MAYOR OF LONDON

Connecting with London's nature

The Mayor's Biodiversity Strategy

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foreword

by Ken Livingstone, Mayor of London

Londoners are fortunate to be living in one of the greenest of world cities. A long history of open space provision and protection has left us with many beautiful and internationally renowned parks, while the River Thames is now the cleanest metropolitan river in Europe, supporting over 100 different types of fish. London has over 100 community gardens, 14 city farms, about 80 kilometres of canals and over 50 nature reserves. These, along with hundreds of other green spaces, and countless suburban gardens, bring experience of the natural world to many Londoners.

Natural open spaces are home to many wild animals such as birds and butterflies, as these places offer food, shelter and places to breed. These open spaces also offer Londoners places to escape the worst of the noise and pollution associated with London's size, growing population, and level of economic activity. Londoners value this respite.

I believe we all have a responsibility to protect and conserve these areas and to pass them on to future generations of Londoners, enhanced, rather than harmed. This Strategy details my vision for achieving this. I will measure the success of my Strategy against two main targets: firstly, that there is no overall loss of wildlife habitats in London; and secondly, that more open spaces are created and made accessible, so that all Londoners are within walking distance of a quality natural space.

Many of London's valued natural places and species are already protected. Even here the essential things that wildlife needs to survive can decline through ignorance, neglect, or a shortage of resources. Other places are not fully protected. This Strategy aims to counter these problems, and work to ensure that our valued natural places are not eroded. This Strategy will be linked closely with the London Plan to help to provide this protection. I have recently made it clear that I will ensure that Rainham Marshes, one of London's most important wildlife sites, is safe from development.

It is important to me that all Londoners have the opportunity to connect with nature, but there are some parts of London where access to natural places is limited. This Strategy aims to improve wildlife habitat in these areas and establish access to places that are not yet accessible, so that all Londoners will be within walking distance of a quality natural place.

This Strategy is an important first step in establishing a Londonwide framework for maintaining London's diversity of wildlife, as part of an

integrated set of strategies to achieve sustainable economic growth and raise the quality of life for London's more than seven million residents. As a requirement of the Greater London Authority Act 1999, it is the first regional biodiversity strategy with a statutory basis. This gives London an excellent opportunity to set the future agenda for the rest of the country. I invite everyone with an interest in improving London to work together to take forward the policies it sets out.

Ken Livingstone

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Mayor of London





1 introduction

- 1.1 London is a thriving and populous city with a great variety of attractive green areas. London's environment has everything from extensive wild areas of woodland, heath, wetlands and marshes, to the more formal landscapes of the Royal Parks and city squares. All of these, together with innumerable small community gardens, public open spaces of every kind, and the enormous extent of private gardens, help to make London one of the most pleasant world cities to live in. These provide opportunities for recreation, relaxation and tranquillity throughout a vibrant capital city. They also support a remarkable diversity of wildlife, which adds to people's enjoyment of these areas. All Londoners therefore have a stake in the conservation of this rich diversity of nature and a responsibility to conserve it. This Strategy is for London and Londoners, not just for the Greater London Authority. The Mayor would like to see an increase in London's wildlife and in the places where people can enjoy it. The Strategy will not succeed without widespread support and participation.

- 1.2 Opinion polls and consultation undertaken by the Greater London Authority suggest that Londoners value London's green environment, and many want to see it improved and protected. Whilst only four out of ten Londoners agree that London is a Green City, the range of parks and open spaces is frequently mentioned as one of the two or three best things about living in London. Londoners give environmental issues a lower priority for improving London than they give to more prominent issues of crime and safety, housing, health, transport and education. Nevertheless, pollution and loss of green spaces in London are generally perceived to be problems that need addressing.
- 1.3 London's green areas are under significant pressure from both competing land uses and a shortage of resources to continue their upkeep. The continued growth of London's population and economy will increase the pressure on available land. There are few good statistics on recent trends in wildlife habitats in London, but the evidence suggests that the gains in some places have been more than offset by declines elsewhere. Doubtless some of those who wish to see improvements have taken part in a local campaign against these losses.
- 1.4 The word biodiversity first hit the headlines at the time of the Earth Summit at Rio de Janeiro in 1992, when over 150 countries adopted a Biodiversity Convention. ^[2] In this context biodiversity meant the whole variety of life on earth. The Convention required every country to produce strategies for the conservation of biodiversity. In the UK this has resulted in development of strategies and action plans at all levels from national to local, but London is unique in that the Mayor has a statutory duty to publish a Biodiversity Strategy. This is the first ever statutory biodiversity





- strategy at the regional level. National guidance and the GLA Act are not prescriptive in what the Strategy should contain. The Mayor therefore has an unprecedented opportunity to lead the way in producing and implementing such a strategy in partnership with others.
- 1.5 One of the key ways in which this partnership working will take place is through the London Biodiversity Partnership and London's Biodiversity Action Plans (see 2.52). Londonwide and borough biodiversity partnerships have been set up in response to the Biodiversity Convention and are working on many actions for priority habitats and species at the local level. The Mayor's involvement as a member of the London Biodiversity Partnership, and in advising the local partnerships, provides an important opportunity to ensure the delivery of many of his own proposals for biodiversity, as laid out in this Strategy. Much of the action on the ground will be undertaken by other partners. The Mayor's Biodiversity Strategy therefore provides the strategic framework within which the action plans sit, and the action plans will be among the principal means of implementing the Mayor's strategic agenda.
- 1.6 Biodiversity conservation in London has long been limited by a shortage of personnel and resources. The Mayor has inherited this situation and will target his limited resources to further the priorities identified in this Strategy.

What is biodiversity?

Biodiversity is the 'variety of life' – the myriad species of plants and animals on earth and the range of habitats where they live. It also includes the genetic variation within species. Biodiversity includes elephants, sparrows and bluebells; woodlands, rivers and grassland. Over 150 nations signed up to protecting biodiversity at the Rio Earth Summit in 1992.

- 1.7 Details of the requirements of the Greater London Authority Act 1999 and of the Secretary of State's guidance to the Mayor are provided in Appendix 2. Following the requirements of the Act, the Mayor has published, and will review as necessary, this Biodiversity Strategy. As required by the Act, the Strategy contains information about Greater London's ecology, wildlife and its habitat. It also has proposals, commitments and targets for the promotion by the Mayor of biodiversity in London.
- 1.8 In keeping with the requirements of the Act, the Mayor has had regard to the promotion of Londoners' health, sustainable development in the UK, and equality of opportunity for all people. In addition to these

- overarching themes, the State of the Environment Report will contain information about biodiversity, and this Strategy is consistent with the Mayor's other strategies.
- 1.9 Following the Secretary of State's guidance, the Mayor has also considered the relevant European Directives and international conventions, the linkages with the Mayor's London Plan (Spatial Development Strategy) and national policies on biodiversity.
- 1.10 The Mayor's Biodiversity Strategy aims to protect and enhance the natural habitats of London together with their variety of species. The Strategy sets out the Mayor's vision for the future, identifying the key issues and providing innovative solutions. It demonstrates how London's biodiversity can be maintained as a crucial part of a sustainable world city.
- 1.11 The following chapters present the background to the Strategy. Chapter 2 presents information on London's biodiversity and the existing programme of conservation work in London. Chapter 3 identifies linkages with the Mayor's other strategies and with crosscutting themes. Chapter 4 sets out the Mayor's policies and proposals. A list of the Mayor's proposals is contained in Chapter 5 and resource issues are addressed in Chapter 6. Chapter 7 outlines how progress will be monitored and Chapter 8 discusses review of the Strategy.
- 1.12 In preparation of this Strategy the Mayor is required under the Greater London Authority Act 1999 ^[3] to have regard to the local Biodiversity Action Plans of the London boroughs and the City of London. The Mayor has taken account of those local Biodiversity Action Plans, which have so far been published by local authorities in London on behalf of the local biodiversity partnership. ^[4-10] Other local Biodiversity Action Plans are in progress, ^[11-20] as summarised in Appendix 3.
- 1.13 The Mayor is required to consult in the preparation of all his strategies with the London Assembly and the GLA's functional bodies, the London boroughs and the City of London. On the Biodiversity Strategy he is also required to consult English Nature, the Countryside Agency and the Environment Agency. In addition to the named statutory consultees the Mayor considered it appropriate to consult certain other persons and bodies. All such persons are listed in Appendix 5.1. Responses were received from many of the consultees, including the three statutory agencies, the Minister for Local Government and the Regions and 21 London boroughs. The Mayor was greatly encouraged by the generally positive and welcoming response by consultees, even though by the very nature and breadth of the consultation process it is clear that universal





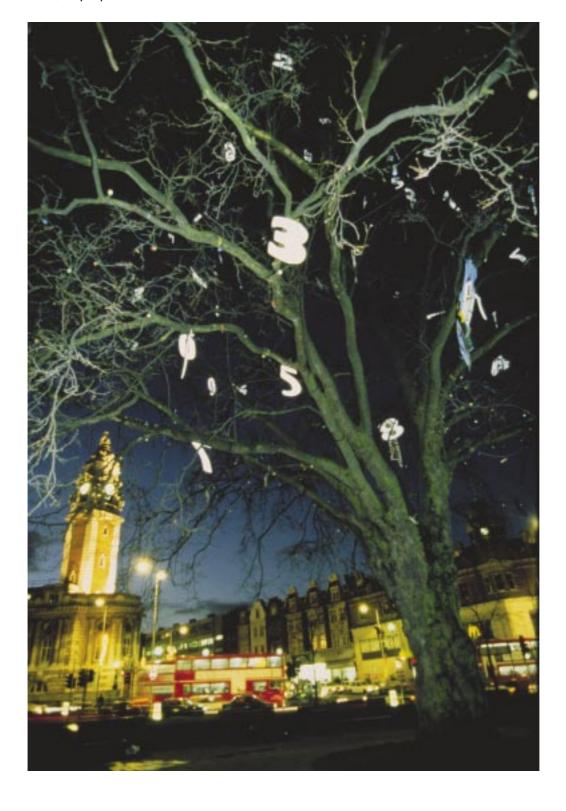
acceptance of the Strategy, or even part of it, was always unlikely. The Mayor has however taken into account all comments, representations and suggestions in formulating the final version of the Strategy.

1.14 The Mayor also distributed some 6000 copies of a 'highlights' document and 15000 copies of a leaflet, both of which included a questionnaire. These were supplemented by use of the internet, a travelling display and a one-day workshop with a panel selected to represent the diversity of London's population. The 1400 responses to these questions expressed a high level of support for the main objectives of the draft Strategy. The consultation process and responses are described in greater detail in Appendix 5.

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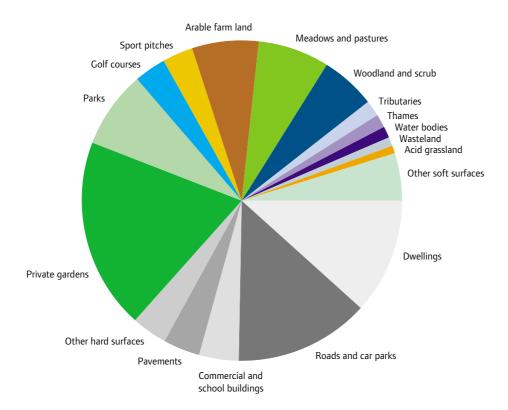


2 London's biodiversity: the context

2.1 London is a remarkably green city. Two-thirds of London's land area is occupied by green spaces and water. Of this, about a third is private gardens, a third parks or in sports use and a further third is other wildlife habitats, such as grasslands, woodlands and rivers. These green spaces support a tremendous variety of plants and animals. The diversity of London's wildlife is illustrated by the fact that over 1500 species of flowering plants and 300 types of birds have been seen here in recent years.



Figure 1 London's land cover



source London Ecology Unit data [1]

London's wildlife habitats

- 2.2 All these plants and animals need suitable places to live and all species have different requirements. For example, woodpeckers need trees to nest and feed in, while skylarks require open grassland or farmland. The best way to ensure the survival of most species is to protect their habitats.
- 2.3 London's habitats were first surveyed comprehensively by the London Wildlife Trust, on contract from the Greater London Council, in 1984-5. Many London boroughs have since been re-surveyed by the London Ecology Unit or the London Wildlife Trust. This information is now held by

the Authority. Information from these surveys has been collated by the London Biodiversity Partnership in The London Biodiversity Audit, [4] which was published in early 2000 and revised on the Partnership's website. [5] Much of the information provided below on each habitat is taken from this audit.

- 2.4 The Audit was used as a baseline by the Partnership for the identification of priority habitats (see Glossary) and species in London. These will be the subject of Action Plans initiated by the Partnership that identify local action required to conserve them. Please refer to Appendix 3 for a full list of the Partnership's priority habitats and species. The priorities aim to cover all the important wildlife habitat in London and therefore accord well with the key objectives of this Strategy.
- 2.5 Repeated surveys can give a good indication of changes in habitats. Although there is a shortage of good data, the information available shows that the trend is downwards for some habitats. Sites may disappear completely beneath built development. Not surprisingly, a very large proportion of 'wasteland' habitat has been lost in this way in recent years. Habitats can also decline through natural processes and neglect. For example, valuable grassland and heathland can be invaded by scrub and trees, and ponds become choked with vegetation and eventually dry out. The Mayor is committed, as an important part of this Strategy, to a rolling programme of re-survey to keep the information on London's habitats updated every ten years. This will allow the Mayor to monitor trends in the changes to our habitats.
- 2.6 Further information on the main types of wildlife habitat is given below.

Woodland

2.7 Woodland is one of the richest and best-loved of wildlife habitats and, because of its popularity, is probably the least threatened. London contains over 7,000 hectares of woodland (about 4.6 per cent of the total land area), a third of it 'ancient' – in other words continuously wooded since at least AD1600. However, woodland is not evenly distributed across the capital. As might be expected, most woodlands are located in the outer boroughs and Bromley alone contains almost a quarter of London's woodland. There is a particular lack of woodland in central boroughs north of the Thames and eastwards into Essex. The seven boroughs along the Thames from Hammersmith & Fulham to Barking & Dagenham, have less than 20 hectares of woodland between them, denying their residents easy access to this popular habitat.



Figure 2 Distribution of broadleaved woodland in London

source GLC London Wildlife Habitat Survey 1984-5

Grassland

- 2.8 Grassland is by far the most widespread habitat in London, though it varies enormously in quality. Frequently-mown amenity grass in parks and recreation grounds is generally of lesser value for wildlife, although collectively such areas help to sustain populations of common birds such as blackbird and mistle thrush. Aside from these areas, London contains over 11,000 hectares of meadows and pastures. Again, the vast majority of this is in outer London, with only about one tenth in the inner London boroughs.
- 2.9 Where the soil is acidic or chalky, special types of grassland occur. Acid grassland has rather few plant species, but supports some characteristic plants that are not found in other grassland types. There are about 1,200 hectares of acid grassland in London, of which almost half is in Richmond. Acid grassland in London is also important for its unique community of invertebrates.
- 2.10 Chalk grassland, by contrast, tends to be very rich in flowers, with many colourful orchids. This is a rare habitat in London, with just over 300 hectares on the chalk hills around the southern edge of London, in Croydon, Bromley and Sutton, with smaller outposts in Hillingdon. What



- we lack in quantity is made up for in quality, with much of London's chalk grassland protected as Sites of Special Scientific Interest (see 2.35 below).
- 2.11 Important areas of seasonally flooded grassland also exist in London, including the grazing marshes associated with the lower Thames floodplain at Rainham, Crayford and Erith. Grasslands of all types can deteriorate if they are not managed, either by grazing or cutting, and this Strategy seeks to ensure that wildlife habitats are managed appropriately.

The River Thames and its tributaries

- 2.12 The River Thames is the largest and undoubtedly the best-known natural feature in London, occupying 24 square kilometres within the Greater London boundaries. Its value for wildlife increased greatly last century, especially through improvements in the system of sewage treatment. The Thames now supports 118 species of fish and is an important nursery for many North Sea species. Over 450 species of invertebrate can be found in the tidal Thames. Many birds are attracted to the rich feeding grounds of the Thames. Down-river, the tidal flats support significant populations of ringed plover, dunlin and redshank, especially on migration and as wintering flocks, and the greater Thames Estuary is probably the most important in the United Kingdom for birds. Upstream, numbers of these wading birds are much lower, but the river here is used by grebes, ducks, herons, gulls, cormorants and terns. A limiting factor for many of these birds is somewhere safe to roost at high tide, as there is a critical shortage of suitable undeveloped and undisturbed open areas alongside the river.
- 2.13 The Thames islands, otherwise known as 'Aits' or 'Eyots', are also important in this regard. All remaining havens must be maintained. Another limiting factor on most of the Thames is the disturbance of sensitive birds by people. In the more important reaches for wildlife it is therefore important to design access in a way which enables people to enjoy the river without causing undue disturbance to wildlife. Among the great diversity of invertebrate life in the Thames there are at least three diminutive species of snail that are rare elsewhere in the United Kingdom, for which we have a special responsibility.
- 2.14 Only fragments of the rich wetland vegetation that once flanked the Thames survive, clinging to near vertical flood defence walls or at the rare places where the river bank is more natural (such as at Syon Park). Further loss of this vegetation must be resisted, and opportunities found for establishing this habitat in the redesign of flood defences.





Like the Thames, many of London's other rivers have been hemmed in by 2.15 built development on their floodplains and have been engineered to accommodate flood flows. Channels have been straightened, widened and occasionally deepened, and natural habitats have been replaced by artificial, often vertical, sides and concrete beds, leading to significant losses of biodiversity. However, climate change is likely to increase the likelihood of flooding in the future, to the extent that attempts to control rivers in this way are unlikely to be effective. It is now widely appreciated that the most effective way to prevent damaging flooding is to allow rivers to flood in places where this will do the least harm, such as in open spaces. [7] This has secondary benefits for biodiversity in providing opportunities for the re-creation of riverside habitats. Where possible, rivers and adjacent wetland habitats should be restored, not only to assist with flood alleviation but also to provide valuable wildlife habitat and to enhance the local environment for people. Where artificial flood control works have not progressed so far, London still supports excellent wetland habitats, especially in the catchments of the Colne, Ingrebourne, Cray and Roding as well as a scattering of localities on other Thames tributaries.

The canals

2.16 London's canals add to our wealth of wetland habitats. Unlike many of our rivers, the canal system is almost entirely accessible via the towpaths, and thus provides valuable opportunities for informal recreation and contact with nature right into the heart of London, north of the Thames. The canals support a diverse population of fish and common species of dragonflies. Marginal and wetland vegetation are scattered along the banks, and the dry habitats alongside the canals are also of interest.



Ponds and lakes

- 2.17 Farm ponds were much more common before the expansion of suburban London over the last 150 years. Over 80 per cent of these have been lost under built development or through neglect, threatening the local survival of species like great crested and palmate newts. The surviving old ponds are concentrated in the outer boroughs, especially those across the north of London from Hillingdon to Havering. There are remarkably few surviving old ponds within the inner boroughs north of the Thames and in Croydon. The loss has been mitigated somewhat by the development of countless smaller garden ponds, which now support the majority of London's frogs, toads and common newts.
- 2.18 London's larger water bodies total over 1500 hectares; all are artificial in origin but many none the less support a wide range of wildlife. The oldest are the lakes created during the landscaping of former country estates, once on London's margins but mostly now in public parks. The prohibitive





cost of maintaining these has unfortunately led to a deterioration in their water quality in many cases. New and cheaper ways to restore such waterbodies have been investigated in recent years. Of more recent origin are the flooded gravel pits resulting from mineral extraction for the construction industry, and the storage reservoirs created to feed water to the canals or for drinking water. Many of the latter continue to serve this purpose. These water bodies are important havens for wetland birds escaping harsher winter weather in places further to the north and east of Europe, and some are of international significance. Some of London's lakes and gravel pits support valuable waterside vegetation, which offers nesting cover for waterfowl, and uncommon species such as the great crested newt may also be present.



Heathland

2.19 Traditional heathland forms open landscapes dominated by low-growing shrubs such as heather and dwarf gorse, with acid boggy pools in damper areas. Most of London's historic heathland has been lost through the expansion of suburbia, as well as neglect and mismanagement, so that only about 80 hectares remain. Most of this is found in five discrete areas, which still support a variety of characteristic plants and animals. These are Wimbledon Common and Putney Heath between Merton and Wandsworth boroughs, Poor's Field in Hillingdon, Stanmore Common in Harrow, the Addington area of Croydon and Hayes Common in Bromley. Although the urgency for conservation of these remnants is now widely acknowledged, there are still threats from management for other purposes, from neglect allowing the invasion of woodland species, and from airborne pollution resulting in increased soil fertility.



Farmland

2.20 Farmland survives mainly in the Green Belt of the outer London boroughs and totals some 12,000 hectares. Much of this is in crops or permanent pasture. The largest areas of farmland are found in the boroughs of Bromley, Havering, Hillingdon, Enfield and Barnet. Much of London's farmland has experienced the agricultural intensification typical of the countryside proper, where miles of hedgerows have been grubbed out and mixed farming has been replaced by monocultures dependent on drainage, fertilisers and pesticides. In some parts of London the earlier landscapes have survived and we are fortunate to retain the old field patterns and ancient hedgerows. London's farmland is still home to national Biodiversity Action Plan priority species, [8] including the brown hare and birds such as skylark, corn bunting and grey partridge. London also has much 'hobby' farming, including the keeping of horses. The continuation of traditional farming practices, such as hay making, the

spring sowing of cereals and extensive grazing, is necessary for the maintenance of many of London's better farmland habitats.

Parks and squares

- 2.21 London's many parks, from the historic landscapes of the Royal Parks to small local parks and recreation grounds, provide valuable habitats for wildlife and are the main places where most Londoners have contact with nature. Some of the larger and older parks are of very high biodiversity value. Richmond Park, for example, is a National Nature Reserve and a candidate Special Area of Conservation. The lakes in several of London's parks, for example Battersea Park, Regent's Park and Kelsey Park, support heronries, which offer the public a spectacular view of wildlife at close guarters.
- 2.22 Although smaller formal parks may not contain such special biodiversity, they are all very important in providing people with an opportunity to see wildlife. Several parks and community gardens also have strong cultural links, providing an opportunity to introduce biodiversity to sectors of society who have not been involved in these issues before. Examples include Marcus Garvey Park in Hammersmith and Chumleigh (multicultural) Gardens in Southwark. Most parks are home to a good selection of common birds, butterflies and other animals. The value of a park for wildlife depends largely on the range of habitats there. The presence of mature trees and shrubs, a pond or lake, some long grass and nectar-rich flowers will all add to the numbers and diversity of animals to be found. Traditional parks management has seen many changes in recent years, in an attempt to encourage more wildlife in these areas.
- 2.23 London's city squares are a very special feature of the centre of the capital. Many contain a good range of the habitats found in larger parks, and help to bring wildlife right into the city centre.

Cemeteries and churchyards

2.24 London's Victorian cemeteries, such as Highgate, Nunhead, Kensal Green and Abney Park, contain a great diversity of wildlife habitats. Their mix of historical and wildlife interest, featuring the monuments in a verdant setting, truly make these cemeteries treasures. Usually less intensively managed than parks, and suffering from less disturbance, churchyards and cemeteries tend to be of greater biodiversity interest than most formal parks. Even the smallest churchyard can be a haven for wildlife, where walls and gravestones provide some of the last refuges for uncommon ferns and lichens in the metropolis, and relict grassland may include rare wild flowers. Due to the cultural diversity reflected in their gravestones, many London cemeteries can provide an opportunity for multicultural environmental interpretation. Cemeteries and churchyards







are excellent venues for educational visits, and environmental studies can be supplemented by the historical and cultural aspects of gravestones and monuments.



- 2.25 A prominent feature of London is the enormous area made up of private gardens, totalling a fifth of its area. Garden ponds have been mentioned above. Apart from these valuable wetlands, gardens can provide habitat similar to hedgerows or the edges of woodlands, with their trees, shrubs, climbers, borders, and both long and short grass. This mixture of habitats supports birds such as the familiar robin, song thrush and various tits, as well as butterflies such as the speckled wood and holly blue.
- 2.26 Allotments also provide considerable areas of wildlife habitat, particularly in the increasing proportion which are managed organically or with minimal use of pesticides. Where they are not too intensively managed, with a few overgrown corners, locally uncommon bird species such as breeding linnet and goldfinch occur. Allotments are particularly important in areas where many people do not have access to a private garden and for helping to develop a closer community. Gardening and growing one's own food provides very important contact with nature, and can also involve the expression and celebration of Londoners' diverse cultural origins through, for example, growing some of the ingredients for traditional cuisine, which can be hard to source in this country.

Community gardens, city farms and ecology centres

2.27 London has over 100 community gardens and 14 city farms, which are often located in some of the most deprived areas lacking other open spaces. Examples include the Phoenix Garden in Holborn and Freightliners Farm in Islington. They have a particularly important role to play in future efforts to ensure that biodiversity is accessible to all Londoners, and are an essential part of London's resource for environmental education. Specialised ecology centres and nature parks, created principally for environmental education, are also found in many boroughs. These include the famous Camley Street, Gillespie Park in Islington and Stave Hill in Rotherhithe.

Railway land, linesides and roadsides

2.28 Land that is owned or managed as part of London's railway system forms an excellent network of green space throughout the capital and comprises a variety of habitats, chiefly woodland, scrub and rough grassland. There are opportunities for enhancing the biodiversity of lineside areas without compromising the operational interests of the owners. Nearly 1000 hectares of lineside have been identified as Sites of Importance for Nature







Conservation, and in many inner London areas the only significant stands of woodland occur on railway linesides. Sydenham Hill station and New Cross Gate cutting are managed as nature reserves, and the latter supports bird species which are uncommon elsewhere in the surrounding locality. Railtrack is currently producing a company Biodiversity Action Plan for its land holdings, as is London Underground Limited, a member of the London Biodiversity Partnership. London Underground commissioned a comprehensive biodiversity survey and assessment of its land holdings in 1999, which provides important information on species and habitats on land that the company manages.

2.29 Roadside land can also be valuable, especially beside major routes. This is more often the case in outer boroughs, where verges can be extensive.



Wasteland

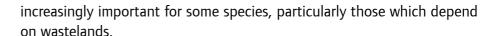
2.30 London also supports a wealth of wildlife in what Richard Mabey [9] describes as 'unofficial countryside', where nature has reclaimed vacant land. These 'wasteland' habitats are far from being wasted from the point of view of their resident wildlife, and some sites provide landscape and informal amenity value for local people. Rare insects and birds, such as the black redstart, are often present. Wastelands are a distinctive urban habitat where a host of plants from all over the world can be found, reflecting London's cultural diversity and its history of trade and horticulture. As with cemeteries, they may offer an opportunity to bring a multicultural angle to environmental interpretation. They tend to be transient in nature, and many of the plants and animals which thrive in them are adapted to rapidly colonising new sites. However, wasteland habitats are disappearing, [10] a casualty of London's thriving economy, with few new sites becoming vacant as older ones are redeveloped. The Government's drive to accommodate the majority of new housing on brownfield land, an initiative which the Mayor supports, will increase the pressure on wasteland habitats.



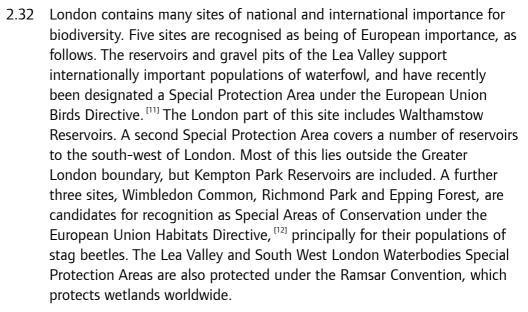
2.31 Buildings can offer opportunities for plants and animals to colonise. Tall buildings are the urban equivalent of cliffs, and provide suitable nest sites for birds such as kestrel and peregrine. Increasingly, buildings are being designed deliberately to provide habitats for wildlife and contact with nature for their occupants. These initiatives include traditional window boxes, climbing plants and roof gardens, as well as more innovative ideas such as providing suitable substrate on roofs to allow wasteland flora and fauna to colonise naturally. Even walls and paving can provide habitats for ferns, mosses and lichens. As London becomes more intensively developed, habitats within the built environment are likely to become









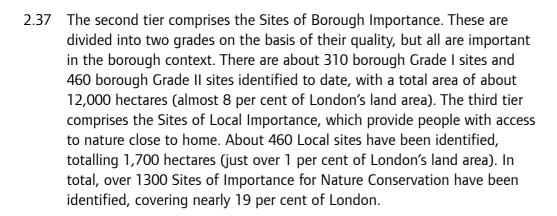


- 2.33 Important Bird Areas are a worldwide network of non-statutory sites, identified by Birdlife International, a partnership of voluntary bird conservation groups. The Royal Society for the Protection of Birds is the United Kingdom partner. London contains parts of three Important Bird Areas: the Lea Valley Important Bird Area, which includes Walthamstow Reservoirs, Chingford Reservoirs and Walthamstow Marshes; the Southwest London Waterbodies Important Bird Area, which includes Kempton Park Reservoirs; and the Thames Estuary and Marshes Important Bird Area, which includes Rainham and Wennington Marshes.
- 2.34 Kew Gardens will be considered by UNESCO as a World Heritage Site in the summer of 2002, having been nominated by the Department of Culture, Media and Sport. Charles Darwin's former home at Down House in Bromley borough, and the surrounding neighbourhood where he conducted much of his scientific and natural history studies, have recently been added to the tentative list for nomination as a World Heritage Site.
- 2.35 There are 38 Sites of Special Scientific Interest in London, including those with European designations. These are sites of national importance for their wildlife or geology. The largest of these are Richmond Park and the Inner Thames Marshes. Ten of the Sites of Special Scientific Interest are predominantly ancient woodlands, seven are mostly grassland, three have a mixture of woodland and grassland, nine are wetlands, two are heathland and bog, and one is parkland with some spectacular ancient



trees. The other five are notified for geological rather than biological interest. Ruislip Woods and Richmond Park have recently been designated National Nature Reserves.

2.36 London contains many places of value below the national level of importance, London's important wildlife sites are recognised by the London borough councils as Sites of Importance for Nature Conservation. [13] There are three tiers of sites. The top tier, Sites of Metropolitan Importance, includes the best sites in London. About 140 Metropolitan sites have been identified, with a total area of nearly 16,000 hectares (10 per cent of London's land area). They include the nationally and internationally designated sites mentioned above.



2.38 The series of sites must be kept current, with changes in boundaries and grading reflecting the latest information.



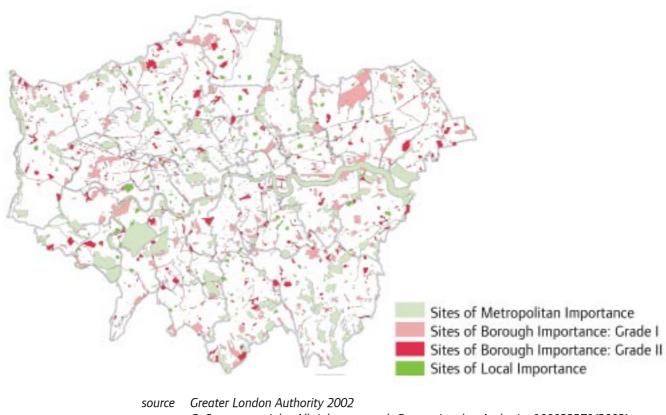


Figure 3 Sites of Importance for Nature Conservation in London

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- 2.39 A few areas have been recognised as Countryside Conservation Areas for their traditional countryside landscape, including small fields with good hedgerows, surviving field ponds, copses and green lanes.
- 2.40 Linking many of these sites and areas to each other and to the Green Belt, is a network of Green Corridors. [14] This network allows some species with specialised habitat requirements to extend their distribution into parts of London where they would otherwise not be seen. The rivers, canals and railside land are important components of these corridors, and expansion of the waterway corridor network will greatly benefit London's biodiversity.
- 2.41 Many London boroughs have designated Local Nature Reserves, following consultation with English Nature. These include some of the best sites in the relevant borough in terms of intrinsic biodiversity value, but may also be chosen because of their value to people for enjoyment of the natural world. There are currently 76 Local Nature Reserves in London.

London's rare species

- 2.42 London contains important populations of several nationally rare plants and animals. South London is a European stronghold for the UK's largest insect, the stag beetle. This impressive creature is in decline throughout its range, perhaps due to the increased tendency to remove the dead wood and tree stumps in which its larvae feed. However, it appears to be thriving in London, even in inner boroughs, and is a common sight on summer evenings in many suburban gardens.
- 2.43 Greater yellow-rattle is a nationally rare plant found on chalk grasslands. The downlands on the southern edge of London support perhaps half the British population of this specially protected plant.
- 2.44 London is home to about a quarter of Britain's black redstarts. This bird, which in the UK has made a home of abandoned industrial sites, has a stronghold in the east Thames corridor. It is declining, however, and could disappear if we do not take account of its needs when regenerating these areas.
- 2.45 Open land in the east Thames corridor is also home to an assemblage of rare burrowing bees and wasps, including the bumblebee Bombus humilis, a priority species for the UK Biodiversity Action Plan. These insects, which require bare ground in which to burrow and a wide range of flowers to provide food, are strongly associated with the Thames Terrace grasslands. Much of the original grassland in this area has been built on in recent decades, but the bees and wasps find former industrial sites equally to their liking. [15]



2.46 Another animal in serious decline is the water vole. Immortalised as Ratty in Wind in the Willows, [16] this once-common animal has vanished from large parts of its former range and is the fastest declining mammal in the UK. The loss of habitat alongside rivers and streams, and the spread of predatory American mink that originally escaped from fur farms, are the main causes. Water voles may still be found in several parts of London, perhaps because mink have not become widely established here yet. The ditches on Rainham Marshes possibly support the highest population density of water voles in the country, while other important London sites include Crayford and Erith Marshes, Twin Tumps at Thamesmead, Walthamstow Marshes, the Ingrebourne valley, Crane Park and the Colne Valley [15].





- 2.47 Recent research shows that London's bats have also undergone a significant decline over the past decade, even though they are fully protected by law. [15]
- 2.48 Even some of our commonest and best-loved birds are under threat, not least the house sparrow, which has suffered a dramatic decline in recent years across many parts of the United Kingdom. This has occurred not only in the countryside, where more intensive agriculture has affected most farmland birds, but also in urban areas where the causes of the decline are not known. The house sparrow has completely disappeared from large areas of London where it was common until only a few years ago. Urgent research is under way to try to discover the reasons for this decline before it is too late. [15]



2.49 On the positive side, many water birds including the beautiful kingfisher are colonising new areas nearer the centre of London. The list of fish species present in the Thames increases every year, with rare species being regularly recorded such as smelt, sea lamprey and the protected twaite shad. The magnificent peregrine falcon has recently bred in London for the first time [15] and seems set to become a permanent resident, nesting on tall buildings alongside the River Thames in the city centre.

The existing programme of work for biodiversity

- 2.50 The last two decades have seen London develop into a world-class centre of excellence for nature conservation in the urban environment. In the London borough councils, biodiversity now plays an important part in planning and land management. Other major players include the London Wildlife Trust, English Nature, the Environment Agency and, before the creation of the GLA, the London Ecology Unit. Numerous other organisations and groups have also played a vital role, especially at the local level. These organisations have been able to build on the long tradition of natural history recording in London, established by the London Natural History Society and its predecessors.
- 2.51 However, increased commitment to biodiversity work has not meant that every site has been protected from development or managed satisfactorily. There have been losses as well as gains. In addition, the 1990s in particular saw some retrenchment in staffing and expenditure on biodiversity, particularly in boroughs faced with severe budgetary constraints and as the Government's Community Programme training schemes closed. Despite this, London still retains a major programme of work in and commitment to biodiversity.

2.52 Many organisations already involved in biodiversity work, together with new partners, formed the London Biodiversity Partnership in 1996. This consortium, which includes BTCV, Countryside Agency, English Nature, Environment Agency, Lee Valley Park Authority, London Underground, London Wildlife Trust, Royal Botanic Gardens Kew, Royal Parks, Royal Zoological Society, Royal Society for the Protection of Birds, Thames Water, representatives from the London boroughs and others, as well as individuals, is implementing the Biodiversity Action Plan for London. [4,15,17,18] The key aims of the Partnership are to conserve priority habitats and species in London, and increase enjoyment, understanding and participation in biodiversity.



