1 The River Thames greatly influences the southern half of the Borough's geology with River Terrace deposits laid down by the shifting course of the Thames. Recent Alluvial deposits are found south of Cheyne Walk, up Chelsea Creek and under Ranelagh Gardens. First Terrace gravels (from the most recent of the River Terrace deposits) form the underlying geology south of Cromwell Road. The Second Terrace lies between Cromwell Road and Kensington High Street, the Third Terrace lies to the north of Kensington High Street and the Fourth Terrace forms a small deposit which just extends into Holland Park.
- 3.2.2 Other low lying land extends up the Borough's western boundary into North Kensington where it is covered in Brickearth (which comprises wind blown post glacial deposits). Further areas of Brickearth occur in small patches over South Kensington.
- 3.2.3 The northern part of the Borough's geology is less influenced by the Thames and is underlain mostly by London Clay which is the earliest of the Borough's deposits having been laid down in shallow seas which covered the southern half of England during the Eocene, 65-38 million years ago.
- 3.2.4 South of Cromwell Road, the land is low-lying at less than 10m above sea level. This rises as one moves northwards with a ridge running from Holland Park through Campden Hill to Kensington Palace. Beyond here, the land undulates gently before rising to the highest point in the Borough, Kensal Green Cemetery which is 42m above sea level.
- 3.2.5 All of the Borough is covered by the catchment of the Thames. Two tributaries used to flow through the Borough but both of these are now culverted underground – Counters Creek and the Westbourne.
- 3.2.6 The Thames takes its present form from the embankments which were constructed at the end of the 19th century. The river was historically much wider and more shallow than at present with subsequent effects on the local geology as noted above.
- 3.2.7 Counters Creek rose at Kensal Green Cemetery and follows the line of the West London and District Line railway which was built over the site of the Creek in the late 19th Century. The Westbourne flowed from Hampstead through Hyde Park and across what is now Ranelagh Gardens. The Westbourne is now culverted and called Ranelagh Sewer, emptying into the Thames below the Royal Hospital Grounds.

3.3 Land-use History

- 3.3.1 The Royal Borough has a long and interesting history which has influenced its built development and its current wildlife sites. A very brief outline of how this development has led to the present day pattern of intensive urban development with historic open spaces is presented below. For a more complete history please refer to the 1993 Ecological Survey.
- 3.3.2 Both Kensington and Chelsea originated as Saxon settlements and they remained distinct from Greater London until the huge Victorian building boom in the latter half of the nineteenth century. The pattern of their development over this time has influenced the open spaces we find today.
- 3.3.3 During the 15th/16th centuries Henry VIII acquired what is now Hyde Park and Kensington Gardens for private hunting, Walter Cope built a mansion that became known as Holland House and William III moved into Nottingham House, later rebuilt as Kensington Palace.
- 3.3.4 Rocque's large scale map of London in the 1740's gives the earliest complete picture of the Borough. Meadows and pasture, dominated to the north, and market gardening and orchards to the south. Wormholt Wood, the only woodland shown, extends over Wormwood Scrubs and enters the Borough over what is now Little Wormwood Scrubs Park
- 3.3.5 As urbanisation spread, many of the developments in Kensington took the form of estates, their design encompassing houses, gardens and streets with similar but smaller speculative developments being built in Chelsea. This has provided the Borough with its many garden squares.
- 3.3.6 The 19th century saw the main transport infrastructure put into place. The Paddington Branch of the Grand Union Canal was opened in 1814. During the 1830's and 1840's the West London Railway built a line along the Borough's western boundary and the Great Western Railway laid lines to the south of the Grand Union Canal.
- 3.3.7 By the mid-1800's a ring of cemeteries was created beyond the built up area of London to take the city's dead which no longer fitted within its parish churchyards. Meadows or pasture to the north of the Grand Union Canal were purchased for Kensal Green Cemetery, which was consecrated in 1833. Brompton Cemetery was consecrated in 1840 on the site of arable land and pasture next to Counter's Creek.
- 3.3.8 Large scale building development in the 1840's and 1850's saw the completion of the Norland and Ladbroke Estates, which included extensive garden squares. The Metropolitan and District lines, built between the 1860's and 1880's completed the Borough's surface rail network.

3.4 Habitats and species

- 3.4.1 There are a surprisingly wide range and variety of habitats present in Royal Borough of Kensington and Chelsea, especially given its proximity to Central London. The Greater London Authority as part of its detailed survey methods gives a full definition of each different habitat type which can be found in Greater London, this information can be found at Appendix 2.
- 3.4.2 Table 1 focuses on the habitat types found within Royal Borough of Kensington and Chelsea, setting out an approximate relative abundance of each habitat type found, based on area of coverage, and indicates where the prime examples are to be found in the Borough. The total areas of each habitat found within the Borough are given as a table as Appendix 3.

Table 1: Royal Borough of Kensington and Chelsea Habitat Types Present 2002 Ecological Survey

Native broadleaved woodland	Rare, the main areas are in Holland Park, particularly the Beech Enclosure. Also at Ranelagh Gardens and Kensal Green Cemetery.
Non native broadleaved woodland	Occasional, the best examples being at Holland Park where there are relatively extensive non native woodland enclosures.
Scattered trees	Common, the Borough is particularly rich in planted scattered trees including some fine specimen trees. Some of the best examples are to be found in the garden squares which often contain many fine mature London plane and common lime trees.
Scrub	Occasional, scrub occurs as an understorey to the woodland in Holland Park and along some stretches of the railway lines and the grand Union Canal and there are good stands around the edge of Little Wormwood Scrubs Park.
Planted shrubbery	Common, the formal parks and garden squares of the Borough provide a rich resource of planted shrubbery. Some of the denser planting can provide valuable habitat for common birds – cover for nesting and berries for food.
Native hedge	Rare, the only examples to be found are recently planted short sections in wildlife gardens – for example, Holland Park, Westway Wildlife Garden and Meanwhile Gardens.
Non native hedge	Common, planted non-native hedges are often used as ‘green screens’ around many of the garden squares in the Borough where the predominant species is garden privet.

Orchard	Rare, only remaining example is to be found within the grounds of the Carmelite Monastery.
Vegetated walls and tombstones	Frequent, vegetated tombstones form a relatively large habitat component at both Kensal Green and Brompton Cemeteries. Vegetated walls provide important habitat beside the River Thames and Grand Union Canal.
Acid grassland	Occasional, much 'acid grassland' heavily modified by cutting, rolling, fertilizing and weed killing. However, there are a few good examples remaining such as at Kensington Palace Gardens, Sunbeam Gardens and at the Moravian Burial Ground.
Semi-improved Neutral grassland	Frequent and also more widespread than acid grassland with some large Areas at Brompton and Kensal green Cemeteries and Little Wormwood Scrubs Park plus many smaller patches where grassland communities have been allowed to develop more naturally.
Basic grassland	Rare, there is no naturally occurring basic grassland in the borough but a small patch has been created at the Natural History Museum Wildlife Garden. Additionally, there are some lime loving plants such as wild basil growing on the limestone tombs at Kensal Green Cemetery.
Amenity grassland	Common, amenity grassland forms the largest single habitat type in the Borough with typical examples to be found in the lawns of the garden squares and formal parkland of Kensington Palace and sports pitches of Burtons Court.
Ruderal or ephemeral	Rare, often a sign of land clearance prior to re-development, ruderal and ephemeral species will be the first to colonise. Best examples in the Borough at Acklam Road Waste and along some of the railway track sides.
Roughland	Frequent, an intimate mixture of tall herb, semi-improved neutral grassland and scrub. The best examples of this habitat type are to be found along the railways, particularly the West London and District Line.
Bracken	Rare, pure stands of bracken forming a continuous habitat are found only at a couple of sites, the most noteworthy being along the banks of the Grand Union Canal.
Tall herb	Occasional, often associated with recent disturbance or less intensive management. Good examples can be found at Holland Park Roundabout South and at West Brompton Station.

Heathland	Rare, there is no naturally occurring basic grassland in the borough but a small patch has been created at the Natural History Museum Wildlife Garden.
Allotments (active)	Rare, the tree locations within the Borough at Chelsea Royal Hospital, The Carmelite Monastery and Barlby Estate are all private.
Reedswamp	Rare, no longer naturally occurs in the Borough but a small patch has been created at the Natural History Museum Wildlife Garden.
Wet marginal Vegetation	Occasional, some good examples can be found along the Thames and at Chelsea Creek and in some of the wildlife ponds created in wildlife gardens, particularly Meanwhile Gardens.
Standing water	Occasional, the Grand Union Canal accounts for the majority of this habitat type with further areas comprising occasional man made ponds.
Running water	Rare, the only running water left in the Borough being the Thames.
Inter-tidal mud, sand, shingle etc	Rare although extensive areas occur along the Thames and at Chelsea Creek during low tide.

3.4.3 A species list of all the plants recorded in the Borough during the 2002 Ecological Survey is provided in this report as Appendix 4.

4. Sites of Nature Conservation Importance – definitions.

The GLA define the characteristics with which a site should comply in order to be designated within a hierarchy of Sites of Nature Conservation Importance, the full details being reproduced in Appendix 5. A brief summary is provided below.

4.1 Sites of Metropolitan Importance (SMI's)

- 4.1.1 These are the sites which contain the best examples of London's habitats, sites which contain particularly rare species, rare assemblages of species or important populations of species, or sites which are of particular significance within otherwise heavily built-up areas of London. These sites are of the highest priority for protection. The identification and protection of Metropolitan sites is necessary, not only to support a significant proportion of London's wildlife, but also to provide opportunities for people to have contact with the natural environment. Sites of Metropolitan Importance are designated on a London-wide rather than borough perspective and therefore may cross a number of borough boundaries.

4.2 Sites of Borough Grade I and Grade II Importance

- 4.2.1 These are sites which are important on a borough perspective in the same way as Metropolitan sites are important for the whole of London. Although sites of a similar quality may be found elsewhere in London, damage to these sites would mean a significant loss to the borough. The selection of these sites reflects the quality of wildlife habitat within a particular borough meaning that those which are relatively rich will contain sites of better quality than less rich boroughs.
- 4.2.3 Borough sites are divided into two grades based on their quality although all are important in a borough wide view.

4.3 Sites of Local Importance

- 4.3.1 A Site of Local Importance is one which is, or may be, of particular value to people nearby (such as residents or schools). These sites may already be in use for nature study or be run by management committees comprised mainly of local people. Local sites are particularly important in areas otherwise deficient in nearby wildlife sites.

4.4 London Notable and Nationally Scarce Plants

- 4.4.1 Burton's Flora of the London Area (1983) recorded Greater London's flora in each of the 400 tetrads (2x2 km squares) covered by the Metropolitan Area. The capitals most common plants such as sycamore and creeping thistle can be found in 100% of tetrads while a plant is considered a London Notable if it occurs in 15% or less. (Note -The tetrad approach describes a species rarity in terms of its distribution and no information on abundance within tetrads is

conveyed. Numerous naturalised species feature among the London notable list).

- 4.4.2 On a similar basis, the UK is split up into 10km grid squares to calculate national abundance. A plant which occurs in less than 15 of these squares is considered nationally rare. One which occurs in 16-100 of the 10km squares is considered nationally scarce.

4.5 Green Corridors and Green Chains

- 4.5.1 A green corridor is a tract of open space which allows the movement of wildlife across otherwise built up areas and links various wildlife habitats. Traditional wildlife corridors include linear features such railways and rivers.
- 4.5.2 Green Chains are open space linkages based on existing public rights of way, linking the Borough's public open space and serving as a leisure and recreation resource rather than for their wildlife value. Green Chains are beyond the scope of this report but mentioned so as to avoid confusion with Green Corridors.