- 2.53 The Partnership has published action plans covering a number of priority habitats and species, [15] and further plans will be published in due course. When complete, the London Biodiversity Action Plan will cover all important wildlife habitats and a number of priority species. The GLA has been in the chair since the Mayor joined the Partnership in 2001 and is taking the lead on several action plans and many individual actions. It is clear from the Partnership's first annual report [19] that considerable progress is being made on delivering targeted action for biodiversity in London.
- 2.54 It is important to recognise the clear distinction between the Partnership's action plans for habitats and species, and the Mayor's statutory Biodiversity Strategy. The Partnership's work originated in direct response to the UK Biodiversity Action Plan and is a targeted attempt to deliver gains for priority habitats and species. The priorities selected by the Partnership are a central part of the conservation of biodiversity in London and accord closely with the objectives of the Strategy. The purpose of the Mayor's Strategy is to provide a broad statutory framework for biodiversity in the capital. It is necessarily wider in its scope than the Partnership's work, but depends on the London biodiversity action planning process for delivery of key areas. The Mayor welcomes this interrelationship, and recognises the need to work in partnership to ensure the delivery of most of his proposals.
- 2.55 Over the past two decades, the London borough councils have increasingly introduced sympathetic management of their open spaces, protected important wildlife habitat through the planning system, enhanced habitat and provided interpretation facilities through special projects. The Royal Parks Agency has also undertaken many projects to encourage and protect wildlife, including the introduction of a biological recording programme. The legacy of advice provided by the London Ecology Unit, English Nature, the London Wildlife Trust, the Countryside

Agency and others is seen in the policies for protection and enhancement of biodiversity, now enshrined within most Unitary Development Plans. Sites of Importance for Nature Conservation were identified by the London Ecology Unit, and this series was endorsed by the London Planning Advisory Committee. The sites were chosen as the best habitats, but also placed an emphasis on access to wildlife for people. The procedures for identifying these sites have now been adopted by the Mayor and are given in full in Appendix 1. Furthermore, London's biodiversity was researched and described in a series of popular handbooks published by the London Ecology Unit. [20-49]

- 2.56 Over the last few decades, many exciting places have been established where city people are able to enjoy the natural world, often on sites which at the outset had seemingly little to offer. These include Camley Street Natural Park in King's Cross, Gillespie Park in Highbury, Gunnersbury Triangle in Chiswick, Stave Hill in Rotherhithe, Mudchute Park and Farm on the Isle of Dogs, Phoenix Community Garden at the heart of the West End, various school nature areas and many others. The important message conveyed by these projects, regardless of their size, is that significant achievements for nature conservation are possible even in the most urban of settings, and often on modest budgets, provided there exists a cocktail of goodwill, optimism, commitment and professional back-up. Moreover such projects often yield social benefits, providing a community focus.
- 2.57 London has a worldwide reputation for work on biodiversity conservation, both through the programme described above and the range of world-class organisations based here. Royal Botanic Gardens Kew, London Zoo, the Natural History Museum, London's academic institutions, the Wetland Centre, the Royal Geographical Society and others have significant international expertise on biodiversity.
- 2.58 It is important that the Mayor's Strategy supports and extends the existing programme of work.

The Mayor's vision for London

- 2.59 The Mayor's vision is to develop London as an exemplary, sustainable world city, based on three interwoven themes:
 - strong, diverse long term economic growth
 - social inclusiveness to give all Londoners the opportunity to share in London's future success
 - fundamental improvements in London's environment and use of resources.



- 2.60 This will mean London needs to become:
 - a prosperous city: in which all share in the benefits of wealth created in London's dynamic economy
 - a city for people: a liveable city of safe, attractive streets, where goods and services are within easy reach and where everyone feels safe and secure
 - an accessible city: with fast, efficient and comfortable means of transport, and access to affordable homes, education and training, health, leisure and recreation
 - a fair city: showing tolerance and abolishing all forms of discrimination, where neighbourhoods and communities have a say in their futures
 - a green city: making efficient use of natural resources and energy, respecting the natural world and wildlife, using to the full the varied pattern of open space, eco-friendly design and construction methods, recycling waste and creating new 'green' industries.
- 2.61 Fulfilling this vision requires concerted action which addresses the wide range of economic, social and environmental needs and priorities of Londoners and contribute to the achievement of sustainable development in the UK. Economic efficiency must be improved and its benefits shared so as to increase social cohesion and environmental quality, and raise the overall quality of life.
- 2.62 The Mayor's vision for London covers all London issues, and is necessarily wide-ranging. The Biodiversity Strategy objectives deal with biodiversity issues. This Strategy and its implementation aim to meet the biodiversity objectives within the context of the Mayor's overall vision for London.

Objectives for biodiversity

- 2.63 The Mayor's objectives for this Strategy are an integral part of his vision for London and take into account our responsibility to conserve London's wildlife and its habitats and involve Londoners in a greater understanding, enjoyment and participation in nature. These objectives answer the question: why have a Biodiversity Strategy?
 - Biodiversity for people: to ensure all Londoners have ready access to wildlife and natural green spaces. Access to nature provides psychological, educational and health benefits an antidote to the stresses of urban life and the Strategy aims to maintain and increase access to natural green space. This is particularly important where open spaces are in short supply, as is often the case in areas of regeneration. Access can be increased in three ways: by creating new wildlife habitat, creating access to existing habitat and encouraging people to use existing accessible places. As the UK Biodiversity Action Plan says, 'we





conserve species and habitats because they are beautiful or because they otherwise enrich our lives, and a culture that encourages respect for wildlife and landscapes is preferable to one that does not'.

- **Nature for its own sake:** to conserve London's plants and animals and their habitats. Biodiversity has an intrinsic right to be conserved for its own sake. We have a responsibility to respect local biodiversity, and to pass it on to future generations. Conservation of biodiversity is about the commonplace as well as the rare.
- Economic benefits: to ensure the economic benefits of natural greenspace and greening are fully realised. London's natural open space acts as a green magnet, attracting and keeping workers and enterprises in London. Greening also plays an integral role in the urban renaissance in new and existing infrastructure, the public realm, regeneration initiatives and other developments. The open spaces of London attract tourists, and the green economy provides jobs. Biodiversity can add value to a site, and ecological management practices can save money. However, there are challenges in successfully integrating biodiversity with economic development because of the potential conflicts between them, and these need to be addressed carefully.
- Functional benefits: to ensure London enjoys the functional benefits that biodiversity can bring. Vegetated surfaces help to slow water runoff and so reduce flooding of London's rivers. Vegetation provides local climatic benefits and helps to prevent erosion, ameliorate ambient noise and absorb some pollutants.
- Sustainable development: to recognise biodiversity conservation as an essential element of sustainable development. The natural world provides a range of sustainability benefits. Changes in biodiversity, like the miner's canary, can alert us to unseen hazards. Quality local open spaces reduce people's need to travel further afield. Providing attractive green footpaths and cycleways can also reduce the use of cars. Growing food organically and locally in farmland, allotments and gardens may reduce the need for transport and infrastructure and provide wildlife habitat. Growing energy crops in London has sustainability benefits. London can reduce its wider ecological footprint for example by composting green waste and reducing the use of materials such as peat and tropical hardwoods.



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3 linkages with other strategies and crosscutting themes

3.1 In preparing or revising the Biodiversity Strategy, the Mayor has had regard to the principal purposes of the Authority, the effect the proposed Strategy will have on the health of the people of London, and the achievement of sustainable development in the United Kingdom. The principal purposes of the Authority are to promote economic development and wealth creation; promote social development; and promote the improvement of the environment in Greater London. Furthermore, in the preparation of the Strategy, due regard has been paid to the principle that there should be equality of opportunity for all people. The Mayor has taken care to ensure that the Biodiversity Strategy is consistent with his other seven statutory Strategies – The London Plan (Spatial Development Strategy), Transport, Economic Development, Culture, Ambient Noise, Municipal Waste Management and Air Quality – as well as his nonstatutory strategies, notably that on Energy. The State of the Environment Report, which the Mayor must prepare by 2003, will include information on biodiversity in London.



- 3.2 Because the key to conserving London's biodiversity is the protection and enhancement of wildlife habitat, land use issues underlie many of the links with other Strategies. This is particularly so for the London Plan (Spatial Development Strategy), Economic Development and Transport Strategies, and the planning issues referred to the Mayor. The latter are considered in Proposal 11 below. Land use and management can have both positive and negative effects on biodiversity.
- 3.3 The continued increase in London's population, and the rapid economic growth in the capital, will lead to greater pressure on limited land resources. Biodiversity conservation must be integrated with the need to build many more homes and offices. This Strategy addresses the potential conflicts over land use, and also recognises the opportunities for enhancements for biodiversity within new developments. It proposes innovative ways to ensure that biodiversity conservation is an integral part of urban regeneration, and that the ever-increasing number of Londoners have good access to wildlife and natural green spaces.

Health

3.4 The health benefits of the Biodiversity Strategy stem both from the psychological effects of the natural environment on people's feeling of wellbeing, and from locally accessible and interesting green spaces acting as an inducement to take exercise. Evidence from Holland shows that 'people living in a greener environment report fewer health complaints, have a better perceived general health and a better mental health'. [1] Additionally it shows that 'the positive association between health and





- green space seems to exist predominantly among lower socio-economic groups'; thus the Biodiversity Strategy may help in tackling inequalities in health.
- 3.5 Underpinning this Strategy is the promotion of access to natural green space for all Londoners. The Strategy therefore addresses the deficiency in accessible green space occurring in some parts of London. One tactic is to create new areas in hospital grounds, as has been done at St George's, Tooting, where health benefits will be particularly tangible for patients, staff and the many visitors.
- 3.6 The Strategy also emphasises the importance of private gardens, community and cultural gardens, allotments, school grounds and city farms for biodiversity. Such places benefit personal health through the physical act of gardening. Involvement in community-led projects can also enhance mental health.
- 3.7 Through strategic provision of advice to land managers, the Mayor will have a role in minimising the health and safety risks particularly associated with biodiversity and open spaces, such as pesticide use, health risks of certain plants and animals and the perceived threat of assault.
- 3.8 There will also be health effects, albeit minor, from biodiversity's influence on ambient noise and air quality. These are largely beneficial, although airborne pollen is a significant cause of allergic reactions.
- 3.9 A rapid review of the health benefits of green spaces conducted in support of this Strategy. Corroborates the health-related proposals in the Strategy. Although it highlights the difficulty of measuring these benefits, its authors conclude that 'The data... suggest that there is considerable potential in current green space to increase their use and benefits'; and that there is potential to develop a 'green space with ideal or optimal attributes with respect to health promotion'. The Review re-iterates that the health benefits of green space are most significant in areas of regeneration and to children. It includes a small public opinion survey which found that 'All those questioned thought that green spaces of all types were beneficial to health', 'A large majority of those questioned would like more green spaces', and 'A relatively large number of children (28 per cent) cited their reason for visiting parks to be nature-related'.

Sustainable development

- 3.10 Effective protection of the environment, including biodiversity, is a key objective of sustainable development, one of the Mayor's duties under the Act (see Appendix 2). Government urges a move towards sustainable development. ^[3] This involves meeting four objectives at the same time, in the UK and the world as a whole:
 - social progress which recognises the needs of everyone
 - effective protection of the environment
 - · prudent use of natural resources, and
 - maintenance of high and stable levels of economic growth and employment.
- 3.11 Sustainability requires that local actions should not compromise options for future generations or for people elsewhere. This leads to the emphasis in this Strategy on biodiversity not only as an environmental concern, but also as a contributor to London's economy and to the quality of life of individual Londoners. The section on London's biodiversity footprint describes the impact Londoners have on biodiversity elsewhere. London can reduce its wider ecological footprint by using locally-produced compost and reducing the use of materials such as peat and tropical hardwoods. The section on the state of the environment describes how changes in biodiversity, like the miner's canary, can alert us to unseen hazards.
- 3.12 Sustainable transport is linked to biodiversity. Interesting local open spaces reduce people's need to travel further afield. Providing attractive green footpaths and cycleways can also reduce the use of cars. Growing food organically and locally in farmland, allotments and gardens reduces the need for transport and infrastructure. Other sustainability benefits of this Strategy's policies are reviewed below under links with other strategies. In this regard, see particularly the links with climate change, which are considered with the Energy Strategy below.
- 3.13 An earlier draft of this Strategy was subject to internal sustainability appraisal and found to be making a positive contribution in moving London towards a sustainable future.

Equality of opportunities

3.14 It is one of the overriding objectives of this Strategy that all Londoners should have equal opportunities to visit and enjoy London's wildlife and green spaces. Currently, this is not the case. Many parts of London are deficient in accessible wildlife habitats and wild open spaces.







- 3.15 Section 33 of the Greater London Authority Act requires that the Authority, in carrying out its functions, must promote equality of opportunity, eliminate unlawful discrimination and promote good relations between persons of different racial groups, religious beliefs and sexual orientation. The 'equality target groups' identified as being affected by this legislation are women, black and minority ethnic people, faith groups, disabled people, lesbian and gay men, older people, young people and children, and the socially excluded such as refugees and asylum seekers, travellers and gypsies, the unemployed, people with mental health issues or learning difficulties, ex-offenders and the homeless. All these groups can be subject to discrimination at work or in finding work, and in their access to services. They may suffer from harassment or abuse.
- 3.16 Further consideration needs to be paid to the way in which the GLA and other agencies promote issues of biodiversity. Wherever possible, complex language, which is understandable only to fellow professionals, should be avoided. The Mayor will ensure that biodiversity is promoted in ways that are understandable to all Londoners, including the use of Braille and other formats, easy summaries of information on biodiversity, and the provision of information in different languages.
- 3.17 An appropriate system for monitoring equality will need to be devised to ensure that the proposed solutions are having the desired effect.

Access to natural green space

- 3.18 The key issue for these groups is their ability to access and enjoy green spaces and nature, starting with the ability to obtain information about where there is a nearby green space, how they get to it and whether they will like it when they get there. Most equality target groups tend to have lower than average disposable incomes and are therefore more likely to live in social or cheaper housing which may be built at high densities in areas that are deficient in natural green space. This lack of local green spaces is exacerbated because a small proportion of people have access to private gardens, and many people have little opportunity, due to distance and cost, to visit the countryside. A recent study of the health impacts of green spaces ^[2] noted that the health benefits of visiting green spaces are especially high for children and in areas of regeneration. The Strategy therefore places great emphasis on increasing accessible natural green spaces, particularly where areas deficient in natural green space coincide with areas of regeneration.
- 3.19 Allotments, community gardens and cultural gardens take on a special significance in areas of regeneration. They not only offer the looked for contact with nature, but often break down social barriers and help foster

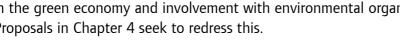
a sense of community. Proposals in Chapter 4 support allotment holding and encourage the creation of more community and cultural gardens.

Threats to perceived safety and physical barriers to access

3.20 Some people may not wish to visit open space for fear of attack or harassment, and disabled people (many of whom are older) may particularly encounter physical barriers to access and a lack of facilities. Proposals listed in Chapter 4 address such problems.

Paid and voluntary employment

3.21 Another issue affecting most of the equality target groups is employment in the environmental sector. Black and ethnic minority groups, disabled people and no doubt other groups are underrepresented in employment in the green economy and involvement with environmental organisations. Proposals in Chapter 4 seek to redress this.



Consultation

- 3.22 A stakeholder forum to oversee implementation of this Strategy will be established; representation of equality target groups will be sought.
- 3.23 Some proposals in Chapter 4 will deal with the creation of new wildlife habitat and natural green spaces. Given that some equality target groups such as children, the disabled, older people, and black and minority ethnic groups may have special requirements from these spaces, it will be important to make a particular effort to consult them on the design and management of any new space.
- 3.24 Whereas the above issues pertain to most of the equality target groups, other issues addressed in the Strategy may be of significance only to a certain group. These are discussed below.

Black and minority ethnic people

- 3.25 In addition to the general issues affecting black and minority ethnic people mentioned above, the Strategy may offer some particular links to this group. For example, cultural gardens (and some parks with multicultural links) aim to highlight one or more cultures through special planting and design, and may also provide wildlife habitat. A proposal in Chapter 4 aims to encourage more such places.
- 3.26 Traditional forms of environmental interpretation may exclude many people from ethnic minorities, particularly those whose command of written or spoken English is poor. Nor may conservation volunteering tasks, guided walks and other events appeal to such groups. New techniques to interest black and ethnic minorities groups need to be





- found, such as the annual Roots Culturefest staged in a Northamptonshire Country Park, which has been highly successful in attracting ethnic minority visitors. [4] A proposal in Chapter 4 addresses the need for innovative interpretation techniques.
- 3.27 Proposals in Chapter 4 relating to London as an 'international centre of excellence' seek to share good practice at home and abroad. This can involve learning from the experiences of other countries, and, in this way, may sometimes offer a link to minority ethnic groups living in London.

Faith groups

3.28 Reverence for nature and respect for the environment is an integral strand of most faiths, and may offer an opportunity to involve new stakeholders in the implementation of the Strategy. The provision and management of burial space is another area of mutual interest between biodiversity and faith groups, who will need to be sensitively consulted on any significant projects for biodiversity enhancements in cemeteries.

Disabled people

3.29 Disabled people may be affected by problems with access to green spaces and a lack of employment opportunities in the environmental sector, as described above. Environmental interpretation needs to accommodate their particular needs, for example notice boards at wheelchair height and special facilities for the visually impaired.

Older people

3.30 Older people are subject to some of the general issues described above. Many older people are interested in gardening, ^[5] and proposals in this Strategy relating to allotments, private gardens, community and cultural gardens may be of particular significance for this group.

Young people and children

3.31 The health benefits to be gained from visiting green spaces are particularly pronounced for children. Parental fears over 'stranger danger' and the crossing of busy roads etc, mean that most children are barred from visiting such places by themselves, ^[6] so special efforts are needed to ensure they do get opportunities to visit outdoor open spaces and enjoy and learn about nature. Several proposals in chapter 4 are specifically addressed at young people and children.

State of the environment

3.32 The Mayor's State of the Environment Report is required to contain information on London's biodiversity. Indicators and targets for biodiversity are proposed to meet this requirement (Policy 14 in chapter 4).

The London Plan

3.33 The London Plan (Spatial Development Strategy), and the way it is reflected in the Unitary Development Plans of London boroughs, will be one of the most important mechanisms for implementing the Biodiversity Strategy. The detail of how this will be achieved is to be found mainly under Policy 1 of this Strategy (in chapter 4). The draft London Plan contains policies to protect, manage and enhance biodiversity. Protection is given to sites of international and national importance and Sites of Metropolitan Importance for Nature Conservation. The latter will be identified by the Mayor under this Strategy. Together, these comprise London's key strategic framework for biodiversity.



- designations and protected or priority species. Appendix I of this Strategy contains the procedures the Mayor expects boroughs to use in identifying this land of importance. New developments are expected to include provision to create, manage and enhance wildlife habitat and natural landscape. The London Plan also contains detailed policies on the River Thames and London's waterways, which seek to protect and enhance wildlife habitats. The London Plan reinforces standards for open space provision and asks London borough councils to identify areas of deficiency, promote improved access, enhance provision based on assessments of local need, and create new open spaces.
- 3.35 The Mayor proposes to work in partnership with London boroughs in support of this strategic planning framework, both in the survey and identification of land of importance for nature conservation and in statutory planning work (see Proposals 1-6, 13 and 16).
- 3.36 The London Plan will be subject to consultation and an examination in public, after which it will be revised before being adopted by the Mayor.

Transport

3.37 Land associated with London's transport infrastructure includes much wildlife habitat. The Mayor expects that the existing work to accommodate biodiversity considerations into the management of this land should be continued and enhanced. Biodiversity should be taken into account in any proposed new transport infrastructure. Transport infrastructure, especially roads, can act as a barrier to the movement of wildlife. The Transport Strategy promotes an improved public transport system. It is important to ensure that this leads to improvements in Londoners' access to nature and green spaces. Disability has been recognised as an issue in accessing green spaces; the Transport Strategy has clear proposals for making transport more accessible for disabled people.



3.38 The Mayor has a particular duty to consider 'the desirability of promoting and encouraging the use of the River Thames safely, in particular for the provision of passenger transport services and for the transportation of freight'. The Thames is London's largest Site of Metropolitan Importance for Nature Conservation, and proposals to further the Mayor's duty and to conserve the river's biodiversity value are considered largely under the Blue Ribbon Network in Chapter 4.

Economic development

London's rich heritage of biodiversity is an important factor in maintaining and enhancing the quality of life for Londoners. It is a positive aspect of London's environment, which brings economic benefits. The variety of attractive parks and open spaces contribute substantially to London's marketing image, and may have an important role in encouraging inward investment. The business community already has a role in conserving London's nature and green spaces, but it is expected that this will increase substantially. The business community is expected to play a significant role in implementing the programme set out in this Strategy. Opportunities should be taken to build biodiversity into new developments in all aspects of regeneration. It is also expected that important wildlife areas will be protected as part of a balanced approach to London's redevelopment. Potential economic impacts on global biodiversity will also need to be considered in relation to ethical trade and procurement. The Economic Development Strategy encourages the enhancement of local employment and the full use of local knowledge and skills in community projects, which could include projects based around biodiversity and open spaces, where they support the London Development Agency's remit. The London Development Agency is working on initiatives to promote local food production and distribution, which will help to reduce London's ecological footprint.

Waste management

- 3.40 The main link between the Waste Management Strategy and biodiversity is where reduction in landfill requirements through waste minimising and recycling should remove pressure on sites important for biodiversity. Other benefits come through the reduction in the need to transport waste. The composting of green waste, an essential part of organic and wildlife gardening, also reduces the need for landfill.
- 3.41 Proposals in this Strategy to encourage wildlife gardening, in community gardens, allotments and domestically, link with the home and community composting proposals of the Waste Management Strategy. Encouraging economic uses for woody material from the management of woodlands and street trees also assists waste minimisation.





- 3.42 Increased volumes of green waste compost will benefit London's biodiversity footprint by reducing the use of peat in horticulture, which threatens peat bogs in Britain and abroad.
- 3.43 The green landscaping of waste management facilities can function as wildlife habitat as well as improve the aesthetics of the site; proposals in this Strategy encourage such features.
- 3.44 There is a physical link between education on waste minimisation, recycling, energy efficiency, renewable energy, biodiversity and other environmental issues in many of London's environmental education centres. Again proposals in this Strategy aim to maintain and enhance access to these centres.
- 3.45 There is also an economic link with the Waste Strategy through the Landfill Tax Credit Scheme. Since its inception in 1996 this has provided a number of major biodiversity benefits in London, for example enabling the Royal Society for the Protection of Birds to purchase much of Rainham Marshes for a nature reserve, and the London Wildlife Trust to purchase Saltbox Hill in the London Borough of Bromley.
- 3.46 The Landfill Tax Credit Scheme is currently the subject of a Government Review, which is likely to result in a larger proportion of revenue thus generated going to sustainable waste management projects. Funding is still likely to be available to deal with environmental consequences of landfill, which would include biodiversity benefits.

Air quality

- 3.47 The links between air quality and biodiversity are not major, although some aspects of poor air quality can affect biodiversity. The most important of these in London is probably nitrogen deposition, predominantly from vehicle emissions, which can affect plants directly and also enrich the fertility of naturally infertile habitats, such as heathland, damaging this habitat. [7] There is considerable variation in the susceptibility of individual plant species to these effects.
- Gritical levels of oxides of nitrogen (mainly nitrogen monoxide and nitrogen dioxide) have been set, below which significant damage to vegetation is not considered likely to occur. Monitoring data allow the modelling of recent average concentrations of one of these oxides, nitrogen dioxide. London has the highest concentrations of nitrogen dioxide of the UK, and the Air Quality Strategy models the present levels. Data on nitrogen dioxide alone show that the whole of London is at present above critical levels. It is likely that susceptible habitats and species are at present suffering from pollution





- from nitrogen oxides, which would be lessened by the improvements sought by the Air Quality Strategy.
- 3.49 Historically it was sulphur dioxide in the smoke from London's industry and domestic fires that had the most significant adverse effect on plants. Improvements since the Clean Air Act of 1956, and subsequent legislation, mean that there is now no significant local problem from these sources and that many sensitive plants, lichens, and perhaps insects and insectivorous birds, are recovering.
- 3.50 Ozone is a secondary pollutant formed in the lower atmosphere when nitrogen dioxide reacts with oxygen in the presence of sunlight and volatile organic compounds. This reaction can occur far from the sources of the primary pollutants, so that ozone over southern Britain can be a result of the emission of pollutants abroad. In London, where there are relatively high concentrations of nitrogen monoxide, the reaction is reversed to produce lower levels of ozone than in the surrounding rural areas. ^[9] This means that critical levels of ozone in relation to damage to vegetation and individual plant species are sometimes exceeded in outer London, but not generally in suburbia or in central areas. The National Air Quality Strategy expects general levels of ozone to improve in the longer term as a result of European legislation. However, local deterioration is possible with reducing emissions of nitrogen monoxide in London.
- 3.51 London's emissions of ozone precursors and other pollutants affect vegetation and species over a wider area, so that an improvement in these emissions would reduce harm outside London as well. This is particularly so for ozone.
- 3.52 The air quality objectives for vegetation that are set within the National Air Quality Strategy do not apply in London and would be difficult to achieve here. Nevertheless the improvements sought in the Air Quality Strategy would ameliorate the effects on sensitive habitats and species, which are part of the value of the Sites of Importance for Nature Conservation which the Biodiversity Strategy seeks to protect.
- 3.53 Vegetation itself can influence air quality. Some wind-pollinated plants and fungal spores contribute to particulate pollution. On the positive side, vegetation has a minor role in filtering out pollutants, and open spaces provide breaks in the urban environment, where people can enjoy better air quality relative to heavily developed areas, largely due to the absence of traffic and other sources from the area. Biological indicators have long been used as pollution monitors and lower plants, such as lichens and mosses, seem particularly susceptible to poor air quality.

3.54 There is a statutory link between air quality and wildlife sites protected under the European Habitats and Birds Directives. [10,11] Regulators are required to take into account the impact of various developments requiring permission on these sites, which, in London, include Wimbledon Common, Richmond Park, Epping Forest, Kempton Park Reservoir and Walthamstow Reservoirs. Competent authorities, including central and local government and other public bodies, are required to review, and if necessary modify or revoke, any existing consents which are likely to have significant adverse effects on any of these sites. [12] In addition, when considering the grant of permits under the pollution prevention and control regulations, consultation is required with English Nature where a Site of Special Scientific Interest may be affected. [13] Although there are 38 SSSIs in London, there is no legal requirement to consider also the many non-statutory sites identified under this Strategy.

Energy and climate change

- 3.55 London's energy consumption generates pollutants that can harm biodiversity (see air quality above). The energy distribution network is often sited in areas of important wildlife habitat, and the management of vegetation beneath pylon lines or over cables needs to be undertaken carefully. Carefully sited wind-turbines should present no hazard to birds.
- 3.56 Climate change is likely to have a significant effect on biodiversity in London, as it will elsewhere. This will be assessed as part of an overall appraisal of the impacts of climate change in London. The role of trees and woodlands in London in fixing atmospheric carbon dioxide (i.e. as a carbon sink) is likely to be minor in the context of London's total energy budget, but it does nevertheless make a contribution so long as there is a net increase in biomass. The implications of accelerated sea level rise for the River Thames are likely to be particularly significant. Current predictions suggest that London's rivers will flood more often in the winter, but suffer from low flows in the summer. This would exacerbate the existing problems for biodiversity from varying river flows, but could allow the development of wetland habitats in flood storage areas.
- 3.57 London's agricultural land, woodlands and street trees could be managed for the production of biomass fuel for heat and power generation. This link should be encouraged where such management also enhances biodiversity.
- 3.58 Green roofs, climbing plants and other natural features of greening on, or adjacent to buildings, can provide opportunities for improving thermal efficiency while benefiting biodiversity. Examples are reducing air



conditioning costs by providing summer shade, reducing wind-chill, and incorporating insulating layers to improve insulation.

Ambient noise

- 3.59 Biodiversity has minor benefits in reducing ambient noise. The barrier effect of deciduous trees on noise levels is modest. A dense belt of evergreen trees or large shrubs may have a greater impact. Trees and other vegetation can, however, have a greater effect on subjective perceptions. Street trees can make a busy thoroughfare feel more livable. Noise barriers such as timber fencing should be designed in conjunction with planting to enhance local biodiversity. 'Living barriers' can be formed largely from plants in a growing medium. 'Soft ground', including grassland and cultivated gardens, absorbs sound, helping to reduce ambient noise levels.
- 3.60 There is some evidence that continuous high noise levels, notably from busy roads, can have adverse effects on populations of breeding birds. Noise is understood to interfere with breeding behaviour in which birdsong is critical. Tranquillity within open spaces is important to many people for their appreciation of the natural and semi-natural world. Ambient noise can affect people's enjoyment of wildlife, such as under aircraft flight paths. Conversely, people can be disturbed by noise from wildlife, such as by early morning birdsong.

Culture

- 3.61 Biodiversity is often closely linked to land-use history and can have cultural resonances which should be valued, conserved and promoted. London's parks and green spaces are important cultural facilities and also provide havens for wildlife. Some open spaces, such as cemeteries and graveyards, have heritage value for both culture and nature. London's place names frequently derive from their natural surroundings, and the appeal of many of London's major attractions and recreation areas relies on their natural setting. Items of biodiversity interest can be included in some of London's cultural festivals, but it is important that major outdoor events do not damage a site's biodiversity interest. Equally, items of cultural interest in the artistic sense, such as sculpture, story telling, the performing arts or sketching, can enhance people's enjoyment of wildlife areas. Public art can be included within functional structures, such as fencing and seating in green spaces. This Strategy seeks to celebrate the variety of links that Londoners from a wide range of backgrounds can have with natural landscapes and biodiversity.
- 3.62 There can be tension between some people's desire for formal landscapes and the often informal and relaxed appearance of wildlife habitat. This





tension can often be eased by good design and management and the provision of information on what is being done and why.

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4 policies and proposals

- 4.1 This chapter presents the Mayor's 14 detailed policies for London's biodiversity, and 72 proposals for their implementation. These provide a comprehensive framework to deliver the Mayor's vision and objectives in this area. Within this framework, the Mayor will give particular priority to four areas:
 - protection of biodiversity
 - positive measures to encourage biodiversity action, promoting the management, enhancement and creation of valuable green space
 - · incorporating biodiversity into new development
 - access to nature and environmental education.

Protecting London's biodiversity

- 4.2 London's diversity of wildlife depends on the protection and appropriate management of the wide range of habitats occurring in the capital. Although there is a need to conserve nature for its own sake, this Strategy also recognises the importance of biodiversity for people. Because of the latter, the identification of wildlife sites for protection in planning takes account not only of their value to wildlife, but also their cultural, landscape, aesthetic, educational and heritage value, and their accessibility and use by Londoners.
- Our responsibility to conserve biodiversity is enshrined in various international conventions, European directives and national policies. The UK Government has signed the Rio Convention on Biological Diversity,^[1] which requires the adoption of Local Biodiversity Action Plans. The European Commission Biodiversity Strategy [2] calls for the conservation and sustainable use of biological diversity, and its Sixth Environmental Action Plan [3] seeks to protect and restore the functioning of natural systems and halt the loss of biodiversity in the EU. The Pan-European Biological and Landscape Diversity Strategy^[4] calls for the establishment of a Pan-European Ecological Network and the European Union Habitats Directive [5] encourages the management of a network of corridors and stepping stones to assist the movement of wildlife. Insensitive development can harm this network. The need to protect locally important wildlife sites is acknowledged in the present Government guidance (especially Planning Policy Guidance for Nature Conservation [6] and Regional Planning Guidance for London [7]), which is confirmed in the planning circular on strategic planning in London. [8]
- 4.4 Biodiversity Action Plans are encouraged at the national and local level through the Countryside and Rights of Way Act 2000, ^[9] and the Local Government Act 2000. ^[10] There is national guidance on the production of local Biodiversity Action Plans. ^[11] The London Biodiversity Partnership has published the first two volumes of the London Biodiversity Action







Plan^[12,13] and the Mayor has already joined this partnership. Individual boroughs are at various stages with their own action plans, as are some of London's larger corporate landowners. These action plans aim to protect priority habitats and species and hence the places where they occur. Appendix 3 gives further details of the UK, London and local action plans. It is important that these local priorities are reflected in the protection afforded to biodiversity through the planning system.

- 4.5 In parallel with this guidance, procedures have been developed for identifying land of importance for London's biodiversity. These are described in Policy, criteria and procedures for identifying nature conservation sites in London (Appendix 1), and have been adopted by the Mayor as a basis for his Biodiversity Strategy. They have led to the identification of a network of sites, areas and corridors extending from the Green Belt and Metropolitan Open Land into the more developed parts of London. It includes most of the existing habitat for important species, but the conservation of species may also require action outside this network. Where possible, sites are selected to alleviate areas lacking in accessible wildlife sites and Areas of Deficiency are identified to assist this process.
- A.6 In 2000, the Parliamentary Committee on the Environment, Transport and Regional Affairs agreed that 'local authorities have a duty to identify and maintain a register of local wildlife sites and give them the status of 'material consideration' in development control decisions'. [14] Much of the protection of wildlife habitat, and of important species, will be provided through statutory planning, in the London Plan (Spatial Development Strategy) and the boroughs' individual Unitary Development Plans. The Secretary of State's guidance on the London Plan (Spatial Development Strategy) [9] requires policies for the protection of areas of strategic importance for biodiversity and nature conservation, and guidance to boroughs on how Unitary Development Plans should contribute to the Mayor's strategic environmental strategies.
- 4.7 Open spaces and wildlife habitats receive protection through the planning process and through legislation. Planning designations such as Green Belt and Metropolitan Open Land, along with local open space designations, provide strong protection from built development. Much wildlife habitat is included in such designations, and receives a degree of protection in this way. However, biodiversity conservation is not the primary purpose of these designations, and many of the permitted uses of Green Belt and Metropolitan Open Land could potentially be harmful to biodiversity. It is important, therefore, to ensure that land of importance for nature



- conservation is protected by specific nature conservation designations and policies.
- 4.8 Planning authorities may use Tree Preservation Orders and Hedgerow Protection Orders to provide an additional layer of protection for trees, woodlands and hedges. However, these can protect only the specified trees, or the shrubs which make up a hedge. No protection is conferred on hedge bottom or woodland ground flora in this way. Nevertheless, the protection afforded by these orders is wider ranging than protection through the planning process, as the latter can only protect against activities for which planning permission is required.
- 4.9 Some land use changes that have a significant impact on biodiversity do not require planning permission. Here, the Mayor will work in partnership to achieve the aims of this policy (see Policies 3 to 5 below). This applies particularly to the operational land of utilities and the railway companies.



- policy 1: The Mayor will work with partners to protect, manage and enhance London's biodiversity.
 - 4.10 Much of the implementation of this part of the Mayor's Biodiversity Strategy will be through the statutory planning process. This policy and the following six proposals are reflected in the Mayor's draft London Plan (Spatial Development Strategy).

Protecting wildlife habitats

4.11 This Strategy aims to ensure no net loss of important wildlife habitat, and the Mayor wants to see a net increase in habitat through enhancement and habitat creation. The target of no net loss (Proposal 70 below) applies particularly to the network of important habitat identified through the procedures adopted by the Mayor (reproduced as Appendix 1 of this Strategy). This network protects almost all the priority habitats for biodiversity and also includes the features of major importance for flora and fauna required by the European Habitats Directive. [5] It is important that the whole of this network is subject to planning protection, as this is the only way to protect it from piecemeal erosion and to provide the potential for the network to be enhanced.

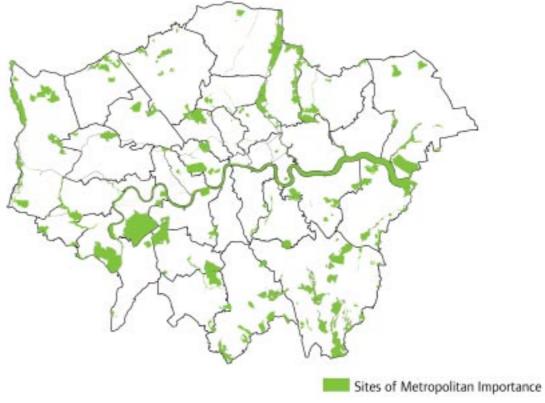


proposal 1: The Mayor will identify Sites of Metropolitan Importance for Nature Conservation. Boroughs should give strong protection to these sites in their Unitary Development Plans. The Metropolitan Sites include all sites of national or international importance for biodiversity.



- 4.12. London contains many sites of national and international biodiversity importance. These include Sites of Special Scientific Interest, National Nature Reserves, Special Protection Areas and Special Areas for Conservation. Public bodies, including local authorities, have a statutory duty under the Countryside and Rights of Way Act 2000¹⁹¹ to protect these sites. There is a statutory requirement to consult English Nature on planning proposals which might affect these sites.
- 4.13. Appendix 1 sets out the criteria and procedures for identifying land of importance for London's biodiversity for protection in Unitary Development Plans. This includes Sites of Metropolitan, borough and Local Importance for Nature Conservation, Green Corridors and Countryside Conservation Areas.
- 4.14. The Mayor will use the procedures and criteria to identify Sites of Metropolitan Importance for Nature Conservation. The London Plan identifies these as London's key strategic framework for biodiversity. As the most important sites for biodiversity in London, the Mayor gives these sites his first priority for protection.

Figure 4 Sites of Metropolitan Importance for Nature Conservation



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- 4.15 These sites will include all sites of national and international importance for biodiversity. However, some Sites of Special Scientific Interest are notified for their geological interest, and may have no significant biodiversity interest. These geological Sites of Special Scientific Interest may therefore not be identified as Sites of Importance for Nature Conservation. Nevertheless, there is still a statutory duty to protect their geological interest and to consult English Nature on any planning proposals which may affect them.
- proposal 2: Boroughs should use the procedures adopted by the Mayor to identify and protect Sites of Borough and Local Importance for Nature Conservation and other local designations. The Mayor will assist and advise them in this.
 - 4.16 The other land identified under the procedures, the Sites of Borough and Local Importance, Green Corridors and Countryside Conservation Areas, is all essential to the conservation of London's biodiversity. Together with the Metropolitan sites, it forms a strategic network of land of importance to biodiversity in London, as is advised in the Habitats Directive. [5] It is therefore important to protect this land in Unitary Development Plans.
 - 4.17 However, while the sites, areas and corridors together form a strategic network, the individual elements of this network are of less than Londonwide importance, and the identification of these is thus properly a role for the boroughs. The Mayor expects boroughs to apply his adopted procedures to identify Sites of Borough and Local Importance, Green Corridors and Countryside Conservation Areas. He will assist the boroughs in this through the provision of data from his programme of open space survey (see Proposal 16) and by working with Council officers and others to identify important sites.
 - 4.18 Green Corridors to promote the movement of wildlife have been defined in London since 1990, [15] and in 1991 their use was extended to include landscape and aesthetic elements and routes for cycles and pedestrians. [16] Their prime purpose, however, is the promotion of the movement of wildlife, as recommended in the EU Habitats Directive; [5] they may include land accessible to the public but they have always included much that is not accessible. Although these corridors are not a panacea, they do assist wildlife movements in some circumstances. [17] They extend into the built fabric of London from the Green Belt and Metropolitan Open Land, and include many Sites of Importance for Nature Conservation. Appendix I paragraphs 2.17–2.19 describe corridors and criteria for their identification.





Conserving species through the planning system

3: The Mayor will and boroughs should resist development which would have a significant adverse impact on the population or conservation status of protected or priority species.

- 4.19 Some species of plants and animals are afforded legal protection, for example under Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended) or the Protection of Badgers Act 1992 of there are identified as priority species in a Biodiversity Action Plan, such as the UK or London Biodiversity Action Plans, or a borough Biodiversity Action Plan. The protection and enhancement of London's wildlife habitat is the main way in which the populations of such important species can be maintained. However, it is not possible to conserve all species through habitat protection alone, and it is therefore necessary to protect the species themselves from the adverse effects of planning proposals.
- 4.20 Planning Policy Guidance [6] makes it clear that this conservation through the planning system is complementary to that provided by the species protection legislation. The latter is considered in the next section of this Strategy. In planning it is necessary to balance any harm to a species, or its habitat, with the benefit of a development proposal. The judgement would be made on the basis of the expected effect on the species, the national or international significance of London's population of the species, and its abundance, rate of decline or degree of threat.
- 4.21 The Mayor expects planning permission to be refused if a proposed development would have a significant adverse effect on land identified as being important for nature conservation under the procedures in Appendix 1 or on the population or conservation status of a protected or priority species, unless the social or economic benefits of the proposal clearly outweigh the importance of the site or species.
- 4.22 The effects of development on species and habitats can be direct or indirect. Indirect effects include increased use and disturbance, hydrological changes (for example due to increased hard surfaces or underground development), level of noise, pollution, shading and lighting disturbance.

Mitigation and compensation

proposal 4: Where, exceptionally, development is permitted which has an adverse impact on a Site of Importance for Nature Conservation or other local designation or on the population or conservation status of protected or priority species, the Mayor will and boroughs should aim to secure

compensatory measures to mitigate such adverse effects.

4.23 Where a development proposal risks damage to important wildlife habitat or species, it is necessary to consider the use of appropriate planning conditions or obligations in the interests of nature conservation. [6] Such mitigation can involve the creation, restoration and enhancement of natural habitats, the recovery, introduction or enhancement of species populations, and the provision of artificial wildlife structures. In developing such mitigation proposals it is important first to have regard to the priority given by Government to the conservation of the best existing habitats:

While some simple habitats, particularly those populated by mobile species which are good colonisers, have some potential for re-creation, the majority of terrestrial habitats are the result of complex events spanning many centuries which defy recreation over decades. Therefore, the priority must be to sustain the best examples of native habitats where they have survived rather than attempting to move or recreate them elsewhere when their present location is inconvenient because of immediate development proposals.'[UK Action Plan, 1995]



- 4.24 Any mitigation should be appropriate to the circumstances of the individual case and should take proper account of the likely outcome. In particular, the salvage and translocation of wildlife habitats should be used as a measure of last resort. [20]
- 5: The Mayor will and boroughs should take account of the protection proposal of wildlife habitats and biodiversity in the consideration of all planning applications.
 - 4.25 There will be many planning proposals which, while not affecting designated sites or corridors or protected species, will nevertheless have an impact on wildlife habitats and biodiversity. The Mayor expects biodiversity to be taken into account in the consideration of all planning applications. Where there are likely to be adverse impacts on biodiversity, boroughs should seek to avoid, mitigate or compensate for these through modifications to layouts, landscaping and design, and the use of planning conditions and agreements.



Greening new developments

poposal 6: The Mayor will and boroughs should ensure that new development capitalises on opportunities to create, manage and enhance wildlife habitat and natural landscape. Priority should be given to sites within or near to areas deficient in accessible wildlife sites, areas of regeneration, and adjacent to existing wildlife sites.



- 4.26 The Habitats Directive ^[5] and planning guidance ^[6] require appropriate management and enhancement of biodiversity and the promotion of access to nature. Statutory Local Nature Reserves (see Proposal 22) are an available mechanism for London boroughs to achieve these aims in the most important areas under their control, but these positive planning provisions should extend far beyond such sites.
- 4.27 The planning process provides many opportunities for this work, and it is important that no such opportunities are missed. This is particularly important where there is a shortage of green space and in areas of regeneration.
- 4.28 Access can be improved by making places more attractive and safer, enhancing or creating new accessible wildlife habitats and opening up access to existing habitats. While encouraging new and improved access to wildlife sites is important, consideration needs to be given to the impact of such access on plants, animals and their habitats. Where there are habitats or species which are particularly sensitive to trampling or disturbance, uncontrolled access, or in a few cases any access at all, is not desirable.
- 4.29 Wherever appropriate, new development should include new or enhanced habitat, or design (eg green roofs) and landscaping which promotes biodiversity, and provision for their management.
- 4.30 Enhancements are most appropriate in places with little or no present wildlife value, as it is in such places that a gain can readily be assured. Even here, there are important principles that need to be followed to avoid inadvertent harm to existing wildlife or its habitat. [21]
- 4.31 The creation of new habitat is also particularly valuable where developments are adjacent to existing wildlife habitats. In such situations, the new habitat can complement the existing habitat, and act as a buffer from any disturbance associated with the new development.
- 4.32 Wherever habitats are to be created or enhanced as a result of development, it is vital to ensure not only that the initial landscaping work is carried out satisfactorily, but also that arrangements and resources are in place for ongoing management. Planning agreements should include requirements for the production of a management plan or guidelines, and specify what resources should be set aside for future management and whose responsibility it will be to carry out such management.

4.33 In the majority of cases, new habitats and open spaces are created to fulfil amenity and educational functions, as well as to enhance biodiversity. It is particularly important to consult local people, including ethnic minorities, children and young people and disabled people, to find out their requirements and desires for their open space.

Brownfield biodiversity

- 4.34 An important concern for statutory planning in London is the need to provide space for its population and the development of its economy. In doing this, a balance is required between the need for land for new housing, employment and infrastructure, and the importance of some of this land for wildlife. Government policy, endorsed by the Mayor, is to concentrate new housing development on previously developed, or brownfield, land. Planning guidance makes it clear that, where the remains of previous use have blended into the landscape so that it can be considered as part of the natural surroundings, or have been overtaken by nature conservation value or amenity use, land is not to be considered to be 'previously developed'. [22] For this reason, there should be little conflict between biodiversity and the redevelopment of brownfield land.
- 4.35 However, the reality is not as simple as this. Many brownfield sites are some way along the line towards being 'overtaken by nature', and, while supporting valuable biodiversity, are still clearly land which has been previously used. The early successional 'wasteland' habitats found on such sites are not generally valued by people so highly as more traditional green spaces, such as woodlands and parks. They are often inaccessible, and may be dangerous due to contamination or unstable structures. There is thus often little local pressure for their protection. Yet these habitats support some of London's most important wildlife, such as the nationally scarce black redstart, and the Thames Terrace assemblage of burrowing bees and wasps, as well as providing feeding habitat for seed-eating birds, including London's declining population of house sparrow.
- 4.36 There has always been a turnover of wasteland sites in London, new sites emerging as others are built on or are left to develop naturally into scrub or woodland. However, the success of London's economy has led to an overall loss of wasteland in recent years, and this shows no sign of slowing down. Wasteland is by far the most threatened of London's habitats.
- 4.37 It is important, therefore, that brownfield sites are subjected to the same consideration under the procedures for identifying Sites of Importance for Nature Conservation as other habitats. Boroughs often seem reluctant to identify wasteland Sites of Importance, but London's best wasteland sites deserve protection.



4.38 Where wasteland habitats are lost to development, it is important that mitigation and compensation should concentrate on provision of similar habitats, rather than more traditional landscaping. If this is seen as inappropriate for the appearance of a new development, innovative solutions should be sought, such as creating wasteland habitats on roofs, where they are out of sight. The London Assembly's Green Spaces Committee support this stance. [23]

Protecting garden biodiversity

proposal

7: The Mayor expects that biodiversity and wildlife habitat will be taken into account in proposals for the redevelopment of garden land, and will develop guidelines for the evaluation of such proposals.

- 4.39 Gardens may sometimes provide opportunities for residential development. Gardens are included within the definition of 'previously developed land', and most of their habitat is not protected through the procedures of Appendix 1. The draft London Plan relates housing densities to transport accessibility and capacity. It seeks infill development to be sensitive to the character of existing areas and reflect, but not simply reproduce, existing densities. The draft London Plan makes it clear that biodiversity is one of the factors which should be taken into account when assessing proposals for development on garden land.
- 4.40 The wildlife habitat found in blocks of gardens can be significant locally and, in sum, London's gardens form a very large area of habitat. The most important areas of wildlife habitat in garden land should be protected from built development. Several factors will determine the biodiversity value of garden land. These include: the area or length of the gardens; the nature and range of habitats; connections with other blocks of habitat; and the presence of protected and priority species. There is also concern over the loss of garden land and street trees through the development of garden land for offstreet vehicle parking.
- The amount of garden land in London is such that there generally should not be great conflict between development and biodiversity there, but quidelines are needed to ensure that nature conservation and amenity are taken into account in assessing proposals for development on garden land. These will be considered in preparing the model policies for biodiversity (Proposal 10).

Assessing impacts

proposal 8: Where biodiversity assessments are submitted, the Mayor expects the options to be refined only after full investigation of the existing ecological conditions and consideration of the potential impacts of options.



4.42 Environmental Impact Assessment is a formal process undertaken for development proposals that fall within the criteria of the statutory regulations. [24] Such assessments include the consideration of biodiversity impacts. [25, 26] In other cases where biodiversity could be affected and developments are not subject to formal EIA, biodiversity assessments are often submitted in order to establish the potential impacts of developments and any mitigation or compensation measures. The production and consideration of such assessments are good practice as they inform planning decisions and ensure that biodiversity issues are fully taken into account.



- 4.43 Some aspects of wildlife and habitat value are difficult to quantify, and impacts on these are even more difficult to establish. Under these circumstances it may be difficult or impossible to prove that damage will occur. Where significant environmental damage may occur, but knowledge on the matter is incomplete, decisions made and measures implemented should err on the side of caution. This approach is termed the 'precautionary principle'. [4]
- 4.44 It is important that assessment provides adequate documentation of the existing value in the proposal area and full consideration of the constraints and alternative opportunities that the scheme presents.
- 4.45 Other proposals below deal with best practice for the treatment of biodiversity in proposals for regeneration or new infrastructure.

Advice on biodiversity in planning

- 4.46 London borough councils are crucial to protecting green spaces and important species, most directly through the planning system and through stewardship of their own land holdings. They require on-hand ecological advice if they are to accomplish this effectively, for example to assess the ecological impacts of development proposals and to guide management of open spaces. It may be possible to obtain some of this advice through partnership with other boroughs or with voluntary groups.
- proposal 9: The Mayor will encourage London borough councils to retain ecological advisors. Boroughs may wish to enter into partnership arrangements to ensure they have suitable expertise.
 - 4.47 The London Ecology Unit, with English Nature, London Wildlife Trust, the Environment Agency and the Countryside Agency, developed detailed advice on the policy content of Unitary Development Plans to conserve and promote access to natural green spaces in London. [27] This advice has been kept up to date with guidance and statute, and is the main basis for



the detailed biodiversity policy content of London's Unitary Development Plans. It is important to continue updating this guidance, to assist London boroughs in playing their role in implementing this Strategy. It is essential that the advice is consistent with the London Plan (Spatial Development Strategy). The referral of Unitary Development Plans to the Mayor will enable uptake of this guidance to be monitored.

4.48 When updating this advice it will be necessary to take on the new agenda of Biodiversity Action Plans. This includes the need for London's Unitary Development Plans to reflect priority habitats and species selected by local biodiversity partnerships.

proposal 10: In consultation with other expert groups, the Mayor will produce model policies for biodiversity conservation to assist London borough councils with this aspect of their Unitary Development Plans.

4.49 The Mayor is consulted on the policies in London's Unitary Development Plans and on proposals for major developments; these are known as 'planning referrals'. These consultations will include many issues that may affect London's important biodiversity. Proposals 1, 2, 3, 4, 5 and 6 of this Strategy cover aspects of the Mayor's policy for such referrals.

proposal 11: The Mayor will take biodiversity issues into account in the consideration of planning referrals and comment on biodiversity issues wherever relevant.

4.50 At present the criteria for identifying development proposals to be referred to the Mayor [28] do not take specific account of biodiversity. Proposals are not required to be referred even though they affect the most important sites.

proposal 12: The Mayor will press the Government to bring Sites of Metropolitan Importance for Nature Conservation into the criteria for Mayoral planning referrals.

4.51 There is a clear need for London borough councils to have access to expert advice on biodiversity with a strategic overview of the Londonwide importance of sites and species, to inform their decisions on planning and development control. Such advice was provided in the past by the London Ecology Unit. The Mayor's staff have the expertise to provide such advice, and will do so whenever possible. The Mayor sees the provision of this advice as a very important part of the implementation of this Strategy. Requests for advice will be prioritised against the objectives of this

Strategy, particularly the protection of London's biodiversity and the promotion of good local access to nature for all Londoners.

proposal 13: The Mayor will provide expert advice on biodiversity to London borough councils on planning issues, other than statutory planning referrals, which could have strategically important consequences for biodiversity.

Species protection

Many wildlife species are afforded statutory protection. [29] The 4.52 Countryside and Rights of Way Act 2000 [9] has recently strengthened species protection legislation contained in the Wildlife and Countryside Act 1981 (as amended). [18] Some species, in particular the badger (protected by the Protection of Badgers Act 1992 [19]), are threatened mainly by persecution; the illegal digging of badgers for baiting with dogs is a serious problem in parts of London. Threats to most of London's other protected species are largely from habitat changes and disturbance resulting from development. The enforcement of this legislation assists the conservation of London's biodiversity and is undertaken by the specialised Metropolitan Police Wildlife Crime Unit, in conjunction with the RSPCA and English Nature. The Mayor's staff can also provide expert ecological advice on these issues.



proposal

14: The Mayor will work with the Metropolitan Police Authority and others to ensure that species protection legislation is enforced in London.

4.53 Hare coursing is a serious threat to London's remaining populations of the brown hare. Despite the hare being a priority species in the UK Biodiversity Action Plan, this activity currently remains legal with the consent of the landowner.

proposal 15: The Mayor will support legislation to ban all hunting with dogs.

Information on London's wildlife habitats and species

- 4.54 The Strategy depends upon an understanding of the status and distribution of wildlife habitats and species in London. The Mayor holds an extensive database and geographic information system on London's habitats and on the Sites of Importance for Nature Conservation and other designations. In order to assess what is important, and to monitor trends and changes, it is necessary to keep this information up to date. Transport for London supports the need to obtain information on its landholdings.
- 4.55 The Mayor will work in close conjunction with the boroughs, English Nature and the Environment Agency to implement a rolling programme of



open space and habitat survey. The survey will use the format originally developed by the Greater London Council and refined by the London Ecology Unit and GLA, and which has for many years been the standard method for habitat surveys in London. Full details of the survey methodology are given in Appendix 4. The Mayor expects this methodology to be used for all habitat surveys in London. Transport for London is using a modified version of the methodology to survey its strategic road verges, and London Underground Limited used it in a survey of all its linesides in 2000. The London Development Agency routinely carries out a biodiversity survey as part of the site development process before any work can go ahead.

4.56 The information collected will be used to review the identification of Sites of Importance for Nature Conservation in each borough surveyed, working closely with officers of the borough. In the first cycle of the programme, priority will be given to boroughs which have not been surveyed recently, boroughs in which Sites of Importance for Nature Conservation have not been reviewed recently, and boroughs where changes are likely to have been greatest. As far as practical, surveys will be timed to coincide with boroughs' unitary development plan review timetables, so that the revised sites can feed into the revised unitary development plan. However, this may not always be possible.

proposal 16: The Mayor will aim to survey all open spaces and wildlife habitats throughout London on a ten year rolling programme, and employ the adopted procedures for evaluating open land to complete the identification of important wildlife sites throughout London and keep this series updated.

proposal 17: The Mayor will request that his functional bodies undertake biodiversity surveys on their holdings of open land, and, where appropriate, manage them to conserve and enhance biodiversity.

4.57 It is essential that information on London's biodiversity is collected and stored in a systematic way and is readily available to decision makers and others. There is a clear need for a local Biological Records Centre to coordinate this process. The National Biodiversity Network, led by the Joint Nature Conservation Committee, has established guidelines for the establishment of local records centres to ensure standardisation across the UK. The guidelines define a Biological Records Centre as a not-for-profit service run in partnership for the public benefit, which collects, collates, manages and disseminates information of known quality relating to the wildlife, wildlife sites and habitats for a defined geographical area.

- 4.58 The London Wildlife Trust has established a recording project to explore the possibilities for a records centre in London, and English Nature has commissioned a report on the way forward. Should a centre be established, it is important that it is used and supported not only by the London Wildlife Trust, but also by the Environment Agency, English Nature, the London boroughs, the London Natural History Society and other potential contributors and users of data.
- proposal 18: The Mayor will co-operate with the London Biodiversity Partnership and other relevant bodies in promoting effective monitoring of animals and plants in London and will support the establishment of a London Biological Records Centre as part of the National Biodiversity Network.

The Blue Ribbon Network (The Thames and London's waterways)

4.59 The Greater London Authority Act requires that the Thames receives special attention in statutory planning and as a transport artery. The Thames and its banks, together with its tidal tributaries, are London's largest unofficial nature reserve, recognised as a Site of Metropolitan Importance for Nature Conservation, and it is important that this value is maintained and enhanced alongside other uses. One of the Mayor's sustainable development principles calls for improvements to river and canal quality. [30]



- policy 2: The Mayor recognises the unique role of waterways and in particular the River Thames in London's history and in the lives of Londoners, and their value for transport, recreation, biodiversity and archaeology. In recognition of their importance, the Mayor has set up the concept of a Blue Ribbon Network for the Thames and London's waterways and the land alongside them. This will establish principles concerning the use and management of the water and land beside it.
- 4.60 To reflect the strategic importance of the River Thames and its tributaries, and London's other waterways, the Mayor has established the concept of a Blue Ribbon Network. This is the subject of an annex to the draft London Plan (Spatial Development Strategy). The Blue Ribbon Annex will replace the London parts of Strategic Planning Guidance for the River Thames. [31] It also recognises the inter-relationships of all of London's waterways and water bodies by extending policy and actions to cover the whole network of rivers, canals and other open water spaces, rather than just the River Thames. The Annex carries the same weight as the rest of the London Plan (Spatial Development Strategy). Proposal 19 summarises the policies in the Blue Ribbon Annex which are relevant to biodiversity, and Proposal 20 is an implementation action point from the Annex.



proposal

19: The Mayor will and boroughs should protect and enhance the biodiversity of the Blue Ribbon Network by:

- resisting development that results in a net loss of biodiversity
- designing new waterside developments in a way that increases habitat value
- allowing development into the water space only where it serves a water dependent purpose or is a truly exceptional case which adds to London's world city status
- taking opportunities to open culverts and naturalise river channels
- resisting impounding of rivers and taking opportunities to remove impounding structures
- recognising the Network as contributing to the open space network of London
- including land of importance for nature conservation in borough appraisals of their Thames Policy Area
- requiring developers to prepare assessments of biodiversity impact for significant development proposals adjacent to the Blue Ribbon Network, detailing the extent of their impact on biodiversity and mitigation measures to address any adverse impacts
- ensuring that rivers, brooks and streams are protected, improved and respected, taking measures to improve both public amenity and wildlife habitat
- taking measures to protect and improve water quality
- ensuring that surface water run-off is managed on site, preferably with sustainable urban drainage systems, which may provide additional wildlife habitat
- improving access to the Blue Ribbon Network, taking care not to disturb wildlife.

proposal

20: The Mayor will work with others and particularly the Environment Agency to establish a restoration strategy for the tributary rivers of the Network. Among other aims this will aim to identify options for reinstating natural features.

4.61 The Blue Ribbon Network provides a valuable series of habitats for wildlife, offering a feeling of openness within the built-up area and sense of nature which has been otherwise lost across much of London. The biodiversity of the Blue Ribbon Network has greatly improved over the past few decades. However, it is still under threat from pollution and insensitive development. The Mayor's approach is to ensure that this natural value is protected and enhanced.

The Thames

- 4.62 Boroughs will be required under the London Plan (Spatial Development Strategy) to designate Thames Policy Areas; it is important that these also highlight Sites of Importance for Nature Conservation.
- 4.63 Encroachment into the waterway has a negative impact on biodiversity. An extreme example is in central London, where successive narrowing of the river over centuries has halved its original width. This has eliminated riverside vegetation and increased the speed of flow, making it an inhospitable place for much aquatic life.
- 4.64 In some locations it may be possible to reverse this process as part of redevelopment or flood defence works, by retreating the flood defences to allow the establishment of waterside flora and fauna. In many other situations enhancements of the existing river walls can bring about smaller scale biodiversity gains.
- 4.65 Where development into the watercourse is allowed, for example piers or wharves for river transport or unique developments such as the London Eye, it should be designed to minimise, and wherever possible mitigate, its impact on biodiversity.

Thames tributaries

- 4.66 London's non-navigable rivers are an important resource for wildlife and for contact with nature. However, most of them have been physically altered from their natural state and this has usually led to a reduction in their value, both for wildlife and landscape. Rivers have been straightened, reconstructed in artificial materials or culverted for various reasons. Where improvements in water quality have been achieved, the full potential benefit for biodiversity and landscape can only be realised if improvements to the physical structure of the river channel are also implemented.
- 4.67 Unfortunately many of London's rivers suffer pollution; one of the most significant sources of chronic pollution is wrongly-connected sewers. Pollution reduces both the amenity and biodiversity value of streams. This in turn can lead to pressure to culvert or divert them, an approach which deals with the symptoms rather than the causes of these problems, and one which the Mayor will oppose. The Mayor will work with others to investigate possible courses of action to reduce the problem of pollution entering rivers.





4.68 The Mayor is opposed to the impounding of rivers, which destroys natural river ecosystems, as well as to the use of the Thames Barrier for purposes other than to protect London from flooding.

Canals and river navigations

- 4.69 London's canals and similar waterways and adjacent open land are important wildlife habitats. The canals are generally accessible to most people via the towpath, and many other waterways have footpaths beside them, offering a wonderful opportunity for contact with nature. This is especially important where canals pass through areas of regeneration and open space deficiency. Wheelchair access onto towpaths is often somewhat less than satisfactory and is an important issue currently being addressed by British Waterways London.
- 4.70 Historically canals were kept free of vegetation, but the increased role of recreation relative to transport use now offers more opportunity to enhance biodiversity, for example by introducing reeds and other marginal vegetation to provide habitat for birds, amphibians and dragonflies.

Enclosed water bodies

- 4.71 Enclosed water bodies have generally fared differently from London's linear waterways. Whilst many older ponds have been lost, a large number of small ponds have been created in Londoners' back gardens and larger ponds have been constructed in several nature parks; these make a valuable contribution to biodiversity.
- 4.72 London's largest enclosed waters were created as reservoirs to supply water, as docks, as gravel pits or as ornamental features. They also make a positive contribution to biodiversity. There may be opportunities to improve the biodiversity value of some of these waterbodies through better management or sensitive planting; this should be encouraged, especially where such sites become the focus for new development.

Sustainable drainage

4.73 Sustainable drainage techniques, such as permeable surfaces, storage ponds, green roofs, and even water butts, will be one of the keys to managing long term flood risk. [32] Many such techniques also have potential for delivering benefits to biodiversity.

Accessibility

4.74 A stroll alongside London's rivers and waterways provides an important part of Londoners' contact with nature. Gaps in the Thames Path will be filled as part of redevelopment schemes, and opportunities should be examined to extend the Path to London's eastern boundary. New sections

should be designed to be easily and safely accessible by all Londoners. It is also essential that the design of riverside paths and the identification of sites for promoting safe public access to the foreshore take account of the need to minimise disturbance to sensitive wildlife.

4.75 Parts of the Blue Ribbon Network are used as an educational resource through organised events and school visits as well as individual exploration. Opportunities to extend these experiences safely should be welcomed. The Mayor's proposals for environmental education are described below.

Managing wildlife habitats

- 4.76 The stewardship of London's open spaces involves managing them. Currently, lack of appropriate management is a major factor adversely affecting biodiversity conservation, although it must be recognised that not all open space should be managed for biodiversity. Management is also needed to allow people from all sections of the community to enjoy open space safely and without undue damage to the environment, and may include provision of interpretation and educational facilities. Access and biodiversity conservation can conflict, especially where public use is heavy. This particularly tends to be the case in areas of London containing few accessible open spaces. In such instances it may be possible to reduce conflict by managing access; a balance may need to be struck between potential damage and the value of public enjoyment and use.

- 4.77 Best Value reviews of council services may serve as catalysts for the introduction of better practices for habitat management and accessibility.
- policy 3: The Mayor will encourage and promote the management, enhancement and creation of green space for biodiversity, and promote public access and appreciation of nature.
 - 4.78 The need for management is not restricted to the most biologically diverse habitats. Changes in the management of even very formal parks can increase biodiversity. For example, planting of nectar-rich or berrybearing plants encourages butterflies and birds, and a reduction in the mowing frequency can, in the right circumstances, lead to an increase in colourful wild flowers. Such enhancements are popular with the public and bring benefits to biodiversity conservation.
 - 4.79 In areas identified as deficient in accessible wildlife sites, efforts to reduce this deficit need not be confined to sites such as parks and school grounds. Land under local authority control would normally be the priority for action, but this should not preclude other approaches. This includes





enhancing biodiversity through the landscaping of hard open spaces, such as in car parks, playgrounds, waste management facilities and hospital grounds; and enhancing the biodiversity of the built environment through green roofs, roof gardens, planting of climbers and so on. Biodiversity and landscape enhancements to land associated with health institutions, for example by the creation of hospital gardens, could bring particularly tangible benefits in terms of speedier recovery of patients and stress reduction for staff and visitors. [33,34] Another option is to encourage controlled public access to private open spaces, such as some of the private garden squares. It must be borne in mind, however, that some of these represent refuges for shyer species of birds, away from the noise and disturbance in public parks. Making sure the gardens continue to provide enough dense cover for birds may help to reduce any disturbance.

- 4.80 Habitat creation can be useful in providing new areas for wildlife and for public access to the natural world. However, newly created habitat is rarely an adequate substitute for habitat damaged or destroyed, for example by development. Priority should go towards conserving and managing what we have, rather than assuming that it can be replaced readily.
- 4.81 There are some health and safety aspects of open space management which are related to biodiversity. These include decreasing pesticide use, management to improve real and perceived safety, and management to minimise the health risks of particular wild plants and animals, such as poisonous blue-green algae in ponds, Weil's disease from rats, and species such as giant hogweed and brown-tail moth which cause severe skin reactions. Fear of crime can be addressed through appropriate design, management and staffing. The need to remove potentially dangerous trees can conflict with conservation, but again, design and management can reduce this conflict. However, a need to balance risk minimisation and promote both access and biodiversity conservation must be recognised. Strategically disseminated advice and information to London's land managers may help to minimise such health risks.
- 4.82 The Rio Convention calls on participating nations to prevent the introduction of, control or eradicate those introduced species which threaten ecosystems, habitats or species. Whilst most recently introduced species are not problematical, a few, such as Japanese knotweed, can be sufficiently invasive that they cause problems. Other species are becoming or may become problems in the future, for example Californian brome, floating pennywort, the Chinese mitten crab and mink. It may be useful if the GLA, London Natural History Society, English Nature, the Environment Agency and other partners collect and disseminate information on such species, which will link in with the statement on



exotic species published by the London Biodiversity Partnership. Problem species should be assessed on a case-by-case basis and it should not be assumed that all recently introduced species are invasive. Climate change may affect the behaviour of exotic species, for example enabling tropical species such as parakeets to survive the winter better and thereby increase in London.



- 4.83 Land management should be undertaken or supervised by suitably trained people. Specialist contractors and voluntary groups may be able to assist in management for biodiversity. The London Biodiversity Partnership's work involves encouraging new partners to contribute to conservation through their normal activities. This is clearly relevant to securing good management for biodiversity on land owned by businesses or public bodies, and will assist the Mayor in achieving this policy.
- proposal 21: The Mayor will encourage land managers, including London borough councils and other public bodies, schools, faith groups and commercial organisations, to take biodiversity into account in the management of their land. This should include managing important habitats to protect and enhance their nature conservation value, providing safe access for all, involving the local community and creating new wildlife habitats where appropriate.
 - 4.84 Under the National Parks & Access to the Countryside Act 1949 [35]), local authorities can declare important wildlife sites which they own (or otherwise have a legal interest in) as statutory Local Nature Reserves. They must consult English Nature, who will expect the sites to be managed for nature conservation according to an agreed management plan. The declaration of Local Nature Reserves is thus a useful mechanism to raise the profile of important sites, add an extra layer of protection, and to ensure that they are appropriately managed. Some funding for management of Local Nature Reserves may be available from English Nature. Many London boroughs have declared some of their best sites as Local Nature Reserves, and the Mayor wishes to see all boroughs identify suitable sites and declare them.
- proposal 22: The Mayor expects boroughs, in consultation with English Nature, to declare suitable sites as Local Nature Reserves, and to manage these sites to benefit biodiversity and people's access to nature.
 - 4.85 The evaluation, management and enhancement of important wildlife habitat all rely on the availability of technical advice, such as that provided in the past by the London Ecology Unit, many boroughs and others. This should be available for all major regeneration proposals,

proposals for new infrastructure, planning applications affecting Sites of Importance for Nature Conservation and important species, as well as management of strategic sites, Best Value reviews and other strategic issues concerning biodiversity. The Mayor's staff have the expertise to provide or recommend where to obtain such advice, and will do so whenever possible. Requests for advice will be prioritised against the objectives of this Strategy, particularly the protection of London's biodiversity and the promotion of good local access to nature for all Londoners. The Mayor sees the provision of this advice as a very important part of the implementation of this Strategy.

proposal 23: The Mayor will provide expert advice and training to London borough councils, and others as appropriate, on the management of strategically important wildlife sites and important species and the creation and enhancement of wildlife habitat. He will work with partners to disseminate

information on best practice in managing wildlife habitats in urban areas.

- 4.86 In addition to paid staff, it is important to encourage local people to be actively involved in conservation, for example on management committees or as volunteer workers. Indeed, volunteers may be fundamental to ensuring the long-term survival and management of a wild space. It is also important to provide for the special needs of the young, older people, the disabled and women in the development of safe and accessible natural open spaces. This can be done through community development projects, which are recognised as providing health benefits to participants.
- 4.87 Involvement in caring for open space can improve the health and morale of disadvantaged groups and can be a particularly creative way of acquiring new skills. St Mungo's, for example, found that homeless people may acquire a sense of identity and purpose by having a role in managing their local park. Similar projects are taking place with other groups such as adults with learning difficulties and the mentally ill, often under the auspices of Thrive (formerly Horticultural Therapy), BTCV (formerly the British Trust for Conservation Volunteers) and the Federation of City Farms and Community Gardens. There is a need to promote such projects more widely.
- 4.88 The capacity needs of smaller environmental organisations will need to be addressed so that they can cater for the requirements of all visitors and volunteers including those with special needs. Linking such groups to new sources of funding and advice is one practical measure which could be taken. Public approbation by the Mayor of voluntary sector achievements could be another form of encouragement.



- proposal 24: The Mayor will work with voluntary organisations to support and develop the role of local volunteers in protecting and managing local nature sites.
 - 4.89 The London Plan (Spatial Development Strategy) states that the production of open space strategies will assist in identifying needs and in providing a clear framework for investment priorities and action, and that boroughs' open space strategies for creating and enhancing open space should include assessments of local needs and the value of existing open space, including for biodiversity value. The London Assembly's Green Spaces Investigative Committee also recommended that open space strategies should include measures to raise awareness of local green spaces in the community. [23]
- proposal 25: The Mayor will produce a good practice guide for London borough councils to the production of open space strategies, which will include proposals for enhancing their open spaces for biodiversity.

Trees and woods

4.90 Trees are a very important part of London's environment. They make an enormous contribution to the landscape of the city, offer shade and shelter, help to filter pollutants from the air, and provide habitats for wildlife. There are many community initiatives and voluntary and other schemes in London to plant trees. Co-ordination of these initiatives into a Londonwide framework for trees and woods will focus on areas which would most benefit from tree planting. A framework will also ensure that appropriate tree planting occurs in places that will not harm the built environment, infrastructure, or important existing wildlife habitat: while planting trees can often be beneficial to biodiversity, planting them in the wrong place, particularly on existing open habitats such as grassland or wetland, can be very harmful. The framework will address the management of London's woodlands, and will be closely linked with the London Biodiversity Partnership's Action Plan for woodland. Best Value reviews of council arboricultural services can be a means to encourage biodiversity to be taken into account in local authority tree operations.



4.91 Biofuel can be produced from such sources as street and park trees, woodland, joinery waste and short-rotation energy crops such as willow. The London Bioenergy Report produced for the London Tree Officers Association estimated that 100,000 tonnes per annum of wood from arboricultural operations could be recovered for energy use within London. This would be dispersed across London and would be most suited to use in relatively small-scale Combined Heat and Power (CHP) schemes. This is estimated to reduce London's emissions of CO2 by up to 56,000 tonnes per year. BioRegional supply wood fuel from Croydon woodlands



for the BedZed development in Beddington. Further details of this are given in the Mayor's Municipal Waste Management Strategy – there are benefits for waste minimisation in such schemes.

proposal 26: A framework for London's trees and woodlands will be prepared by the Mayor in partnership with other relevant bodies, including Trees for London, the London borough councils, the London Tree Officers Association, the Community Forests, Green Gateway and the Forestry Commission.

Parks

- 4.92 London's parks are the main contact with nature for many people living in the capital. Many parks are of great cultural and heritage value, which must be respected. Wildlife in parks must generally coexist with provision for sport and recreation, and all park users must feel safe and comfortable. It is important to achieve an appropriate balance, whereby the park can fulfil people's need for contact with nature as well as other uses. This will vary from place to place. The park's management should also take account of perceptions of public safety.
- 4.93 Management for biodiversity should include sustainable practices, such as minimising the use of pesticides and green waste management. In some places it may be possible to manage grassland as a hay crop, or even by grazing; this not only adds biodiversity and amenity interest, but also minimises waste production. Park managers may also be able to assist with innovative recycling projects. For example, tyres have been used to build play equipment or path edging; fences can be made from old piping or recycled plastic; and waste rubble and subsoil are suitable substrates for creating 'wildflower meadows'.
- Adoption of good biodiversity management practices is by no means universal. The Best Value review process offers an opportunity to recognise the value the public sees in wildlife and so make adjustments to parks management.
- 4.95 A London Parks and Green Spaces Forum has recently been set up which will provide a point of contact for sharing information between people working on parks and open space management across London. The London Biodiversity Partnership's Parks, Amenity Grassland and City Squares Habitat Action Plan will provide an additional impetus for conservation action.

proposal 27: The Mayor will work with the London Parks and Green Spaces Forum, the London Biodiversity Partnership, London borough councils, the Royal



Parks Agency and others to facilitate information exchange on best practice in enhancing biodiversity value and promoting sustainable management in parks and green spaces in London.

Cemeteries and churchyards

- 4.96 Many of London's cemeteries and churchyards are of high biodiversity value and are recognised as Sites of Importance for Nature Conservation. Together with their historic and cultural interest, this gives them a very special character. London has an acute shortage of burial space, however, leading to calls to re-bury in land containing older graves. A balanced approach is necessary to ensure that provision of burial space will not compromise the special character of existing cemeteries.
- 4.97 A few cemeteries are managed primarily for biodiversity conservation, and many more have areas set aside as nature reserves, bird sanctuaries or butterfly gardens. Such areas enhance the experience of visitors, and provide a valuable resource for environmental education. The Mayor is leading on the London Biodiversity Partnership's Habitat Action Plan for cemeteries and churchyards, which aims to protect and promote their nature conservation interest, while at the same time respecting their primary purpose.
- 4.98 In developing new proposals on the management of sites, it will be essential to consult relatives and faith groups.
- proposal 28: The Mayor will encourage the sympathetic management of cemeteries and churchyards for biodiversity and the quiet enjoyment of nature.