4.6 Areas of Deficiency

- 3.6.1 An Area of Deficiency in the context of this Ecological Survey is defined by the Greater London Authority as an area beyond 1km walking distance to a publicly accessible open space of Metropolitan, Borough Grade I or Borough Grade II Importance.

5. Current and proposed Sites of Nature Conservation Importance

5.1 Summary of existing and proposed SNCI's based on the 1993 and 2002 habitat surveys

5.1.1 Following the 1993 Borough Ecological Survey, 23 Sites of Nature Conservation Importance were proposed by the London Ecology Unit and subsequently adopted by the Borough Council in their 1995 Unitary Development Plan. These sites are shown on Map 1. The 2002 Ecological Survey re-scrutinised the existing Sites of Nature Conservation Importance and this has led to a number of proposed changes. Map 2 shows the location of each of these sites. Table 2 below lists existing, new and de-designated sites and indicates those where proposed designations or boundaries have changed between 1993 and 2002. Sites where re-grading has been proposed appear in the table as their current designation with their suggested designation in the change column, while potential new sites obviously appear as graded in the current survey. Detailed descriptions of all sites follow from section 5.3 onwards and here re-graded sites are grouped according to the 2002 assessment. The SNCI reference number accords with the standard referencing system used by the GLA and ties in with the numbering system employed in the Borough's Unitary Development Plan.

Table 2: Summary of Changes to SNCI's in Royal Borough of Kensington and Chelsea Between 1993 and 2002

SNCI reference	SNCI name	Change between 1993 and 2002
<u>Sites of Metropolitan Importance</u>		
M31	The River Thames (including Chelsea Creek)	None
M103	Kensington Gardens	Proposed extension to include Perks Field.
M6	The Grand Union Canal	Considerably greater area within Royal Borough of Kensington and Chelsea due to 1994 boundary changes.
M131	Holland Park	None
M125	Kensal Green Cemetery	None
<u>Sites of Borough Importance Grade I</u>		
BI01	Kensal Green Gas Works	Proposed de-designation due to development.
BI02	The West London and District Lines	None
BI03	Brompton Cemetery	None
BI04	Chelsea Physic Garden	None
BI05	Chelsea Hospital South Front Lawn	Proposed new site.

Sites of Borough Importance Grade II

BII01	British Rail Western Region Land	Proposed de-designation due to development.
BII02	Metropolitan Line	Proposed expansion and re named 'Hammersmith and City Line'.
BII03	Carmelite Monastery	None
BII04	Ladbroke Grove Garden Complex	None
BII05	Moravian Burial Ground	None
BII06	Royal Hospital South Grounds	None
BII07	Ranelagh Gardens	None
BII08	Kings College	Proposed de-designation due to development.

Sites of Local Importance

L01	Emslie Horniman Pleasance	None
L02	Westway Wildlife Garden	None
L03	Avondale Wildlife Garden	None
L04	Natural History Museum Gardens	Proposed re-designation as Borough Grade II.
L05	Little Wormwood Scrubs Park	Proposed re-designation as Borough Grade II.
L06	Meanwhile Gardens	Proposed re-designation as Borough Grade II.
PL07	Holland Park School	Proposed new site.
PL08	Sunbeam Gardens	Proposed new site.
PL09	Kensington Memorial Gardens	Proposed new site.

5.2 SNCI's lost between 1993 and 2002 and proposed for de designation

5.2.1 Kensal Green Gas Works (BI01) is currently being cleared prior to development and only a small amount of ruderal vegetation at the sites edges was present at the time of survey. Habitat creation is understood to be included in the development plan and vegetation remaining along the eastern edge of the site has the potential to act as a wildlife corridor, linking up the Grand Union Canal with the Paddington mainline railway.

5.2.2 British Rail Western Region Land (BII01) was originally in two sections. Most of the eastern section has been lost to buildings erected under the Westway and along Acklam Road or is now used for temporary car parking. A small section remains beside the Hammersmith and City railway and this has been added to the proposed Hammersmith and City Borough Grade II Site. Much of the section to the west has been developed for the Eurostar depot although good sections of scrubby roughland vegetation remain to the edges of the tracks. The remaining wildlife importance of the site has been recognised in its designation as a Green Corridor linking Little Wormwood Scrubs Park, the Grand Union Canal, Kensal Green Cemetery and the remains of the Kensal Green Gasworks site.

- 5.2.3 Kings College (BII08) is currently being converted into luxury apartments and houses. There will be some communal areas for the residents although it is not known whether the planting scheme will be of benefit to wildlife. To the east of the site, a permissive path will be opened up creating a shortcut between Kings Road and Fulham Road. This path will retain a thin strip of the current vegetation where it exists and new planting elsewhere.

5.3 Sites of Metropolitan Importance

1. The River Thames (including Chelsea Creek) (M31)

Grid Reference = TQ 268 774

Area (within Royal Borough of Kensington and Chelsea) = 26.52 ha

2002 Survey Reference; 12246/01 – 12246/06

Planning Status; Conservation Area, Area of Metropolitan Importance, Site of Archaeological Importance, Site of Nature Conservation Importance.

Major Habitats; inter-tidal mud, sand and shingle, vegetated walls, wet marginal vegetation, running water.

Justification for Designation; This SMI has been designated primarily for its brackish and freshwater flora, wildfowl, waders, fish and invertebrates and for its strategic importance as a natural landscape feature.

Description; The course of the Thames within Kensington and Chelsea forms part of one of London's richest wildlife habitats supporting diverse assemblages of birds, fish and invertebrates. The Borough bird survey carried out in 2001 reported 28 species present along the Thames, 18 of which were breeding or probably breeding. This list includes common tern, greylag goose, pintail, tufted duck, dunnoek and probably inner London's largest colony of house martins (that nest in the streets immediately north of Chelsea Creek).

The stretch of the Thames from the mouth of Chelsea Creek to Kensington Borough Wharf includes areas of extensive inter-tidal mud, while mud and shingle are exposed at low tide between Kensington Borough Wharf and Battersea Bridge where there is also a small sand beach. These features and the muddy channel of Chelsea Creek are particularly valuable for birds, with large numbers of black-headed gull, grey wagtail, heron and mallard reported in the current survey.

The best vegetation associated with the main stretch of the River was found between Kensington Borough Wharf and Battersea Bridge. Here there are areas of diverse wet marginal vegetation including a large stand of the London notable blue water speedwell (*Veronica anagallis-aquatica*) and well vegetated sections of wall with celery leaved buttercup (*Ranunculus sceleratus*), wild angelica (*Angelica sylvestris*), common alder (*Alnus glutinosa*), skullcap (*Scutellaria galericulata*), trifid bur-marigold (*Bidens tripartita*), amphibious bistort (*Persicaria amphibia*), water figwort (*Scrophularia auriculata*) and water mint (*Mentha aquatica*).

From the mouth of Chelsea Creek to Kensington Borough Wharf the river walls and wooden piers are sparsely vegetated with gypsywort (*Lycopus europaeus*), water dock (*Rumex hydrolapathum*), common alder, pelitory of the wall (*Parletaria judaica*), buddleia (*Buddleia davidii*) and sea couch (*Elytrigia atherica*), the latter a London notable.

The various habitats of Chelsea Creek support a rich assemblage of plants. The western bank in the upper stretches of the Creek grades from inter-tidal mud to

shingle to wet marginal vegetation and then tall herb. Wet marginal vegetation includes common water starwort (*Callitriche stagnalis*), watercress (*Rorippa nasturtium-aquaticum*), water pepper (*Polygonum hydropiper*) and the London notables grey club rush (*Schoenoplectus tabernaemontani*) and blue water speedwell. The vertical brick and concrete walls in this upper section support a rich flora including male fern (*Dryopteris filix-mas*) and harts tongue fern (*Phyllitis scolopendrium*), pelitory of the wall, gypsywort, marsh yellow cress (*Rorippa palustris*), hemlock water dropwort (*Oenanthe crocata*) and wild angelica. The lower stretches of the Creek pass between a semi-derelict industrial landscape (the former Chelsea power station) with predominately bare mud and aggregates exposed at low tide. The vertical walls here support a have a limited flora, predominantly buddleia scrub. The survey covered the whole of the creek including that west of the borough Boundary in Hammersmith and Fulham.

The remainder of the Thames, from Battersea Bridge to Chelsea Bridge is largely formed by granite river walls which are less well colonised by vegetation. An area of semi-improved neutral grassland and neglected shrubbery near Chelsea Bridge diversify the habitat in this area although they are relatively species poor.

An invertebrate survey has been undertaken for Chelsea Creek. A copy of the survey is held by the Ecology Service.

The majority of the Thames has steep sided and walled banks making it inaccessible to the majority of mammals although Chelsea Creek with its overgrown and scrubby vegetation in its upper reaches provides plenty of cover and suitable earth digging places for foxes.

Data Sources; Borough Ecological Survey 1993, Fox Survey 1998, Borough Breeding Bird Survey 2001, Borough Ecological Survey 2002.

2. Kensington Gardens (M103)

Grid Reference = TQ 358 801

Area (within Royal Borough of Kensington and Chelsea) = 16.8 ha

2002 Survey Reference; 12179/01, 12328/01-07

Planning Status; Metropolitan Open Land, Conservation Area, Area of Metropolitan Importance, Site of Nature Conservation Importance.

Major Habitats; Amenity grassland, semi-improved neutral grassland, acid grassland, scattered trees, planted shrubbery.

Justification for Designation; The SMI has an essential role as a major breathing space in central London that supports an abundance of commoner wildlife. More specific to Kensington Gardens and Palace Grounds are areas of acid grassland and interesting fungi.

Description; Kensington Gardens forms part of the larger Hyde Park and Kensington Gardens SMI, the majority of which falls within the boundaries of Westminster City Council. That part which is currently within Royal Borough of Kensington and Chelsea includes the formal lawns to the east of Kensington Palace and a strip of what is effectively a continuation of Hyde Park.

An additional area, Perks Field, a private recreation ground for Kensington Palace is adjacent to the existing SMI and is proposed for inclusion with the existing site. Visually and from a wildlife perspective, Perks Field functions as the rest of the SMI with and includes some noteworthy wildlife as discussed below. There is currently no public access to the field.

The site is dominated by amenity grassland but large areas of semi-improved neutral grassland were found at Perks Field and scattered occasionally throughout. Good populations of lady's bedstraw (*Galium verum*), black knapweed (*Centaurea nigra*) and birds foot trefoil (*Lotus corniculatus*) were a feature of these semi-improved neutral grassland areas, again particularly at Perks Field.

Acid grassland is also widely distributed throughout the SMI. Some of the best examples occur on a slope to the south of the main site, to the west of the Broad Walk. Here red fescue (*Festuca rubra*) and sheep's sorrel (*Rumex acetosella*) are abundant and the London notable, sand spurry (*Spergularia rubra*) were found. The grassland on the slope is in poor condition due to trampling and being mown too closely. Further notable acid grassland also occurs in the William of Orange garden, Victoria Field and in Perks Field. Sheep's sorrel is again present and Victoria Field in particular has a large population of mouse eared hawkweed (*Pilosella officinarum*).

There are reported to be excellent fungi throughout the site (Pers com. Paul Clarke, Head Gardener) and large *Marasmius* sp. rings were seen in both Perks Field and Victoria Field. Additionally, a small clump of a waxcap species was found near the eastern edge of Perks Field (Probably *Hygrocybe conica* but exact identification difficult due to their poor condition.) This mushroom species is a strong indicator of old grassland (Marren, British Wildlife, 1998).

The SMI includes many fine scattered trees including London plane (*Platanus x hispanica*), lime species (*Tilia spp.*), horse chestnut (*Aesculus hippocastanum*), oaks (*Quercus spp.*), ash (*Fraxinus excelsior*), hornbeam (*Carpinus betulus*), false acacia (*Robinia pseudoacacia*), honey locust (*Gleditsia triacanthos*) etc and avenues of tulip tree (*Liriodendron tulipifera*) and black mulberry (*Morus nigra*). Veteran sweet chestnut (*Castanea sativa*) from an important resource of standing dead wood likely to support specialist dead wood invertebrates.

Two water bodies have been created on the site. One is a concrete rectangular pond within a formal sunken garden, planted with iris species (*Iris sp.*), common reed (*Phragmites australis*), hard rush (*Juncus inflexus*), white water lily (*Nymphaea alba*), galingale (*Cyperus longus*) and reed sweet grass (*Glyceria maxima*). The second pond is within the William of Orange garden has a more natural profile. Planted wet marginal vegetation includes galingale, hard rush, yellow iris (*Iris pseudoacorus*), water forget-me-knot (*Myosotis scorpioides*), great willowherb (*Epilobium hirsutum*) and a large Gunnera (*Gunnera sp.*). Blue tailed damselfly, common blue damselfly, emperor dragonfly and common darter were seen around the pond. Smooth newts and common frogs were reported.

Despite the large area of grassland and good scattered trees, the site appears poor for mammals. The Borough Fox Survey reported that the site was too open and disturbed for fox earths to be present but provided an ideal feeding place. No small mammals have been reported in recent years, hedgehogs being locally extinct and the grass generally cut too short to provide any form of cover. The only mammal seen during the survey was the grey squirrel, which was abundant and very tame.

32 bird species have been recorded at the site (23 of which were breeding or probably breeding). This list includes uncommon birds for inner London such as greater spotted woodpecker, sparrowhawk and redpoll. The good bird populations are a reflection of the whole SMI, including Hyde Park to the east.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Fox Survey 1998, Borough Breeding Bird Survey 2001, Borough Ecological Survey 2002.

3. The Grand Union Canal (M6)

Grid Reference = TQ 246 822

Area (within Royal Borough of Kensington and Chelsea) = 4.36 ha

2002 Survey Reference; 12054/01-02

Planning Status; Site of Nature Conservation Importance.

Major Habitats; Open water, semi-improved neutral grassland, amenity grassland, roughland, vegetated walls.

Justification for Designation; The Canal is of strategic importance as a green corridor spanning the city. It contains characteristic aquatic flora, fauna and breeding water birds.

Description; The Paddington Branch is a part of the Grand Union and Regent's Canal SMI that runs through the Borough for approximately 2.0km, following the transfer of a 1.1km stretch from Westminster City Council due to boundary reorganisations in 1994.

A towpath provides public access along the entire southern length of the canal. The vegetation in the Kensal Green section comprised semi-improved grassland to the north and roughland, tall herb and bracken dominated vegetation to the south. The vegetation of the newly acquired section from Ladbroke Grove to the Westminster City Council boundary is predominantly amenity grassland but includes small amounts of quite diverse wetland vegetation. Wet marginal vegetation included hard rush, yellow iris, hemlock water dropwort, great water dock, angelica, reed sweet-grass and lesser pond sedge (*Carex acutiformis*). The canal walls are constructed from a variety of materials with brick sections supporting most diverse vegetation including skullcap, common alder, trifid bur-marigold and marsh woundwort (*Stachys palustris*), gypsywort, pelitory of the wall.

The roughland, bracken and tall herbs found alongside parts of the canal included dense growth of nettle (*Urtica dioica*), bramble (*Rubus fruticosus* agg), willowherbs (*Epilobium* spp) and thistles (*Cirsium* spp) with sections dominated by bracken (*Pteridium aquilinum*). There is also a low scrubby area of hazel (*Corylus avellana*), elder (*Sambucus nigra*) and blackthorn (*Prunus spinosa*) with suckering English elm (*Ulmus procera*) and some larger scattered trees forming small pockets of woodland (grey poplar (*Populus x canescens*), hybrid black poplar (*Populus x canadensis*), sycamore (*Acer pseudoplatanus*)).

Many invertebrates were recorded, including small white, brown hawker, field grasshoppers, specked wood and common blue butterfly. A good variety of birds were seen at the time of the survey, including mute swan, mallard, tufted duck, Canada geese (x18), coot, moorhen, black-headed gull, heron, cormorant and green woodpecker. The Borough Bird Survey of 2001 reported 35 species of birds, 24 breeding or probably breeding. The presence of two lesser whitethroats was particularly noteworthy.

Mammal surveys report that the area is an excellent feeding ground for foxes, wood mice were found in 1997, hedgehog faeces in 1998 and brown rat in 1995 suggesting that this is a potentially important corridor for a number of mammal species.

The water appeared rather polluted during the 2002 survey and no submerged vegetation was found. No amphibians were recorded from the Borough 1995 Amphibian and Reptile Survey. Interpretation boards along the towpath indicate that the canal contains a number fish species.

Data Sources; Borough Ecological Survey 1993, Amphibian and Reptile Borough Survey 1995, Mammal Borough Survey (Excluding Bats) 1997, Fox Survey 1998, Borough Breeding Bird Survey 2001, Borough Ecological Survey 2002.

4. Holland Park (M131)

Grid Reference = TQ 248 797

Area = 21.74 ha

2002 Survey Reference; 12001/19-39

Planning Status; Metropolitan Open Land, Conservation Area, Area of Metropolitan Importance, Site of Nature Conservation Importance.

Major Habitats; Non-native-broadleaved woodland, native broadleaved woodland, planted shrubbery, scattered trees, amenity grassland, semi-improved neutral grassland, standing water.

Justification for Designation; Holland Park comprises one of the larger areas of semi-natural habitat within central London and is important for its populations of mammals (including bats), birds and breeding amphibians. The site includes large areas of woodland, an uncommon habitat in inner London. .

Description; Holland Park contains a complex mosaic of habitats that have in recent years been managed with ecology in mind. There is an Ecology Centre within the park which oversees environmental education and provides a base for ecological management of the park.

Holland Park's current habitats originate from the creation of a woodland park on open pasture in the 18th and 19th centuries. Following a long period of neglect, the park was acquired by London County Council in the 1950's and later transferred to Royal Borough of Kensington and Chelsea, who introduced more ecologically based management in the 1980's.

The current woodland habitats comprise a number of enclosures of varying character. During a period of neglect much the woodland park succeeded to an elm/sycamore dominated woodland. Dutch elm and sooty bark disease greatly reduced both species possibly creating a more open, ecologically interesting woodland structure. Elsewhere there are areas dominated by beech (*Fagus sylvatica*) or Turkey (*Quercus cerris*) and pedunculate oak (*Q robur*). The shrub layer generally comprises suckering elm, young sycamore and holly (*Ilex aquifolium*). The holly can become very dense in places and the shrub layer is shading out all ground-flora in a number of enclosures. Further commonly found species included bramble, elder and dog rose (*Rosa canina*). The ground-flora is very variable, depending on level of disturbance and level of shade cast by canopy and/or shrub layer. Widespread species include bluebell (*Hyacinthoides non-scripta*), nettle, ivy (*Hedera helix*), wood avens (*Geum urbanum*), red campion (*Silene dioica*), lords and ladies (*Arum maculatum*). More localised species include male fern and probably introduced foxglove (*Digitalis purpurea*), lily of the valley (*Convallaria majalis*) and sowbread (*Cyclamen hederifolium*). The woodland park reportedly supports an excellent assemblage of over 300 species of fungi.

The wildlife enclosure, path-sides and arboretum include more open vegetation where semi-improved neutral grassland (some sown with wild flower mixtures) grades into tall herb. Yorkshire fog (*Holcus lanatus*), cocks foot (*Dactylis glomerata*),

annual meadow grass (*Poa annua*) and perennial rye grass (*Lolium perenne*) mix with greater birds foot trefoil (*Lotus pedunculatus*), tufted vetch (*Vicia cracca*), meadow vetchling (*Lathyrus pratensis*), musk mallow (*Malva moschata*), hedge bedstraw (*Galium mollugo*) and ox-eye daisy (*Leucanthemum vulgare*). The wildlife enclosure additionally includes pignut (*Conopodium majus*), upright hedge parsley (*Torilis japonica*), stone parsley (*Sison amomum*) and three clumps of wood millet (*Milium effusum*).

There are number of water features within the park including two very well planted wildlife ponds within the wildlife enclosure. The larger pond contains bogbean (*Menyanthes trifoliata*), yellow iris, water mint, gypsywort, lesser spearwort (*Ranunculus flammula*), common reed, purple loosestrife (*Lythrum salicaria*), spiked water milfoil (*Myriophyllum spicatum*) and a little least duckweed (*Lemna minuta*). The reeds and open water supported a family of moorhens. The second pond is partially dried up and contains a dense stand of common reed and common reedmace with water mint and purple loosestrife. The Borough Amphibian and Reptile Survey 1995 reported common toads, common frogs and smooth newts from the wildlife ponds, common frogs from the Kyoto Pond and both common toads and common frogs from Lord Holland's Pond. Lord Holland's Pond contained 15 pairs of common frogs and 140 clumps of frogspawn indicating that Holland Park was the most important common frog breeding ground in the Borough.

Around the remains of Holland House, there are formal gardens with planted shrubbery and amenity lawns and further expanses of amenity grassland towards the south of the site and near the site entrances.

The current survey recorded 12 bird species, a variety of invertebrates (field grasshoppers, speckled wood, small white, common darter and blue tailed damselfly). The Borough Bird Survey 2001 recorded 34 species, 27 breeding or possibly breeding. This included species uncommon in central London such as sparrowhawk, great spotted woodpecker and tawny owl. The Park also supports large numbers of breeding blue tits, great tits and wrens as well as smaller numbers of song and mistle thrush, blackcap, chiffchaff, goldcrest, long tailed tit and coal tit.

The Borough Bat survey indicated that Holland Park is an extremely important site for bats with brown long eared bats and pipistrelles seen feeding in the park. The Borough Mammal survey 1997 highlights that a number of mammals are present within the park, including hedgehogs (indicated by droppings), domestic rabbits, foxes (the Fox Survey estimates four resident families), grey squirrel and wood mice. Additionally, there have been reports of brown rat and a feral ferret.

Data Sources; Borough Ecological Survey 1993, Borough Bat Survey 1994, Amphibian and Reptile Borough Survey 1995, Mammal Borough Survey (Excluding Bats) 1997, Fox Survey 1998, Borough Breeding Bird Survey 2001, Borough Ecological Survey 2002.

5. Kensal Green Cemetery (M125)

Grid Reference = TQ 234 825

Area (within Royal Borough of Kensington and Chelsea) = 19.4 ha

2002 Survey Reference; 12055/06-12

Planning Status; Metropolitan Open Land, Conservation Area, Site of Nature Conservation Importance.

Major Habitats; Semi-improved neutral grassland, scattered trees, vegetated walls, tombstones etc, tall herbs, non-native broadleaved woodland, amenity grassland.

Justification for Designation; A large area of relict, unploughed and largely unsprayed grassland containing distinctive plants and fungi with diversity enhanced by vegetated tombs/mausoleums. A total 9 London notable plant species were recorded and a diverse mammal fauna has been reported.

Description; A large cemetery run by a private company and one of the original cemeteries set up in the 19th century to help overcome the problems of London's overcrowded parish graveyards. One third of the cemetery site extends westwards into Hammersmith and Fulham, the whole site has been designated an SMI.