Gardens and allotments

4.99 A large proportion of London's land area is made up of private gardens. Collectively, they are of immense value as wildlife habitat and Proposal 7 seeks the protection of this value. The importance of allotments as an integral part of a sustainable London will become greater as housing densities increase significantly in some parts of the capital. These, too, can include important wildlife habitat such as ponds, hedges and rough grass. There are many ways in which gardeners and allotment holders can improve their sites as wildlife habitat without damaging their horticultural, aesthetic and recreational value. For example, use of native plants, nectar-rich flowers and berry-bearing trees and shrubs can all increase the food available to animals. Minimising the use of harmful pesticides, particularly some slug pellets, is also beneficial. Responsible pet ownership can reduce the impact these animals have on garden and other wildlife, for example the number of birds killed by cats.





proposal 29: The Mayor will promote the important role of private gardens for wildlife and, together with other members of the London Biodiversity Partnership, will provide information to encourage London's gardeners to make their gardens wildlife-friendly.

4.100 Gardens and allotments can lead to improved health through physical exercise, fresh produce, relaxation and contact with nature. They also make a significant contribution to making London a more sustainable city. By encouraging composting, they can help to minimise waste and reduce the use of peat, and thereby reduce London's ecological footprint. By producing food locally they reduce the need for transport and packaging of food, again reducing London's ecological footprint. They also help to perpetuate local varieties of fruit and vegetables.

4.101 As with garden land (see 4.39 and Proposal 7 above), allotments too may be regarded as suitable sites for development, especially if they are not in active use. Once developed, however, an allotment site is lost to further use and can never again be made available for the local community. This is a particularly severe loss where no local alternative sites are available. Best Value reviews of council allotment provision can make councils aware of good practice. The important, multiple roles of allotments were also recognised by the London Assembly's Green Spaces Investigative Committee, who recommended that the London Parks and Green Spaces Forum should promote and share information on allotments. [23] There is a potential conflict between the biodiversity value of abandoned allotments and their restoration to active use. However, there are few abandoned allotments among London's Sites of Importance for Nature Conservation.

proposal

30: The Mayor will work with the boroughs and others to encourage greater public use of allotments. He will promote the social, health and sustainability benefits of allotments and encourage London and borough Biodiversity Action Plans to address improvements to their wildlife value.

Biodiversity and agriculture

4.102 London's farmland is home to a wide variety of animals and plants, including many of our best-loved birds and wild flowers. The agricultural intensification that has taken place in our countryside nationally, particularly since the Second World War, has resulted in widespread and catastrophic declines in many species, along with losses of traditional farmland habitats such as ponds and hedgerows. London is no exception to this, although detailed information on farms and farming methods in London, and trends in these, is generally lacking. Although in many areas a farmland landscape has been retained, commercial farming has given way to permanent horse pasture or other recreational uses such as



country parks. The adoption of sympathetic management is essential if farmland species and habitats are not to be lost.

policy 4: The Mayor will promote the conservation and enhancement of London's farmland biodiversity

4.103 There are a number of relevant 'agri-environment' and other schemes aimed at encouraging farmers to take biodiversity into account when managing land. Some schemes designed for the wider countryside may need modification if they are to operate successfully in the special conditions of the urban fringe, and this is considered in Proposal 67. Organic farming is beneficial, particularly as some of the requirements for organic certification require natural features to be managed sympathetically for wildlife. Local organic farming therefore delivers a sustainability benefit. Energy production from agricultural wastes or energy crops also has a sustainability benefit. Promotion and enhancement of farmland biodiversity is relevant to the proposed framework for London trees (see Proposal 26).



- 4.104 Genetic modification is a new technology that has agricultural applications. It is based on techniques that allow genes to be moved between different species so that the host organism expresses new characteristics. For example, a crop such as oilseed rape can be made resistant to particular herbicides with the aim of achieving efficient weed control. Other potential applications related to the environment include the modification of trees and horticultural plants.
- 4.105 Genetically modified crop plants, if released into commercial agriculture in the UK, may allow 'cleaner' farming, with fewer weeds and higher yields, but lower attendant biodiversity. The potential risks that genetically modified organisms (GMOs) pose to London's farmland biodiversity, along with global issues referred to in the section on 'London's Biodiversity Footprint' below, lead the Mayor to the view that the introduction of genetically modified organisms to London should not be supported until such time that they can be unequivocally shown to be free of risk.

proposal 32: The Mayor will oppose commercial or experimental release of Genetically Modified Organisms (GMOs) into the environment in London.





Connecting people with nature

- In Wild in London published in 1986, [36] David Goode described the change in attitudes to nature conservation taking place in London during the 1970s. Natural sites were being saved from development because they were important for local people rather than rare wildlife; and new 'natural parks' and nature reserves were being designed using ecological principles and, more significantly, became beloved by local people. Proposals 33 to 50 are intended to revive and extend this movement within the changing context in the new Millennium.
- 4.107 London's many high quality green spaces make it one of the most pleasant of world cities to live in for many people. Accessible, local, green places are not only important to people where they live, but also for enterprises seeking a suitable environment for their workforce. These green spaces are a magnet: one of the factors which attract and keep workers and businesses in London. However, some parts of London are poorly provided with access to such places, particularly areas of regeneration. People living in these areas should not be denied the health, cultural and recreational benefits provided by access to nature and open spaces.
- 4.108 Connecting people with nature should:
 - enhance everyday opportunities for people to have contact with nature through the creation of new greenspace and through enhancements to existing space
 - ensure more people know the location of their local greenspace and can get there easily; and
 - help people to understand and enjoy contact with nature.
- 4.109 There is a potential conflict between biodiversity and housing and economic growth, which must be carefully managed. There is also a need for further research and information on the economic benefits of green space.

Regeneration and greening of the built environment

4.110 One way of providing everyday contact with nature is to 'green' the built environment. For example, plants in courtyards and climbers on walls soften the landscape and can provide habitat for invertebrates and common birds, even in the centre of town. Roofs too can be vegetated and even window boxes give some immediate contact with the natural world. Greening might also take the form of creating completely new open spaces or enhancing existing ones, as described in other parts of this chapter. Greening should play an integral role in the urban renaissance, in infrastructure, the public realm, regeneration initiatives,



- and development generally. This applies not least to development on 'brownfield' sites.
- 4.111 Greening is not an alternative to the protection and maintenance of existing wildlife habitat many wildlife habitats are difficult or impossible to create (see above). Biodiversity aspects should be incorporated into development proposals at the earliest stage, and consultation undertaken with local people, when any extra costs will be less significant and when options are not precluded. It is vital that the existing biodiversity value of an area is always considered before greening is carried out, to ensure existing interest is not overlooked or damaged by the new landscaping.
- 4.112 Some types of greening provide biodiversity benefits as a complement to a wider suite of sustainability benefits. These may include improved energy efficiency and noise insulation, reduced run-off, local shading and cooling, and improved materials life. [37,38]
- 4.113 The strong link between economic regeneration and environmental regeneration was emphasised by the London Assembly's Green Spaces Investigative Committee, who recommended that the London Development Agency more fully consider the role of green spaces in regeneration planning. ^[23] This Strategy endorses this link. The London Development Agency can lead the way in the development of its own land holdings.
- 4.114 Many examples of good practice in greening are collated in the London Ecology Unit handbook Building Green [38] and various 'green buildings' can be found across London. For example, turf roofs can be seen at the Horniman Museum in Forest Hill and the Soanes Centre in Tower Hamlets; Cannon Street station has a roof garden, and various buildings at Canary Wharf have large areas of roofing planted with stonecrop. These developments provide habitat on roofs suitable for species such as black redstarts, as well as visual amenity and other benefits such as energy conservation. Techniques are developing all the time and pioneering methods of greening the built environment are now being planned at the outset of some new developments in London, such as the Laban Dance Centre in Deptford. Much of the success of these developments is owed to the imagination and hard work of local experts. [39]
- 4.115 In schemes for sustainable urban drainage (see Proposal 19 above), there are many possibilities for creating wildlife habitat with ponds and wetlands, and also on porous surfaces.



- 4.116 Much of this work can be undertaken through the statutory planning process and the following two proposals make this link. Advice will also be available under Proposals 13 and 23. The draft London Plan states that future developments should meet the highest standards of sustainable design and construction, which will include measures to conserve and enhance the natural environment, particularly in relation to biodiversity. Greening and its maintenance can be secured through planning obligations and agreements (see Proposal 6 and paragraph 4.32).
- policy 5: The Mayor will seek to ensure that opportunities are taken to green the built environment within development proposals and to use open spaces in ecologically sensitive ways. This is particularly important in areas deficient in open spaces and in areas of regeneration.
- proposal 33: The Mayor will liaise with others to research and disseminate good practice for designing or adapting buildings to enhance and maintain biodiversity. He will follow this aim when considering development proposals referred to him.
- proposal 34: The Mayor will work with the London Development Agency, the London borough councils, the business sector and others to encourage the inclusion of greening initiatives in new developments, and proposes that these should be addressed from the outset in developing such schemes.
 - 4.117 There is also great potential to create and maintain significant new wildlife habitats on the verges of roads, footpaths, cycleways and railways.
- proposal 35: The Mayor will work with Transport for London and will encourage the Highways Agency, Railtrack, the borough councils and other transport bodies to ensure that the potential for wildlife habitat on the verges of roads, footpaths, cycleways and railways is realised wherever possible.
 - 4.118 The provision of new wildlife habitat and open space is of little social benefit if people are not interested in using it. Assessing, and making visible, the success of environmental projects is important, so that biodiversity is 'mainstreamed' and becomes a major concern to organisations and individuals.
 - 4.119 There are tangible health benefits to be gained from exercising and relaxing in a natural open space. Some relevant research has already been undertaken showing that benefits may be particularly significant for elderly people, children and people with mental and social problems.

 A number of pilot initiatives have begun to promote this aspect of open



space, for example BTCV's 'Green Gym' project and the 'Walking the Way to Health' initiative of the British Heart Foundation and Countryside Agency. The Mayor can assist with such schemes through his partnerships with the London Health Commission, London boroughs and other land managers. A rapid review of the health impacts of green spaces in London, commissioned to inform this Strategy, [40] includes suggestions on maximising the health benefits of the 'optimal green space' and suggests that a pilot project could be undertaken. Draft proposals to maximise the health benefits of green spaces and to promote related research were strongly supported by the London Assembly's Green Spaces Investigative Committee. [23]



proposal 36: The Mayor will encourage research into measuring the success of greening initiatives.

proposal 37: The Mayor will work in partnership with other interested organisations, such as the NHS and park managers, to maximise the health benefits of green spaces.

proposal 38: The Mayor will seek to increase the relevance of biodiversity to the daily life of Londoners by drawing on visitor surveys, opinion polls and social, medical and psychological research to inform the way the Strategy is promoted and implemented.

Discovery and involvement

4.120 Many people living in cities do not have gardens, and miss out on regular contact with the natural world. This is a particular loss for children, who may grow up with little hands-on experience of plants and animals, a loss sometimes exacerbated by parental fears about letting children play alone in local green spaces. However, city farms, community and cultural gardens, allotments, environmental education centres and school grounds, among others, can all help to redress this deficiency, especially where staff are on site to ease safety concerns. These places provide opportunities to learn about and understand nature, potentially leading to a respect for living things and a desire to conserve them. Environmental education, participation and training are a vital part of biodiversity conservation. Most people learn best by doing, so opportunities to learn and apply skills in habitat management are important. Engaging in such activities, with appropriate health and safety precautions, can be a very positive experience, and can be enjoyed by young people and adults (including older adults) of a wide range of abilities, and from all communities. Such places can also provide useful wildlife habitat, which is particularly significant in parts of London with few other green spaces.



policy 6: The Mayor will promote local opportunities for regular direct contact with the natural world, through a variety of types of open space (such as allotments, community and cultural gardens, school grounds, environmental education centres and city farms, as well as informal wildlife areas).

policy 7: The Mayor will promote environmental education, participation and training for all ages and across all sectors of London's society.

School grounds and local green spaces

4.121 Natural elements of the landscaping to be found in school grounds are an important source of regular contact with nature in childhood, and a resource for environmental education. Using them is free and safe, and they can be studied over a long period of time, so that, for example, seasonal changes can be observed and plants can be cultivated. They can also lead to children helping to care for other local greenspaces. Benefits to health from using open spaces are particularly pronounced in children. For many years, individual schools and Learning through Landscapes and other organisations have pioneered and implemented imaginative ways of using school grounds. The Mayor wishes to support this work and encourage its growth.

proposal 39: The Mayor will work in partnership with Learning Through Landscapes and other partners to increase the biodiversity value of school grounds.

proposal 40: The Mayor will work with London borough councils, schools and other groups, to enable and encourage children to take an active interest in the biodiversity of their local green spaces.

Environmental education centres

4.122 Environmental education, beyond that which may be possible in school nature areas, is available in environmental education centres, with specialist teachers and equipment. These can also have a wider scope, including activities for people of all ages. There are several excellent environmental education centres in London running programmes for school groups, playschemes, and families. The programme content is rich and varied, covering not only biodiversity, but also many wider sustainability issues such as recycling, waste minimisation, energy efficiency and renewable energy. A smaller number offer training to young adults. High quality environmental education programmes are also offered at several nature reserves, such as those run by the London Wildlife Trust. Many borough councils undertake environmental outreach programmes to raise public awareness and provide safe opportunities to enjoy nature.





City farms, allotments, community and cultural gardens

- 4.123 Allotments and community gardens enhance local communities, build community spirit and, by reducing barriers between people, can be of particular value to minority groups. There are opportunities for people with special needs, and for a variety of training programmes.
- 4.124 City farms give direct contact with domesticated animals such as goats and chickens, an experience which few urban children would otherwise obtain. City farms are particularly important in the inner city and in areas of regeneration, where there is otherwise little opportunity to see domestic animals apart from pets. They help children and adults to have an understanding of animal welfare and of the origins of foods such as milk and meat. There is a potential conflict between increasing the number of city farms and pressure on wildlife habitat. It is therefore important that new provision is planned, so that important habitat is not damaged.



- 4.125 Gardening and animal care have proven health benefits, such as physical exercise and relieving stress, and local food production contributes to healthier diets and is sustainable in terms of reduced energy use. It is important, however, to be aware of possible soil or airborne contamination when selecting places to grow food.
- 4.126 It is possible to grow plants of special cultural relevance in many of these local spaces to provide links with ethnic origins and traditions and to engender appreciation of global biodiversity. This can be an excellent tool to enhance community identity. Facilitation can help local groups to develop their own special cultural gardens; the Black Environment Network and the 1990 Trust have considerable expertise in this field.

proposal 41: The Mayor will work with partners with expertise in environmental education to improve the provision and secure the long-term future of environmental education centres, city farms, and community and cultural gardens throughout London, especially in those parts of London where the need is greatest.

School visits to centres of excellence

4.127 Many London schoolchildren visit London's centres of excellence for biodiversity work, such as London Zoo, the Natural History Museum and Kew Gardens. These visits provide an international perspective on wildlife and engender an understanding and respect for nature which is relevant in London too. The Mayor wishes to ensure that all children in school Key Stage 2 (Year 3 to Year 6) have an opportunity to visit some of these places. Currently he has developed a scheme with London Zoo to sponsor





a free visit for all children in London schools. Equality monitoring of this scheme will form part of the Strategy's overall equality monitoring.

proposal

42: The Mayor will continue his scheme to provide a free visit to London Zoo for all children in London schools. He will work with Government, London's education authorities, city farms and other environmental education initiatives to facilitate other opportunities for environmental education, especially at the local level.

Cultural links

- 4.128 Biodiversity is relevant to all cultural traditions, so the celebration of its place in our lives involves the participation of London's various communities as well as visitors and tourists. Strong media interest in stories related to biodiversity provides opportunities to raise the awareness of a wider public.
- 4.129 Some species and habitats are particularly associated with London and therefore have cultural resonance. These include the house sparrow, stag beetle, the Thames, and the 'unofficial countryside' (see Chapter 2). Some are even 'commemorated' in pub, place and species names: The Falcon, Heron Quays, Deptford pink and Camberwell beauty, for example. Some species may hold significance to people from ethnic minorities. It is important to use these headline issues and commonplace species familiar to everyone to illustrate the wider, long-term issues surrounding biodiversity conservation.
- 4.130 People from some ethnic minorities are generally under-represented in membership of environmental organisations and in their attendance at biodiversity-related events. There is a need to understand the requirements and aspirations of London's varied communities, and to attempt to make the capital's biodiversity and wider environment relevant and interesting to all Londoners. Making culturally trained workers aware of biodiversity issues is an initial step which could be taken. The development of 'cultural gardens' and the recruitment of black and ethnic minority staff in local authority parks departments are other practical measures being encouraged by Proposals 41 and 59.
- 4.131 The Mayor will take every opportunity to publicise London's wildlife and accessible natural areas. He will also publicise this Strategy, and the major projects and events related to it.
- policy 8: London's many species, and the landscapes where they are found, should be celebrated and promoted.



- proposal 43: The Mayor will promote news about biodiversity and events where biodiversity can be enjoyed, and will help to promote better understanding about wildlife.
- proposal 44: The Mayor's Culture Strategy will recognise the enjoyment of wildlife and landscape as a cultural experience. The Mayor will include elements of biodiversity interest, where appropriate, in his cultural events.
- proposal 45: The Mayor will produce and disseminate information on London's biodiversity, including a popular guide to exploring London's wildlife.
- proposal 46: The Mayor will work with the London borough councils, other landowners, and environmental organisations to promote an annual 'London Wildlife Day' (or 'week'), when land managers will be encouraged to organise events, and Londoners, including school groups, will be encouraged to visit and discover their local wild open spaces.
 - 4.132 Environmental interpretation can ensure that visits are enjoyable and more likely to be repeated. This can be done, for example, with interpretation boards, sculptures, guided walks, story-telling and other cultural events. Interpretation should take account of the needs of minority groups, such as ethnic minorities and disabled people. For example, written material can be produced in different languages, in Braille, and with audio alternatives, and signs can be placed at a comfortable height for wheelchair users to read. Events can also be targeted at specific minority groups.



proposal 47: The Mayor will explore the feasibility of appointing a team of interpretation specialists who could help improve accessibility and visitor satisfaction at a number of popular wildlife sites.

Accessibility and safety

4.133 Although the series of wildlife sites is selected to promote equality of physical access to wildlife sites, it cannot ensure that every accessible site is easy to travel to, feels safe and is enjoyable to visit for all sections of the community. This is a point reiterated by the London Assembly's Green Spaces Investigative Committee, who cited a Memorandum by Sustrans in their report, 'If people cannot get into a green space for fear of crossing a road or difficult access arrangements, (for example the style of gates, opening hours, infrequent access points), improvements within the park will be underused and undervalued'. [23] Some Londoners, such as children, women, elderly people and people from ethnic minorities, may feel particularly vulnerable to attack, exposure to anti-social behaviour or harassment once within the open space. NSPCC research





has shown that parental fears over 'stranger danger' restricts children's use of open spaces. [41]

- 4.134 It will be important to work with the voluntary sector, including the 'Friends' groups of many open spaces, and other partners to address these key barriers to access in an integrated and co-ordinated way so that public transport links are appropriately enhanced or promoted, and everyone can easily visit their local wildlife site and feel safe whilst there. Indeed, a recommendation of the London Assembly's Green Spaces Investigative Committee was that user assessment and consultation conducted by local authorities should pay particular attention to the views and needs of minority and vulnerable groups and consider how to increase their usage of green space. Children and young people, in particular, are key users of parks and need to be included in user surveys and represented in park user groups. The availability of public transport to green spaces was also raised by the Assembly's Investigative Committee, who recommended that the proposed GLA audit of green space in London include assessment of transport accessibility, and that the Mayor's Transport Strategy should deliver improved public transport and accessibility to green space.[41]
- 4.135 Landscape design and management can do much to promote visitors' confidence. This can be achieved on many sites by zoning visitor facilities such as paths and seating to define the most used (and therefore safest) areas, swift removal of problems such as litter, dog faeces, graffiti and vandalised street furniture, and formalised design of entry-points. Safety is also to be had in 'numbers' and in organised and accompanied events, such as open days and guided walks. The presence of trained park rangers is also important to promoting confidence.
- 4.136 All London boroughs have a Crime and Disorder Strategy where issues regarding public safety from crime are considered. It is important that these should give consideration to safety and the fear of crime in open spaces.
- 4.137 Many of London's wildlife sites and open spaces are not readily accessible to wheelchairs, pushchairs and people with other mobility problems. While it is not possible to make every green space fully accessible, at least selected parts of the vast majority of sites could be made more accessible. Provision can also be made to improve the experience of visitors with sight problems to wildlife sites.
- 4.138 Baseline information will allow a system of equality monitoring to be devised and introduced. Appropriate indicators and targets might include: a reduction in the size of areas deficient in wildlife sites; an increase in

number of sites audited and improved to allow disabled access; an increase in number of people from minority groups employed by London's environmental sectors; an increased minority ethnic membership of environmental organisations and attendance at outreach events; and equality monitoring of visits to London's centres of excellence for biodiversity work.

proposal

48: The Mayor will facilitate best practice for developing safe, convenient and enjoyable access to nature, and addressing issues of safety, antisocial behaviour and fear of crime in green spaces. He will work with stakeholder groups on the issues of training of parks staff, information exchange and introduction of equality monitoring.

Biodiversity partnerships

policy

9:The Mayor supports the establishment and maintenance of partnerships at Londonwide and local levels to produce and implement Biodiversity Action Plans.

The London Biodiversity Partnership

- 4.139 The London Biodiversity Partnership was formed in 1996 [42] to produce a Biodiversity Action Plan for London. The Partnership includes most of the major organisations with an interest in or influence over London's biodiversity, including statutory and voluntary bodies and major corporate landowners, and intends to broaden its influence to include sectors that are currently less closely associated with biodiversity conservation. Individuals, as well as organisations are also involved. The London boroughs are represented in all its working groups, and the Partnership is co-ordinated by a small steering group, the 'Project Board'.
- 4.140 The Mayor agreed to join the Partnership shortly after taking office, and the Authority provides the current Chair. The London Biodiversity Project Officer, employed by the Partnership to co-ordinate its work, is based at London Wildlife Trust. The Mayor has already agreed to take the lead in the production and implementation of action plans for Woodland and the House Sparrow in the first round of the action plans [13], as well as those for Churchyards and Cemeteries and Parks, Squares and Amenity Grassland in the second round. His staff have contributed to many other action plans and provided advice elsewhere to developing borough biodiversity partnerships.

proposal

49: The Mayor will continue to be an active member of the London Biodiversity Partnership and will assist where possible in supporting its functions.



proposal 50: The Mayor will take the lead on the production and implementation of some action plans, and will contribute to other action plans as appropriate.

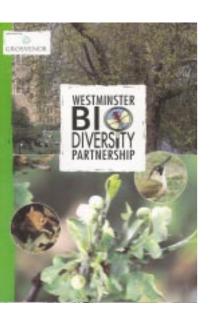
4.141 Many major stakeholders in London's biodiversity, and thus in this Biodiversity Strategy, are represented on the London Biodiversity Partnership. The Partnership is focused on the delivery of the London Biodiversity Action Plan and is not a consultation mechanism for other initiatives. However, the members of the Partnership will be key to the delivery of this Strategy and should be involved through a stakeholder forum that oversees the Strategy's implementation. The forum is an opportunity to enlarge the constituency that understands and participates in biodiversity and will therefore be broad and inclusive.

proposal 51: The Mayor will work with members of the London Biodiversity

Partnership and others to establish a stakeholder forum to facilitate the implementation of the Biodiversity Strategy.

Local partnerships

- 4.142 Most London borough councils have or are setting up partnerships to produce local biodiversity action plans. Such partnerships should encompass all sections of the community, as well as businesses and voluntary organisations and should be lead by the council, [43] ideally through a dedicated officer. It is essential for the effective implementation of this Strategy, and of the London Biodiversity Action Plan, that all borough councils establish partnerships to produce and implement local biodiversity action plans.
- 4.143 Businesses can contribute through borough partnerships and by producing their own corporate biodiversity action plans (Proposal 57). [44, 45]
- 4.144 Local biodiversity action plans are amongst the elements local authorities should build upon when preparing the overarching Community Strategy required by section 4 of the Local Government Act 2000. Community Strategies aim to promote and improve the economic, social and environmental well-being of their areas, and contribute to the achievement of sustainable development in the United Kingdom.
- 4.145 The Countryside and Rights of Way Act 2000 ^[9] gives the importance of biodiversity conservation a statutory basis, requiring Government departments to have regard for biodiversity in carrying out their functions, and the Secretary of State for Environment, Food and Rural Affairs to take positive steps to further the conservation of listed species and habitats. Although there is no such duty placed on local authorities or others at the local level, paragraph 47 of Circular 4/2001 indicates that



the Secretary of State may include local authorities in exercising his duty^[46]. In practice, Government expects the lists of habitat types and

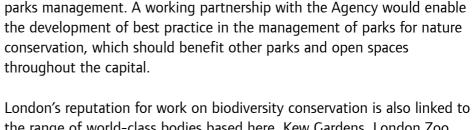
species of principal importance to be consistent with those that are already the subject of action plans under the UK Biodiversity Action Plan.

- proposal 52: The Mayor will encourage and support all London borough councils in the establishment of local biodiversity partnerships and the production, implementation and monitoring of borough Biodiversity Action Plans as an integrated element of the delivery and implementation of Community Strategies.
- proposal 53: The Mayor will press the Government for legislation to place a statutory duty on local authorities to produce and implement local Biodiversity Action Plans through local partnerships.
 - 4.146 It is hoped that such a legal standing would result in increased levels of central funding directed at local biodiversity action planning.

London as an international centre of excellence

- 4.147 London's enviable record in urban biodiversity conservation, achieved over the last two decades, has justifiably resulted in its international recognition as a leader in the field (see Chapter 2). Numerous projects across London have contributed to make London a centre for excellence for local initiatives. Camley Street Natural Park, in particular, has demonstrated that a valuable wildlife space can be created from nothing to become a hub of communal and educational activity, supporting wildlife such as the reed warbler in a place where this would otherwise be unthinkable. Visitors from far and wide come to learn from this example. The new Wetland Centre at Barnes demonstrates habitat creation on a much grander scale, featuring finely-tuned wetlands designed to suit a whole range of species, including nesting lapwing and little ringed plover. Another success has been the enormous improvement in the Thames tideway and its habitats; the river is now one of the cleanest Metropolitan rivers in the world. The London Ecology Unit's series of Ecology Handbooks also received national and international acclaim. It is important that, in the new Millennium, new and equally successful projects are developed. We must learn from what has been achieved already and share some of the experience gained.
- 4.148 In addition to these innovative projects, London's reputation as a world city owes much to its fine series of Royal Parks. These play an important role in the conservation of London's biodiversity, and the Royal Parks Agency increasingly sees nature conservation as an important element in







- 4.149 London's reputation for work on biodiversity conservation is also linked to the range of world-class bodies based here. Kew Gardens, London Zoo, the Natural History Museum, London's academic institutions, the Royal Geographical Society and others have expertise on biodiversity that is internationally significant. The capacity for influence that these bodies can bring to bear should be fostered. They offer considerable support to London's professional environmental community, providing specialist advice, international networking links and generally enhancing the profile of biodiversity conservation.
- 4.150 International recognition is a two way process. The Mayor will communicate these successes to those involved in similar initiatives elsewhere in the world, as well as the threats to urban nature conservation. Such advice has been disseminated by the London Ecology Unit in the past, to Santiago in Chile and the cities of Shanghai and Nanjing in China, for example. We too must be prepared to learn from the experience of other countries, such as Holland and Germany, which have a long tradition of encouraging wildlife in towns, and to help disseminate information gained to others in London. It is also important to maintain links with international groups, to keep abreast of the latest developments in urban nature conservation and to promote London as a centre of excellence. International links are significant for the corresponding ethnic minorities living in London.

policy 10: The Mayor will promote the reputation of London as a world centre of excellence for biodiversity conservation, working with London's world class organisations for greater influence globally and to learn from exemplary experience at home and abroad.



proposal

54: The Mayor will foster working links and exchanges with international bodies and organisations in other major cities, to give a lead in urban greening and biodiversity conservation.

proposal

55: The Mayor will support enterprising new flagship projects for urban nature conservation and people's enjoyment of the natural world, which may further London's reputation as a World City.

proposal 56: The Mayor will encourage the formation of a partnership for excellence in global biodiversity conservation, harnessing the skills and expertise of London's centres of excellence.

Contributing to London's economy

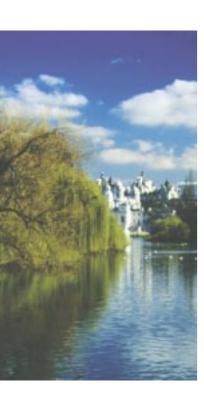
The role of companies

4.151 The Chief Executive of the Co-operative Bank has summarised his company's view of biodiversity: 'Our aim is to ensure that our own activities, and those of businesses financed by us, reflect our belief that conserving biodiversity is important to our quality of life and that economic goals should not be pursued at the cost of our natural environment. Sustainable, long-term, development is the only kind worth having'. [47] Although biodiversity should be conserved for its own sake, and is protected by legislation, London's wildlife and its habitats provide a valuable resource of benefit to people in terms of health, recreation, employment, and quality of life in general. Action to help people connect with nature can benefit the business sector in many ways and, in return, London's businesses can contribute to biodiversity conservation and a greener environment.



- 4.152 Biodiversity matters to business. Many businesses depend on biological resources such as water or paper, and natural ecosystems offer functional benefits such as flood control through reduced water run-off. Many local impacts on biodiversity can be felt globally so, by acting for biodiversity in their neighbourhood, businesses can contribute to the quality of life of others in the world.
- 4.153 Those companies with land holdings can make direct improvements to biodiversity which help to create a more pleasant working and living environment for their staff. Companies with no land can improve their image and benefit from 'good news' stories if they green their buildings, for example, or contribute financially to nature conservation projects and initiatives, particularly those undertaken by charitable organisations. The welfare of employees can be enhanced through team building exercises on a local wildlife site. For example, teams of staff from Barclays' Corporate Operations Unit have carried out practical work at Camley Street Natural Park. The management of green space can produce economically valuable products such as hay, wood chip and woodland products, which can include carbon-neutral fuels. The London Assembly's Green Spaces Investigative Committee believe that the private sector may have a role in funding public open space through sponsorship. [23]

- policy 11: The Mayor will encourage the business community to play a major role in implementing the programme for conserving London's biodiversity.
- 4.154 Mutual benefits between business and biodiversity are increasingly promoted through organisations such as Business in the Community, Earthwatch, academic bodies and regeneration units run, for example, by borough councils.
- 4.155 There are many links between biodiversity conservation and environmentally responsible business, such as: improving a company's image and marketing of goods and services; improving relations with the local community; inclusion in lists of companies suitable for ethical investment; and cost savings for example through reduced energy consumption due to installation of a green roof. Nature conservationists and others are getting better at communicating these benefits and encouraging businesses to modify or change aspects of their activities for their benefit and the benefit of biodiversity. In a questionnaire survey carried out by YouGov in 2002, 75 per cent of respondents said that, given the choice, they would be more likely to buy services or products from a company with a good environmental record. [48] Further information is available from the Business and Biodiversity Resource Centre [49] and various publications by Earthwatch.
- 4.156 Links must be strengthened between business organisations (including businesses owned and managed by black people, other minority ethnic people and disabled people) and those involved in biodiversity conservation. A number of London's larger commercial landowners, including Thames Water and London Underground Ltd, have already joined the London Biodiversity Partnership. Thames Water has prepared a corporate Biodiversity Action Plan and other businesses should be encouraged to follow suit.
- 4.157 Company Biodiversity Action Plans can be implemented through environmental management systems. [44,45,50] Doing so enables businesses to identify, assess and manage risks, improve performance and reduce impacts.
- proposal 57: The Mayor will work with the London Chamber of Commerce and Industry, CBI, London First and other organisations to strengthen the role which business can play in conserving London's biodiversity, including the development of company Biodiversity Action Plans.



Tourism

- 4.158 The open spaces of London are attractive to tourists. The central Royal Parks and the Thames are fundamental to the attraction of central London, and many other attractions have a prominent green component. These include Hampstead Heath and Epping Forest, the Wetland Centre, Greenwich Park, Kew Gardens, London Zoo, the Lea Valley Regional Park, boat trips on the Thames, and a major new nature reserve currently being developed at Rainham Marshes.
- 4.159 There is a need to develop joint proposals with the London Tourist Board to ensure that the full potential of these places as tourist attractions is realised and their biodiversity interest is promoted for all to enjoy. This is especially important for those sites outside central London, which are away from the usual tourist routes.
- proposal 58: The Mayor will work with the London Tourist Board and others to raise the profile of London's major natural attractions.

Green jobs

- 4.160 The green economy provides training and supports jobs, many of which are related to open spaces, such as park keepers, rangers, reserve wardens and wildlife officers. Other related occupations include museum staff and on-site environmental education staff. Jobs are sustained also by enterprises such as garden centres, and through the collection of materials for recycling and the production and sale of wood and composts. However, Londoners from ethnic minorities and disabled people are currently under-represented in these jobs. The landscape and nature conservation sector is unlikely to become a major employer in London, but a report by Forum for the Future for the London Development Agency [51] notes that the sector is leading the way in the types of jobs it provides which often act as employment and training pathways out of social exclusion with schemes such as the Government's New Deal for Young People Environment Task Force option.
- 4.161 The London Development Agency has commissioned Capel Manor College to draft a Green Skills Strategy for London. It includes projections of the skilled worker requirements of the 'green and land-based industries in London' and makes proposals on how these needs can be met. The Greenheart Academy is a related pilot training scheme, which has already started in North London aiming to provide qualified staff to work in London's parks and open spaces.



4.162 City farms, environmental education centres, conservation groups and others provide training and opportunities for voluntary work. These can be an essential first step to gaining paid work in the green economy.

proposal 59: The Mayor will work with the London Development Agency to ensure that the green economy is supported and developed in London and will work to encourage greater representation of minorities in the green sector.

Links with the wider environment

- 4.163 There are links between biodiversity and other environmental factors and processes, as outlined in Chapter 3. For example research suggests that trees and other plants may have a beneficial effect on air quality, particularly through the filtering of particles. Trees and other plants do, however, produce pollen and spores, some of which is under ten micrometres in diameter (or PM10), so that vegetation may also have a negative effect on air quality. Conversely, biodiversity may also be affected by air quality, for example through vehicle emissions increasing nutrient levels in soils to the detriment of wildlife habitats.
- 4.164 Similarly, there are links between biodiversity and noise. Although trees and shrubs only reduce the sounds of traffic and other ambient noise to a minor degree, they can lessen the perception of the noise. In turn, ambient noise may reduce breeding success of birds.
- 4.165 Whilst it is important to keep such processes under review and take them into account in implementing this Strategy, their impacts are mostly minor compared with other factors in London, such as pressures of development and the management and use of open space.
- proposal 60: The Mayor will keep links between biodiversity and other aspects of the environment under review and take them into account in implementing this Strategy.
 - Flora and fauna will be influenced directly by changes in the climate, and habitats will alter in their composition. New species may come to thrive in London, with possible positive or negative consequences. Biodiversity will also be affected indirectly. For example, flood control strategies required by rising sea levels include setting aside low-lying areas of land to contain the floodwater, and these areas can be valuable for biodiversity.

proposal 61: The Mayor will consider biodiversity effects as part of an overall appraisal of the impacts of climate change in London.





London's biodiversity footprint

4.167 As a thriving World City, London has a significant impact on other parts of the United Kingdom, the European Union and indeed the globe. This is through London's trade in goods and services and its consumption of resources. Some aspects of this 'ecological footprint' affect biodiversity elsewhere. For example, London's consumption of electricity makes a contribution to acid rain elsewhere in the United Kingdom and Europe, which can harm freshwater life. Few people realise that by pressing a switch in London, one threatens the ecology of a bird of upland brooks, the dipper. Our high rate of energy consumption also contributes to global warming, which is likely to have major effects on biodiversity worldwide. Tackling London's growing production of waste, and managing it locally and sustainably, would lessen the pressure to find landfill sites in the British countryside, many of which are on land with existing value for biodiversity. In this way, a compost heap in London assists countryside conservation, as does choosing to purchase less product packaging or participating in recycling.



- 4.168 Some of London's organisations are involved in the biotechnology trade and the exploration, patenting and use of global genetic resources. The activities of these industries may have far-reaching social, environmental and economic implications that include biodiversity, particularly in the less developed world. This is a key element of the Rio Biodiversity Convention^[1], to which the United Kingdom Government is a signatory.
- 4.169 Several imports to London cause concern. Britain contains a high proportion of the surviving area of the world's lowland peat bogs, which are an ecologically rich habitat. These have become scarce and are still diminishing through peat extraction for horticultural purposes. Weathered limestone is another import to London. Although the main areas of limestone pavement in the United Kingdom are protected by Limestone Pavement Orders, removal for decorative landscaping features may still be continuing from unprotected areas, some of them abroad, as well as illegally from protected areas. Even further abroad are the old and highly diverse forests of tropical hardwoods and old-growth temperate woodlands, where any exploitation for timber leaves a permanent scar. Even managed plantations can displace valuable wildlife habitat, as has happened in the 'flow country' of northern Scotland.
- 4.170 This Strategy encourages the development and use of sustainable alternatives to such products: for example, managing local woodlands for 'small wood' products (such as coppicing for charcoal production), which not only reduces the demand from further afield, but can also be one of the best ways of securing a sustainable future for these habitats.