The majority of the site comprises semi-improved neutral grassland between and over the graves. The grassland is dominated by false oat (*Arrhenatherum elatius*) and Yorkshire fog with red fescue, rough meadow grass (*Poa trivialis*), creeping and common bent (*Agrostis stolonifera* and *A. capillaris*), cock's foot and meadow barley (*Hordium secalinum*). The wide range of forbs include the London notable plants wild onion (*Allium vineale*), meadow cranesbill (*Geranium pratense*) and grey sedge (*Carex divulsa*) as well as lady's bedstraw, birds foot trefoil, tufted vetch, common vetch (*Vicia sativa*), smooth tare (*Vicia tetrasperma*), meadow buttercup (*Ranunculus acris*), black knapweed and five types of clover. The cemetery lies on London clay and the resultant neutral grassland community includes a number of species favouring heavy, moisture retentive soils such as greater burnet (*Sanguisorba officinalis*) a London notable and indicator of ancient pasture, meadowsweet (*Filipendula ulmaria*) and creeping jenny (*Lysimachia nummularia*). The grassland is extremely rank and competition may be adversely affecting some species. While current management to cut and presumably rake off the trimmings is appropriate cutting may be too early for the great burnet to seed and raking insufficiently vigorous to counteract soil enrichment. The route of a mown grass path currently includes most of the best colony of great burnet and should be realigned.

The gravestones and tombs support further notable species - wild basil (*Clinopodium vulgare*), found infrequently on limestone gravestones and lesser hawkbit (*Leontodon saxatilis*) occurs occasionally. A varied assemblage of ferns occurred on the chapel area's tombs and mausoleums including maidenhair spleenwort (*Asplenium trichomanes*), wall rue (*Asplenium ruta-muraria*) and black spleenwort (*Asplenium adiantum-nigrum*), again all London notable species

Scrub and woodland occurred along both the northern and southern boundaries of the site, in both areas dominated by ash, horse chestnut and evergreen oak

(*Quercus ilex*). The shrub layer comprised elm regeneration with rose species (*Rosa* sp), bramble and privets (*Ligustrum* sp) and is poorly developed in the southern woodland. The ground layer to the north was dominated by ivy with occasional wood poa (*Poa nemoralis*), bluebells and herb Robert (*Geranium robertianum*). The more open southern woodland contained abundant hogweed (*Heracleum sphondylium*) and frequent cow parsley (*Anthriscus sylvestris*) and occasional scaly male fern (*Dryopteris affinis* London notable). This section included stands of tall herb comprising nettle, bristly ox-tongue (*Picris echioides*), creeping thistle (*Cirsium arvense*), bindweed (*Calystegia sepium*), mugwort (*Artemisia vulgaris*), Canadian goldenrod (*Solidago canadensis*) and broadleaved everlasting pea (*Lathyrus latifolius*). Scattered trees are most dense to the east of central chapel where the trees almost form a closed canopy in places. Here, horse chestnut, hybrid black poplar, London plane, yew (*Taxus baccata*), birch (*Betula pendula*), Turkey oak and evergreen oak are common.

A large number of the uncommon fungus *Leccinum duriusculum* can be found under the poplars to the west of Cambridge Avenue and it is expected that other areas of the site could hold good fungal populations.

The site abounded with invertebrate activity with many narrow bordered five spot burnet moths, field grasshopper, small white, meadow brown, speckled wood, large skipper, large white, yellow meadow ant and common blue damselfly. The 1993 Ecological Survey recorded 18 breeding butterfly species at the site.

Kensal Green Cemetery has the highest mammal species diversity in the Borough with the following species recorded; fox; weasel, brown rat, grey squirrel, hedgehog, bank vole, field vole, wood mouse. The 1994 Bat Survey surprisingly only found one pipistrelle. In January 1994, 50 bat boxes were installed within the cemetery which may have led to an increase in bat numbers since the 1994 survey.

Thirty species of bird 21 breeding or probably breeding have been recorded. Stock dove, great spotted woodpecker, lesser whitethroat, willow warbler are of particular note.

Data Sources; Borough Ecological Survey 1993, Borough Bat Survey 1994, Mammal Borough Survey (Excluding Bats) 1997, Fox Survey 1998, Borough Breeding Bird Survey 2001, Borough Ecological Survey 2002.

5.4 Sites of Borough Grade I Importance

1. The West London and District Lines (BI 2)

Grid Reference = TQ 256 776

Area (within Royal Borough of Kensington and Chelsea) = 9 ha

2002 Survey Reference; 12333/01-06

Planning Status; Site of Nature Conservation Importance.

Major Habitats; Scrub, ruderal/ephemeral, roughland, semi-improved neutral grassland, bare artificial habitat.

Justification for Designation; Undisturbed vegetation, dense in places providing a semi natural refuge in built up area. The site forms an important wildlife corridor joining the Grand Union Canal.

Description; The West London and District Line runs north-south along the Borough boundary with Hammersmith and Fulham with much of the trackside area actually falling within the neighbouring borough. The part of the site within Hammersmith and Fulham has been designated as a site of Borough Grade I importance. All the railside land was surveyed either from moving trains, stations or bridges as no direct access was possible.

The majority of the tracksides comprise a complex of abandoned sidings overgrown with roughland and patches of semi-improved neutral grassland with a ruderal/ephemeral community nearer the track bed. Some areas of roughland have progressed to semi-mature sycamore woodland. There is a large area of semi improved neutral grassland to the south of Cromwell Road. The value of an extensive area of roughland, tall herb and sycamore woodland to the west of West Brompton Station is enhanced by adjoining habitat, including wetland areas in Hammersmith and Fulham.

The Borough Fox Survey indicated that the area is suitable for foxes providing undisturbed breeding habitat and a corridor to feeding areas including the adjacent Brompton Cemetery. Although there are no other specific surveys cover the fauna of the site, the mixture of habitats including bramble and other berrying species are likely to provide a good food source and protection for birds and small mammals.

Data Sources; Borough Ecological Survey 1993, Nature Conservation in Hammersmith and Fulham Ecology - Handbook 25 (1993), Borough Fox Survey 1998, Borough Ecological Survey 2002.

2. Brompton Cemetery (BI 3)

Grid Reference = TQ 257 777

Area = 15.31 ha

2002 Survey Reference; 12053/03-05

Planning Status; Metropolitan Open Land, Conservation Area, Site of Nature Conservation Importance.

Major Habitats; Semi-improved neutral grassland, vegetated walls and tombstones etc, scattered trees.

Justification for Designation; The site includes moderately diverse grassland containing at least three London notable species and which supports a diverse invertebrate assemblage.

Description; A large cemetery established in 1840 on pasture along the Borough's western boundary. The majority of the site comprises semi-improved neutral grassland dominated by false oat with much red fescue, Yorkshire fog and rough meadow grass. Herbs include lady's bedstraw, birds foot trefoil, meadow vetchling, black knapweed, smooth tare, broadleaved everlasting pea and ox-eye daisy. The London notables grey sedge, sheep's fescue (*Festuca ovina*) and dark mullien (*Verbascum nigrum*) are also present. Patches of acid grassland contain red fescue, sheep's sorrel, mouse eared hawkweed and the aforementioned sheep's fescue. Associated invertebrates included field grasshoppers, small white, meadow brown, cinnabar moth caterpillars and red tailed bumblebee. Within the grassland are many vegetated tombstones and the wall separating Brompton Cemetery from the West London and District Railway supports male and harts tongue fern. There are many fine mature trees including, false acacia, evergreen oak, Turkey oak, weeping ash, Scott's pine, horse chestnut, London plane, common lime and yew.

Mammal surveys report the presence of a number of species and emphasise the value of the site for bat. Seven feeding pipistrelles were noted with higher counts expected with more intensive survey. The Fox Survey indicated a resident population of two or three families and additional feeding visitors. The 1997 Mammal Survey also recorded 2 house mice, 2 wood mice and 20+ grey squirrels.

Data Sources; Borough Ecological Survey 1993, Borough Bat Survey 1994, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

3. Chelsea Physic Garden (BI 4)

Grid Reference = TQ 277 777

Area = 1.25 ha

2002 Survey Reference; 12257/01

Planning Status; Conservation Area, Area of Metropolitan Importance, Site of Nature Conservation Importance.

Major Habitats; Planted flowerbeds, scattered trees, planted shrubbery

Justification for Designation; The site supports large breeding populations of common toads, common frogs and smooth newts and acts as a resting point along River Thames corridor for passing birds. It is a historic open space in densely built up area. The site is noted for its lichen assemblage.

Description; The Physic Garden has been in continuous use as an apothecary's garden or botanic garden since 1673. The site comprises numerous planted beds surrounded by amenity grass or gravel paths. There are a number of fine mature trees including black mulberry and England's largest outdoor olive tree.

The site supports a diverse self-established flora including henbane (*Hyoscyamus niger*), thorn-apple (*Datura stramonium*), deadly nightshade (*Atropa belladonna*), lady's mantle (*Alchemilla vulgaris*), small impatiens (*Impatiens parviflora*) and perfoliate alexanders (*Smyrniium perfoliatum*) – all London notables. From the survey of nearby sites, it is clear that some of these are spreading beyond the Physic Gardens boundaries, the site acting as a source of exotic escapee plants for the local area. This explains the higher than expected incidence of deadly nightshade found within a 1-2 km radius of the gardens. This site may also be the source of the perfoliate alexanders which has previously been reported from the nearby Ranelagh Gardens.

There is a good sized pond to the south of the site has been richly planted with native species such as bogbean, galingale, reed sweet grass, lesser reedmace (*Typha angustifolia*), water horsetail (*Equisetum fluviatile*), purple loosestrife, water mint and water lilies. The pond supports a very large colony of common toads with over 100 individuals counted leading to a conservative population estimate of 200+ adults. A smaller number of common frogs and approximately 30 adult smooth newts were also recorded.

Long tailed tits breed in the garden, one of the closest sites to central London as do coal tit, blue tit, great tit, wren, dunnock, robin, greenfinch and blackbird. Sparrowhawks and green woodpeckers are particularly interesting visitors.

Unsurprisingly given the isolation of the site it has a low mammal diversity with foxes, grey squirrel and house mice reported.

The Garden has an education officer who works with visiting school parties and carries out botanical research in association with the Natural History Museum.

Data Sources; Borough Ecological Survey 1993, Amphibian and Reptile Borough Survey 1995, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

4. Chelsea Hospital South Front Lawns (BI 4 Proposed New Site)

Grid Reference = TQ 280 780

Area (within Royal Borough of Kensington and Chelsea) = 1.84 ha

2002 Survey Reference; 12295/06

Planning Designation; Conservation Area, Area of Metropolitan Importance.

Major Habitats; Amenity grassland, scattered trees, planted shrubbery, semi-improved neutral grassland.

Justification for Designation; An old lawn with good flora including the nationally scarce clustered clover (*Trifolium glomeratum*).

Description; Chelsea Hospital was designed by Sir Christopher Wren and was completed in 1692. It lies in the southeast corner of the Borough by the banks of the Thames. The part of the Hospital proposed as a Borough Grade I site is the south Front Lawn comprising three terraces sloping southwards towards the Thames. The main botanical interest is found on the slopes between lawn terraces where the species assemblage includes characteristic species of acid and neutral grassland - perennial rye grass, creeping bent, red fescue and smaller cats tail (*Phleum bertolonii*) with red clover (*Trifolium pratense*) creeping cinquefoil (*Potentilla repens*), mouse eared hawkweed, birds foot trefoil, lady's bedstraw and a good population of the nationally scarce clustered clover (*Trifolium glomeratum*). The Flora of London (Burton, 1983) includes five records for this plant within greater London, the nearest known site to Chelsea Hospital being Kew Green.

The lawns are surrounded by planted shrubbery and there is a tennis court to the south of the site. Tree species include three fine old black mulberry trees, mature London plane, birch, beech and false acacia. Gravel paths surround the lawns and cut a cross pattern through the site

This site was not surveyed in the 1993 Borough Ecological Survey and consequently has been omitted from subsequent mammal and bird surveys. The 1997 Mammal Survey did cover the nearby sites Ranelagh Gardens and Hospital Burial Ground where wood mice, house mice, grey squirrel and foxes were reported. It is not expected that this site harbours any additional important mammal or bird species.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Ecological Survey 2002.

5.5 Sites of Borough Grade II Importance

1. Hammersmith and City Line (BII 2) (RE-NAMED & EXPANDED, Originally Metropolitan Line)

Grid Reference = TQ 245 815

Area (within Royal Borough of Kensington and Chelsea) = 2.05 ha

2002 Survey Reference; 12331/01, 12332/01, 02, 12051/04

Planning Status; Site of Nature Conservation Importance.

Major Habitats; Roughland, non-native broadleaved woodland, semi-improved neutral grassland, ruderal/ephemeral, amenity grassland, bare artificial habitat.

Justification for Designation; Some dense and relatively undisturbed vegetation providing a feeding and nesting sites form common birds. The site is one of a few remaining areas in the Borough where ruderal/ephemeral species can thrive and is a valuable east-west wildlife corridor.

Description; This railside site is situated between Westbourne Park and Ladbroke Grove Stations and comprises roughland and areas of sycamore dominated woodland with occasional birch and elder. Nearer the rail lines there is a thin strip of ruderal vegetation with much michaelmas daisy (*Aster sp*), Canadian fleabane (*Conyza canadensis*), ragwort sp (*Senecio sp*), mugwort, fat hen (*Chenopodium album*), common toadflax (*Linaria vulgaris*), evening primrose (*Oenothera biennis*) etc. There are also patches of false oat dominated grassland. Bramble scrub containing occasional berrying firethorn (*Pyracantha sp*) and elder and smothered in Russian vine (*Fallopia baldschuanica*) occurs near Ladbroke Grove Station and is a foraging area for common birds.

The fauna of the site is presently un-recorded but one would expect it to provide some refuge for foxes and a number of bird species. Much of the track runs above ground level which may limit access for some species but it is still likely to function as a wildlife corridor in some respects.

An area of British Rail Western Region Land near Westbourne Park station which remains undeveloped has been added to this site and comprises a small patch of amenity grassland with thin buddleia scrub.

Data Sources; Borough Ecological Survey 1993, Borough Ecological Survey 2002.

2. Carmelite Monastery (BII 3)

Grid Reference = TQ 238 817

Area = 2.05 ha

2002 Survey Reference; 12119/01

Planning Status; Site of Nature Conservation Importance.

Major Habitats; Amenity grassland, planted shrubbery, scattered trees, orchard, allotments, standing water, ruderal/ephemeral.

Justification for Designation; The site includes habitats rare in Kensington and Chelsea, particularly allotments and an orchard. The site is relatively undisturbed and unchanged over time producing a mature garden of value to a number of plant and animal species.

Description; Private walled monastery gardens, the original seven metre high walls having been erected in mid 19th century. The grounds comprise of amenity lawns divided by gravel paths and planted shrubberies with many fine mature trees. There are in addition an old orchard and blocks of allotment gardens, the latter containing the London notable dark mullein and a number of formerly planted, self established species such as soapwort (*Saponaria officinalis*), marigold (*Calendula officinalis*). The presence of butchers broom (*Ruscus aculeatus*) provides a historical link with vernacular plant uses as it was originally planted here to supply berries for use as hatpin ends. A recently constructed pond with a natural profile has been planted with marsh marigold (*Caltha palustris*), white water lily, hard rush, yellow iris, purple loosestrife and yellow water lily (*Nuphar lutea*).

Foxes and several bird species including greater spotted woodpecker, green woodpecker and kestrel were reported and bats have also been observed. The low intensity management the recently constructed pond may be expected to attract amphibians. Fuller amphibian and bat surveys are recommended to more fully determine the wildlife value of this site.

Data Sources; Borough Ecological Survey 1993, Borough Ecological Survey 2002.

3. Ladbroke Grove Garden Squares Complex (BII 4)

Grid Reference = TQ 246 807

Area = 10.255 ha (excluding intervening roads and buildings)

2002 Survey Reference; 12153/01-12168/01, 12297/01

Planning Status; Conservation Area, Site of Archaeological Importance, Site of Nature Conservation Importance.

Major Habitats; Planted shrubbery, amenity grassland, scattered trees.

Justification for Designation; A large area of relatively undisturbed open space which is particularly important for mammals.

Description; This site consists of 16 garden squares, all in private communal ownership with no public access. They are considered as one site due to their close proximity that allows movement of animals between them.

Most of the squares comprise amenity lawns surrounded by densely planted shrubberies. There are also smaller areas of scattered trees, mainly non-native hedging, flower beds and gravel path surfacing. The mature trees, some dating back to the original mid 19th century layout are an important resource for wildlife as well as an asset to the surrounding built environment. London plane and common lime dominate but there is a wide variety of planted ornamental species including birch, ash, black mulberry, false acacia, honey locust, crab apple (*Malus sylvestris*), dawn redwood (*Metasequoia glyptostroboides*), Caucasian wingnut (*Pterocarya fraxinifolia*), pedunculate oak, Turkey oak and Norway maple (*Acer platanoides*). The larger squares are quite rich in plant species as they included secluded, less intensively managed corners.

Fungi were reported from a number of the gardens, particularly Stanley Gardens South where a dying ash was providing an excellent habitat for a number of different species.

Mammal surveys indicate that the Gardens are a particularly important corridor for foxes. Grey squirrels were frequently seen. Common garden birds were frequent, seven species recorded during the survey and some of the flowering plants provided valuable nectar for invertebrates such as red admiral and small white.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

4. Moravian Burial Ground (BII 5)

Grid Reference = TQ 267 776

Area = 0.4 ha

2002 Survey Reference; 12252/01

Planning Status; Conservation Area, Site of Nature Conservation Importance.

Major Habitats; Acid grassland, scattered trees, planted shrubbery, non-native hedge

Justification for Designation; The site includes an area of moderately diverse acid grassland and supports a large population of the London notable grey sedge

Description; This small square includes regularly mown acid grassland dominated by red fescue with clumps of mouse eared hawkweed, occasional heath bedstraw (*Galium saxatile*) and frequent sheep's sorrel. The site boundaries are marked by a privet hedge with rows of mature London plane trees to the south, west and east beneath which there is tall herb and abundant grey sedge. The site is bounded by an old wall supporting much pelitory of the wall, ivy leaved toadflax (*Cymbalaria muralis*), male and harts tongue fern.

The sheltered nature of the site is likely to make it attractive to common birds and butterflies although no official surveys have been reported.

Data Sources; Borough Ecological Survey 1993, Borough Ecological Survey 2002.

5. Royal Hospital Old Burial Ground (BII 6) 12295/04

Grid Reference = TQ 280 782

Area = 0.46

2002 Survey Reference; 12295/04

Planning Status; Conservation Area, Area of Metropolitan Importance, Site of Nature Conservation Importance.

Major Habitats; Semi-improved neutral grassland, acid grassland, vegetated walls, tombstones etc, scattered trees.

Justification for Designation; This site includes old grassland and vegetated tombstones with three London notable species.

Description; The site comprises an old, disused graveyard. Semi-improved neutral grassland is dominated by creeping bent, perennial rye grass, rough meadow grass, cock's-foot and Yorkshire fog and includes common herbs such as yarrow (*Achillea millefolium*), creeping cinquefoil and creeping buttercup (*Ranunculus repens*). Areas of more acid grassland contain typical herbs such as autumn hawkbit (*Leontodon autumnalis*), common cat's ear (*Hypochaeris radicata*), mouse eared hawkweed and occasional red fescue. The London notable grey sedge is abundant around the northern edges of the site. Four fern species found on the tombstones, male fern, harts tongue fern, maidenhair spleenwort and black spleenwort – the last two being London notables. There are some good specimen trees including purple beech and Indian bean tree (*Catalpa bignonioides*).

Mammal surveys of the site indicate that foxes use the area for feeding. Shrew species and hedgehogs were reported up to 1995 but in 1997 only wood and house mice were found. Grey squirrels were abundant.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

6. Ranelagh Gardens (BII 7)

Grid Reference = TQ 283 780

Area = 5.3 ha

2002 Survey Reference; 12295/01

Planning Status; Conservation Area, Area of Metropolitan Importance, Site of Nature Conservation Importance.

Major habitats; Amenity grassland, non-native broadleaved woodland, planted shrubbery.

Justification for designation; A large area of mature habitat adjacent to a major wildlife corridor. The site includes areas of woodland, a rare habitat in inner London and two London notable plant species - deadly nightshade and perfoliate alexanders (probably colonised from the nearby Chelsea Physic Garden).

Description; A large semi-formal park within the grounds of Chelsea Hospital. The site has been profiled into gently sloping embankments and hollows with blocks of planted trees and shrubbery. Where the trees form a continuous canopy they have been classified as non-native broadleaved woodland comprising a wide variety of tree species including London plane, beech, hornbeam (*Carpinus betulus*), sweet chestnut (*Castanea sativa*), birch, false acacia, common lime (*Tilia x vulgaris*), and weeping willow (*Salix x sepulcralis*). Blocks of amenity shrubbery, particularly in more secluded areas provide valuable nesting and foraging areas for common birds. Eight species were noted during the current survey, while green and greater spotted woodpeckers were reported. A full bird survey is likely to record more species. The site also includes infrequently mown grassy slopes dominated by cock's-foot and Yorkshire fog that may support common butterflies such as speckled wood.

As for the Chelsea Hospital Old Burial Ground, shrew species and hedgehogs were reported up to 1995 but during 1997 mammal survey, only wood mice, house mice and abundant grey squirrels were found. The site contains the densest concentration of fox earths in the Borough due to the suitability of the terrain and availability of food. The fox survey also reported possible signs of Muntjac deer which would be a very surprising find if corroborated, given the central location of the site and the lack of mammalian wildlife corridors leading to it.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

7. Natural History Museum Gardens BII 9 (UPGRADED FROM LOCAL – previously L 4)

Grid Reference = TQ 266 790

Area = 1.71 ha

2002 Survey Reference; 12284/02, 03

Planning Status; Conservation Area, Area of Metropolitan Importance, Site of Nature Conservation Importance.

Major habitats; Planted shrubbery, amenity grassland, scattered trees, basic grassland, semi-improved neutral grassland, heathland, standing water, native hedge, scrub.

Justification for designation; The wildlife garden includes a number of created habitats that are a valuable awareness-raising tool seen by for visitors from all over the world. A nationally notable species of clearwing moth and a large population of a leaf-mining moth are present. The garden has developed significantly since 1993 and its designation has therefore been upgraded.

Description; The gardens surrounding the front sections of the Natural History Museum are split into two sections. That to the east is more formal and used for public displays and recreation while to the west, a wildlife garden has been created. The wildlife garden contains an amazing variety of habitats given its size and location and acts like an outdoor extension to the Museum. It comprises nine different habitats; urban, chalk grassland, ponds, meadows, oak woodland, acid, hedgerow, reedbed and wet meadow/fen. The range of habitats and the great variety of planted native species is likely to attract a good range of invertebrates and support breeding and foraging birds. Mammal surveys reported the presence of low numbers of wood and house mice, grey squirrels and foxes.

The ponds are particularly important for invertebrates, bird and mammal populations in this part of the Borough which is otherwise densely urbanised. The site appears very suitable for amphibians and if they are not already present introduction could be considered.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

8. Meanwhile Gardens (BII 10) (UPGRADED FROM LOCAL – previously L 6)

Grid Reference = TQ 246 820

Area = 2.46 ha

2002 Survey Reference; 12300/03-06

Planning Status; Site of Nature Conservation Importance.

Major habitats; Amenity grassland, planted shrubbery, standing water, wet marginal vegetation, native broad-leaved woodland, scrub, semi-improved neutral grassland.