Sustainable trade of this kind can even occur within London's borders, through enterprises such as 'timber stations' that make economic use of material arising from the management of London's open spaces which would otherwise go to landfill sites. The Building Research Establishment (BRE) and the Construction Industry Research and Information Association (CIRIA)^[52] have both undertaken much research into these issues and may be regarded as major sources of guidance towards achieving 'best practice'. Supplementary Planning Guidance to the London Plan will address sustainable construction techniques and the demand for sustainable goods and services.

- 4.171 In March 2002 The Mayor launched a Green Procurement Code for London, [48] produced in partnership with London Remade. The code, to which over 121 companies and other organisations had signed up by May 2002, encourages use of recycled products, particularly glass, paper and compost.
- policy 12: The Mayor will encourage practices, and support existing effective initiatives, that reduce London's impact on biodiversity elsewhere.
- proposal 62: The Mayor will consider, with the London Development Agency, the development of a strategy for ethical trade, to discourage trading activity that damages biodiversity beyond London's borders, including such issues as the use of peat, limestone and wood products from unsustainable sources.
- proposal 63: The procurement policies of the GLA group will pay due regard to biodiversity conservation. The Mayor will encourage sustainable procurement of materials used in construction and development.
 - 4.172 An international convention (CITES), [53] and UK law, regulate trade in many species. Serious harm abroad results from the illegal trade in endangered species and their derivatives for taxidermy, private collections, the pet, fur, exotic 'bushmeat' and horticultural trade and, particularly, traditional medical products. London is a very significant centre for this illegal trade in western Europe, which, in terms of its overall value, is second only to that in street drugs. About a million tons of bushmeat are taken out of equatorial Africa every year, and some ends up in Britain. In 2001 a coalition of conservation groups joined forces to campaign against the illegal trade.
 - 4.173 The Metropolitan Police Wildlife Crime Unit undertakes enforcement of legislation protecting wildlife within London, as well as being responsible



for Operation Charm, the Unit's ongoing initiative against the illegal trade in endangered species in the capital.

proposal 64: The Mayor will work with the Metropolitan Police Authority, HM Customs and others, to develop an effective programme to prevent the illegal trade in endangered species and species products within London.

Funding of Biodiversity Projects

- 4.174 Many of the initiatives described in this Strategy can be funded through existing budgets; many others, however, can only be achieved if substantial new funding is made available. This includes funding both for new projects and to support existing projects. It is also important that major new development proposals and infrastructure projects include provision for biodiversity in their budgets.
- policy 13 The Mayor is committed to increasing the funding for biodiversity projects in London, and wishes to ensure that major new development projects include provision for biodiversity.
 - 4.175 The protection of wildlife habitats and species can be furthered by organisations and individuals acquiring land for nature conservation and public enjoyment of the natural world. However, there is little to be gained from such endeavours unless the land can be appropriately managed over a long time scale. Many habitats gradually change to a less desirable state if they are not managed correctly, and the potential for human enjoyment of nature is thereby reduced. Many existing Sites of Importance for Nature Conservation are also at risk of losing some of their ecological interest through a lack of resources to carry out necessary management. Ecologically sensitive management often requires a different approach from traditional amenity management, different staff skills and different types of equipment.
- proposal 65: The Mayor will work with local authorities and leading conservation organisations in London to seek to establish a strategic programme of funding for site acquisition and long-term management, to conserve strategically important land for biodiversity and for the enjoyment of nature by people.
 - 4.176 Funding is also required to maintain and extend the network of environmental education centres, city farms, community and cultural gardens and environmental outreach programmes across London (see the section on Discovery and involvement in relation to Proposal 41 above).





proposa

66: The Mayor will support appropriate funding bids from the Federation of City Farms and Community Gardens, environmental education centres and environmental outreach programmes in London to maintain and extend the provision city farms, community and cultural gardens and environmental education facilities in London, particularly in areas of greatest need.



- 4.177 A number of grant schemes are available for funding biodiversity work in London. These include schemes from the Department of Environment, Food and Rural Affairs, English Nature, the Lottery Distributors and the Forestry Commission, as well as various charitable trusts. Some existing grant schemes require adjustments if the maximum possible benefits to nature conservation and people's enjoyment of nature are to be achieved. Some grant schemes may not cater well for the special conditions in London, being designed more for the wider countryside. For example, payment rates based on land area are not attractive for the smaller sites met with in and near London. There is also a problem in matching up the strategies of the funding agencies with the needs of the London Biodiversity Action Plan and borough biodiversity action plans. The procedures for applying for some schemes may be so complex that applicants are deterred from applying; it is important that procedures are kept as simple as possible, especially for smaller-scale grants. In other cases, the proportion of overall budget which the scheme will provide has been too small to encourage applicants to apply.
- 4.178 As indicated in paragraph 4.76 above, continued and improved management is also needed for many sites that are already held by local authorities, conservation bodies or other organisations. It is a common problem that funding, and especially sponsorship schemes, tend to be focussed on capital projects or one-off events, rather than the steady input of revenue that is needed to maintain the ecological quality of a site, address security and vandalism problems and provide a service for visitors.
- 4.179 In order to secure funds for the projects outlined in this document and to support the London Biodiversity Action Plan, it will be necessary for the GLA to develop working links with funding agencies at various levels, from local trusts and charities to larger scale operations such as the London Development Agency, Government regeneration funding, the Neighbourhood Renewal Fund, European Community Funds, Heritage Lottery and New Opportunities Fund.



proposal

67: The Mayor will investigate the problems in accessing funding for biodiversity work in London, and will explore with funding agencies the possibilities for making grant schemes more attractive to potential

applicants, more appropriate to the special conditions in London, and applicable to a wider range of work, especially in relation to the London and borough Biodiversity Action Plans.

- 4.180 Many of the projects outlined in this Strategy could be delivered through the London Biodiversity Partnership's Biodiversity Action Plan. The GLA is a partner in this, and the Mayor is the lead for several of the habitat and species action plans. Although some of the projected actions can be achieved through existing budgets, many require new resources, and the GLA has been identified as the lead player in the development of a funding strategy for the London Biodiversity Action Plan.
- proposal 68: The Mayor will work with key partners in the London Biodiversity Partnership to develop a funding strategy for the London Biodiversity Action Plan.
 - 4.181 The Mayor and his functional bodies are in a position to ensure that major projects, such as new infrastructure and development, contain an appropriate budget for biodiversity and greening. This is supported by Transport for London. This should include provision for an initial biodiversity survey, retention and enhancement of wildlife habitat, and provision of new habitat where appropriate, as well as for long term habitat management and consideration of public access improvements. This includes projects undertaken on behalf of the Functional Bodies themselves, as well as projects funded by Government regeneration funding (the Single Regeneration Budget and its successors) and other schemes.
- proposal 69: The GLA group should ensure that the budgets for major infrastructure and development projects include provision for the necessary environmental appraisal (including a biodiversity assessment where appropriate) and for retention, enhancement, creation (where appropriate) and long-term management of wildlife habitat.

The state of London's environment: monitoring biodiversity

4.182 Biodiversity is a key measure of the state of London's environment and the quality of life of its inhabitants. National 'headline' indicators of sustainability include populations of wild birds and rivers of good and fair quality. National targets for priority habitats and species are set in the individual action plans of the several volumes of Biodiversity: the UK Steering Group Report. The London Biodiversity Action Plan contains a comprehensive set of specific targets for those national priorities relevant to London, and for London's local specialities. These are also reflected at the borough level in borough biodiversity action plans.



Targets

- 4.183 Many of the national targets for biodiversity [54-56] do not relate to London, as they deal with a species or habitat that does not occur in London. Others, however, do apply and these have been reflected in the London Biodiversity Partnership's choice of Action Plans. Appendix 3 lists those national priority habitats and species which occur in London. These all have Biodiversity Action Plans at the national level and therefore targets that apply to London.
- 4.184 The GLA Act [57] does not require this Strategy to have targets, but any targets are not to be less demanding than any related targets or objectives set nationally. Detailed targets for Biodiversity Action Plans in London are appropriately set by the London Biodiversity Partnership and partnerships in the individual boroughs. However, it is appropriate to seek targets against which to measure the progress at a strategic level. Targets can be developed from the review of the wildlife sites series in the Mayor's rolling programme of survey (Proposal 16). This will detect losses and gains to the sites. The survey results can also be analysed using natural resource accounting methods to determine the trends in London's wildlife habitats. The updating of the series of wildlife sites will also provide information on changes in the areas of London that are deficient in accessible wildlife sites.

policy 14: Progress in conserving London's biodiversity should be measured with particular reference to the status of important species and habitats, and progress on proposed actions or targets.

proposal 70: The Mayor will measure the success of this Strategy primarily against two targets, to ensure:

- that there is no net loss of Sites of Importance for Nature Conservation, and
- that the Areas of Deficiency in accessible wildlife sites are reduced.

Monitoring

4.185 Existing work shows that headline indicators for London's State of the Environment Report and quality of life assessment can be based on wildlife habitat and species populations. Work is also underway on population changes of birds, butterflies and bats in London through the co-ordinated efforts of naturalists, [58-60] which should detect any differences from the national trends in these groups. Such changes act as a wake-up call in alerting us to the subtle deterioration, or improvement, of the environment.



- 4.186 The efforts of amateur naturalists (Proposals 18 and 72) also provide monitoring statistics for species like stag beetles, rare plants and the amphibians of garden ponds. Street trees are monitored by tree wardens in some boroughs.
- 4.187 The National Biodiversity Network works towards the coordination and exchange of information on biodiversity through local records centres.

 London does not yet have a Biological Records Centre, but English Nature is investigating the options for one and London Wildlife Trust has led the way with its Recording Project. The Mayor will support the establishment of a Biological Records Centre for London (see Proposal 18).
- 4.188 Access for people to the natural environment may be indicated through the identification of areas of London deficient in accessible Sites of Importance for Nature Conservation (Areas of Deficiency see Appendix 1). Work is required to keep the information on these areas up to date.
- 4.189 Measures of the quality of access to the natural environment include the availability of visitor facilities and participation in organised events in natural open spaces.
- proposal 71: The Mayor will compile State of the Environment Indicators, which will include headline indicators on bird populations (and other appropriate groups where possible), quantity of wildlife habitats, access to natural green spaces.
 - 4.190 Viewed together, the indicators discussed above will provide a sound overall guide to the success of this Strategy. Although not strictly part of the Mayor's Strategy, progress on implementing the many specific actions agreed in the London Biodiversity Action Plan and borough biodiversity action plans must also be documented for the national action plan reporting system and will contribute to the monitoring of this Strategy.
- proposal 72: The Mayor will develop, with other partners, methods for monitoring the progress of actions contained in the London Biodiversity Action Plan and the biodiversity action plans adopted by individual London borough partnerships, in order that such data can be readily combined to provide information for London as a whole.

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5 summary of proposals and implementation

- 5.1 Implementation of the Strategy relies on partnerships between many organisations and community groups. Working together, these bodies will shape the future of green London, having a far greater effect than any single organisation acting alone. The detail of this implementation is to be found in the Strategy proposals. To assist the reader of the Strategy, these proposals are gathered together into a table below, together with details of the roles of the various partners.
- 5.2 Alongside the proposals, the table indicates the main partners who will be expected to take each proposal forward. The Mayor and his Functional Bodies have a crucial part to play. They will join in partnership with others to implement the Mayor's Biodiversity Strategy. No other body is better placed than the Greater London Authority to provide strategic advice and act as an essential catalyst on issues relating to biodiversity conservation in London. The other major partners in the implementation of this Strategy are the London borough councils, English Nature, the Environment Agency and the London Wildlife Trust.
- 5.3 The London Biodiversity Partnership has been identified only a few times under Lead or Other Partners in the summary list, but the Mayor's dependence on the activities of the Partnership for the success of the Strategy is implicit throughout. All the key organisations identified above are members of the London Biodiversity Partnership. The Mayor welcomes the key role of London Biodiversity Partnership and its individual members in the implementation of many of his proposals. The London Biodiversity Partnership contains representatives of the London boroughs, and the Mayor recognises the key role that biodiversity partnerships at the borough level will have in implementing biodiversity action.
- 5.4 Considerations of health, equalities and sustainability will be fully integrated into implementation of the Strategy. For example, survey of wildlife habitat will include measures of accessibility.

Proposals summary

policy 1: The Mayor will work with partners to protect, manage and enhance London's biodiversity.

proposal 1: The Mayor will identify Sites of Metropolitan Importance for Nature Conservation. Boroughs should give strong protection to these sites in their Unitary Development Plans. The Metropolitan Sites include all sites of national or international importance for biodiversity.

Lead organisation GLA Other major partners Boroughs, EA, EN

proposal 2: Boroughs should use the procedures adopted by the Mayor to identify and protect Sites of Borough and Local Importance for Nature Conservation and other local designations. The Mayor will assist and advise them in this.

Lead organisation Boroughs Other major partners GLA, EA, EN

3: The Mayor will and boroughs should resist development which would have a significant adverse impact on the population or conservation status of protected or priority species.

Lead organisation Boroughs Other major partners GLA, EN

proposal 4: Where, exceptionally, development is permitted which has an adverse impact on a Site of Importance for Nature Conservation or other local designation or on the population or conservation status of protected or priority species, the Mayor will and boroughs should aim to secure compensatory measures to mitigate such adverse effects.

Lead organisation Boroughs Other major partners GLA

proposal 5: The Mayor will and boroughs should take account of the protection of wildlife habitats and biodiversity in the consideration of all planning applications.

Lead organisation Boroughs Other major partners GLA, EN

proposal 6: The Mayor will and boroughs should ensure that new development capitalises on opportunities to create, manage and enhance wildlife habitat and natural landscape. Priority should be given to sites within or near to areas deficient in accessible wildlife sites, areas of regeneration, and adjacent to existing wildlife sites.

Lead organisation Boroughs Other major partners GLA, EA, EN

proposal 7: The Mayor expects that biodiversity and wildlife habitat will be taken into account in proposals for the redevelopment of garden land, and will develop guidelines for the evaluation of such proposals.

Lead organisation Boroughs Other major partners GLA

proposal 8: Where biodiversity assessments are submitted, the Mayor expects the options to be refined only after full investigation of the existing ecological conditions and consideration of the potential impacts of options.

Lead organisation Boroughs Other major partners GLA, EA

- 9: The Mayor will encourage London borough councils to retain ecological advisors. Boroughs may wish to enter into partnership arrangements to ensure they have suitable expertise.

 Lead organisation Boroughs Other major partners GLA
- Lead organisation boloughs other major partners of
- proposal 10: In consultation with other expert groups, the Mayor will produce model policies for biodiversity conservation to assist London borough councils with this aspect of their Unitary Development Plans.

 Lead organisation GLA Other major partners EN, LWT, CA, EA, boroughs
- proposal 11: The Mayor will take biodiversity issues into account in the consideration of planning referrals and comment on biodiversity issues wherever relevant.

 Lead organisation GLA Other major partners Boroughs
- proposal 12: The Mayor will press the Government to bring Sites of Metropolitan Importance for Nature Conservation into the criteria for Mayoral planning referrals.

 Lead organisation GLA Other major partners EN, DEFRA
- proposal 13: The Mayor will provide expert advice on biodiversity to London borough councils on planning issues, other than statutory planning referrals, which could have strategically important consequences for biodiversity.

 Lead organisation GLA Other major partners Boroughs
- proposal 14: The Mayor will work with the Metropolitan Police Authority and others to ensure that species protection legislation is enforced in London. Lead organisation MPA Other major partners EN, GLA
- proposal 15: The Mayor will support legislation to ban all hunting with dogs. Lead organisation GLA
- proposal 16: The Mayor will aim to survey all open spaces and wildlife habitats throughout London on a ten year rolling programme, and employ the adopted procedures for evaluating open land to complete the identification of important wildlife sites throughout London and keep this series updated.

 Lead organisation GLA Other major partners EN, EA, boroughs
- proposal 17: The Mayor will request that his Functional Bodies undertake biodiversity surveys on their holdings of open land, and, where appropriate, manage them to conserve and enhance biodiversity.

 Lead organisation TfL, LDA Other major partners MPA, LFEPA, GLA

proposal 18: The Mayor will co-operate with the London Biodiversity Partnership and other relevant bodies in promoting effective monitoring of animals and plants in London and will support the establishment of a London Biological Records Centre as part of the National Biodiversity Network. Lead organisation EN Other major partners GLA, LNHS, LWT, LBP, boroughs

policy 2: The Mayor recognises the unique role of the River Thames in London's history and in the lives of Londoners, and its value for transport, recreation, biodiversity and archaeology. In recognition of their importance, the Mayor has set up the concept of a Blue Ribbon Network for the Thames and London's waterways and the land alongside them. This will establish principles concerning the use and management of the water and land beside it.

proposal 19: The Mayor will and boroughs should protect and enhance the biodiversity of the Blue Ribbon Network by:

- recognising the Network as contributing to the open space network of London
- resisting development that results in a net loss of biodiversity
- including land of importance for nature conservation in borough appraisals of their Thames Policy Area
- only allowing development into the water space where it serves a water dependent purpose or is a truly exceptional case which adds to London's world city status
- requiring developers to prepare assessments of biodiversity impact for proposed development adjacent to the Blue Ribbon Network, detailing the extent of their impact on biodiversity and mitigation measures to address any adverse impacts.
- designing new waterside developments in a way that increases
- ensuring that rivers, brooks and streams are protected, improved and respected, taking measures to improve both public amenity and
- taking opportunities to open culverts and naturalise river channels
- resisting impounding of rivers and taking opportunities to remove impounding structures
- taking measures to protect and improve water quality
- ensuring that surface water run-off is managed on site, preferably with sustainable urban drainage systems, which may provide additional wildlife habitat
- improving access to the Blue Ribbon Network, taking care not to disturb wildlife.

Lead organisation GLA Other major partners EA, PLA, BW, boroughs

proposal 20: The Mayor will work with others and particularly the Environment Agency to establish a restoration strategy for the tributary rivers of the Network. Among other aims this will aim to identify options for reinstating natural features.

Lead organisation GLA Other major partners EA, boroughs, TW

- policy 3: The Mayor will encourage and promote the management, enhancement and creation of green space for biodiversity, and promote public access and appreciation of nature.
- proposal 21: The Mayor will encourage land managers, including London borough councils and other public bodies, schools, faith groups and commercial organisations, to take biodiversity into account in the management of their land. This should include managing important habitats to protect and enhance their nature conservation value, providing safe access for all, involving the local community and creating new wildlife habitats where appropriate.

Lead organisation Boroughs Other major partners GLA

- proposal 22: The Mayor expects boroughs, in consultation with English Nature, to declare suitable sites as Local Nature Reserves, and to manage these sites to benefit biodiversity and people's access to nature.

 Lead organisation Boroughs Other major partners EN
- proposal 23: The Mayor will provide expert advice and training to London borough councils, and others as appropriate, on the management of strategically important wildlife sites and important species and the creation and enhancement of wildlife habitat. He will work with partners to disseminate information on best practice in managing wildlife habitats in urban areas. Lead organisation GLA Other major partners Other land managers, boroughs
- proposal 24: The Mayor will work with voluntary organisations to support and develop the role of local volunteers in protecting and managing local nature sites.

Lead organisation GLA Other major partners Other land managers, boroughs

proposal 25: The Mayor will produce a good practice guide for London borough councils to the production of open space strategies, which will include proposals for enhancing their open spaces for biodiversity.

Lead organisation GLA Other major partners Boroughs, EN, EA

proposal 26: A framework for London's trees and woodlands will be prepared by the Mayor in partnership with other relevant bodies, including Trees for London, the London borough councils, the London Tree Officers Association, the Community Forests, Green Gateway and the Forestry Commission.

Lead organisation GLA Other major partners TL, LTOA, GG, CFs, boroughs

proposal 27: The Mayor will work with the London Parks and Greenspaces Forum, the London Biodiversity Partnership, London borough councils, the Royal Parks Agency and others to facilitate information exchange on best practice in enhancing the biodiversity value and promoting sustainable management in parks and greenspaces in London.

Lead organisation GLA Other major partners LPGF, boroughs, RPA

proposal 28: The Mayor will encourage the sympathetic management of cemeteries and churchyards for biodiversity and the quiet enjoyment of nature.

Lead organisation Boroughs Other major partners GLA, LWT

proposal 29: The Mayor will promote the important role of private gardens for wildlife and, together with other members of the London Biodiversity Partnership, will provide information to encourage London's gardeners to make their gardens wildlife-friendly.

Lead organisation LWT Other major partners GLA, boroughs

proposal 30: The Mayor will work with the boroughs and others to encourage greater public use of allotments. He will promote the social, health and sustainability benefits of allotments and encourage London and borough Biodiversity Action Plans to address improvements to their wildlife value. Lead organisation GLA Other major partners Boroughs

policy 4: The Mayor will promote the conservation and enhancement of London's farmland biodiversity.

proposal 31: The Mayor will support and encourage the use of agri-environment and other schemes that enhance London's farmland biodiversity.

Lead organisation DEFRA Other major partners GLA

proposal 32: The Mayor will oppose commercial or experimental release of Genetically Modified Organisms (GMOs) into the environment in London. Lead organisation GLA

- policy 5: The Mayor will seek to ensure that opportunities are taken to green the built environment within development proposals and to use open spaces in ecologically sensitive ways. This is particularly important in areas deficient in open spaces and in areas of regeneration.
- proposal 33: The Mayor will liaise with others to research and disseminate good practice for designing or adapting buildings to enhance and maintain biodiversity. He will follow this aim when considering development proposals referred to him.

Lead organisation GLA Other major partners LWT, EN, boroughs, LDA, others

proposal 34: The Mayor will work with the London Development Agency, the London borough councils, the business sector and others to encourage the inclusion of greening initiatives in new developments, and proposes that these should be addressed from the outset in developing such schemes.

Lead organisation GLA Other major partners LDA, boroughs, business, EA

- proposal 35: The Mayor will work with Transport for London and will encourage the Highways Agency, Railtrack, the borough councils and other transport bodies to ensure that the potential for wildlife habitat on the verges of roads, footpaths, cycleways and railways is realised wherever possible.

 Lead organisation TfL Other major partners HA, Railtrack, boroughs, GLA
- proposal 36: The Mayor will encourage research into measuring the success of greening initiatives.

 Lead organisation Universities Other major partners GLA
- proposal 37: The Mayor will work in partnership with other interested organisations, such as the NHS and park managers, to maximise the health benefits of green spaces.

 Lead organisation GLA Other major partners NHS, boroughs

proposal 38: The Mayor will seek to increase the relevance of biodiversity to the daily life of Londoners by drawing on visitor surveys, opinion polls and social, medical and psychological research to inform the way the Strategy is promoted and implemented.

Lead organisation GLA Other major partners Universities, LHC

- policy 6: The Mayor will promote local opportunities for regular direct contact with the natural world, through a variety of types of open space (such as allotments, community and cultural gardens, school grounds, environmental education centres and city farms, as well as informal wildlife areas).
- policy 7: The Mayor will promote environmental education, participation and training for all ages and across all sectors of London's society.
- proposal 39: The Mayor will work in partnership with Learning Through Landscapes and other partners to increase the biodiversity value of school grounds. Lead organisation LTL Other major partners GLA, boroughs, schools
- proposal 40: The Mayor will work with London borough councils, schools and other groups, to enable and encourage children to take an active interest in the biodiversity of their local green spaces.

 Lead organisation Boroughs Other major partners LTL, GLA
- proposal 41: The Mayor will work with partners with expertise in environmental education to improve the provision and secure the long-term future of environmental education centres, city farms, and community and cultural gardens throughout London, especially in those parts of London where the need is greatest.

 Lead organisation GLA Other major partners Boroughs, FCFGC, LTL, community groups
- proposal 42: The Mayor will continue his scheme to provide a free visit to London Zoo for all children in London schools. He will work with Government, London's education authorities, city farms and other environmental education initiatives to facilitate other opportunities for environmental education, especially at the local level.

 Lead organisation GLA Other major partners Zoo, NHM, RBGK, WWT, DES, boroughs
 - policy 8: London's many species, and the landscapes where they are found, should be celebrated and promoted.
- proposal 43: The Mayor will promote news about biodiversity and events where biodiversity can be enjoyed, and will help to promote better understanding about wildlife.

Lead organisation GLA Other major partners EN, LWT, boroughs

- proposal 44: The Mayor's Culture Strategy will recognise the enjoyment of wildlife and landscape as a cultural experience. The Mayor will include elements of biodiversity interest, where appropriate, in his cultural events.

 Lead organisation GLA
- proposal 45: The Mayor will produce and disseminate information on London's biodiversity, including a popular guide to exploring London's wildlife. Lead organisation GLA Other major partners LWT, EA, boroughs, LUL
- proposal 46: The Mayor will work with the London borough councils, other landowners, and environmental organisations to promote an annual 'London Wildlife Day' (or 'week'), when land managers will be encouraged to organise events, and Londoners, including school groups, will be encouraged to visit and discover their local wild open spaces.

 Lead organisation GLA Other major partners Boroughs, LWT, RPA, BW, EA
- proposal 47: The Mayor will explore the feasibility of appointing a team of interpretation specialists who could help improve accessibility and visitor satisfaction at a number of popular wildlife sites.

 Lead organisation GLA
- proposal 48: The Mayor will facilitate best practice for developing safe, convenient and enjoyable access to nature, and addressing issues of safety, antisocial behaviour and fear of crime in green spaces. He will work with stakeholder groups on the issues of training of parks staff, information exchange and introduction of equality monitoring.

 Lead organisation GLA Other major partners Boroughs, LWT
 - policy 9: The Mayor supports the establishment and maintenance of partnerships at Londonwide and local levels to produce and implement Biodiversity Action Plans.
- proposal 49: The Mayor will continue to be an active member of the London Biodiversity Partnership and will assist where possible in supporting its functions.

 Lead organisation GLA Other major partners LBP
 - roposal 50: The Mayor will take the lead on the production and
- proposal 50: The Mayor will take the lead on the production and implementation of some action plans, and will contribute to other action plans as appropriate.

Lead organisation GLA Other major partners LBP

proposal 51: The Mayor will work with members of the London Biodiversity
Partnership and others to establish a stakeholder forum to facilitate the implementation of the Biodiversity Strategy.

Lead organisation GLA Other major partners LBP

proposal 52: The Mayor will encourage and support all London borough councils in the establishment of local biodiversity partnerships and the production, implementation and monitoring of borough Biodiversity Action Plans as an integrated element of the delivery and implementation of Community Strategies.

Lead organisation Boroughs Other major partners GLA, LBP

proposal 53: The Mayor will press the Government for legislation to place a statutory duty on local authorities to produce and implement local Biodiversity Action Plans through local partnerships.

Lead organisation GLA Other major partners DEFRA

policy 10: The Mayor will promote the reputation of London as a world centre of excellence for biodiversity conservation, working with London's world class organisations for greater influence globally and to learn from exemplary experience at home and abroad.

proposal 54: The Mayor will foster working links and exchanges with international bodies and organisations in other major cities, to give a lead in urban greening and biodiversity conservation.

Lead organisation GLA Other major partners International bodies

proposal 55: The Mayor will support enterprising new flagship projects for urban nature conservation and people's enjoyment of the natural world, which may further London's reputation as a World City.

Lead organisation GLA

proposal 56: The Mayor will encourage the formation of a partnership for excellence in global biodiversity conservation, harnessing the skills and expertise of London's centres of excellence.

Lead organisation GLA Other major partners Zoo, NHM, RBGK, WWT, EA

policy 11: The Mayor will encourage the business community to play a major role in implementing the programme for conserving London's biodiversity.

- proposal 57: The Mayor will work with the London Chamber of Commerce and Industry, CBI, London First and other organisations to strengthen the role which business can play in conserving London's biodiversity, including the development of company Biodiversity Action Plans.

 Lead organisation LF Other major partners GLA, CBI, LCCI
- proposal 58: The Mayor will work with the London Tourist Board and others to raise the profile of London's major natural attractions.

 Lead organisation LTB Other major partners GLA
- proposal 59: The Mayor will work with the London Development Agency to ensure that the green economy is supported and developed in London and will work to encourage greater representation of minorities in the green sector. Lead organisation LDA Other major partners GLA
- proposal 60: The Mayor will keep links between biodiversity and other aspects of the environment under review and take them into account in implementing this Strategy.

 Lead organisation GLA
- proposal 61: The Mayor will consider biodiversity effects as part of an overall appraisal of the impacts of climate change in London.

 Lead organisation GLA Other major partners EA
 - policy 12: The Mayor will encourage practices, and support existing effective initiatives, that reduce London's impact on biodiversity elsewhere.
- proposal 62: The Mayor will consider, with the London Development Agency, the development of a strategy for ethical trade, to discourage trading activity that damages biodiversity beyond London's borders, including such issues as the use of peat, limestone and wood products from unsustainable sources.

 Lead organisation LDA Other major partners GLA
- proposal 63: The procurement policies of the GLA group should pay due regard to biodiversity conservation. The Mayor will encourage sustainable procurement of materials used in construction and development.

 Lead organisation GLA & Functional Bodies
- proposal 64: The Mayor will work with the Metropolitan Police Authority, HM Customs and others, to develop an effective programme to prevent the illegal trade in endangered species and species products within London.

 Lead organisation MPA Other major partners HMC, GLA

policy 13: The Mayor is committed to increasing the funding for biodiversity projects in London, and wishes to ensure that major new development projects include provision for biodiversity.

proposal 65: The Mayor will work with local authorities and leading conservation organisations in London to seek to establish a strategic programme of funding for site acquisition and long-term management, to conserve strategically important land for biodiversity and for the enjoyment of nature by people.

Lead organisation GLA Other major partners Boroughs, EN, LWT, Funding bodies

proposal 66: The Mayor will support appropriate funding bids from the Federation of City Farms and Community Gardens, environmental education centres and environmental outreach programmes in London to maintain and extend the provision of city farms, community and cultural gardens and environmental education facilities in London, particularly in areas of greatest need.

Lead organisation GLA Other major partners FCFCG, HLF

proposal 67: The Mayor will investigate the problems in accessing funding for biodiversity work in London, and will explore with funding agencies the possibilities for making grant schemes more attractive to potential applicants, more appropriate to the special conditions in London, and applicable to a wider range of work, especially in relation to the London and borough Biodiversity Action Plans.

Lead organisation GLA Other major partners Funding bodies

proposal 68: The Mayor will work with key partners in the London Biodiversity Partnership to develop a funding strategy for the London Biodiversity Action Plan.

Lead organisation LBP Other major partners GLA, Funding bodies

proposal 69: The GLA group should ensure that the budgets for major infrastructure and development projects include provision for the necessary environmental appraisal (including a biodiversity assessment where appropriate) and for retention, enhancement, creation (where appropriate) and long-term management of wildlife habitat.

Lead organisation GLA & Functional Bodies

policy 14: Progress in conserving London's biodiversity should be measured with particular reference to the status of important species and habitats, and progress on proposed actions or targets.

proposal 70: The Mayor will measure the success of this Strategy primarily against two targets, to ensure:

- that there is no net loss of important wildlife habitat, and
- that the Areas of Deficiency in accessible wildlife sites are reduced.

Lead organisation GLA

proposal 71: The Mayor will compile State of the Environment Indicators, which will include headline indicators on bird populations (and other appropriate groups where possible), quantity of wildlife habitats, access to natural green spaces and the quality of that access.

Lead organisation GLA

proposal 72: The Mayor will develop, with other partners, methods for monitoring the progress of actions contained in the London Biodiversity Action Plan and the biodiversity action plans adopted by individual London borough partnerships, in order that such data can be readily combined to provide information for London as a whole.

Lead organisation LBP Other major partners GLA

Key

BW **British Waterways** CA Countryside Agency

CBI Confederation of British Industry

Community Forests (Thames Chase & Watling Chase) CFs Department for Environment, Food and Rural Affairs DEFRA

DES Department for Education and Skills

EΑ **Environment Agency** ΕN **English Nature** FC **Forestry Commission**

FCFCG Federation of City Farms and Community Gardens

GLA **Greater London Authority**

GG Green Gateway (Thames Gateway Urban Forestry Strategy)

Highways Agency HA Heritage Lottery Fund HLF HMC Her Majesty's Customs

LBP London Biodiversity Partnership

LCCI London Chamber of Commerce and Industry

LDA London Development Agency

LEEF London Environmental Education Forum LFEPA London Fire & Emergency Planning Authority

LF London First

LHC London Health Commission London Natural History Society LNHS LPGF London Parks & Greenspaces Forum

LTB London Tourist Board LTC Learning through Landscapes
LONGON Tree Officers' Association

LWT London Wildlife Trust

LUL London Underground Limited
MPA Metropolitan Police Agency
NHM Natural History Museum
PLA Port of London Authority
RBGK Royal Botanic Gardens, Kew

RPA Royal Parks Agency
 TfL Transport for London
 TL Trees for London
 TW Thames Water

WWT Wildfowl & Wetlands Trust

Zoo London Zoo



6 resources

- 6.1 The GLA Act requires this Strategy to take account of resource availability (Appendix 2).
- 6.2 The Mayor's Biodiversity Strategy will be implemented through a number of mechanisms. Members of the London Biodiversity Partnership a broad consortium of organisations and individuals, including the London boroughs, statutory agencies, voluntary sector, communities and the Mayor himself already invest considerable resources in biodiversity work in London, as described in Chapter 2. Action through the Partnership itself is focused on conserving London's priority habitats and species and involving people in biodiversity. The Mayor regards the health of this Partnership as crucial to the implementation of this Strategy and sees this as a priority for his funding.
- 6.3 Consultation has identified a real concern amongst the Mayor's partners, and particularly the London boroughs, that in order to achieve the Mayor's objectives, and to ensure that they shall not become unduly burdensome, this Strategy should be matched both by dedicated professional advice and by the availability of additional resources.
- 6.4 The Authority is bringing considerable staff and financial resources to biodiversity work. The Mayor's inheritance from the London Ecology Unit of a wealth of information, experience and contacts will greatly assist the Mayor and partners working in this field. This is being supplemented by the major rolling programme of open space survey which the GLA is carrying out, and specific projects such as publications. In terms of staff, officers are available to undertake work described in chapter 4, and the Mayor regards expert advice to London boroughs and other partners as one of the priorities here. In addition, the Mayor sponsors a major scheme to provide free school visits to London Zoo, and has also provided funds for city farms.
- 6.5 Addressing the need for additional funding will also be a priority. Funds are available from a wide range of sources for biodiversity projects, and the Mayor will work with partners to ensure that London receives its fair share of these. In regeneration schemes he will seek to ensure that appropriate resources are allocated to the protection and enhancement of the environment, and will also encourage businesses to play their part in investing in the environment. He will support the efforts of boroughs and other partners in their search for funding. In this way, the Mayor will work with partners to provide leverage to obtain additional funding both to implement the proposals in this Strategy and as pump priming for specific biodiversity initiatives.



6.6 The Strategy cannot succeed without the full participation of the partners. It is vital, therefore, that all the partners continue to find the resources both to sustain programmes for biodiversity conservation and to seek additional funding. In this way each partner can play its role in the co-operative effort of implementing the Strategy.



7 monitoring progress

- 7.1 This Strategy proposes 'headline' indicators and targets to measure the long-term changes in London's biodiversity (Policy 14). Progress against these indicators will be measured at least once every four years for the State of the Environment Report. The aim will be no net loss in important wildlife habitat and improved access to natural open spaces.
- 7.2 While monitoring the indicators will provide the best measure of trends in London's biodiversity, there is also a need to document actions undertaken by the partners, and their success. Much of this monitoring will be undertaken through the Action Plans being adopted by the London Biodiversity Partnership (Proposal 50, Appendix 3).
- 7.3 This Authority will also monitor progress on its own contribution to the implementation of this Strategy.





8 review of the Strategy

- 8.1 The GLA Act provides for each Strategy to be reviewed. The need for review comes not only from changing circumstances, but also from the requirements that the Strategy should be consistent with national policies, international obligations, the other Strategies and resource availability (Appendix 2). In this regard it should be noted that the London Plan (Spatial Development Strategy) will provide an important means for implementing this Strategy, and that the London Plan is required to undergo an examination in public and periodic review. The requirement for consistency clearly may require a review of this Strategy. Finally, it is likely that the monitoring of the implementation of the Strategy and of the state of London's biodiversity will reveal issues requiring the Strategy to be reviewed.
- 8.2 It is proposed that the first review of the Strategy should be begun immediately after publication, and that the aim should be to publish at least a partial review of the Strategy on a four-year cycle.