Justification for designation; A maturing wildlife garden forming a valuable ecological refuge and providing important opportunities for contact with nature in a particularly dense urban area. The varied habitats including open water and wet marginal vegetation habitats, both uncommon in the Borough, add value to the Grand Union Canal SMI and green corridor.

Description;

The majority of the site comprises a maturing wildlife garden with a wide range of habitats including native woodland, scrub, semi-improved neutral grassland and wildlife ponds. The larger pond towards the centre of the site supports diverse wet marginal vegetation including trifid bur-marigold, water plantain, water dock, water mint, water forget me knot, yellow iris, brooklime (*Veronica beccabunga*), arrowhead (*Sagittaria sagittifolia*) and various ornamental reed species. School parties use the site and pond dippers have caught toads and newts in the past and an amphibian survey of the site is recommended. The intimate mix of habitats and diverse planting provides ideal breeding and foraging for a range of common birds and invertebrates and foxes that visit from nearby gardens.

The site is used as a training facility for horticultural students and includes a skateboard park and children's nursery, strengthening links between the community and the natural environment.

The eastern end of the site comprises amenity grassland and scattered trees

Data Sources; Borough Ecological Survey 1994 Update, Borough Ecological Survey 2002.

9. Little Wormwood Scrubs Park BII 11 (UPGRADED FROM LOCAL - previously L 5)

Grid Reference = TQ 229 819

Area (within Royal Borough of Kensington and Chelsea) = 8.9 ha

2002 Survey Reference; 12126/02-05

Planning Status; Site of Nature Conservation Importance.

Major habitats; Amenity grassland, semi-improved neutral grassland, scattered trees, scrub, tall herb.

Justification for designation; The site includes quite extensive areas of semi-improved neutral grassland and scrub, the latter uncommon in the local context. It has additional value as one of a group of nearby open spaces that together form an important part of the Boroughs wildlife habitat.

Description; The current survey covered the whole the Park though the eastern margin only lies within Royal Borough of Kensington and Chelsea and the habitat here comprises amenity grassland. However, the adjacent habitats in Hammersmith and Fulham form an important part of the wildlife resource available to the residents of North Kensington.

A large area of unmown semi-improved neutral grassland occurs to the north of the park and includes a good range of grasses including common bent, red fescue, smaller cats tail, cock's foot, Yorkshire fog, meadow barley, false oat and perennial rye grass. Herbs include yarrow, greater stitchwort (*Stellaria holostea*), black knapweed and stone parsley. An amazing number of field grasshoppers were noted during the survey along with frequent, relatively large ant nests – possibly yellow meadow ants which were recorded at Scrubs Wood prior to its development. Meadow brown and small/Essex skipper were also recorded. Areas of young bramble and hawthorn scrub occur within the grassland and currently add to its ecological value by providing a habitat mosaic suitable for wheatears and whinchats, (reported from neighbouring Wormwood Scrubs Park), though further colonisation could become detrimental. Two kestrels were seen hovering above the site suggesting the presence of small mammals associated with the unmanaged grassland.

Much more extensive scrub including semi-mature trees occurs along the western and northern margins. Predominant species comprise blackthorn, goat willow (*Salix caprea*), hawthorn (*Crataegus monogyna*), grey poplar, crack willow (*Salix fragilis*), white willow (*Salix alba*), sycamore and elder. Roughland with much bramble, cock's foot and Yorkshire fog occurs along the northern boundary with the railway line. A stand of the London notable sea couch occurred here, probably introduced with imported substrate.

The Borough Bat Survey found one pipistrelle when it surveyed the part of the park currently within Kensington and Chelsea though it is expected that the count entire

park would be higher. A fuller mammal and bird survey is highly recommended for this site.

Data Sources; Borough Ecological Survey 1993, Nature Conservation in Hammersmith and Fulham – Ecology Handbook 25 (1993), Borough Bat Survey 1994, Borough Ecological Survey 2002.

5.6 Sites of Local Importance

1. Emslie Horniman Pleasance (L1)

Grid Reference = TQ 243 822

Area = 1.37 ha

2002 Survey Reference; 12107/01

Planning Status; Site of Nature Conservation Importance.

Major habitats; Amenity grassland, scattered trees, planted shrubbery, bare artificial habitat, standing water.

Justification for designation; A relatively large open space in densely built up area that provides a partial link between the Grand Union Canal and Western Mainline Railway green corridors. There are further opportunities to enhance the site for nature conservation.

Description; A public park remodelled three years ago and now comprising a children's play area, large central area of amenity grassland, planted shrubbery, a quiet garden with herbs, seating and sculpture, and a rectangular water garden. The water garden included a concrete lined pond planted white water lily and attracting brown hawker and abundant water boatmen

The amenity grassland is dominated by perennial rye-grass and contains many bare and trampled patches plus a high proportion of red fescue but few herbs except common cats ear and autumn hawkbit suggesting underlying acid conditions. (although the site has been too degraded to qualify as acid grassland). Fox and cubs (*Pilosella aurantiaca*), an unusual garden escape was growing in a shrubby border.

The Fox survey was carried out during site refurbishment and found no signs of fox activity. It is expected that as the site matures, its value to foxes will increase. During the Borough Bat Survey in 1994, a solitary pipistrelle bat was recorded flying over the site and the accompanying report suggested some habitat creation and improvement to encourage bats.

Data Sources; Borough Ecological Survey 1993, Borough Bat Survey 1994, Borough Fox Survey 1998, Borough Ecological Survey 2002.

2. Westway Wildlife Garden (L2)

Grid Reference = TQ 235 811

Area = 0.17 ha

2002 Survey Reference; 12116/02

Planning Status; Site of Nature Conservation Importance.

Major habitats; ruderal/ephemeral, semi-improved neutral grassland, native broad leaved woodland, scattered trees, scrub, native hedge, standing water and wet marginal vegetation.

Justification for designation; Wildlife garden used for education and local recreation which demonstrates a number of different habitat types and provides a valuable refuge for urban wildlife. The site lies within an area of deficiency.

Description; A long narrow wildlife garden created on land below the Westway flyover contains a good range of well-established habitats. The ruderal habitat comprised an area sown with a cornfield/agricultural weed mixture and included corn cockle (*Agrostemma githago*), corn marigold (*Chrysanthemum segetum*), meadow barley, common poppy (*Papaver rhoeas*), bristly ox-tongue, annual meadow grass and scarlet pimpernel (*Anagallis arvensis*). A small pond with a band of wet marginal vegetation included yellow iris, purple loosestrife, meadowsweet, watercress, white water lily, bogbean, brooklime and galingale and pond appears suitable for amphibians. There are in addition areas of meadow, scrub and scattered trees that had merged to form woodland.

Overall that site provides habitat for invertebrates with some denser, scrubby areas suitable for mammals and common birds. A fox was seen during the field survey although the 1997 Mammal Survey recorded no mammal species present.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

3. Avondale Wildlife Garden (L3)

Grid Reference = TQ 240 806

Area = 0.03 ha

2002 Survey Reference; 12137/04

Planning Status; Site of Nature Conservation Importance.

Major habitats; Semi-improved neutral grassland, scrub, bare soil and rock, bare artificial habitat.

Justification for designation; A neglected wildlife garden retaining a diverse planted native flora that could feasibly be restored.

Description; The site boundaries comprise field maple (*Acer campestre*), dog rose, blackthorn (originally planted as a hedge) and buddleia scrub with thistles and nettles and a line of planted crack willows to the south. There is a sown meadow area in centre of the site with Timothy (*Phleum pratense*), Yorkshire fog, red fescue and perennial rye grass with abundant meadow cranesbill, frequent birds foot trefoil, lady's bedstraw, black knapweed and occasional field scabious (*Knautia arvensis*). The 1995 Amphibian and Reptile Survey found four male common frogs and 49 clumps of frogs spawn, apparently naturally colonised. Unfortunately this habitat has been lost and the pond dried up. The Fox Survey suggested that the site may be good for foraging but too disturbed by frequent dog walkers for earth building. The 1997 Mammal Survey recorded the presence of grey squirrels only.

Data Sources; Borough Ecological Survey 1993, Mammal Borough Survey (Excluding Bats) 1997, Borough Fox Survey 1998, Borough Ecological Survey 2002.

4. Holland Park School (Proposed New Site L 07)

Grid Reference = TQ 249 799

Area = 2.55 ha

2002 Survey Reference; 12311/01

Planning Status; Conservation Area.

Major habitats; Scattered trees, planted shrubbery, bare artificial habitat, acid grassland, semi-improved neutral grassland, amenity grassland.

Justification for designation; The site comprises dense and mature planting adjacent to Holland Park and contains some locally uncommon plants including meadow buttercup, scarlet pimpernel and the London notable field madder.

Description; Mature school grounds on a site immediately to the east of Holland Park with numerous scattered trees comprising common lime, horse chestnut, ash, sweet chestnut and London plane, and some dense amenity shrubbery. A small meadow area to the east of the site contains meadow buttercup. The site provides valuable additional bird habitat to the adjacent Holland Park, with green woodpecker noted during the current survey. It is expected that mammal populations will also be influenced by those of Holland Park.

Data Sources; Borough Ecological Survey 2002.

5. Sunbeam Gardens (Proposed New Site L 08)

Grid Reference = TQ 243 840

Area = 0.41

2002 Survey Reference; 12317/01

Planning designation; Major Site with Development Opportunity.

Major habitats; Acid grassland, amenity grassland, planted shrubbery

Justification for designation; Good acid grassland herbs occur in sword including the London notable sand spurry. Small site but some potential for habitat re-creation and interpretation in built up area.

Description; A recently created public square in a new housing estate. Comprises grassland separated by paths and planted shrubbery and includes a children's play area. Eastern half of the grassland notably acid in character, dominated by red fescue with mouse eared hawkweed, heath bedstraw (identification uncertain as very closely mown), autumn hawkbit and the London notable sand spurry. Also wild carrot (*Daucus carota*), birds foot trefoil and ox-eye daisy just surviving the tight mowing regime.

Site very young and quite small but it provides an ideal opportunity to preserve some of the acid grassland and associated herbs. Interpretation will help understanding of wildlife issues in a densely built up area.

Data Sources; Borough Ecological Survey 2002.

6. Kensington Memorial Gardens (Proposed New Site L 09)

Grid Reference = TQ 236 817

Area = 2.55

2002 Survey Reference; 12118/02-03

Planning Status; Conservation Area.

Major habitats; Amenity grassland, planted shrubbery, scattered trees, native hedge, semi-improved neutral grassland. Close to an area of deficiency.

Justification for designation; An extensive area of open space in a built up area including good native hedges and with potential for habitat re-creation.

Description; Public park towards the north of the Borough with formal planted shrubbery, tennis courts, children's play area and a large expanse of amenity grassland. A small patch of more mixed un-mown grass behind tennis courts contains cock's-foot, timothy, Yorkshire fog, perennial rye-grass, false oat, wall barley (*Hordeum murinum*) and red fescue with abundant yarrow and ribwort plantain (*Plantago lanceolata*) in an undisturbed sunny spot.

The hedges surrounding the main park on its northern and western sides are planted with native species including field maple, hawthorn and blackthorn.

Habitat creation, particularly wild flower and scrub planting could be considered on the amenity grassland towards the site boundaries.

Data Sources; Borough Ecological Survey 1993, Borough Ecological Survey 2002.