9 appendices

Appendix 1 Policy, criteria and procedures for identifying nature conservation sites in London

A1.1 Introduction

A1.1.1 This appendix updates the previous adopted policy of the London Ecology Committee, which described the policy, criteria and procedures used to identify and recommend land to be protected because of its nature conservation (biodiversity or ecological) value. The appendix does not go into detail on the need for such protection, except as this bears on the criteria used. The previous policy report was adopted by the London Ecology Committee on 25th January 1994, and by the London Planning Advisory Committee for use in the review of Unitary Development Plans in March 1995. It was consequently recommended to London boroughs in paragraphs 7.24 and 7.25 of Government's Strategic Guidance for London Planning Authorities (RPG3, in 1996). An update was adopted by the London Ecology Committee in its meeting of 27th March 2000 and recommended to the Mayor of London as a firm basis for the London Biodiversity Strategy. Minor changes of wording reflect the Mayor's adoption of these procedures in June 2000 and consultation on the draft Biodiversity Strategy.

Previous advice

- A1.1.2 The procedure for selecting sites for protection was first described in the Greater London Council Ecology Handbook No 3, Nature Conservation Guidelines for London, published in 1985. Chapter 3 described policies in London and Chapter 4 outlined how to decide what is important. These two chapters, especially Chapter 4, formed the basis for the rationale adopted by the London Ecology Unit in its series of publications comprising a Nature Conservation Strategy for London. A summary account of the various categories of sites and areas for protection has been included in each of the published handbooks on individual boroughs since the publication of A Nature Conservation Strategy for London: the London Borough of Brent in 1987.
- A1.1.3 Although the broad rationale has been maintained, a number of detailed changes have been made as the system has been refined and improved and guidance has changed. Since the publication of Ecology Handbook 7, Nature Conservation in Hillingdon, Sites of Borough Importance have been split into Grade I and Grade II. The original definition of Sites of Metropolitan Importance has also been modified (in 1988) to include sites of value to people in particular sectors of London (see paragraph 2.3.4). This change was published in the Ecology Unit's report Sites of Metropolitan Importance for Nature Conservation endorsed by the London Ecology Committee on 19th September 1988.

- A1.1.4 The publication Green Capital was a joint recommendation by the London Ecology Unit, the Nature Conservancy Council (now English Nature), Countryside Commission and London Wildlife Trust of policies for Unitary Development Plans in London; it describes the relationship between these sites and areas and the desirable protection to be given in these plans. Since then, these policies have been kept up-to-date by the London Ecology Unit and Greater London Authority.
- A1.1.5 A London Ecology Unit Advisory Note (No 6 Green Corridors in London) gave advice on the identification of corridors and their protection in planning. The essence of this advice has been brought into this appendix.

A1.2 The different kinds of sites and areas

A1.2.1 There are three kinds of site, which are chosen on the basis of their importance to a particular defined geographic area. This use of search areas is an attempt, not only to protect the best sites in London, but also to provide each part of London with a nearby site, so that people are able to have access to enjoy nature.

Sites of Metropolitan Importance

- A1.2.2 Sites of Metropolitan Importance for Nature Conservation are those 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.
- A1.2.3 They 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.
- A1.2.3.1 The best examples of London's habitats include the main variants of each major habitat type, for example hornbeam woodland, wet heathland, or chalk downland. Habitats typical of urban areas are also included, eg various types of abandoned land colonised by nature ('wasteland' or 'unofficial countryside'). Those habitats which are particularly rare in London may have all or most of their examples selected as Metropolitan Sites.
- A1.2.3.2 Sites of Metropolitan Importance include not only the best examples of each habitat type, but also areas which are outstanding because of their assemblage of habitats, for example the Crane corridor, which contains the River Crane, reservoirs, pasture, woodland and heathland.

- A1.2.3.3 Rare species include those that are nationally scarce or rare (including Red Data Book species) and species which are rare in London.
- A1.2.3.4 A small number of sites is selected which are of particular significance within heavily built up areas of London. Although these are of lesser intrinsic quality than those sites selected as the best examples of habitats on a Londonwide basis they are outstanding oases and provide the opportunity for enjoyment of nature in extensive built environments. Examples include St James's Park, Nunhead Cemetery, Camley Street Natural Park and Sydenham Hill Woods. In some cases (eg inner London parks) this is the primary reason for their selection. For sites of higher intrinsic interest it may only be a contributory factor. Only those sites that provide a significant contribution to the ecology of an area are identified.
 - A1.2.4 The list of sites was updated regularly by the London Ecology Committee.

 This list, and details of the site boundaries, can be obtained from the

 Greater London Authority.
 - A1.2.5 Should one of these sites be lost or damaged, something would be lost which exists in a very few other places in London. Management of these sites should as a first priority seek to maintain and enhance their interest, but use by the public for education and passive recreation should be encouraged unless these are inconsistent with nature conservation.

Sites of Borough Importance

- A1.2.6 These are sites which are important on a borough perspective in the same way as the Metropolitan sites are important to the whole of London. Although sites of similar quality may be found elsewhere in London, damage to these sites would mean a significant loss to the borough. As with Metropolitan sites, while protection is important, management of borough sites should usually allow and encourage their enjoyment by people and their use for education.
- A1.2.7 Since 1988 borough sites have been divided, on the basis of their quality, into two grades, but it must be stressed that they are all important on a borough-wide view.
- A1.2.8 In defining Sites of Borough Importance, the search is not confined rigidly to borough boundaries; these are used for convenience of defining areas substantially smaller than the whole of Greater London, and the needs of neighbouring boroughs should be taken into account. In the same way as for Sites of Metropolitan Importance, parts of some boroughs are more heavily built-up and some borough sites are chosen there as oases providing the opportunity for enjoyment of nature in extensive built environments.

- A1.2.9 The borough is an appropriate search area in relation to Planning Policy Guidance on nature conservation (1994) which, in paragraphs 15 and 25, states that local plans should identify, and include policies for, areas of local nature conservation importance.
- A1.2.10 Since essentially a comparison within a given borough is made when choosing Sites of Borough Importance, there is considerable variation in quality between those for different boroughs; for example, those designated in Barnet will frequently be of higher intrinsic quality than those in Hammersmith and Fulham, a borough comparatively deficient in wildlife habitat. Only those sites that provide a significant contribution to the ecology of an area are identified.

Sites of Local Importance

- A1.2.11 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 used for nature study or be run by management committees mainly composed of local people. Where a Site of Metropolitan or Borough Importance may be so enjoyed it acts as a Local site, but further sites are given this designation in recognition of their role. This local importance means that these sites also deserve protection in planning.
- A1.2.12 Local sites are particularly important in areas otherwise deficient in nearby wildlife sites. To aid the choice of these further local sites, Areas of Deficiency (see below) are identified. Further Local sites are chosen as the best available to alleviate this deficiency; such sites need not lie in the Area of Deficiency, but should be as near to it as possible. Where no such sites are available, opportunities should be taken to provide them by habitat enhancement or creation, by negotiating access and management agreements, or by direct acquisition. Only those sites that provide a significant contribution to the ecology of an area are identified.

Areas of Deficiency

- A1.2.13 Areas of Deficiency are defined as built-up areas more than one kilometre actual walking distance from an accessible Metropolitan or borough site. These aid the choice of Sites of Local Importance (see above).
- A1.2.14 Research indicates that few people are willing to walk for more than five or ten minutes to their local natural open space. This translates into a distance of around 500 metres. Using this distance identifies much greater areas of London that are deficient in access, but some of this deficiency can be met with accessible natural greenspace in places that do not meet the criteria for selection as a Site of Local Importance. A distance of 500 metres actual walking distance is recommended for this

more detailed consideration of local access.

Other wildlife habitat

A1.2.15 If an area of wildlife habitat is not designated as of Metropolitan, borough or Local Importance this does not imply that it has little or no value. The needs of wildlife and the value of natural vegetation should be considered throughout the planning process. It is particularly important that opportunities be taken to preserve, enhance or create areas of natural water and vegetation within heavily built-up areas, and to provide access locally.

Suburban gardens

A1.2.16 Private suburban gardens constitute about one fifth of Greater London's land area. Few individual gardens qualify as sites but, in some parts of London, blocks of contiguous private gardens are of value, and may even be the most important habitat in their neighbourhood. Valuable blocks have large and well-established gardens with mature trees, shrubs, water features and other habitats, but few such features occur in small or recent gardens. The better blocks of suburban gardens in a neighbourhood, even if not accessible to the general public, deserve protection.

Green corridors

- A1.2.17 Green corridors are relatively continuous areas of open space leading through the built environment and which may link sites to each other and to the Green Belt. They often consist of railway embankments and cuttings, roadside verges, canals, parks, playing fields and rivers. They may allow animals and plants to be found further into the built-up area than would otherwise be the case and provide an extension to the habitats of the sites they join.
- A1.2.18 There are special criteria for the recognition of land as part of a corridor network, which are detailed in the former London Ecology Unit's Advisory Note 6 and summarised here. The essential tests are habitat composition and near continuity. The minimum habitat requirement is a natural surface: water or vegetation. The corridor network connects to the countryside (Green Belt or Metropolitan Open Land). Small discontinuities, such as division by a road, are allowed, but larger gaps are fatal. Most blocks of back garden land are isolated from the network, but sometimes they adjoin it, or the gap is small enough for them to be included. Corridor elements are not required to be any particular shape, to link sites, or link together into any particular geometry.

A1.2.19 Sites of importance are included in corridors, but these deserve protection in their own right. Hence the protection recommended for the remainder of the network need not be so strong.

Countryside Conservation Areas

A1.2.20 Within London there still remain a few countryside areas where more traditional landscape predominates, and these broad tracts of land are of high wildlife interest. The wildlife value is not usually concentrated in any one part (or where it is, a site is identified), but is diffused throughout the whole area in features such as hedges, ditches, ponds, meadows, permanent pasture, copses and woods. These should be retained and appropriately managed, so that continued use for farming goes hand-in-hand with maintenance of the wildlife resource.

A1.3 Survey information

A1.3.1 In order to choose sites for protection it is necessary to have good survey information on the habitats and species of all candidate areas.

The London Open Spaces Survey

- A1.3.2 Information on wildlife habitats can be collected in a standardised, comprehensive survey. We are fortunate in London in having such a survey, first carried out by the London Wildlife Trust for the Greater London Council in 1984/85, and updated and extended in various surveys since, including re-examination of sites to be described in the handbook series or in relation to proposed developments or management. In a number of London boroughs a systematic survey has been carried out using the London Ecology Unit's specification since 1985. The specification was updated in 2000, when the GLA was established, to collect additional data required for open space planning. The format of the survey is similar to those usually described as 'Phase I' or 'Field by Field', but is enhanced by the extensive use of standardised written notes. The Authority holds this survey information.
- A1.3.3 The initial survey documented areas with semi-natural habitats (more natural than well-gardened allotments or heavily mown urban playing fields) and was also confined to large areas (above 0.5 ha for inner boroughs and 1 ha for outer boroughs). Much subsequent survey work has documented open spaces regardless of their natural quality and has used a much lower area threshold, to provide a more comprehensive coverage.
- A1.3.4 The survey helps to ensure that candidate sites are not overlooked and that the same essential minimum of information is available for each.

 There is usually little other information available on the quality of the wildlife habitats, but any information provided is taken into account.

Information on species

- A1.3.5 Information on species, which has been obtained in a consistent and standardised manner as part of the systematic survey of habitats may be used by the Authority in reaching decisions on site quality. Other information on species, relating to individual sites, is frequently available but has rarely been collected in a systematic way so as to allow straightforward comparisons with other sites.
- A1.3.6 Information on species is often available from local naturalists, who are able to observe sites throughout seasons and years to provide an accurate and quite comprehensive listing of these and who may publish accounts of particular species or sites. Valuable though this information is, it often proves difficult to use it to compare candidate sites, as the recording effort put into each site may differ greatly and so may the completeness of the list. The length of the species list and the detection of rare species therefore depends upon the searching effort. For these reasons, such information on species is used only together with knowledge of how the information was obtained and of the way in which the ecology of individual species affects their apparent status.
- A1.3.7 The policy of the Authority is to take considerable care in interpreting site-based species data to ensure that fully professional standards are maintained.

A1.4 Criteria for choosing sites

A1.4.1 Having assembled all the useful survey information it is necessary to use a set of criteria for comparing one area with another. Appropriate criteria for assessing sites in an urban context are set out below. These are based upon many years' experience of comparing sites one with another in London, but they are not unique to our work. While the terminology may differ in detail (and usually because we prefer the precision of our wording), many of these criteria closely correspond with those used by the Nature Conservancy Council and its successor bodies. The criteria are applied in the context of national and regional planning policy guidance on nature conservation, and taking account of the considerable experience of habitats and species throughout Greater London and their importance for nature conservation.

Kinds of criteria

A1.4.2 Some of the criteria are based in ecological science, in that they are known to be related to attributes that are desirable (these include ancient habitats, size and non-recreatable habitats). Some criteria are based on intrinsic attributes (those that are properties of a site regardless of its geographic setting), but others take geography and use into account.

Taking the criteria together

4.3 There have been a variety of schemes published which attempt to put numerical scores onto criteria and to sum them to an overall score of importance. We agree with the vast majority of workers in this field that this practice is unrefined and does not lead to satisfactory results. Rather, the criteria are used to act as a guide for a professional judgement of a particular site in comparison with alternatives. For some sites only one or a few of the criteria may be important, but for others it may be all or most of them. Whichever criteria are important for a particular site, only those sites that provide a significant contribution to the ecology of an area are identified.

The criteria take relative, not absolute, values

A1.4.4 It must be stressed that each criterion is used to facilitate a comparison of candidate sites within a given search area (metropolis, borough or locality within a borough) and thus they do not take absolute values independent of the search area. Obviously, criteria that show a site to be valuable for a larger search area than London (a region or nation, for example) mean that it is important to London. The converse is not necessarily so.

Representation

A1.4.5 The best examples of each major habitat type are selected. These include typical urban habitats such as abandoned land colonised by nature ('wasteland'). Where a habitat is not extensive in the search area it will be appropriate to conserve all or most of it, whereas where it is more extensive a smaller percentage will be conserved.

Habitat rarity

A1.4.6 The presence of a rare habitat makes a site important, because the loss of, or damage to, only a few sites threatens the survival of the habitat in the search area.

Species rarity

A1.4.7 The presence of a rare species makes a site important in a way that parallels rare habitat.

Habitat richness

A1.4.8 Protecting a site with a rich selection of habitat types not only conserves those habitats, but also the wide range of organisms that live within them and the species that require more than one habitat type for their survival. Rich sites also afford more opportunities for enjoyment and educational use.

Species richness

A1.4.9 Generally, sites that are rich in species are to be preferred, as this permits the conservation of a correspondingly large number of species. However, some habitats, such as reed beds, heaths and acid woodlands, are intrinsically relatively poor in species.

Size

A1.4.10 Large sites are usually more important than small sites. They may allow for species with special area requirements. Large sites may be less vulnerable to small-scale disturbance, as recovery is sometimes possible from the undisturbed remainder. They are also more able to withstand visitors, by diluting their pressure within a wider space. Size is also related to the richness of habitat and species, and so is used as a surrogate for these other two criteria where information is incomplete.

Important populations of species

A1.4.11 Some sites are important because they hold a large proportion of the population of a species for the search area (eg waterfowl populations or colonial birds such as herons or jackdaws).

Ancient character

A1.4.12 Some sites have valuable ecological characteristics derived from long periods of traditional management, or even a continuity in time to the woodlands and wetlands which occupied the London area before agriculture. Ancient woodlands, old parkland trees and traditionally managed grasslands tend to have typical species that are rare elsewhere. These habitats deserve protection also because of the ease with which they are damaged by changes in management, ploughing, fertiliser and herbicide treatment.

Recreatability

A1.4.13 Habitats vary in the ease with which they can be recreated and the length of time required; for example ponds can be created from scratch with reasonable success within a few years, but woods not only take much longer - at least decades - to mature, but even then they do not contain the same flora and fauna as ancient woods on undisturbed soils. In addition to the ecological reasons why certain habitats cannot be recreated, many sites are not capable of being recreated because of practical reasons such as land availability and cost. The more difficult it is to recreate a site's habitats the more important it is to retain it.

Typical urban character

A1.4.14 Features such as canals, abandoned wharves, walls, bridges, tombstones and railway sidings colonised by nature often have a juxtaposition of

artificial and wild features. Some of these habitats are particularly rich in species and have rare species and communities of species. Their substrates may have a particular physical and chemical nature which allows species to thrive that are rare elsewhere. They may also have particular visual qualities. Such areas are often useful for the study of colonisation and ecological succession.

Cultural or historic character

A1.4.15 Sites such as historic gardens with semi-wild areas, garden suburbs, churchyards and Victorian cemeteries which have reverted to the wild may have a unique blend of cultural and natural history.

Geographic position

A1.4.16 This criterion is operated through the use of search areas and areas of deficiency (see A1.2.1, A1.2.13 and A1.4.4 above).

Access

A1.4.17 Access is an important consideration, especially in areas where there may be few places for large urban populations to experience the natural world. Nature conservation is not restricted to the preservation of wildlife, but goes hand in hand with the enjoyment of it by all people, from the specialist naturalist to the casual visitor. Some access is desirable to all but the most sensitive of sites, but direct physical access to all parts of a site may not be desirable.

Use

A1.4.18 The importance of a site can include its established usage (eg for education, research, or quiet enjoyment of nature).

Potential

A1.4.19 Where a site can be enhanced given modest changes in management practices this gives it value. Opportunity exists where a site is likely to become available for nature conservation use, or where there is considerable local enthusiasm about it, or where a voluntary group is willing to use and manage it. Potential in this context can be for habitat enhancement through management, for educational or nature conservation amenity use. Where such potential could remedy a deficiency, or is readily capitalised, it is considered important.

Aesthetic appeal

A1.4.20 This factor is the most difficult to measure, but it includes such factors, which contribute to the enjoyment of the experience of visiting a site, as seclusion, views, variety of landscape and habitat structure, colour, and natural sounds and scents.

A1.5 Consultation

- A1.5.1 The criteria are used with the professional judgement of the Authority and with adequate information, but it is equally important that this judgement should benefit from additional consideration by a wide range of interested parties. For this reason the procedures include widespread consultation with individuals and organisations with knowledge of the sites and of nature. These include local naturalists, voluntary organisations, land owners, statutory authorities, council officers and elected members.
- A1.5.2 This consultation is normally achieved using a map and schedule of sites recommended for protection in planning. After the consultation period is over this schedule is revised and the site descriptions may be drafted. Every submission made is considered in this process.
- A1.5.3 The map and schedule of sites should be updated periodically and at least when comprehensive re-survey permits.
- A1.5.4 Where the advice from maps and schedules has been incorporated into Unitary Development Plans, it has been subject to the statutory consultation and objection and inquiry procedure alongside other aspects of these plans.

A1.6 Protection in planning policies

- A1.6.1 The Authority recommends that the Sites of Importance for Nature Conservation all be afforded protection in London's Unitary Development Plans, against proposals that may harm their value. The detailed advice on policy wording should take planning guidance into account.
- A1.6.2 For the parts of Green Corridors outside the sites of importance and Countryside Conservation Areas, a lower level of protection is recommended.
- A1.6.3 In addition to protection through planning policies, any site of importance, where the London borough council has a legal interest, can be declared as a Local Nature Reserve under the National Parks and Access to the Countryside Act 1949 (after consultation with English Nature). These will include some of the best in terms of intrinsic value and also others chosen as part of the council's programme to provide places for study and for the quiet enjoyment of nature.

Appendix 2 The requirements of statute and guidance

The Greater London Authority Act 1999 requires the Mayor to publish a Biodiversity Strategy.

- 1.1 Section 30(1) of the Act defines the principal purposes of the Authority as promoting economic development and wealth creation, social development and improvement of the environment in Greater London. The general requirements for strategies are in a part entitled The Mayor's strategies, (sections 41 to 44). The specific requirements for biodiversity are in section 352.
- 1.2 Subsection 41(1) requires eight strategies, and that on biodiversity is the only one not described as a 'strategy' in its title. It is described as the London Biodiversity Action Plan, but subsection 41(11) makes it clear that this is nevertheless a strategy. However, since the London Biodiversity Partnership is already preparing a document with this title, and the Act clearly intends this to be one of a series of strategies, this document is referred to as the Mayor's Biodiversity Strategy.
- 1.3 Section 41, requires the Mayor's Strategies, and their implementation, to have regard to the principal purposes of the Authority, Londoners' health, and sustainable development in the UK, consistency with national policies, international obligations, and the other strategies, resource availability and the desirability of using the River Thames safely and for transport.
- 1.4 Section 33 requires the GLA to exercise its functions with due regard to
 - promote and secure equality of opportunity for all persons irrespective of their race, sex, disability, age, sexual orientation, or religion;
 - · eliminate all forms of unlawful discrimination; and
 - promote good relations between persons of different racial groups, religious beliefs and sexual orientation.
- 1.5 These principles fully inform the Strategy. The Mayor is committed to doing all in his power to ensure that those responsible for implementing the Strategy also reflect these objectives.
- 1.6 Subsection 41(9) allows the setting of targets, having regard to national and local targets and performance indicators.
- 1.7 Section 352 of the Act requires the Biodiversity Strategy to contain information about the ecology of Greater London and the wildlife of Greater London and its habitat. It is to contain proposals for the

conservation and promotion by the Mayor of biodiversity within Greater London and commitments made by those required to be consulted. The Strategy is to be prepared with regard to the local Biodiversity Action Plans of London boroughs and the City of London and to the guidance of the Secretary of State.

- 1.8 Consultation is covered generally under section 42. Consultation is required first with the Assembly and functional bodies and then with London boroughs and the City of London. The Mayor is also required then to consider consulting others active in London voluntary bodies, racial, ethnic, national and religious groups and businesses. Subsection 352 of the GLA Act adds requirements for consultation specific to the Biodiversity Strategy consultation is required with English Nature, the Countryside Agency and the Environment Agency.
- 1.9 Another requirement is in subsection 351(3), which requires a state of the environment report to contain information about biodiversity.
- 1.10 Biodiversity issues will also enter into the planning issues referred to the Mayor under the Town and Country Planning Act 1990 as amended by section 344 of the GLA Act.
- 1.11 The guidance of the Secretary of State was received in November 2000. The guidance for this Strategy listed European Directives on:
 - Environmental Impact Assessment (85/337/EEC as amended by 97/11/EEC);
 - the control of major-accident hazards involving dangerous substances (96/82/EEC);
 - the conservation of wild birds (the Birds Directive); and
 - the conservation of natural habitats and of wild flora and fauna (the Habitats Directive).
- 1.12 It also listed international conventions:
 - The Bern Convention on Conservation of European Wildlife and Natural Habitats;
 - The Ramsar Convention on Wetlands of International Importance especially as Waterfowl habitat; and
 - The Bonn Convention on the Conservation of Migratory Species of Wild Animals.
- 1.13 The Secretary of State also included some national policies to take account of under the GLA Act. Policies included in relation to the London Plan (Spatial Development Strategy) were Planning Policy Guidance note 9 on nature conservation, which is to be revised soon, and the detailed

guidance on strategic planning in London (GOL Circular 1/2000). The latter indicates that the Spatial Development Strategy as a minimum, in conjunction with the Mayor's Biodiversity Strategy, should include policies for the protection and enhancement of the capital's natural and open environment, including sites of major ecological importance and identify and promote ecological corridors (section 3(vi)). Section 3(xii) points to the River Thames as, among other things, an important ecological resource. Section 3(viii) states that the Spatial Development Strategy should be consistent with the Biodiversity Strategy and provide a mechanism for delivering some of its policies.

- 1.14 National policies listed for the Biodiversity Strategy included The Convention on Biological Diversity, and Biodiversity: the UK Action Plan. Other documents referred to included:
 - · Biodiversity: The UK Steering Group Report;
 - Government Response to the UK Steering Group Report on Biodiversity;
 - UK Biodiversity Group: Action Plans Volumes I to VI; and
 - Six Guidance Notes for Local Biodiversity Action Plans.
- 1.15 The Countryside and Rights of Way Act (2000) gives the importance of biodiversity conservation a statutory basis, requiring government departments to have regard for biodiversity in carrying out their functions, and to the Secretary of State for Environment, Food and Rural Affairs to take positive steps to further the conservation of listed species and habitats. Although there is no such duty placed on local authorities or others at the local level, paragraph 47 of Circular 4/2001 indicates that the Secretary of State may include local authorities in exercising his duty.

Appendix 3 Biodiversity Action Plans

A3.1 Biodiversity Action Plan priority habitats and species

- A3.1.1 The UK was one of 150 countries that signed the Convention on Biological Diversity at the 'Earth Summit' in Rio de Janeiro in 1992. The UK's Biodiversity Action Plan, produced in 1994 in response to the Rio commitment, highlighted the important need for action at a local level as a means of implementing national targets and aspirations, and set up the UK Biodiversity Steering Group. The UK Steering Group's report was published in 1995 and contained a number of targets and proposals for the conservation of biodiversity in the UK. It identified Local Biodiversity Action Plans as the best way forward for the conservation of biodiversity at all levels and the implementation of national targets.
- A3.1.2 The London Biodiversity Partnership was set up in response to this call. One of its early roles was to identify Habitat and Species Action Plans for London, which relied on an assessment of which nationally important species and habitats occur here. This took place through an auditing process summarised in the 'London Biodiversity Audit'. UK Biodiversity Action Plan priority habitats and species that are found in Greater London are listed below.
- A3.1.3 It is the intention of the UK Steering Group that all national priorities will have their own Action Plan to address their conservation at the UK level. Most of these plans have now been published and can be found at www.ukbap.org.uk.

National Priority Habitats and Species found in Greater London

National Priority Habitats

Lowland beech and yew woodland Fens
Wet woodland Reedbeds

Lowland wood pasture and parkland Purple moor grass and rush pasture

Cereal field margins Eutrophic standing waters

Lowland calcareous grassland Coastal saltmarsh

Lowland dry acid grassland Mudflats
Lowland meadows Chalk rivers

Lowland heathland Ancient and/or species rich

Coastal and floodplain grazing marsh hedgerows

National Priority Habitats and Species found in Greater London

National Priority Species

Mammals Invertebrates

Brown hare

Water vole

Dormouse

Pipistrelle bats

Buttoned snout moth
Four-spotted moth
Double line moth
Stag beetle

Otter Southern wood ant

Hornet robberfly, Asilus crabroniformis

Birds A Long-tongued bumble-bee, Bombus humilis

Grey partridge A cranefly, *Lipsothrix nervosa*Tree sparrow Freshwater white-clawed crayfish

Turtle dove

Bullfinch Plants

Corn bunting Deptford pink
Linnet Tower mustard
Reed bunting Early gentian
Skylark Juniper

Song thrush

Marsh warbler Fungi

Spotted flycatcher A fungus, *Hygrocybe calyptraeformis*

Oak polypore, Buglossoporus pulvinus

Amphibians

Great crested newt

A3.2 London Biodiversity Action Plan

- A3.2.1 The London Biodiversity Action Plan identifies the action required to conserve priority habitats and species in London. The London Biodiversity Audit lists 19 habitats and some 300 species that are especially important Londonwide.
- A3.2.2 Many of the habitats include not only areas defined principally by their vegetation, such as chalk grassland, but also areas of land defined by their use. Habitats in the latter category include Private Gardens and Railway Linesides. Some are groups of habitats, such as Parks, Amenity Grasslands and City Squares. All 19 of these habitats will be the subject of individual Habitat Action Plans.
- A3.2.3 Most species in London can be conserved through the protection and management of the habitat they form part of. However, some species have complex habitat requirements and therefore require their own Action Plan if their conservation is to be addressed effectively. Water Voles, for example, depend on several habitats. Peregrines, on the other hand, do

- not have a clear-cut relationship with a particular habitat. Species such as these are the subject of Species Action Plans.
- A3.2.4 In addition to the Habitat and Species Action Plans there are Statements which act either as a stepping stone document before a full plan is produced, or as a tool for information and awareness-raising.
- A3.2.5 Two rounds of action plans have been published and further plans will follow. The Mayor has taken the lead on several plans that are especially important Londonwide and have particular resonance with the public. To date these are House Sparrow; Woodland; Churchyards and Cemeteries; and Parks, Amenity Grasslands and City Squares.
- A3.2.6 The Mayor's involvement as a member of the London Biodiversity Partnership, and in advising the local partnerships, provides an important opportunity to ensure the delivery of many of his own proposals for biodiversity, as laid out in this Strategy. Much of the action on the ground will be undertaken by other partners. The Mayor's Biodiversity Strategy therefore provides the strategic framework within which the action plans sit, and the action plans will be among the principal means of implementing the Mayor's strategic agenda.
- A3.2.7 The Mayor's contribution to the work of the Partnership includes the implementation of some of the individual actions within the Action Plans. The successful delivery of these plans will assist the Mayor in achieving the objectives of the Biodiversity Strategy.

London Biodiversity Partnership Habitat and Species Action Plans

Habitats

Round 1 2001

Woodland Wasteland

Chalk Grassland Private Gardens (Statement)

Heathland

Round 2 2002

Acid Grassland Private Gardens

Tidal Thames Parks, Amenity Grasslands and

Canals City Squares

Churchyards and Cemeteries

Future rounds

Open Landscapes with Ancient/Old Trees Railway Linesides

Grazing Marsh and Floodplain Grassland Farmland
Marshland Hedgerows

Ponds Lakes and Reservoirs Grassland, Meadow and Pasture

Reedbed

Species

Round 1 2001

Bats Stag Beetle
Water Vole Tower Mustard
Grey Heron Mistletoe

Peregrine House Martin (Statement)
Sand Martin Humble Bumble (Statement)
Black Redstart Exotic Flora (Statement)

House Sparrow

Round 2 2002

Reptiles Black Poplar

A3.3 Borough Biodiversity Action Plans

A3.3.1 Borough Biodiversity Action Plans, formed by a partnership of local organisations and individuals, are key to the delivery of UK and London targets for biodiversity. As such, the implementation of this Strategy relies in part on their success. This is recognised in the requirements of the GLA Act (1999), which requires the Mayor to have regard to the local

Biodiversity Action Plans of the London boroughs and the City of London in preparation of this Strategy.

A3.3.2 To date, some seven boroughs have published Biodiversity Action Plans.

More are expected to follow now that the London Biodiversity Action Plan
has been published and is being implemented. The following local
Biodiversity Action Plans have been published and action is being taken:

Bexley Ealing

Brent Waltham Forest Bromley Westminster.

Camden

A3.3.3 The following boroughs are in the process of preparing Biodiversity Action Plans:

Greenwich Merton
Haringey Redbridge
Havering Richmond

Hounslow Kensington & Chelsea

Lewisham Wandsworth.

- A3.3.4 Unfortunately, some London boroughs have yet to begin the preparation of plans, though most are now in the process of establishing local partnerships and priorities. It is vital that local authorities take the lead in these partnerships so that complete and thorough coverage of London can be achieved and all Londoners given the opportunity to participate in this process.
- A3.3.5 The Lee Valley Regional Park Authority is implementing a Biodiversity Action Plan covering a considerable region, including parts of London, and involving a large partnership.

A3.4 Company Biodiversity Action Plans

A3.4.1 Thames Water were the first company to publish a Biodiversity Action Plan that covered the London region. Railtrack, London Underground and British Waterways are in the process of producing company Biodiversity Action Plans and other businesses are encouraged to follow suit.

Appendix 4 Open space and habitat survey for Greater London

A4.1 Introduction

- A4.1.1 In 1984/85 the Greater London Council commissioned the London Wildlife Trust to complete the first comprehensive survey of wildlife habitats in Greater London. The survey methodology has been updated and consolidated by the London Ecology Unit and, more recently, by the GLA. The latest revisions incorporate the collection of additional data on access and facilities, which are required for open space planning. It has the great advantage that it is standardised and comprehensive, so that any particular site is readily put into perspective. It is now the main information basis for nature conservation planning in the capital, and has been adopted by the Mayor in this Strategy. The Mayor's policies, procedures and criteria for evaluation of nature conservation sites (Appendix 1), include the use of this survey methodology.
- A4.1.2 Further survey is needed for several reasons:
 - to keep the database up to date;
 - to extend the original survey to document sites which are smaller or of less nature conservation interest than those originally documented;
 - to monitor changes in the amount or quality of open space and wildlife habitats, within individual boroughs and in London as a whole.
- A4.1.3 This survey format is broadly similar to English Nature's Phase I methodology. There are a few small differences in habitat classification, but the two specifications collect essentially the same ecological information, in the same detail, with the same comprehensive coverage. The differences in habitat classification are largely due to the essentially urban setting for which the London survey specification is designed. The other main difference from Phase I is that every site has an individual survey form, in addition to a map, in the London format. This reflects the fragmented nature of green spaces in the urban setting, makes retrieval of data much simpler, and facilitates comparison of sites.
- A4.1.4 This survey format is sufficiently technical that some expertise in ecology is required to undertake the survey. It is not, therefore, suitable for general public use. It is designed to collect the objective, or relatively objective, raw data. It must be stressed that the interpretation of these data is a separate stage, which should be planned at the same time as a new survey is planned. Such interpretations can be published, as in the London Ecology Unit's series of Ecology Handbooks, but further interpretation is usually required in response to particular planning issues.

A4.2 The ingredients

- A4.2.1 The basic unit of survey is a piece of land termed a 'parcel'. A parcel should be as homogeneous as possible in terms of habitat, ownership and public access, and must lie within a single London borough. Parcels should also be relatively homogeneous in terms of nature conservation importance, as Sites of Importance for Nature Conservation are defined using whole parcels.
- A4.2.2 Parcels are grouped to make more arbitrary 'sites', which may often be better-known large units of open land, such as Hampstead Heath or Walthamstow Marshes. Many smaller sites comprise just one parcel.
- A4.2.3 These parcels and sites are defined on a survey map. This is usually at a 1:10,000 scale, although larger scales may be appropriate for parts of central London. Public access points to sites are also indicated on the maps.
- A4.2.4 Each parcel also has a written record on one or more standard A4 forms (see appendix 4.5). Every parcel must be noted on the first form, which collects information about its name, location, ownership, habitats, species richness and details of the surveyor and the date and duration of visit. The reverse of the form collects information on land use and planning status, accessibility, nature conservation interest, recreational facilities, potential for enhancement, threats, change since previous survey and an evaluation of the nature conservation importance of the parcel. There is a field on this form to cover every aspect normally covered in surveys of this kind except for the species of plants present, and for detailed change statistics, for which there are additional (optional) forms.
- A4.2.5 A plant recording form will usually only be used for the more interesting or diverse parcels. It allows the collection of a list of species identified, with a coarse indication of abundance and qualifiers relating to maturity and distribution within the parcel. This information can also optionally be written on the parcel form.
- A4.2.6 The changes form is used where a comprehensive re-survey is to be compared with previous survey(s). A separate document describes its use in detail.
- A4.2.7 A third form is available as a continuation sheet, or for a revisit when the standard details remain much the same. The plant recording form can also be used as a stand-alone form for use on successive visits to a parcel if no major changes have occurred.

- A4.2.8 When planning a new survey, it is essential to decide on the following criteria before commencing:
 - the geographical area to be covered (eg an individual London borough);
 - · the minimum size for a site to be surveyed;
 - any land uses or habitats to be excluded. It is usual to cover everything
 predominantly vegetated or water, except private gardens. Open
 spaces which are predominantly hard surfaces, such as some town
 squares, should also be included for open space planning purposes;
 - the level and type of photographic documentation required.

A4.3 Detailed instructions for completing the survey form

See the appended form. The form is designed for use in a clip board. One form is filled in for each parcel, but for the first parcel of a site it also serves as a record of the whole site. Any items that are the same for successive parcels within a site (eg site name or owner/manager) can be indicated as such with a '*'.

Site and parcel number

This is to be recorded in the format:

Site number/parcel number (number of parcels in the site),

the latter item for the first parcel only. For sites which have already been surveyed, the existing site number should be used. For new sites, a five digit number not already in use should be allocated, according to the format:

First two digits: code for the borough holding the visual centre of the site, including leading zeros. These numbers are listed in Appendix 7.1.

Last three digits: unique number within each borough (001-999) including leading zeros.

Thus, in the example given, '27' is the number of Ealing Borough and '038' is the unique number of the site within the Ealing series. The site has three parcels and this sheet is for parcel 1.

Site name

This must be filled in for at least the first parcel of a site. If at all possible use a name to be found on Ordnance Survey maps. Any secondary names can be given in brackets (eg Brent Reservoir (Welsh Harp)). If no established name can be found, a descriptive name should be coined.

Parcel name

This should be filled in if a name exists on ordnance survey maps, or if a well-established local name is known. Otherwise, a suitable descriptive name should be coined (eg 'Hanger Lane railway embankment' or 'Pastures in north-east').

Location

This should be in terms of London road maps (eg 'east of Fernbank Road, west of the railway and south of Longhalt station').

Owner/manager

Often to be gleaned when gaining access, sometimes to be found on a noticeboard on site. Obtain full address and phone number if possible. Guesses should be indicated as such. Where owner and manager are different, record both if known (eg 'owned by Railtrack, managed by London Wildlife Trust').

Access/view from

Indicate access point(s) to a parcel if you gained access, and viewpoints where not.

Permission to enter obtained from

Unless a parcel is obviously accessible to the public, surveyors should not attempt to enter land without permission from the owner or other authorised person. This should ideally be obtained in writing before setting out to survey the site, but may sometimes be obtained on arrival. Note the name, status and telephone number of the person giving permission in this section of the form. If possible, obtain signed written authorisation on a separate sheet.

Grid reference

This should be an eight-figure reference for the visual centre of the parcel as indicated on the specimen form. Almost all of Greater London falls within 100km square 51 or TQ, only a small part of Enfield being in 52 or TL. Thus in most cases 'TQ' may be pre-printed on the forms.

Surveyor(s)

Initials and surname if not a regular surveyor, otherwise initials will suffice.

Borough

A parcel should fall entirely within a single London borough. A site may be in more than one.

Area

This should be measured to 10 per cent accuracy from the map prepared of the parcel. On a map of appropriate scale, a dot overlay will usually provide this accuracy. Indicate clearly whether the units are hectares or square metres.

Date

The date of the visit when the information was obtained, in the usual day/month/year format. A new form (which may be a plant recording form or continuation sheet) must be used for each visit to a site.

Time spent

This is the time spent on the parcel during the visit. It need only be approximate, as it is merely a coarse guide to the thoroughness of the examination.

Weather

A brief summary of the weather during the visit, concentrating on factors which affect recording, such as sunshine, rain, rough temperature and wind (eg 'cloudy but warm, no wind'). This is to provide an indication if a lack of records of, for example, butterflies, is likely to be due to a poor site for butterflies, or to poor weather.

Species richness

This is a visual assessment of the number of vascular plant species in the parcel in relation to similar parcels elsewhere in Greater London. All species, whether native or not, count for this assessment, except for those obviously planted and not reproducing. As the comparison is within, not between, habitat types, it is possible to have a low score for naturally rich habitats such as chalk grassland or a high one for naturally poor habitats like heathland. If the survey was carries out at an inappropriate time of year, or a significant proportion of the parcel was not examined closely, 'not known' should be ticked. It may, however, be possible in some circumstances to make a meaningful assessment without actually entering a site.

Access gained to

For an indication of the proportion of the parcel that was examined at close range. Add a note to clarify if necessary.

Habitats

It is best if a parcel can comprise a single habitat, but this may be relaxed if additional habitats comprise a very small area, or if there is an intricate

mix (such as hawthorn bushes invading grassland, or a park with scattered trees, hedges, shrubbery and hard surfaces among amenity grassland). This can also be relaxed for a parcel comprised solely of heavily improved or managed land of fairly low wildlife value, such as an area of playing fields with some standard trees around its edges.

Aerial photographs are often of value when estimating the percentage cover of each habitat. Percentage cover should be expressed to the nearest ten per cent, except for very small percentages and consequently to make the sum 100 per cent.

Appendix 4.2 gives a definition of each of the habitats, with notes on how to judge marginal cases. The definitions of some of the swamp/fen habitats have been changed to reflect the priority given to reed beds in biodiversity action plans.

Habitat qualifiers

These are located in three columns beneath the habitats on the form, and generally refer to the habitats in the column directly above them. Tick or fill in any that apply. Use a question mark if uncertain. The percentage shrub layer should always be estimated for woodland, but this need be only to the nearest ten per cent. 'Sand/clay bank' refers to a sloping or vertical face of bare sand or earth which might be of value to invertebrates such as burrowing hymenoptera.

Notes, sketch map

A sketch map is desirable if no field map or aerial photograph is carried during the survey or if there are new details to be recorded which are fine enough not to be clearly annotated on the scale of the field map carried. It is better, if possible, to carry both an aerial photograph and a field map at an appropriate scale.

This area is valuable for noting observations made while walking about the parcel. Always note the dominant plant species for each habitat, and any notable plants, as well as any fauna identified, such as birds, butterflies and signs of mammals. Full lists of plants may be recorded here, but for more diverse parcels (generally more than about 15 species of plants) it is preferable to use the plant recording form.

Land use

Tick one box only, to refer to the predominant land use of the parcel. The categories are defined in appendix 4.3

Planning status

It will not be possible to complete this section in the field. Instead, it should be completed after the field visit by reference to English Nature's schedules of Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR, currently only two in London) and Local Nature Reserves (LNR). The relevant adopted UDP Proposals Map should be consulted for other nature conservation and open space designations.

SINC or equivalent includes any site protected for nature conservation (different boroughs use different terms; Site of Importance for Nature Conservation is the most widely used, but others include Site of Wildlife Value, Site for Local Nature Conservation and Area of Nature Conservation Importance). Green corridor includes similar designations such as Wildlife Corridor, but not Green Chain, which is recorded separately. Other protected open space includes a wide range of designations, including Public Open Space, Urban Green Space, Local Open Land and Private Open Space; specify the designation which applies.

Ownership

Tick one box only. Local authority ownership is any land owned by a borough council or the Corporation of London, except for education land. It should be noted that land owned by health and education institutions, usually playing fields, should be recorded in those boxes rather than in the local authority box, since it is often difficult to distinguish between hospitals which are run by the NHS and those which are run by trusts, or to know whether schools are in the public sector or not. Government/crown land includes land managed by the Royal Parks Agency and MOD land. English Heritage, Countryside Commission and similar quangos should be recorded as 'government'. Trusts can be private or voluntary. Religious ownership includes the Church Commissioners and all other religions and Christian denominations. Note which religion or denomination if possible. Note that while churchyards may be managed by a local authority, they will almost always be under church ownership; cemeteries, however, are more likely to be in local authority or private ownership, although non-Christian cemeteries are often under religious ownership. If unsure of ownership, use a '?' in the box of your best guess.

Public access

Tick one box. De facto access should be ticked if a site is readily accessible and clearly used by the public, but not if a few children squeeze in through a small hole in the fence. Restricted access includes time restrictions, such as open days, (but not parks that close at night, which can be recorded as free access), access only to certain people, such

as club members, a financial charge for access, or access only to parts of a parcel, such as footpaths. Always note which type(s) of restrictions apply. Tick wheelchair if, in your opinion, the parcel is accessible to wheelchairs; use a '?' if unsure, and add a note to qualify if necessary.

Entry points

This applies to entry from outside an open space. It therefore does not apply to any part of a parcel that adjoins another accessible open space. If the parcel has completely open access, i.e. it has no boundary fence or wall limiting access, the open access box should be ticked, and an indication given as to whether this applies to the whole or only part of the parcel. However, if the parcel is bounded by a wall or other structure which limits the number of entry points, the limited entry points box should be ticked. In this case, it will also be necessary to indicate the access points on the 1:10,000 maps. In a few cases, for example, Tooting Bec Common, it may well be that a combination of access arrangements apply, i.e. some of the site is bounded by a fence and thus has limited access, whilst other parts may have open access, such as a road running along the site boundary. If this is the case, the individual points of access and lengths of open access should be indicated on the 1:10,000 map. If a parcel is completely surrounded by other accessible open space, the third box should be ticked.

Accessibility by mode

Score each mode of transport from 0-2 as follows:

Pedestrian This is scaled 0-2, with 0 having no access for pedestrians, i.e. it is completely enclosed by a wall or fence, with no points of entry (including roads); 1 indicates limited points of access, i.e. two or less; and 2 indicates good access for pedestrians, i.e. multiple points of entry. This category is very closely linked to Entry points above. Also take into account the distance of the site from residential areas: if the site has no access points within 400 metres walking distance of a residential area (defined as a group of 20 or more dwellings), do not score it higher than 1; if no access points within 800 metres of a residential area, score 0.

Cycle This is scaled 0-2, with 0 having no access for cyclists, i.e. it is completely enclosed by a wall or fence, with no points of entry (including roads); 1 indicates limited points of access, i.e. two or less, and particular problems relating to cyclists such as limited gate width; and 2 indicates good access for cyclists, i.e. multiple points of entry and/or provision of cycle racks at entrances where cycling is not permitted within an open space and close proximity to either the London Cycle Network or a designated local cycle route.

Public Transport This is scaled 0-2, with 0 having very poor access to the public transport network (which here includes bus stops, underground, overground and light rail stations), i.e. the site is more than 800 metres or ten minutes walking time to the network; 1 indicates limited access to the public transport network, i.e. the site is more than 400 metres or five minutes walking time to the network (but less than 800 metres/10 minutes walk); and 2 indicates high accessibility to the public transport network, i.e. less than 400 metres or 5 minutes walk to the network. For sites only on bus networks, if bus services are less frequent than one per hour, score 0, and if buses are between one and two per hour score no higher than 1.

Private Car This is scaled 0-2, with 0 having no access for cars into the site and no car parking within 5 minutes walk of the site; 1 indicates limited or poor access for cars to the site, i.e. several entry points but no on-site parking provision (although off-site provision may be within 5 minutes walking distance); and 2 indicates good accessibility for cars, i.e. multiple entry points for cars and dedicated on-site parking provision.

Nature conservation value (surveyor's personal view)

This is for the surveyor's view of the nature conservation value of the site. It is somewhere to wax lyrical. Beware of damning a parcel (except with faint praise); good places can be misjudged at the end of a hard day's work, even the best surveyor can miss something of significance, and a considered judgement will include factors not obvious on a field visit.

Interest

A particular interest is to be ticked if the site is judged to be notable for that factor. Tick the box if you have direct evidence (eg one or more locally rare plants present, or a slow-worm seen, or a badger path crossing the site), or use a '?' if the judgement is based more on the character of the habitat than direct observation (eg the site looks good for reptiles or there are features which might be utilised by bats).

Potential for enhancement

A space for brief notes on how the parcel might be improved. Education could include the proximity of a primary school, or the need for some interpretation, or the suitability of the site for a nature trail. Amenity could include access improvements, including for people with disabilities, or the provision of seating, shade or shelter. Nature conservation might include brief suggestions for habitat management or a note that a little-used corner of a park might be appropriate for nature conservation management or habitat creation. Use the 'Notes' section overleaf to expand if necessary.

Threats and disturbances

Give brief details of any of these which apply, noting the nature and severity of the problem in each case.

Invading plants includes scrub invasion of grassland as well as invasive aliens.

Pollution includes signs of contaminated land, dumping of toxic substances (such as oil drums) and water pollution. You could also include a note here if poor air quality affects the enjoyment of an open space beside a busy road. Excessive nutrient enhancement through dog faeces could also be recorded here.

Tipping includes fly tipping, dumped cars or dumping of household/garden waste over a fence; also include notes on serious litter problems here.

Motorcycle scrambling is a common cause of erosion and habitat damage, as well as a threat to the safety of people using the site, and a noisy intrusion. Note if possible whether the motorcycle use is authorised or not (it is usually not).

Erosion is damage caused by excessive wear, either through overuse of a site with inadequate maintenance, or through muddy paths 'expanding', or through mountain biking, etc. Deliberate damage should be recorded under vandalism below.

Vandalism Take care to distinguish between vandalism and poor maintenance. Vandalism is caused deliberately, not accidentally or by heavy use. Signs include graffiti; the contents of litter bins deliberately strewn across the site; broken windows; and obvious damage to other structures and features.

Record aircraft noise or road/rail noise only if these are significant enough to affect the enjoyment of the site by people or to disrupt wildlife such as singing birds. Be aware that low cloud can muffle aircraft noise. With road or rail noise, note whether it affects the whole parcel, or whether it is possible to 'escape'.

Intrusive buildings are unattractive features, such as tower blocks, gas holders, masts, pylons, elevated roads and railways, that overlook the open space in a way that is unsympathetic to its ambience. They need not be on the boundary. (The boundary is treated separately, see below.) Note if any of these things can be seen from the open space. Are they

pervasive, i.e. always in the background or can you get away from them? Remember: they don't need to be adjacent to the site; they could be some distance away and still affect the ambience of the open space. Include pylons, railways etc. that cross the site.

Unsympathetic boundary treatment Note if the boundary of the open space is unattractive. This can be if the use is intrinsically unattractive, such as a sewage treatment works, a major traffic-ridden road, industrial buildings (unless attractive, modern, high-tech). It can also be if the boundary feature itself is unattractive. Typically, the boundary between houses and open space comprises a jumble of sheds, wooden fences, chicken wire and concrete slab walls, much of which is likely to be dilapidated, and often with signs of graffiti. Do note, however, that some boundaries, such as old, weathered brick walls, can be quite attractive. In all cases, use your judgement to determine whether the impact of the intrusive feature(s) is significant.

Redevelopment Imminent redevelopment can be a serious threat. You may have foreknowledge of this (it may indeed be the reason for the survey). Signs on site include planning notices, advertisements for sale of vacant land, etc.

Other includes any threat not covered by the above.

Safety/security Note here any factors affecting public safety or the perception of public safety. This could include uneven paths and hidden holes, dangerous structures, evidence of use by alcoholics or drug users, and the availability of hiding places for potential lurkers, particularly near paths. Comments on sightlines, lighting and the proximity of other people might also be useful.

Predominant recreational use

Tick one box only. Active recreation includes pitch sports, tennis, swimming and running. Passive recreation includes walking (with or without dog) relaxing, sunbathing and nature study. If a large park has small areas of facilities for active recreation, tick passive. If sports facilities dominate a park, tick active. The relevant UDP Proposals Map or Ordnance Survey map may be useful if unsure which to tick.

Level of use

A coarse scale only, to be judged by physical signs as well as by direct observation of people.

Maintenance

Tick one box only. This is a subjective evaluation, and should be judged with regard to the intended land use(s) of the site. Good maintenance of a formal park differs markedly from good habitat management in a nature reserve. Tick satisfactory if the overall standard of maintenance seems adequate for the intended use. Tick good if it seems that special efforts have been made to maintain a better than average overall standard of maintenance. Tick poor if there are signs of inadequate maintenance.

In parks and other formal open spaces, signs of poor maintenance to look out for include worn out playing pitches; overflowing rubbish bins, tatty flower beds, litter, pot-holed footpaths and roads, worn-out grass areas (or signs that the mower blades were too low and have scraped off most of the turf), and structures and other features (including fences, buildings, gates, seats and lighting) that need cleaning, repair or painting. If none, or few, of these things are present, tick satisfactory, unless everything is unusually spick and span and in good repair, in which case tick good.

In sites managed for nature conservation, signs of poor maintenance might be litter and tipping, invasive plants including scrub invasion of high-quality grasslands, inappropriate tree planting or over-zealous tidying of dead wood. In some nature reserves, no maintenance at all might be satisfactory, but this is by no means always the case. Good path maintenance is always a sign that at least something is being done (and conversely poor or no path maintenance suggests that the site is neglected).

In the case of cemeteries, poor maintenance may be demonstrated by a significant number of headstones leaning over, or clear signs of untreated subsidence. Allotments may appear to be unmaintained; but do not identify them as unmaintained if there are clear signs that they are in use – no matter how scruffy they look. Obviously, disused or partly disused allotments can qualify as poorly maintained (unless they are deliberately being left wild for nature conservation).

Facilities

More than one box may be ticked. Explanations of some of the more ambiguous general facilities are provided below:

Play Equipment for under 7s includes play equipment that has been formally designated by the borough council on a sign or notice board as only suitable for children under the ages of seven and is normally signed to such effect. However, the category may also include play equipment

that is not formally designated, but which is clearly for use by children of the aforementioned age, i.e. swings with cradles, small slides, seesaw, etc.

Play Equipment for 7-13 year olds includes play equipment that has been designated by the council on a sign or notice board as only suitable for children of the aforementioned age range. However, the category may also include play equipment that is not designated, but which is clearly for use by such children and may include such features as aerial ropeways, large slides and climbing frames.

Play Equipment for over 13s includes facilities such as skateboard tracks and basketball hoops clearly designed for use by teenagers. Such facilities may not be formally designated on a sign or notice board.

Seats Only tick the box if you consider that someone wanting to sit down would stand a reasonable chance of finding a seat. Thus, don't tick if there is only one seat in a huge park.

Refreshments includes only permanent structures or buildings for that purpose and does not include temporary or mobile facilities.

Facilities for the Disabled could include either specific provision in limited areas such as access, Braille signs, disabled toilets, scented gardens etc., or the entire site could be designed to meet the needs of the disabled (if so, this should be indicated in the notes on the questionnaire form).

Litter bins Use the same criteria as for seats.

Car parking Tick only if there are parking spaces within the site. On-street parking around or close to the site doesn't count. Car parks should be within the curtilage of the site, laid out for that purpose, not an area which represents an encroachment into the site, or local on-street parking.

Nature trails includes those areas of a site set out with signposts/guides indicating the significance of features.

Historical features includes great houses, follies, bandstands, pump houses, bridges, ice houses, orangeries, old walled gardens, historic greenhouses, historic tombs and monuments, etc. Include all 'listed' buildings and structures.

Art Gallery such as the Serpentine Gallery in Kensington Gardens, but not temporary displays such as the Sunday morning Bayswater Road display

on the railings alongside Kensington Gardens.

Sculpture/monuments You might already have ticked historical features for these; don't be afraid to tick again. Be careful with piles of bricks and other things that might look to you like rubbish, but which might be 'installations' or even 'art'. Most cemeteries will include monuments.

Dog litter bins/areas Tick this if there are special bins for dog crap. Look out for dog-shit areas, which may be indistinguishable from sandpits. There ought to be signs.

Information includes information boards, interpretation panels, leaflets available in cafes, etc.

Cycle Paths means formally designated surfaced routes for cyclists (such as the London Cycle Network). This does not, however, include facilities for off-road/mountain biking (even if way-marked).

Water Sports include water skiing, rowing and sailing, but not swimming.

Fishing includes only where coarse angling is permitted. There are usually signs indicating fishing rights. Do not assume that someone fishing has a right to do so.

Other Pitches includes pitches formally marked out for the purposes of rugby, football, hockey, and other field sports.

Horse riding can include rides (such as Rotten Row in Hyde Park), bridleways and riding centres (which usually have stables and other facilities such as showjumping).

All weather surfaces include astroturf pitches and hard surface tennis courts.

Change since last survey

Make brief notes on any changes. Significant changes include the loss (through redevelopment, etc) of part or all of a parcel, major changes in habitat or management (such as total scrub invasion of a grassland site), or a boundary change moving the parcel from one borough to another. Minor changes include small changes in habitats or management (some scrub invasion, introduction of grazing, etc). Tick Error in last survey if it is clear that a significant error was made in defining boundaries or the classification of habitats. This does not include small differences of opinion over the percentages of different habitats. For parcels where

there has been a significant or minor change the losses and gains are recorded in a separate record.

Geology, topography, aspect, drainage, soil

Notes on any of these factors where possible, with reference to geological maps if necessary.

Contacts/others' information/history and succession

For notes on people or organisations (other than the owner/manager) known to be interested in the site, for information provided by other people, and notes on known historical sources on the site or parcel.

Appendix 4.1 Borough codes for assigning site numbers

Appendix 4.1 Borough codes for assigning site numbers				
Borough	Code	Borough		
City of London	17	Newham		
Westminster	18	Bexley		
Camden	19	Bromley		
Islington	20	Croydon		
Hackney	21	Sutton		
Tower Hamlets	22	Merton		
Greenwich	23	Kingston upon Thames		
Lewisham	24	Richmond upon Thames		
Southwark	25	Hounslow		
Lambeth	26	Hillingdon		
Wandsworth	27	Ealing		
Hammersmith & Fulham	28	Brent		
Kensington & Chelsea	29	Harrow		
Waltham Forest	30	Barnet		
Redbridge	31	Haringey		
Havering	32	Enfield		
Barking & Dagenham	99	Outside Greater London		
	Borough City of London Westminster Camden Islington Hackney Tower Hamlets Greenwich Lewisham Southwark Lambeth Wandsworth Hammersmith & Fulham Kensington & Chelsea Waltham Forest Redbridge Havering	BoroughCodeCity of London17Westminster18Camden19Islington20Hackney21Tower Hamlets22Greenwich23Lewisham24Southwark25Lambeth26Wandsworth27Hammersmith & Fulham28Kensington & Chelsea29Waltham Forest30Redbridge31Havering32		

Appendix 4.2 A list of habitats for open space survey in London

Code	Name	Definition
01	Woodland	Stands of trees forming at least 75 per cent cover,
02		including coppice and trees of shrub size, but excluding
03		fen carr (19). Includes stands of willow except Salix cinerea,
		caprea and viminalis, but excludes hawthorn, hazel (except
		hazel coppice with standards), elder, juniper and the three
		willow species listed above, which are always scrub (06)
		regardless of height. Where the species composition does
		not fulfil any of 01, 02 or 03 below, code as a mixture.
		Always record per cent shrub layer under the qualifiers.

01	Native	Woodland (see above) with native broadleaved species
	broadleaved	(ie excluding sycamore and sweet chestnut) comprising
	woodland	at least 75 per cent of the canopy.
02	Non-native	Woodland (see above) with non-native broadleaved species
	broadleaved	(including sycamore and sweet chestnut) comprising
	woodland	75 per cent of the canopy.
03	Coniferous	Woodland (see above) with coniferous species (including
	woodland	yew) comprising 75 per cent of the canopy.
37	Scattered trees	Trees forming less than 75 per cent canopy cover over
		another habitat (excluding coppice with standards, which is
		coded as woodland). Record percentage tree cover here,
		and the rest of the area under the appropriate habitat.
05	Recently felled	Does not include coppice, which is coded as woodland.
	woodland	,
06	Scrub	Dominated (at least 75 per cent cover) by shrubs (usually
		less than 5 metres tall), excluding fen carr (19), heathland
		(15), young woodland, coppice, hedges (25, 34) and
		planted shrubberies (38). Includes stands of hawthorn,
		hazel (except coppice with standards), elder and Salix
		cinerea, caprea and viminalis regardless of height.
38	Planted	Dominated (at least 75 per cent cover) by shrubs,
	shrubbery	usually non-native species, the majority of which have
	·	clearly been planted. Excludes hedges (25, 34).
25	Native hedge	Line of shrubs, with or without treeline, one or two mature
		shrubs wide (wider belts should be coded as scrub or
		woodland), with native species comprising at least 75 per
		cent of the shrubs.
34	Non-native	As above but with non-native species comprising at least
	hedge	75 per cent of the shrubs. If neither 25 nor 34 apply, code
	-	as a mixture.
31	Orchard	Planted fruit or nut trees forming at least 50 per cent
		canopy cover.
36	Vegetated walls,	Includes ruins, fences and other artificial structures with
	tombstones etc	an appreciable amount of vegetation (including mosses and
		lichens) but excluding artificial water margins, which should
		be coded as wet marginal vegetation (18) if vegetated.
26	Bare soil	Includes active quarries, fresh road workings, spoil or
	and rock	tipping and earth banks of water habitats, where these are
		minimally vegetated. Excludes arable land (28).
 27	Bare artificial	Includes tarmac, concrete, railway ballast, gravel paths,
	habitat	buildings and artificial margins to aquatic habitats, where
		these are minimally vegetated.

08	Acid grassland	Un-or semi-improved grassland on acidic soils, with less
		than 25 per cent cover of heather or dwarf gorse. Excludes
		reedswamp (17). Usually with one or more of Deschampsia
		flexuosa, Molinia caerulea, Nardus stricta, Juncus
		squarrosus, Galium saxatile, Potentilla erecta or Rumex
		acetosella in abundance.
09	Neutral	Mesotrophic grassland usually with one or more of
	grassland	Arrhenatherum elatius, Deschampsia cespitosa, Alopecurus
	(semi-improved)	pratensis, Cynosurus cristatus, Dactylis glomerata, Festuca
		arundinacea or F.pratensis. Contains more than just Lolium
		perenne, Trifolium repens, Rumex acetosa, Taraxacum, Bellis
		perennis and Ranunculus species (see 07 and 11), but lacks
		the characteristic forbs of 35. Excludes reedswamp (17).
35	Neutral	Mesotrophic grassland with more forbs typical of old
در	grassland	grassland than 09. Likely to contain one or more of Primula
	(herb-rich)	veris, Lychnis flos-cuculi, Achillea ptarmica, Silaum silaus,
	(Herb-Herr)	Succisa pratensis, Stachys officinalis, Serratula tinctoria,
		•
		Ophioglussum, Gensita tinctoria, Sanguisorba officinalis or
		Caltha palustris, or an abundance of Carex ovalis,
		Pimpinella saxifraga, Conopodium majus, Cardamine
		pratensis, Knautia or Filipendula ulmaria.
10	Basic grassland	Un- or semi-improved grassland containing calcicoles.
		Usually with some of Brachypodium pinnatum, Bromopsis
		erecta, Heliotrichon pratense, Thymus polytrichus,
		Sanguisorba minor, Centaurea scabiosa or Origanum vulgare
		in some abundance.
11	Improved or	Species-poor mesotrophic grassland containing little but
	re-seeded	Lolium perenne, Trifolium repens, Agrostis species, Bellis
	agricultural	perennis, Taraxacum and Ranunculus species. Distinguished
	grassland	from 07 by its agricultural use and hence usually less
		frequent mowing.
07	Amenity	Usually frequently mown, species-poor mesotrophic
	grassland	grassland characteristic of parks and sports pitches,
		containing similar species to 11. Scattered trees and
		shrubberies in parks should be coded separately.
12	Ruderal	Communities composed of pioneer species such as
	or ephemeral	occur in early succession of heavily modified substrates.
		Typical species include Senecio squalidus, S.vulgaris, Sinapis
		arvensis, Poa annua, Hirschfeldia incana and species of
		Polygonum, Persicaria, Melilotus, Atriplex, Chenopodium,
		Medicago, Vulpia, Picris, Lactuca, Diplotaxis, Conyza
		and Reseda.
13	Bracken	Stands where bracken is dominant. Also used with other
		habitat codes to indicate scattered bracken.

Tall h		Stands of tall non-grass herbaceous species, often rhizomatous perennials, such as Fallopia japonica, Conium maculatum, Chamerion angustifolium, Anthriscus sylvestris Urtica dioica, Epilobium hirsutum, Solidago canadensis and species of Aster and Heracleum. Excludes herbaceous fen vegetation 32).
33	Roughland	An intimate mix of semi-improved neutral grassland (09), tall herbs (14) and scrub (06). If these occur in large enough patches they should be coded separately. Usually the next successional stage after 12.
15	Heathland	Dwarf-shrub cover greater than 25 per cent of species suc as heathers and Ulex minor, with less than 50 per cent cover of Sphagnum. May include a large amount of acid grassland (06) in a close mosaic, but code as a mixture if grassland areas are large.
39	Allotments (active)	Communal allotment gardens which are under cultivation. Code disused plots under other habitats as appropriate.
28	Arable	Cropland, horticultural land (excluding allotments), freshly ploughed land and livestock paddocks stocked so heavily to have little vegetation.
16	Bog	Dominated by Sphagnum mosses (greater than 50 per cencover) with water table at or just below the surface.
17	Reedswamp	Stands of Phragmites australis with at least 75 per cent cover of reeds. Includes dry and tidal stands.
40	Typha, etc swamp	Stands of Glyceria maxima, Typha species or Phalaris arundinacea where these species form at least 75 per cent cover.
18	Wet marginal vegetation	Emergent vegetation with a permanently high water table in strips less than five metres wide on the margins of water bodies. Contains species such as Iris pseudacorus, Apium nodiflorum, Acorus calamus and species of Rorippa, Alisma and Juncus. May include Phragmites, Typha and Glyceria maxima, but where these form single-species stands code as 17 or 40 respectively. Usually too small to map but must always be coded if present.
19	Fen carr	Woodland or scrub over herbaceous vegetation with the water table above ground for most of the year.
20	Standing water (includes canals)	Lakes, reservoirs, pools, wet gravel pits, ponds, canals, docks and brackish lagoons beyond the limit of swamp or wet marginal vegetation. Always code vegetated margins separately and note trophic status and whether saline or tidal.

21	Ditches	Distinguished from 20 and 22 by their (often
	(water filled)	agricultural) drainage role. Always code vegetated margins
		separately and note trophic status and whether saline
		or tidal.
22	Running water	Rivers and streams. Always code vegetated margins
		separately and note trophic status and whether saline
-		or tidal.
23	Intertidal mud,	Intertidal areas without significant vegetation of higher
	sand, shingle, etc	plants. Try to record the extent at low tide.
24	Saltmarsh	Intertidal areas appreciably vegetated with higher plants,
		excluding reedswamp (17).
30	Habitat	Areas which cannot be observed due to
	information	restricted access, etc.
	not available	
29	Other	To be avoided if possible. Must be specified if used.
32	Species-rich	Stands of herbaceous vegetation where the water table
	herbaceous fen	is above ground for most of the year, with less than 75 per
		cent dominance of Phragmites, Typha, Glyceria and Phalaris
		arundinacea. Distinguished by width from 18. So rare in
		London that it is not on the survey form; write in under
		'Other' if required.

Appendix 4.3 Land use categories

Park

Refers to traditional public open spaces laid out formally for leisure and recreation. They usually include a mixture of lakes, ponds, lidos, woodland, flower beds, shrubs, ornamental trees, play spaces, formal and informal pitches, bowling greens, tennis courts, golf pitch & put, footpaths, bandstands, toilets, cafes and car parks - but not necessarily all of these. Parts of some parks might be managed as so-called natural areas. Examples of parks include the Royal Parks, municipal parks such as Battersea and Victoria, and wilder places such as Hampstead Heath which, although having distinctly informal qualities, are maintained predominantly for the same purpose, and include the usual swings and roundabouts and playing pitches. Many parks are enclosed by walls or railings, although some parks that began as common land may not be enclosed.

Common

Refers to publicly accessible open space that has few if any 'facilities'. It will typically be mainly open rough grassland (not mown playing field or

recreation ground type grass) and/or woodland, and may have a limited provision of facilities. In typology terms, commons are much less formal than parks or parkland. Examples include Wimbledon Common, Wanstead Flats, and parts of Epping Forest.

Village green

Usually an expanse of grass in the centre of old villages, often used in the summer for cricket.

Town square

Includes both the green open spaces and hard open spaces. It includes the London squares common to central London, which are typically square areas of grass with some shrub borders, bounded by railings, and surrounded by buildings. Examples include Belgrave Square and Soho Square. The category also includes tarmac areas or paved open spaces, which may or may not include planting. These typically are used as 'sitting out' areas, where city workers can enjoy the sun and eat their sandwiches, and as such usually have seats or benches. For example, Emma Cons Gardens opposite the Old Vic Theatre. However, they do not necessarily have seats and may just be a plaza area, with some planting (usually trees) and public art. Examples include the area in front of the jubilee line station at Canary Wharf, and the plaza in front of Westminster Cathedral. This category excludes pedestrianised streets, car parks, servicing areas to buildings, and housing amenity space such as communal courtyards.

Recreation ground

An area of mown grass used primarily for informal, unorganised ball games and similar activities (including dog walking). Not to be confused with playing fields, below.

Playing field

A site comprising playing pitches, usually for football, but also for rugby and hockey and, in the summer, for cricket. Playing pitches may not always be laid out in the summer, so look out for notice boards or changing rooms and pavilions for evidence. Include sites here even if they appear disused. Include school playing fields. Almost always, playing fields consist only of pitches; but they will sometimes have other bits of open land around the edges. Do not include sites that partly contain playing pitches but are more properly categorised as parks or commons. Pitches are often to be found in parks and commons, but the type here is concerned with sites that are exclusively or predominantly reserved for organised team sports.

Golf course

Do not include golf courses that are part of parks, commons etc. This type does not include golf driving ranges, pitch & putt or crazy golf.

Play space

A site set aside mainly for children. It will contain the usual paraphernalia of swings, slides and roundabouts. Do not record play spaces here if they form part of parks, commons and other open spaces.

Other recreational

To be used for sites that are used exclusively or predominantly for other organised sports such as bowls, tennis and golf driving ranges (but not golf courses, see below).

Educational

Refers to school or college grounds and field study centres where school education is the primary function. Nature sites which cater for schools and for the general public should be recorded under nature reserves. School playing fields should be recorded under playing fields.

River

Should only be used for rivers and streams that do not form part of another land use, such as park, common or nature reserve.

Reservoir

Includes covered reservoirs unless these form part of a park.

Canal

Implies an artificial waterway which is navigable. Include docks in this category.

Disused quarry/gravel pit

May be water-filled, but is not necessarily so.

Railway cutting and railway embankment

Self-explanatory.

Disused railway trackbed

Usually obvious, with some traces of its former use. Where disused trackbeds are specifically managed for nature conservation, such as Parkland Walk, record as nature reserve.

Road island/verge

Self-explanatory. Record as nature reserve if specifically managed for nature conservation.

Hospital

Includes the grounds of any clinic or health centre.

Churchyard/cemetery

Includes burial grounds, graveyards, crematorium grounds and memorial gardens, and gardens or grounds of non-Christian places of worship. Some former or burial grounds that have become full have been converted to informal leisure or recreation spaces; where the gravestones have been removed, these should be recorded as parks.

Nature reserve

A category reserved for an open space that is managed primarily for nature conservation. Do not tick this box just because the site has a nature conservation designation. Many parks, etc. have such designations. An SSSI is likely to have park, common or agriculture as its type. Designated Local Nature Reserves, however, are recorded here. Also do not tick this box where you find small areas set aside for nature within parks, commons and other open spaces.

Landscaping

Around premises includes communal amenity space around housing estates and community centres, and also landscaping around industrial premises.

Back garden land

Self-explanatory. While most surveys exclude private gardens, backlands are often surveyed for planning casework.

Allotments

Should be obvious. Include them even if they appear or are disused.

Agriculture

Includes arable and grazing land, including horse grazing, and market gardening (such as vegetables, often grown under cloches, etc.).

Nursery/horticulture

Does not include commercial retail nurseries (although these might legitimately form a part of a park or common, etc.). Horticulture includes areas of permanent glasshouses.

Equestrian centre

Includes any land used for intensive horse keeping and riding, but not extensive horse grazing, which should be recorded as agriculture.

Sewage/water works

Includes extensive sludge drying areas, filter beds, etc.

Land reclamation

Land recently decontaminated or reclaimed from disuse, which has not yet been redeveloped.

Vacant land

Land with no formal land use. This includes many 'urban commons' which are used by people for informal recreation and which may be very valuable for nature conservation. If sites have formalised access and management for nature conservation, record as commons or nature reserves as appropriate.

Private woodland

Refers to woodland which is not accessible for recreational use, nor managed for nature conservation. Record this under 'other' until the survey form is revised to accommodate it.

Others could be anything that does not fit any of the above categories, such as airfields or forestry (not wooded commons or woodland nature reserves).

Appendix 4.4: Recording changes in wildlife habitat Introduction

When undertaking a comprehensive re-survey of open spaces, using the Greater London Authority Open Space and Habitat Survey format, it is important to collect change statistics as a contribution to monitoring trends in London's biodiversity. This report details the methods employed to do this.

The kinds of site involved

Three types of site may be involved in changes:

• The first is sites that were covered in both the original survey and the current one. As the methodology used in both surveys was much the same, the habitat composition of each parcel could be compared directly. However this is inaccurate, as this assumes that both the classification of habitats and the estimation of their areas is not subject to error. The likelihood of two surveyors coming up with exactly the same data in the absence of change is low. In order to

ensure maximum accuracy, rather than using just the raw figures from the original survey, the surveyor should use her judgement on what the real changes were, based on the original figures, contemporary aerial photographs and evidence in the field on the current survey.

- The second type is sites surveyed currently, but not in the original. This can occur particularly where the qualification criteria for survey differ between the two times. Here the surveyor has only aerial photographs from the time of the original survey and her judgement from evidence in the field to go on. Assessment of habitat composition based on aerial photograph evidence is difficult, but must be done to avoid biasing the results. While it is usually possible to tell the difference between broad habitat types, such as woodland, scrub, rough grassland, close-mown grass and bare ground, it is difficult to get any more detailed information than this. In some cases the surveyor may have enough local knowledge to record whether the grassland may have been acid or neutral, or the woodland may be native or non-native, but this is still an estimate.
- The last type of site is those which showed on the earlier aerial
 photographs as satisfying the present criteria for survey, but were
 excluded from the current survey because they have been replaced
 by hard surfaces, usually due to being developed in the intervening
 years. The original habitat composition of these sites is estimated from
 aerial photograph evidence alone, with the same difficulties as
 outlined above.

The size threshold for survey effectively excludes most private residential gardens and a few other small blocks of open space. The method does not provide an estimate of the changes that take place in such small areas.

Documenting the changes

The changes in an individual survey parcel can be complex. For example, an area of mixed semi-improved grassland and scrub can undergo succession, with some of the grassland being displaced by scrub and some of the scrub being replaced by woodland. At the same time some other grassland could be lost to built development. Although the changes would be correctly summarised by estimating the original and final habitat compositions of the whole parcel, information on which areas moved between which pairs of habitats would be lost. This information is available to the surveyor, and these procedures collect the full details, as in the first four lines of the following table. Note that only 30 per cent of

the parcel is judged to have changed. There is no need to log the composition of the remaining 70 per cent.

For the third category of site new 'change pacels' need to be defined. As these represent places where habitat has been lost and what remains does not currently qualify for survey, there is no requirement to bring these into the parcels system for general habitat survey. These are identified in a separate one-up numerical series as shown in the model given in the last three rows of the following table. The final habitat composition of such parcels will be predominated by habitat categories that support little or no widlife (26, 27, 07 and to a lesser extent 37, 38). The individual percentages in these change parcels should add to 100.