5.7 Green Corridors

5.7.1 The main Green Corridors in Kensington and Chelsea are marked on map 2 and detailed below.

West London and District Line Railway

- Chelsea Creek
- Brompton Cemetery
- Little Wormwood Scrubs Park

Hammersmith and City Railway

- Maxilla Walk
- Portobello Green
- North Kensington Leisure Centre Grounds

Paddington Main Line – North Pole Junction

- Little Wormwood Scrubs Park
- Grand Union Canal
- Kensal Green Cemetery
- Kensal Green Gasworks

The Thames

- Chelsea Hospital Grounds
- Chelsea Physic Gardens
- Chelsea Harbour (LBHF)
- Chelsea Creek
- Cremorne Gardens

Grand Union Canal

- Meanwhile Gardens
- Kensal Green Cemetery
- Horniman Pleasance

5.8 Cross Borough Wildlife Habitats

5.8.1 Some wildlife habitats are important on a strategic level beyond borough boundaries. All Sites of Metropolitan Importance are of strategic importance for London and as such, Sites of Metropolitan Importance do frequently cross borough boundaries (Hyde Park and Kensington Gardens, the Thames and the Grand Union Canal for example). Similarly, wildlife corridors, especially in such a geographically small area as is covered by Royal Borough of Kensington and Chelsea may extend beyond the borough's boundaries.

5.8.2 Sites in the neighbouring Borough of Hammersmith and Fulham are particularly closely linked to those of Royal Borough of Kensington and Chelsea and many of the sites actually abut the Borough boundary. These include the Grand Union Canal, the Thames and Chelsea Creek, West London and District lines, Kensal Green Cemetery and Little Wormwood Scrubs Park and Wormwood Scrubs Park. Westminster City Council,

neighbouring Royal Borough of Kensington and Chelsea to the east shares the Grand Union Canal, the Thames and Hyde Park and Kensington Gardens. Wandsworth to the south shares the Thames and contains the large open space of Battersea Park which lies directly opposite Chelsea Hospital. There is a small boundary with Brent to the north where Queens Park extends the area of natural habitat around Kensal Green Cemetery.

- 5.8.3 The condition of neighbouring Borough's wildlife sites can influence the quality of sites within Royal Borough of Kensington and Chelsea. All sites can act as a reservoir for wildlife, and more mobile wildlife can use these wider sites to extend their available habitat.

5.9 Areas of Deficiency

- 5.9.1 There are currently two Areas of Deficiency in the Borough, one centred on Chelsea Square, the other centred on the North Kensington Leisure Centre, as shown on Map 3.
- 5.9.2 The proposed designation of the Natural History Museum Wildlife Garden as a Site of Borough Importance Grade II will largely rectify the Chelsea Square Area of Deficiency and the proposed designation of Little Wormwood Scrubs Park as a Site of Borough Importance Grade II will greatly reduce the other.
- 5.9.3 There will however remain a sizable Area of Deficiency which will be centred on the Latimer Road area. This area is bounded by the West Cross Route to the west and the Westway to the north. The Ladbroke Grove Garden Square Complex Site of Borough Grade II Importance is close by but there is no public access. Additionally, there are three proposed Sites of Local Importance nearby (Avondale and Westway Wildlife Gardens, Kensington Memorial Gardens). Good quality habitat re-creation at Kensington Memorial Gardens has the potential to introduce new areas of wildlife habitat which may warrant that this site be designated Borough Grade II status in the future. Such a future designation, if warranted, would rectify this area of deficiency.

6. Change Analysis

- 6.1 Change analysis was undertaken to determine the major habitat changes which have occurred between the 1993 and 2002 Borough Ecological Surveys. Direct comparison between the two datasets and accompanying maps was backed up by studying aerial photographs. The change was recorded in the terms of change between different habitats, and so monitors which habitats were lost in order for the new habitat type to come into being. The methods employed followed those of the Greater London Authority as detailed in Appendix 6.
- 6.2 Kensington and Chelsea has a long established residential pattern with no open spaces remaining for new developments. Accordingly, the main changes which were recorded in the Borough between 1993 and 2002 fall into two categories. Firstly, there is redevelopment which leads to a loss of open space summarised in table 3 and secondly there is the ongoing evolution of open spaces and changes which occur due to new planting, natural growth and management change (table 4).

Table 3; Redevelopment leading to the loss of an SNCI

Site	Habitat Lost
Kensal Green Gas Works (12056/01)	Semi-improved neutral grassland Roughland Scrub
Kings College Chelsea (12144/01)	Scrub Scattered Trees Vegetated Walls, tombstones etc Amenity Grassland Tall Herb
British Rail Western Region Land (12051/03-04)	Roughland Ruderal or ephemeral

Table 4; Changes due to site evolution

Site	Habitat Lost	Habitat Gained	Comments
Meanwhile Gardens (12300/05)	Roughland Semi-improved neutral grassland Tall herb	Native broadleaved woodland Non native woodland Scrub Allotment	Maturity and development of the wildlife gardens
Carmelite Monastery (12119/01)	Roughland	Standing water Wet marginal vegetation	Creation of a pond
Avondale Park Wildlife Garden (12137/04)	Ruderal or ephemeral Tall herb Native hedge Standing water Wet marginal vegetation	Semi-improved neutral grassland Scrub Bare soil and rock	Apparent neglect of site
Natural History Museum (12284/03)	Amenity grassland Planted shrubbery	Standing water Wet marginal vegetation Reedswamp Heathland Semi-improved Neutral grassland Basic grassland Ruderal or ephemeral Native broadleaved woodland Scattered trees Scrub Native hedge	Development of wildlife garden
Horniman Pleasance (12107/01)	Amenity grassland	Planted shrubbery	Planting
Westway Wildlife Garden (12116/01)	Tall herb Semi-improved neutral grassland Non-native hedge	Neutral grassland (herb rich) Native broadleaved woodland Native hedge Scrub Wet marginal vegetation	Maturity and further planting up of wildlife garden
Kensington Memorial Gardens (12118/01)	Amenity grassland	Scattered trees Planted shrubbery Non-native hedge Native hedge	Planting and maturity

- 6.3 As can be seen from Table 3, there have been some significant habitat losses in the Borough since the 1993 survey, particularly with the loss of a Borough Grade I site and two Borough Grade II sites. In a Borough with an already low level of open space and wildlife habitat, this is of concern. The losses from these three relatively large sites represent a significant loss of semi-improved neutral grassland, scrub and roughland.
- 6.4 While redevelopment is expected in a Borough that is already as densely developed as Royal Borough of Kensington and Chelsea and which occupies such an important location close to central London and the West End, the loss of such important sites with no apparent replacement is worrying.

- 6.5 There have been some gains in habitat to offset the major losses, particularly with the planting of a wildlife garden at the Natural History Museum and habitat maturity at Westway and Meanwhile Gardens Wildlife Gardens but, these have been small in scale and due to evolution on a previously designated site rather than new areas of open space and wildlife habitat being created.
- 6.6 The loss of habitat at Avondale Wildlife Garden shows the importance of appropriate management, the loss of the pond and its wet marginal vegetation having greatly reduced the wildlife value of the site and removed a potentially important amphibian breeding site (the Amphibian and Reptile Borough Survey 1995 found 4 adult male common frogs and 49 clumps of spawn). However, the site itself remains and it would be relatively easy to restore the pond and install more appropriate management could the necessary funding and local input be found.

7. Nature Conservation, Biodiversity and the Town Planning Process

7.1 Biodiversity

- 7.1.1 The UK, in honouring its commitment to the Biodiversity Convention which it signed in 1992 at the United Nations Conference on Environment and Development (the 'Earth Summit') has produced a Biodiversity Action Plan.
- 7.1.2 This plan comprises nearly 400 species action plans and over 45 habitat action plans. The successful implementation of this national strategy relies on translation of policy and strategy down to local action. This is chiefly being facilitated by the production of Regional Biodiversity Strategies by regional government and Local Biodiversity Action Plans (LBAP) by local authorities.
- 7.1.3 The Regional Strategies set out the regional context in a strategic, non site-specific manner. Local Biodiversity Action Plans focus on national priority species and habitats which are found in the local authorities administrative area (or historically found) as well as locally scarce species, as determined by each local authority.
- 7.1.4 The London Biodiversity Action Plan produced by the London Biodiversity Partnership puts forward a new agenda for biodiversity in London. Part one, The Audit described the London-wide status of fifteen habitats and a wide range of dependant species, chosen to reflect national priorities. Part two, The Action sets out targets for the conservation of key habitats and species that have again been chosen to reflect national conservation priorities as well as elements of London's unique urban ecology. While providing a framework, delivery of the Plan depends on local action and as such the formation of partnerships at Borough level to produce Local Biodiversity Action Plans is essential to the success of the London Plan.
- 7.1.5 Royal Borough of Kensington and Chelsea is in the process of developing its own Local Biodiversity Action Plan and is currently consulting widely on its proposed contents. Consultation ends 15 December 2002 with the final Local Biodiversity Action Plan to be issued in early 2003. There are three habitats and five species proposed for inclusion in the final LBAP;

Habitats;

Woodland and Hedgerows
Grassland
Water

Species

Finches and House Sparrow
Pipistrelle Bat
Water Vole
Common Frog
Common Ash

- 7.1.6 It is important to stress that biodiversity encompasses all wildlife and that all sites in the Borough contribute to overall biodiversity. The data gathered as part of the Ecological Survey process has identified the location and quality of all the wildlife habitats in the Borough and this information will be invaluable to help target the best sites for protection and provide baseline information for

monitoring. The Ecological Survey also provides the necessary information to select or further refine the list of habitats and species for inclusion in the LBAP.

- 7.1.7 The 2002 LBAP habitat types are currently rather broad. The habitat type map data will be particularly helpful to refine, in consultation with the London Biodiversity Action Plan, the types of habitat which occur and those which are most under threat. The species identified could be usefully expanded to include some indicator species which occur in the refined habitats (for example, sheep's sorrel, an acid grassland indicator could be chosen as a priority species).

7.2 Town Planning

- 7.2.1 There are two main areas of town planning in which the Ecological Survey information may be of use. Firstly there is Planning Policy and secondly, Development Control.

7.3 Planning Policy

- 7.3.1 The Unitary Development Plan sets out the Boroughs development strategy in the medium/long term. Policies contained within the Unitary Development Plan are used when judging the suitability of a planning application for new development or a change of use. Sites of Nature Conservation Importance are non-statutory designations and the level of protection that they confer depends on the weight that the Council attaches to their designation. Additionally, there is no legal mechanism to prevent a landowner from undertaking potentially harmful management. It is essential then that the SNCI's are included in the Unitary Development Plan with strong policy wording in order to confer any realistic level of protection, including a policy encouraging the formulation of wildlife sensitive management agreements with landowners.
- 7.3.2 The 1994 Royal Borough of Kensington and Chelsea Unitary Development Plan 'Conservation and Development' chapter includes a small section on the natural environment including four policies which relate specifically to Sites of Importance for Nature Conservation and one relating to the allocation of new pockets of land for nature conservation and the planting of native species in development landscaping;

Policy LR24 TO IDENTIFY AND PROTECT SITES OF NATURE CONSERVATION IMPORTANCE.

Policy LR25 TO ADOPT AND ENCOURAGE THE APPROPRIATE NATURE CONSERVATION MANAGEMENT OF SITES OF NATURE CONSERVATION IMPORTANCE.

Policy LR26 TO CONSIDER THE EFFECT ON NATURE CONSERVATION IN DEALING WITH ANY PROPOSALS FOR DEVELOPMENT.

Policy LR27 TO ENCOURAGE THE ALLOCATION OF POCKETS OF LAND FOR NATURE CONSERVATION AND THE PLANTING OF NATIVE SPECIES IN LANDSCAPING ON APPROPRIATE DEVELOPMENT SITES.

The UDP also includes a map on which all the current Sites of Nature Conservation Importance highlighted and these are also included on the overall Proposals Map. A number of other sections throughout the Plan make further important linkages with nature conservation, including sections on open space and built environment conservation.