Parcel	Area of the	Estimated %	Original	Final
number	parcel (ha)	of the parcel	habitat	habitat
22043/13	15.1	11	09	06
		5	06	01
			14	09 27
22C01	3.6	10	25	27
		50	09	27
		40	09	07

Appendix 4.5 sample survey form (opposite)

Site & parcel no	/	Grid ref		
Site name		Surveyor/s		
Parcel name		Borough		
Location		Area		ha/m2
Owner/Manager		Date		
Access/view from		Time spent	hrs	mns
Permission to enter from		Weather		
Species richness: □ poor □ poor/ave □ a	ave \square ave/rich \square rich \square not know	n. Access gained to	□ all □ part	□ none
 [%] 01 Native broadleaved woodland 02 Non-native broadleaved woodland 03 Coniferous woodland 37 Scattered trees 05 Recently felled woodland 06 Scrub 38 Planted shrubbery 25 Native hedge 34 Non-native hedge 31 Orchard 36 Vegetated walls, tombstones etc 26 Bare soil and rock 27 Bare artificial habitat 	 % 08 Acid grassland 09 Neutral grassland (semi-improved) 35 Neutral grassland (herb rich) 10 Basic grassland 11 Improved/reseeded agric grassled 07 Amenity grassland 12 Ruderal or ephemeral 33 Roughland (intimate mix of 9, 14) 13 Bracken 14 Tall herbs 15 Heathland 39 Allotments (active) 28 Arable 	40 Typ 18 We 19 Fer 20 Sta (include 21 Dit. 22 Rur 23 Inte 24 Salt 30 Hal	edswamp ha etc. swamp t marginal vegetation carr (woodland/sc) nding water les canals) ches (water filled) nning water (rivers & ertidal mud, sand, sl	rub over fen) & streams) hingle etc ot available
☐ Treeline w/out hedge ☐ hedge w/treeline ☐ even-aged plantation ☐ ancient woodland ☐ coppice ☐ dead wood ☐ pollarded ☐ flush ☐ wet wood shrub layer %	☐ grazed ☐ frequently mown ☐ infrequently mown cuttings removed Y ☐ unmanaged grassland ☐ ridge & fur ☐ flush ☐ wet ☐ sand/clay bank	$^{\prime}$ /N \Box emergent row \Box naturally \Box	getation □ submerg vegetation □ salin formed river bank s: □ eu- □ meso- □	e 🗆 tidal

Notes/sketch map record dominant and notable plant species, birds, butterflies etc.

Site and parcel no: Land use	date	:		
 □ Park □ Common □ Village green □ Town square □ Recreation ground □ Playing fields □ Golf course □ Play space 	 □ Other recreational □ Educational □ River □ Reservoir □ Canal □ Disused quarry/gravel pit □ Railway cutting □ Railway embankment 	☐ Road is☐ Hospita☐ Churchy☐ Nature	yard/cemetery reserve aping around premises arden land	☐ Agriculture ☐ Nursery/horticulture ☐ Equestrian centre ☐ Sewage/water works ☐ Land reclamation ☐ Vacant land ☐ Other (specify)
Planning status	Ownership	Public a	ccess	Entry points
□ SSSI □ LNR □ SINC or equivalent □ Green corridor □ Green chain □ MOL □ Green Belt	Local Authority Government/Crown Health Education Religious Voluntary organisation Railtrack		ed [describe s]	 □ Open access [whole/part of site] □ Limited entry points □ Whole parcel surrounded by accessible open space
☐ Other protected open space	□ Kalitrack □ LRT	□ None		
[specify]	☐ British Gas ☐ Water company ☐ Other private	Accessib ☐ Pedestr ☐ Public t		ore 0-2] ☐ Cycle ☐ Private car
\square No open space designation	_ oe. pa.e		'	
Nature conservation value	e [survevor's personal view]		Interest	
Potential for enhancemen			☐ Invertebrate ☐ Fish ☐ Amphibian ☐ Reptile ☐ Mammal	☐ Higher plant☐ Bryophyte☐ Lichen☐ Fungi☐ Physiography
Education			\square Bird	\square History
A '1			Other	Landscape
Nature Conservation			Predominant red	
Threats and disturbances	[give details of severity]		☐ Active Level of use	☐ Passive ☐ None
Invading plants Pollution Tipping Motorcycle scrambling	-5 ,-		☐ Not or hardly used☐ Used by moderate☐ Frequent use by la Maintenance	
Erosion Vandalism			☐ Good	☐ Satisfactory ☐ Poor
Aircraft noise			Facilities	,
Road/rail noise			☐ Play equipment: ☐	\square under 7s \square 7-13 \square over 13's
Intrusive buildings			Operational toilet	☐ Tennis
Unsympathetic boundary treatmen	nt		☐ Seats ☐ Litter bins	☐ Water sports ☐ Bowls
Redevelopment Other			☐ Refreshments	□ Bowls □ Driving range
Safety/security			☐ Facils for disabled	☐ BMX track
Surety, security			\square Car parking	☐ Motor cross
Change since last survey			\square Nature trails	\square Fishing
☐ No apparent change since last Not previously surveyed: ☐ P Significant Minor Error in last survey	-		☐ Historical features☐ Animal/bird enc☐ Art gallery☐ Sculptures/monum☐ Recycling facilities	Outdoor paddling pool
Geology, topography, aspect, drain	nage and soil		☐ Dog litter bins/are	
			☐ Information	Outdoor swimming pool
			☐ Changing rooms☐ Cycle paths	☐ Floodlit surfaces ☐ All weather surface
Contacts/Others' information/His	tory and succession		☐ Golf course	☐ Other (specify):

Appendix 5: Consultation on the draft Biodiversity Strategy

The consultation process

The consultation on the Mayor's draft Biodiversity Strategy was undertaken in two phases, as required in Sections 42 and 352(3) of the Greater London Authority Act 1999. In February 2000 the Assembly and functional bodies were consulted on a draft. Their comments were then taken into account in the preparation of a public consultation draft. This was launched on 25th September 2000 and the consultation ended on 4th January 2002. The consultation process and results are documented in full in the records of the Authority. This appendix summarises these.



An integrated programme of consultation was carried out which used a range of qualitative and quantitative methods to enable Londoners to give their views about the Strategy. These are described below.

Three publications were produced; these were distributed according to the recipient's knowledge or interest in the topic. The full document, The Mayor's Draft Biodiversity Strategy, was circulated to English Nature, the Environment Agency, the Countryside Agency, London boroughs and the Common Council of the City of London, as required by the Act. Further copies were sent to key stakeholders, being organisations or individuals with a vested interest in biodiversity issue, such as London boroughs, Government advisors and environmental organisations. Those that were sent a copy of the Strategy are listed in appendix 5.1. About 2,000 copies of the full document had been distributed by the end of the consultation period. Enclosed with the document was a letter from the Mayor inviting written comments. These were received from some 21 London boroughs, the statutory consultees and some 70 other organisations and individuals. Four responses were received from groups concerned with disabilities, the elderly or social action.

A shorter document, Highlights of the Mayor's Draft Biodiversity Strategy, was circulated to a wider list of London stakeholders, including bodies that represent the interests of various groups, such as religious, racial, ethnic or national groups and voluntary bodies. The highlights document, of which about 6,000 copies were distributed, included a questionnaire devoted to the Mayor's main objectives, with provision for additional comments. Some 75 of these questionnaires were completed and returned. This included two responses from disability groups and two from faith groups.

A leaflet, Connecting with London's Nature and including a shorter questionnaire, was also produced, aimed primarily at the public living and

working within London. About 15,000 of these were distributed to the public, partly through all public libraries and partly through an exhibition and travelling roadshow at various shopping centres and a major transport interchange. Of the 388 questionnaires returned, 11 per cent were from people of black or ethnic minority origin. Seven completed questionnaires were received from faith or ethnic groups.

Further exercises included:

- a community workshop held with 60 Londoners, selected to be broadly representative of London, spent a day giving in-depth consideration to the key issues from the Strategy
- six biodiversity questions in the 2001 London Survey carried out by MORI for the GLA with a representative sample of 1450 Londoners
- an Internet survey using an extended version of the leaflet and highlights document sample questionnaires, to which over 600 Londoners responded
- two questions on the GLA website, which elicited 1050 responses
- two questions placed on three public access information kiosks, which elicited 500 responses.

The Mayor also undertook 12 meetings to assist individuals and organisations to prepare their written response to the draft:

- two with officers of London boroughs and two with borough leaders or chief executives
- three with those individuals and organisations who responded to an invitation with the highlights document
- one with business
- one with each of the statutory consultees: English Nature, the Countryside Agency and the Environment Agency
- · one with the London Wildlife Trust.

The responses

Much of the exercise, such as in returned questionnaires from the Highlights document and the leaflet, elicited comments on the major objectives of the Mayor's draft Biodiversity Strategy, rather than the detailed policies and proposals given in the full document. A summary of the results is provided below. A full report of the exercise can be obtained by contacting the Public Consultation Team at the GLA on telephone number: 020 7983 4049, minicom 020 7983 4458.

Survey questions and questionnaires

Survey questions and questionnaires showed overwhelming support for the Mayor's four main themes as they were presented. Results from the Highlights document and the leaflet questionnaires, internet survey, and GLA website questions showed that:

- overall, 98 per cent supported the Mayoral pledge to ensure that there
 is no overall loss of wildlife habitat. All respondents (100 per cent) to
 the Highlights document questionnaire supported the pledge
- 96 per cent of all respondents, including 96 per cent of website respondents, supported the Mayor's promotion of management and creation of green space so that everyone is within walking distance of good quality natural places
- 89 per cent of all respondents supported the Mayor to encourage practices that reduce London's impact on biodiversity elsewhere, with 87 per cent of internet responders supporting
- 92 per cent supported the Mayor to promote environmental education in London. Support was highest amongst people replying to the leaflet questionnaire (98 per cent).

Overall, respondents were satisfied with the quality and quantity of London's parks and green spaces. Three quarters (75 per cent) of the 2001 London Survey respondents agreed London to be a good city for parks, open spaces, community recreation facilities and activities whilst more than half of Internet survey respondents were satisfied with the quality (64 per cent) and quantity (58 per cent) of London's green spaces.

However, London is not regarded as a green city by the majority of Londoners (55 per cent of the 2001 London Survey respondents disagreed that London is a green city) and London's environment is not ranked as highly as other concerns for improving London as a place to live. London Survey respondents ranked the environment as seventh out of eight listed priorities (mentioned as one of the top two or three priorities by 23 per cent of respondents) with crime and safety (mentioned by 51 per cent), property prices (49 per cent), health service (39 per cent), public transport (36 per cent), education (31 per cent) and traffic congestion (27 per cent) all considered to be more important.

Community workshop

The 60 members of the public, drawn to represent London, deliberated the main issues contained within the Draft Biodiversity Strategy and agreed that London required clear leadership from the Mayor and GLA to provide a catalyst for partnership within the public and private sectors to implement the Biodiversity Strategy effectively. Support for a leadership role was clear despite the recognition that the GLA held limited direct responsibility for environmental regulation.

"This is the first time that any political body has asked my view about how London should be. A very refreshing and enjoyable exercise in democracy—after all, London's future concerns us all."

Community workshop participant.

People accepted the demands for further urban development in London as a whole but believed strongly that further development should not be undertaken at the expense of their local green spaces.

Workshop participants produced a series of key messages for the Mayor:

- respect for the environment is developed by people's use of natural places
- value and protect London's gardens and green spaces
- emphasise regeneration in urban planning and development
- promote education to raise public awareness
- ensure that Londoners see that a difference has been made.

The written responses to the full Strategy and Mayoral decisions

The majority of the written comments were helpful suggestions to clarify, strengthen, extend, or otherwise improve the wording of the text, the majority of which were accommodated in the revised text. The list of items below are responses which required detailed consideration.

- 1 Priorities and targets A call for priorities, targets and time scales for delivery was the most frequent comment on the overall assessment of the draft Strategy. In response, information on the Mayor's four main priority areas was added to Chapter 4, but it was felt inappropriate to set targets and timescales for individual proposals. These will be set through annual work programmes.
- 2 Stronger wording Many responses, including one statutory consultee, wished to see stronger wording such as 'require' for 'seek', 'expect' for 'encourage' and 'will' for 'seek to'. In response, wording was strengthened where possible, especially in Proposals 1-6 referring to the London Plan.
- 3 Resource issues There was widespread concern that most of the proposals in the Strategy were not explicitly resourced. The Strategy makes it clear that the Mayor does not have the resources to implement all of the proposals on his own, but has chosen a partnership approach. He has already committed resources to free visits to the Zoo and to his rolling programme of resurvey, as well as to employing biodiversity staff and to obtaining further funding, eg through leverage. The first call on any further GLA resources should be in support of the London Biodiversity Partnership, and Chapter 6, on resources, was amended to reflect this. It is not possible to be more explicit about resources at this stage.
- 4 *Protection policy and proposals* There was widespread support for these proposals, but many consultees wanted the wording strengthened and made clearer. Following discussions with the London Plan team, the

wording of the draft London Plan policy on biodiversity has been agreed, and the proposals in the Biodiversity Strategy have been reworded to reflect this. As a result, they are much more explicit and stronger. The Mayor has agreed that he will identify Sites of Metropolitan Importance, and will assist the boroughs in the identification of the remainder of the land identified in Appendix 1.

- 5 Protection of garden land The responses show that there is considerable concern over the pressures on gardens in London from redevelopment, with the majority, including several boroughs, seeking stronger protection for garden land. Given the importance afforded to this issue in the responses, the proposal has been revised to provide a better definition of 'balance', and the supporting text indicates the criteria to be employed. These emphasise garden conservation in suburbia away from town centres and transport nodes, and garden blocks that make a significant local contribution through their size and character. A cross-reference has been added to brownfield issues and sustainable urban design.
- 6 Maintenance and creation of habitat Several respondents identified the desirability of using planning agreements to fund maintenance work. In response, the supporting text was strengthened to emphasise the desirability of making more use of such agreements to secure the management of wildlife habitat.
- 7 Brownfield land Widespread concern was raised about the threat to London's brownfield biodiversity. Many consultees felt that the draft Strategy glossed over the real conflict between wasteland habitats and development. The supporting text to the protection policies was altered to recognise this and provide further detail of how brownfield biodiversity should be taken into account.
- 8 Free zoo visits & passport to nature Many consultees said that the scheme should be widened to include, or should concentrate on, more local sites such as city farms and environmental education centres, and place an emphasis on local biodiversity. In response, the proposal was re-worded to commit the GLA to working with partners to facilitate other opportunities for environmental education, especially at the local level.
- 9 London Biodiversity Partnership There was strong agreement among consultees that the Mayor should continue to support the London Biodiversity Partnership. However, the form of this support needed to change due to changing circumstances. In particular, it is unlikely the GLA will house future Partnership staff, who will be based at London Wildlife

- Trust. The chapter on resources was amended to state that support of the London Biodiversity Partnership was a priority if funds were available.
- 10 City Farms funding bid There was widespread concern among consultees that city farms are given priority over other places and issues closer to biodiversity. In response, the proposal was widened to include other places, such as environmental education centres and community and cultural gardens.
- 11 Environmental Business Marque There was support among consultees, but some stressed the difficulty of doing it well and called for further detail. However, it proved very difficult to put together a Marque across other environmental strategies, and the proposal was dropped.
- 12 Functional bodies surveys Several respondents felt that 'encouraging' functional bodies to undertake biodiversity surveys of their holdings of open land was too weak: they should be required to survey. The proposal was re-worded to state that the Mayor 'requested' such survey.
- 13 Local Nature Reserves One of the consultees requested a new proposal encouraging boroughs to declare statutory Local Nature Reserves in consultation with English Nature and to manage them effectively. An appropriate proposal was added.
- 14 Tone of Chapter 2 Two boroughs felt that the text was unduly optimistic, and did not acknowledge declines in funding and staffing over the last decade. In response, the text was reworded to recognise that there are problems, while continuing to be positive and pointing out the major achievements of the past two decades and the particular contribution of boroughs to this.
- 15 Awareness of open spaces The comments showed that the proposal was not fully understood. This issue is covered by more specific proposals under policy 8, and the proposal was deleted.
- Volunteer task force It was felt that the proposal needed to avoid a topdown tone and not regard volunteers as a uniform group: eg not all are unskilled, not all keen experts. The term 'task force' might provoke negative images. The proposal was reworded to place emphasis on working with voluntary organisations to support and develop the role of volunteers in protecting and managing local nature sites.
- 17 Parks best practice Respondents suggested adding reference to the opportunities to improve the management and use of other amenity

- greenspace. Reference to management of such land was added to the supporting text.
- 18 Cemeteries Only half the comments on recognition of the biodiversity value of cemeteries were supportive, with consultees regarding the proposal as vague or unclear, unwise due to critical lack of burial space, and unnecessary because other habitats or land uses are not singled out in this way, and cemeteries which are valuable for biodiversity are included in the protected sites series. The draft London Plan contains no specific policy on cemeteries, and mention of the London Plan and the proposal was therefore deleted. The following proposal (now Proposal 28) was strengthened to encourage the management of cemeteries in general in a manner sympathetic to biodiversity.
- 19 Promoting garden biodiversity Several consultees pointed out that there is already a strong programme promoting gardening for wildlife through the Private Gardens Habitat Action Plan led by London Wildlife Trust. A very good publication has just been produced by the Trust. Explicit reference to proposal for a publication was therefore deleted. Consultees also suggested that the Mayor may wish to consider running a wildlife gardening competition: a scheme in LB Hillingdon has been quite successful, but this suggestion was not taken up.
- 20 Funding for Environmental Impact Assessment in major projects Guidance was requested regarding the suggestion by a borough that Environmental Impact Assessment should extend to road pricing, including assessing the likely increase in environmental pollution in Hyde Park and Kensington Gardens as a result of cars avoiding Park Lane. It was agreed that there was no requirement for a Statutory EIA on this proposal and the Mayor decided not to include such a policy.
- 21 Allotments There was strong support among consultees for recognising the importance of allotments, and many wanted a more proactive policy encouraging allotment use. However, there is no allotment policy in the draft London Plan. The proposal was revised to address the issue of active promotion and remove the reference to the London Plan.
- 22 Improving environmental education provision Concern was expressed that support should be given for existing provision of environmental education, rather than new centres. A need to work for securing the long-term future of such centres was added to the proposal.
- 23 *Blue Ribbon Network* This section was re-written to be consistent with the wording in the draft Blue Ribbon Annexe of the London Plan.

- Advice on strategically important planning and land management issues

 A major issue raised by consultees including several boroughs was that
 the Mayor is not replacing the advisory service previously provided by the
 London Ecology Unit. An amendment was made to the supporting text
 indicating that the Mayor regards this aspect of his partnership work as
 crucial to the implementation to the Strategy.
- Air quality and trees Concern was expressed that this proposal was too narrow. In response, the proposal was widened to include other environmental issues. The supporting text was widened to include other sources of particulates and eutrophication, acidification and toxicity issues and to indicate that this proposal is not an early priority.
- Of green buildings Comments pointed out that a proposal on the desirability of green buildings was a significant omission from the draft Strategy. In response, a new proposal was added for partnership work on research and disseminatation of good practice for designing or adapting buildings to enhance biodiversity, and stating that the Mayor will apply the principles concerned when considering development proposals. The link to sustainable urban drainage and sustainable urban design was made in the supporting text.
- 27 Equalities For consistency with the other environmental strategies, the section on equalities implications in Chapter 3 was expanded to consider each target group separately.
- 28 Health benefits In response to comments by the London Health Commission and others, the proposal was amended to state that the Mayor would work in partnership with other interested organisations to maximise the health benefits of green spaces.
- 29 Major cultural events One respondent thought the proposal unclear. It was re-worded to clarify that the Mayor's Culture Strategy would recognise the enjoyment of wildlife and landscape as a cultural experience, and that the Mayor would include elements of biodiversity interest where appropriate in his cultural events.

Appendix 5.1 List of persons and bodies considered by the Mayor to be appropriate consultees under Section 42(2)(e) of the Greater London Authority Act 1999

Abbey Wood Wildlife Group CIRIA

Abney Park Cemetery Trust Common Ground

Accra Crawford Youth Centre Confederation of British Industry
Arboricultural Association Consultants in Environmental

Archbishop of Westminster Services (CES)

Asian Business Association Council for the Protection of Rural

Association of London Government England

Baha'i Community of the UK Craig Churchill Photography

Barking and Havering Health Crown Estate

Authority Department for Culture, Media and

Ben Cave Sport

Berks Bucks and Oxon Wildlife Trust Department for Education and Skills

Bishop of London

Bishop of Southwark

Bishop of Southwark

Department for Environment,
Farming and Rural Affairs
Department for International

Black Environment Network Development

Black Londoners Forum

Board of Deputies of British Jews

Brent & Harrow Health Authority

Department for Transport, Local

Government and the Regions

Department for Work and Pensions

Brian Wurzell Department of Health

Bridge House Estates Trust Fund Department of Trade and Industry

British Airports Authority Heathrow Diocese of Rochester

British Airways Dusty Gedge

British Ecological Society Earthwatch Institute

British Gas East of England Regional Assembly
British Telecom East Sussex, Brighton & Hove

British Tourist Authority
British Trust for Ornithology
British Waterways

Health Authority
English Partnerships
English Tourist Board

BTCV Essex Birdwatching Society/East

Buckinghamshire County Council London Birders Forum
Butterfly Conservation Essex County Council
Cabinet Office Essex Field Club
CARIS Essex Wildlife Trust

CARIS Essex Wildlife Trust
Chartered Institution of Water and Evangelical Alliance

Environmental Management Farming and Rural Conservation

(CIWEM) Agency London & South East
Chelsea Physic Garden Federation of Small Businesses
Christian Ecology Link Foreign & Commonwealth Office

Church Army Forestry Commission, Eastern

London First Centre

London Canals Committee **England Conservatory** London Chamber of Commerce & Foundation for International

Environmental Law & Development Industry

Friends of the Earth London Civic Forum Froglife London Electricity plc

Glaxo Wellcome London First

Golf Course Wildlife Trust London Forum of Amenity and Civic

Government Office for London Societies

Going for Green

Greater London Action on Disability London Green Belt Council Green Print for London London Health Commission

Greenpeace UK London Housing Unit Groundwork **London Mammal Group**

Health and Safety Commission London Natural History Society Hertfordshire Biological Records London Rivers Association London School of Hygiene &

Hertfordshire County Council Tropical Medicine Herts and Middlesex Wildlife Trust London Tourist Board

HM Treasurv London Tree Officers Association Home Office London Underground Ltd

Horniman Museum London Voluntary Service Council House Builders Federation London Voluntary Service Council

London Walking Forum Imperial College of Science London Wildlife Trust Technology and Medicine

Institute of Burial and Cremation London Zoo Administration Lower Lea Project

Institute of Environmental Metropolitan Police Wildlife Crime

Assessment

Institute of Environmental Policy Ministry of Defence

Most Revd J Ade Odufona J&L Gibbons National Council for Sustainable Kent County Council

Kent Wildlife Trust Development

King's Fund National Farmers Union

Landscape Institute National Federation of City Farms

Lee Valley Regional Park Authority and Community Gardens

Leo Batten National Health Service Executive

Local Government Association London Regional Office Local Government Modernisation National Mistletoe Survey Co-

Team ordinator

National Playing Fields Association

National Power plc National Trust

London Biodiversity Partnership Natural Environment Focus Group

Natural History Museum

London Amphibian and Reptile

Trust

London Bat Group

London Brownfields Forum

Nature Conservation Bureau

Network 21

Nicholas Pearson Associates Ltd

Nick Bertrand

Norwood Park Primary School

Nunhead Cemetry

Open Spaces Society

Pagan Federation

Parklife Ltd

People's Trust for Endangered

Species

Planning Officers' Society

Sustainability Group

Plantlife

Port of London Authority

Post Office

Prime Minister

Queen Mary Westfield College

Rail Link Engineering

Railtrack Plc

Ramblers Association Ranjini Beveridge

Revd Andrew Wakefield

Rinku of London PLC

Royal Botanic Gardens Kew

Royal Horticultural Society

Royal Parks Agency

Royal Society for the Protection of

Birds

Royal Town Planning Institute

Selbourne Society

South Buckinghamshire District

Council

South East England Regional

Assembly

Sport England

Strategic Rail Authority

Surrey County Council

Surrey Wildllife Trust

Sustain

Thames & Chilterns Region

Thames 21

Thames Chase Community Forest

Thames Estuary Partnership

Thames Gateway London

Partnership

Thames Landscape Strategy

Thames Water Utilities Ltd

The Environment Trust

The Wildlife Trusts

Thrive

Tidy Britain Campaign

Tony Drakeford

Trade Partners UK

Transport 2000

Tree Council

Trees for London

United Reform Church Thames

North

University College London

Urban Design Panel

Wardell Armstrong

Waste Watch

Wildfowl and Wetlands Trust

Woodland Trust

WWF

acronyms & glossary

Acronyms

CHP Combined Heat and Power

CITES Convention on International Trade in

Endangered Species

GLA Greater London Authority

GMO Genetically Modified Organism

TfL Transport for London

LDA London Development Agency

LFEPA London Fire and Emergency

Planning Authority

MPA Metropolitan Police Authority

PPG Planning Policy Guidance

RPG Regional Planning Guidance

SRB Single Regeneration Budget

Glossary

Accessible natural greenspace

A term used to describe natural landscape that is accessible to the public. A wider concept than wildlife habitat, in that it includes aspects of topography, views and vegetation structure that contribute to the aesthetic value or traditional character of an area. See Appendix 1 paragraph 2.14.

Agricultural Intensification

Process of industrialisation of agriculture, accompanied by increased use of machines and chemicals with changes to crop rotation and yields. This has often resulted in removal of hedgerows and other features of wildlife value.

Agri-Environment Schemes

Agri-Environment Schemes focus on promoting environmental awareness and good practice with farmers. Funds are available from the Department for Environment, Food and Rural Affairs under the new England Rural Development Programme.

Ambient noise

Ongoing unwanted sound in the environment, such as from transport and industry, as distinct from individual events such as a noisy all-night party.

Ancient Woodland

Land which has been continuously wooded since 1600. In practice, most woodland which is this old has been continuously wooded since the end of the last Ice Age. Ancient woodlands are particularly rich in plants and animals, and support characteristic species which are rarely if ever found in younger woods.

Areas of Deficiency

Areas lacking in nearby accessible wildlife sites – see Appendix 1. These assist in the process of identifying Sites of Importance for Nature Conservation.

Areas of regeneration

Wards with the greatest socio-economic need, defined on the basis of the GLA's London Index of deprivation.

Best Value

Government programme to seek continuous improvement in service quality in the way in which authorities exercise their functions.

Biodiversity

The diversity, or variety, of plants, animals and other living things in a particular area or region. It encompasses habitat diversity, species diversity and genetic diversity. Biodiversity has value in its

own right and has social and economic value for human society.

Biodiversity Action Plan

A plan that sets objectives and actions for the conservation of biodiversity, with measurable targets. The London Biodiversity Action Plan is being produced by the London Biodiversity Partnership, which includes the Greater London Authority.

Biodiversity footprint

The biodiversity component of Ecological Footprint: an area, scattered throughout the world (and usually vastly greater than the physical boundary of the city itself) on which a city depends, in terms of resource demands and disposal of waste and pollution.

Borough

Usually used to include all 32 London boroughs and the City of London.

Brownfield land

Any land or premises which has previously been used or developed and is not currently fully in use, although it may be partially occupied or utilised. The land may also be vacant, derelict or contaminated. This excludes parks, recreation grounds, allotments and land where the remains of previous use have blended into the landscape, or have been overtaken by nature conservation value or amenity use and cannot be regarded as requiring redevelopment.

Compensation

Used in this Strategy in the context of redressing harm caused by development. Compensation involves the provision of features to fully replace those lost through development. Compensation preferably involves the replacement of like with like.

Conservation

Short hand for nature conservation, in the context of this Strategy. Protection, management and promotion for the benefit of wild species and habitats, as well as the human communities that use and enjoy them. This also covers the creation and re-creation of wildlife habitats, the techniques that protect genetic diversity and can be used to include geological conservation.

Ecological footprint

An area, scattered throughout the world (and usually vastly greater than the physical boundary of the city itself) on which a city depends, in terms of resource demands and disposal of waste and pollution.

Environmental Impact Assessment

Either a formal assessment of a major development proposal under the statutory regulations (The Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999), or an informal assessment using similar procedures.

Functional Bodies

The Mayor has responsibility for appointing members to, and setting budgets for, four new organisations: Transport for London (TfL), London Development Agency (LDA), London Fire and Emergency Planning Authority (LFEPA), Metropolitan Police Authority (MPA).

Garden land

The open spaces within the curtilage of individual residential properties

Genetically modified organism (GMO)

The use of biotechnology techniques to move genes between organisms in order to produce new characteristics.

Greater London

The geographical area encompassed by the 32 London boroughs and the City of London.

Green corridor

Green corridors are relatively continuous areas of open space leading through the built environment, which may link sites to each other and to the Green Belt or Metropolitan Open Land. They often consist of railway embankments and cuttings, roadside verges, canals, parks, playing fields and rivers. They may allow animals and plants to be found further into the built-up area than would otherwise be the case and provide an extension to the habitats of the sites they join.

Green renaissance

Part of the Urban Renaissance that recognises the contribution of the natural environment to people's increased quality of life.

Greening

The improvement of the appearance, function and wildlife habitat value of the urban environment through landscaping and other features.

Habitat

The environment required to sustain animals, plants and other species. It includes air, water and soil, as well as other living things. In the London open space and habitat survey, the habitat categories are mainly types of vegetation. See also Priority Habitat.

Habitat survey

The systematic collection of information on habitat types. In London, there has been a standard method for this since 1984. This has recently been revised to include the GLA's open space data as well

'Headline' Indicators

A subset of national indicators for sustainable

development. These are intended to focus attention on what sustainable development means, provide a high level overview of progress towards a better quality of life and act as a powerful tool for simplifying and communicating the main messages. Defined in Quality of Life Counts, DETR 2000. See also Indicators.

Indicators

Indicators are tools that measure, simplify and communicate important issues and trends. They can provide a benchmark against which progress can be measured. The national indicators are defined in Quality of Life Counts, DETR 2000. Local indicators are defined in Local Quality of Life Counts, DETR 2000. See also Headline Indicators.

Important Bird Area

International, non-statutory designation of areas of importance for bird conservation. Identification of Important Bird Areas is undertaken by Birdlife International, a worldwide partnership of conservation organisations of which the United Kingdom partner is the Royal Society for the Protection of Birds.

Important species

Species that are important in London because they are identified as a priority in a Biodiversity Action Plan or are protected in law.

Local Nature Reserve

Nature reserves designated by local authorities under the 1949 National Parks and Access to the Countryside Act. May include sites important to people's quiet enjoyment of nature.

London

Shorthand for Greater London, the geographical area encompassed by the 32 London boroughs and the City of London.

Mayoral Strategies

This Biodiversity Strategy is one of eight

statutory strategies that together will lay out a blueprint for the future of London. The other statutory strategies are Air Quality, Ambient Noise, Cultural, Economic Development, Spatial Development, Transport and Waste Management. In addition to the statutory strategies he is required to produce, the Mayor (using his general power to do anything which he considers will further one of his three principle purposes) is developing policy initiatives across a wide range of other areas important to Londoners' lives. These include energy, homelessness, domestic violence, drug and alcohol abuse, children and others.

National Nature Reserve

Nature reserves holding the best examples of particular habitats in England. Designated by English Nature under the 1949 National Parks and Access to the Countryside Act

Nature

A term synonymous with biodiversity.

Nature conservation

Protection, management and promotion for the benefit of wild species and habitats, as well as the human communities that use and enjoy them. This also covers the creation and re-creation of wildlife habitats, the techniques that protect genetic diversity and can be used to include geological conservation.

Natural heritage

A term used to overcome a narrow reading of 'biodiversity' by bringing geological features, landscapes and use by people into the equation

Natural landscape

A wider concept than wildlife habitat, in that it includes aspects of topography, views and vegetation structure that contribute to the aesthetic value or traditional character of an area

PM10

Particulate matter with a mean effective aerodynamic diameter of 10 microns or less. They are small enough to penetrate the lungs.

Precautionary principle

Where significant environmental damage may occur, but knowledge on the matter is incomplete, decisions made and measures implemented should err on the side of caution.

Previously developed land

A synonym for Brownfield: any land or premises which has previously been used or developed and is not currently fully in use, although it may be partially occupied or utilised. The land may also be vacant, derelict or contaminated but excludes parks, recreation grounds, allotments and land where the remains of previous use have blended into the landscape, or have been overtaken by nature conservation value or amenity use.

Priority Habitat

London's Priority Habitats, identified by the London Biodiversity Partnership, cover both areas defined particularly by their vegetation – as in Chalk Grassland – and areas defined by their land use, such as Railway Linesides. There are 19 Priority Habitats and these aim to cover all of London's important wildlife areas.

Priority species

These are species that are chosen for priority action in biodiversity action planning, because they are under particular threat or they are characteristic of a particular region. In London, these have been listed in the first volume of the Partnership's London Biodiversity Action Plan [x]. Action for priority habitats suffices for the majority of these, but a few will have a species action plan.

Procurement

Obtaining or acquiring goods and services.

Protected species

Certain plant and animal species protected to various degrees in law, particularly the Wildlife and Countryside Act, 1981 (as amended).

Regionally Important Geological Sites

A series of non-statutory sites notified for their geological interest. Although not strictly for conserving biodiversity, these geological sites are recommended for the same protection in planning guidance as are the biological sites.

Site of Special Scientific Interest

Sites of special ecological or geological interest, designated by English Nature and notified under the Wildlife and Countryside Act (1981 as amended). All the London sites of biodiversity interest are included within Sites of Metropolitan Importance for Nature Conservation.

Sites of Importance for Nature Conservation (SINCs)

A series of sites identified originally by the Greater London Council, and then the London Ecology Unit, London boroughs and Greater London Authority, chosen to represent the best wildlife habitats and emphasising the value of access for people. Sites are classified into Sites of Metropolitan, borough and Local Importance for Nature Conservation. Procedures for identification of this series have been approved by the Mayor – see Appendix 1

Spatial Development Strategy

The Strategy being prepared by the Mayor to replace existing strategic planning guidance for London (RPG3). The Mayor calls it the London Plan.

Special Areas of Conservation

Sites of European importance for habitats and species other than wild birds, designated under the Conservation (Natural Habitats, &c.)
Regulations, 1992 in the UK. All the London areas are included within Sites of Metropolitan Importance for Nature Conservation.

Special Protection Areas

Sites of European importance for wild birds designated under the Conservation (Natural Habitats, &c.) Regulations, 1992 in the UK. All the London areas are included within Sites of Metropolitan Importance for Nature Conservation.

Single Regeneration Budget

A Government regeneration fund started in 1994 managed through partnerships who win funding through competitive bidding rounds. Six annual bidding rounds were run against broad criteria. The administration of the fund transferred to the Regional Development Agencies and the last year of traditional bidding was 2001/02.

Stakeholder

Person or organisation affected by decisions and actions.

State of the Environment Report

Four-yearly report on the state of London's environment required by Section 351 of the GLA Act, including information on natural resources, biodiversity, the quality of air, water and land in the capital, waste issues, on energy use and London's contribution to meeting climate change targets, on ground water levels, on traffic levels and emissions and on litter.

Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is often summed up by the phrases 'think globally act locally' and 'don't cheat on your children'.

Unitary Development Plan

Statutory plans produced by each borough which integrate strategic and local planning responsibilities through policies and proposals for the development and use of land in their area.

Unofficial countryside

That land that has been so reclaimed by nature as to not qualify as Brownfield or Previously Developed land. Often referred to as Wasteland Habitat.

Urban Renaissance

Rediscovery of the opportunities offered by cities to sensibly accommodate changing population, work and leisure patterns through the creation of practical, safe and efficient urban areas which offer a vibrant and desirable quality of life. See also Green Renaissance.

Wildlife

A collective term for wild-living animals and plants.

Wildlife habitat

The physical environment required by wildlife for its survival. Often used as a synonym for more technical terms in ecological science – biotope, community and ecosystem.

Wildlife site

Shorthand for Site of Importance for Nature Conservation.

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contributors' credits

Biodiversity team

John Archer
Julie Brownbridge
Dave Dawson
James Farrell
Meg Game
Jan Hewlett
Graham Myers
Michael Waite

Environment Steering Group

Victor Anderson (from October 2001) John Duffy David Goode Darren Johnson (until October 2001)

GLA

Henry Abrahams Aneeta Ahluwalia Daniel Alford Simi Awosika Alex Bax Bibi Berki Jane Carlsen Liza Cragg Liz Crawshaw Tina Devenport

Andrea Davis-Brochocka

Pete Daw Joanna Dawes Max Dixon Alison Dunatov Sarah Dyson **Emily Evans** Frances Evans Alleyne Friesener Rosemary Greenlees Lesley Harding Jane Harmsworth Clare Hennessey Katherine Higgins Robert Hood John Jackson Lee Jasper

Catherine Jones

Doreen Kenny

Adam Leibowitz
John Lett
Gregory Lomax
Sue Lovemore
Niall Machin

Christine McGoldrick Debbie McMullen Mike Newitt

Clodagh O'Donnell

Lena Patel Kevin Reid Albert Rose Guy Rubin Lucy Sadler Roz Salik

Hilary Samson-Barry Helen Scadding Nicola Smith Josh Thumin Dave Turner David Vowles Ian Yarham

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cover PA Photos

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