- 7.3.4 The Sites of Nature Conservation Importance map is extremely helpful to highlight the individual sites and the need for management agreements with landowners is clearly recognised in Policy LR25. Additional linkages between wildlife, open space and built environment conservation are welcome.
- 7.3.5 The policy wording and accompanying text that refers to SNCI's would benefit from being stronger and more direct in order to more fully display the council's commitment to the natural environment. Policy LR24 should include the word *enhance* which reflects the fact few that new sites are likely to become available and that one must maximise the potential of what is already present.
- 7.3.6 The text accompanying LR24 states that the Council will *consider the contribution of the site to the ecology of the area when considering planning applications*. This wording is weak and the text should state that *harmful development on SNCI's will be resisted*.
- 7.3.7 Policy LR26 forms the basis of a good biodiversity policy. It recognises the contribution that all open sites can make towards safeguarding biodiversity and that all planning applications should be judged for their effect on nature conservation.
- 7.3.8 Going beyond the linkages which the UDP has already made between open space provision, recreation and the natural environment, there needs to be a recognition that Sites of Nature Conservation Interest benefit residential amenity as well as wildlife.

7.4 Development Control

- 7.4.1 Development Control judges applications for development and to a large extent relies on clear policies in the UDP to validate those judgements. The Ecological Survey will add robustness to the adopted SNCI designations (as they will be based on 2002 survey information and therefore more up to date). The accompanying survey forms and species lists will be particularly helpful when assessing specific environmental impacts of future developments in the Borough.
- 7.4.2 The GIS data showing all the SNCI's will be useful in the initial scoping of planning applications to determine their potential ecological impact. Planning applications that are highlighted in this way could then be flagged for

consultation with the Ecology Officer. The full site/parcel outline information could also be used to alert officers to the proximity of any surveyed open space to a potential development site. This would help assessment of the proposal's impact on neighbouring areas and biodiversity as well as help target any potential funds accrued for off-site nature conservation enhancement.

8. Storage and Dissemination of the 2002 Borough Ecological Survey

8.1 Introduction

- 8.1.1 All of the data produced is supplied in electronic and paper format. It is expected that the electronic format will be the one used day to day with paper copies kept as a back-up and for reference by staff or visitors who do not have access to a PC with the appropriate software.

The following items make up the full survey report;

- i full report and non technical summary.
- ii 1:2,000 scale hand-drawn habitat maps covering all sites surveyed.
- iii 1:10,000 scale hand-drawn site and parcel map.
- iv 1:10,000 scale map identifying all the SNCI's and areas of deficiency.
- v Box file of original survey and species list sheets.
- vi CD-rom containing the report and non-technical summary in MS Word format and .jpg images for all the maps included within the report.
- vii CD-rom containing all the original survey information in Recorder 2000 format.
- viii CD-rom containing all of the photographs taken during the site surveys, in .jpg format.
- IX CD-rom of all cartographic data as MapInfo tables.

8.2 Paper

- 8.2.1 All maps are supplied on A1 sheets that are sized for hanging in a standard plan-chest. The 1:2,000 scale habitat maps come in a complementary series and should be kept in order (i.e. the main maps should be kept with their acetate overlays). The raw data for the site surveys (consisting of a site/parcel sheet and corresponding species list where applicable) are presented in a box/lever arch file and 1 copy of the final report, appendices and non-technical summary are presented with spiral binding.

8.3 Electronic

- 8.3.1 The full report, appendices and non-technical summary is supplied in two formats; both in MS Word, one as plain text, the other incorporating maps.
- 8.3.2 The cartographic data is in standard MapInfo format and can be read by any PC with MapInfo software. Parcel and site details are saved as separate layers and these layers provide the boundaries and identification numbers for each location visited. It is best if these layers are 'switched on' when viewing the habitat data in order to see a boundary and identification number for each location.

- 8.3.3 For the digitised habitat maps, each habitat type is saved as a separate layer and so can be viewed separately. This allows an area estimation to be done for each habitat type found in the Borough (Appendix ???).
- 8.3.4 Photographs of each location visited were taken with a digital camera, the number taken depending on the relative interest of each location. The photographs are stored on a cd-rom and are labelled with their site/parcel number (followed by a letter to differentiate photographs when more than one was taken at a particular location).
- 8.3.5 All of the raw site/parcel and species list data has been entered onto a Recorder 2000 database. Update files for Recorder 2000 are supplied on a cd-rom along with instructions for assimilating the data with that already held by the Borough. Mandy Rudd of London Wildlife Trust's Biological Recording Project can provide technical assistance with Recorder 2000.
- 8.3.6 A particular advantage of the digital data is its accessibility. The data supplied can be uploaded to the Borough's server and so be made accessible to a wide range of council staff. The photographs could be shared with the planning, environment, press and PR departments for example and the GIS files could be made widely available, particularly the SNCI outline data. Recorder 2000 ideally lends itself to data sharing and indeed, its success as a habitat and species recording database depends on its being shared widely to facilitate information exchange.
- 8.3.7 Digital data shared over a network, including Recorder 2000 data, has the additional benefit of having controllable access. Sensitive data can be password protected or its access restricted only to those who really need it.

9 Raising Public Awareness and Consultation

9.1 Raising Public Awareness of the SNCI's

9.1.1 All open space is a precious resource in urban London although it can sometimes be undervalued. Raising public awareness of the Sites of Nature Conservation in the Borough which have been proposed in the current survey and the wildlife which can be found generally, can help to improve the quality of life of local residents. Awareness raising within the Borough should be tied to ongoing biodiversity initiatives in order to maximise the message that all wildlife is important.

9.1.2 The following list includes a number of suggested methods to raise awareness and understanding within the local community of the Sites of Nature Conservation Importance found within Royal Borough of Kensington and Chelsea.

- Production of a free leaflet detailing the location, access and main points of interest for all the accessible designated Sites of Nature Conservation Importance in Royal Borough of Kensington and Chelsea which can be widely distributed, sent out with information requests and made available at public libraries. This could include notes on access for the disabled and a section on access by public transport, walking and cycling where applicable. A series of walks could be devised which link up a number of nearby sites, including notes on the built history which may be found between such sites to add value
- Library displays timed to coincide with the launch of the above leaflet. Full use of the photographs taken during the survey could be made and material produced by local school children at the Holland Park Ecology Centre on the theme of local wildlife could also be used.
- Photographic competition for the best photographs taken by Royal Borough of Kensington and Chelsea residents at a Site of Nature Conservation Importance. Local sponsors could donate a small prize. Announcement of the competition followed by for example, an article in the local paper, will help to keep the Sites of Nature Conservation Importance in the public eye for a sustained period of time.
- Updated web site – expand ecology service section with details of each SNCI (links to and from open space and leisure sections).
- Include a section in Royal Borough of Kensington and Chelsea annual report/magazine to all households
- Generate local newspaper articles (see also photographic competition).
- Organise open days for sites not usually open to the public.

- Run outreach education classes targeted especially at the less privileged areas of the Borough via the Holland Park Ecology Service. These could include information about and visits to Sites of Nature Conservation Importance near to the targeted schools, a programme of events and activities and suggestions for independent work.

9.1.3 In addition to refining and expanding the proposals made in this report consultation provides a further means for involving a diverse range of local groups and individuals. A suggested list of the main consultees is given below.

- Greater London Authority
- English Nature
- English Heritage
- Environment Agency
- Port of London Authority
- London Natural History Society Recorders
- Garden Squares Committee
- Proposed Sites of Nature Conservation Importance Landowners
- Friends of Holland Park/Kensal Green Cemetery/Brompton Cemetery
- London Wildlife Trust

10. Conclusions

- 10.1 Royal Borough of Kensington and Chelsea has a diverse range of habitats and species especially when considering its location in the heart of London. The Borough is particularly fortunate to have sites such as the Thames and Grand Union Canal and the large open spaces of Kensal Green Cemetery, Holland Park and Kensington Gardens. One nationally scarce plant and 15 London notable species were found during the survey which highlights the relatively high quality of the natural environment. It must be remembered however that all of the open spaces contribute towards this habitat and species richness and all species add to the Boroughs biodiversity.
- 10.2 While the Borough has a number of very good large sites, it is weaker on its provision of smaller and local sites. Many of the open spaces, particularly in the south of the Borough and around Ladbroke Grove, are privately owned with access limited to residents and key holders. The majority of these are historic garden squares, often solely for residential amenity and visual value. The introduction of wildlife sensitive management would greatly enhance the wildlife potential of the Borough and help improve the quality of life for those who have access to the gardens.
- 10.3 Open spaces and the ability to interact with nature and wildlife greatly enhances quality of life – from direct health issues of breathing clean air and taking exercise outside to less tangible but equally valuable benefits such as stress relief and relaxation. It is also an invaluable asset for education and general recreation. Good provision of attractive and useable open spaces which benefit both wildlife and humans is intimately bound up with the enhancement and amenity of residential areas and character.
- 10.4 Since the last survey in 1993, the Borough has lost three Borough Sites of Importance for Nature Conservation. This is, as stated in section 4, a significant loss. While the Borough may have a number of good sites at present, what is lost cannot be realistically replaced and the council needs to strengthen its Unitary Development Plan policies and work closely with Sites of Nature Conservation Importance land owners to do all that they can to resist further losses.
- 10.5 The Borough is also fortunate in having a well used environmental education facility and Ecology Service in its own dedicated building. Initiatives such as those carried out by the Ecology Service, do much to improve the understanding of wildlife and help more people appreciate the value of the habitats and species found in Royal Borough of Kensington and Chelsea. This is especially important when working with children in less privileged parts of the Borough where there is little opportunity for contact with the natural world. Similarly the Natural History Museum Garden provides excellent opportunities for local children to learn about nature and links between the Museum and the Ecology Service could further enhance Borough-wide provision of environmental education.

References

- Archer J, Keech D Nature Conservation in Hammersmith and Fulham, LEU 1993
- Burton R The flora of the London Area, London Natural History Society 1983
- Chinery M Insects of Britain and Western Europe, Collins 1996
- Courtescuisse R Mushrooms of Britain and Europe, Collins/Wildlife Trusts 1999
- Greater London Authority Connecting with London's Nature – The Mayors biodiversity strategy, GLA 2002
- Haslam s, Sinker C, Wolsey P British water plants, FS Publications 1995
- Hubbard CE Grasses, Penguin 1964
- London Biodiversity Partnership The London biodiversity action plan I and II, 2001
- Marram P. Scarce Plants, JNCC 1994
- Mitchell A, Wilkinson J Trees – Collins Pocket Guide, Harper Collins 1989
- Ritter F (Eds) RHS plant guides - shrubs and climbers, Dorling and Kindersley 1996
- Rose F. Wild flower key, Frederick Warne 1981
- Stace C Field flora of the British Isles, CUP 1998

Borough Surveys and Plans

- Amphibian and Reptile Survey, London Amphibian and Reptile Group 1995
- Bat Survey and Conservation Plan, Herbert C 1995
- Bird Survey, Graham Gildens, Borough Bird Surveyor 2001
- Flora of Holland Park, Wiltshire E 1999
- Fox Survey, Wilson A 1998
- Habitat Survey, London Ecology Unit 1993
- Mammal survey (Excluding bats), Atkins W, Aybes C, Herbert C 1997
- Royal Borough of Kensington and Chelsea UDP 1995

Appendices

Appendix 1 – Full Greater London Authority Ecological Survey Methods

Appendix 2 – Greater London Authority Habitat Types Descriptions

Appendix 3 - Greater London Authority Habitat Type Areas Within the Royal Borough of Kensington and Chelsea

Appendix 4 – Borough Species List 2002

Appendix 5 – Greater London Authority Designation Criteria for Sites of Importance for Nature Conservation

Appendix 6 – Greater London Authority Change Analysis Methods

Appendix 7 – Full Change Analysis Results