Biodiversity Survey of the London Borough of Barking and Dagenham

Produced for the London Borough of Barking and Dagenham February 2017



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EXECUTIVE SUMMARY

Denis J Vickers (Consultant Ecologist) was commissioned by the London Borough of Barking and Dagenham in April 2016 to undertake a habitat survey of all existing Sites of Interest for Nature Conservation (SINCs) in the borough and to identify new and potential SINCs and Wildlife Corridors. The evidence provided by the survey will form part of the Evidence Base for the Council's emerging Local Plan (2018 – 2033).

The Open Space and Habitat Survey in Greater London survey methodology (as it is referred to) was employed for determining SINCs and to recommend an appropriate grade of designation. The survey methodology was adopted by the Mayor of London in his Biodiversity Strategy in 2002. The survey methodology was further modified in 2004 to take account of PPG17 open space typology.

A London Wildlife Sites Board (LWSB) has been set up which offers guidance on the selection of SINCs. The LWSB ensures that a transparent and consistent approach is applied to the selection and approval of SINCs. It ensures that the designation of new SINCs, and changes to existing SINCs, comply with the National Planning Policy Framework (NPPF), national guidance on the selection of sites, regional policy and regional guidance. The survey methodology employed and presentation of data conforms to the guidance issued by the LWSB.

A total of 25 sites are currently designated as SINCs in Barking and Dagenham. These comprise three Sites of Metropolitan Importance, seven Sites of Borough Importance Grade 1, eight Sites of Borough Importance Grade 2 and seven Sites of Local Importance.

The Biodiversity Survey will provide:

- accurate data for the evidence base for London Borough of Barking and Dagenham's Local Plan;
- recommendations for the protection and enhancement of biodiversity that can be incorporated into Local Plan policies;

- recommendations for new SINCs and Wildlife Corridors (where appropriate);
- an assessment of (proposed) new sites worthy of SINC/Wildlife Corridor site designation, recommend changes to those already designated, and provide written evidence to support these recommendations;
- recommendations for enhancement of biodiversity value of existing and potential SINCS and Wildlife corridors
- mapping of sites, parcels and features and species of specific note;
- making observations about current site conditions, management and how the site's biodiversity value could be enhanced.

The fieldwork stage of the survey commenced in May 2016 and continued through to September 2016. Evaluation of survey results suggest 38 sites¹ are of SINC value in the borough.

Two current Borough Grade 1 SINCs: Beam Parklands and Beam Valley Country Park are suggested combined and upgraded to a new single Beam Valley Site of Metropolitan Importance.

It is suggested that the Mayesbrook Park and Scratton's Farm Ecopark sites are upgraded from Borough Grade 2 Sites to Borough Grade 1. A new Borough Grade 1 Site, Buzzard's-mouth Creek and Thames View Ditch is created in the Barking Riverside area. Two new Borough Grade 2 Sites are recommended for designation i.e. Marks – Warren Quarry Restored Area and Cranfield Golf Centre. It is also suggested that Gascoigne Road Pumping Station Rough is upgraded from a Local Site to a Borough Grade 2 Site as it is not publically accessible but it is an important wildlife corridor link Finally a further 11 new Local Sites are recommended with emphases on parts of the borough near or within areas deficient in access to nature² or where they may act as stepping stones or links in a wildlife corridor.

¹ Total includes the proposed upgaded Beam Valley Site of Metropolitan Importance (formed from Beam Parklands and Beam Valley Country Park Borough Grade 1 sites).

² Areas of Deficiency are defined as built-up areas more than one kilometre actual walking distance from an accessible Metropolitan or borough site.

1. INTRODUCTION

1.1 Background

Denis J Vickers (Consultant Ecologist) was commissioned by the London Borough of Barking and Dagenham in April 2016 to undertake a habitat survey of all existing Sites of Interest for Nature Conservation (SINCs) in the borough and to identify new and potential SINCs and Wildlife Corridors. The evidence provided by the survey will form part of the Evidence Base for the Council's emerging Local Plan (2018 – 2033).

The Open Space and Habitat Survey in Greater London survey methodology (as it is referred to) was employed for determining SINCs and to recommend an appropriate grade of designation. The survey methodology was adopted by the Mayor of London in his Biodiversity Strategy in 2002. It was originally developed in the mid-1980s by the Greater London Council with regards the first comprehensive survey of wildlife habitats in Greater London. Subsequently the methodology was refined and updated by the London Ecology Unit (LEU) and the Greater London Authority. The survey methodology was further modified in 2004 to take account of PPG17 open space typology.

A London Wildlife Sites Board (LWSB) has been set up which offers guidance on the selection of SINCs. The LWSB ensures that a transparent and consistent approach is applied to the selection and approval of SINCs. It ensures that the designation of new SINCs, and changes to existing SINCs, comply with the National Planning Policy Framework (NPPF), national guidance on the selection of sites, regional policy and regional guidance. The survey methodology employed and presentation of data conforms to the guidance issued by the LWSB.

1.2 Policy context

The National Planning Policy Framework (DCLG 2012) states in Paragraph 109: The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;

- minimising impacts on biodiversity and providing net gains in biodiversity where
 possible, contributing to the Government's commitment to halt the overall decline
 in biodiversity, including by establishing coherent ecological networks that are
 more resilient to current and future pressures;
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The NPPF (2012) also states in Paragraph 165:

Planning policies and decisions should be based on up-to-date information about the natural environment and other characteristics of the area including drawing, for example, from River Basin Management Plans. Working with Local Nature Partnerships where appropriate, this should include an assessment of existing and potential components of ecological networks.

Policy 7.19 of the London Plan (March 2015) requires local planning authorities in their Local Plans to:

- a) use the procedures in the Mayor's Biodiversity Strategy to identify and secure the appropriate management of sites of borough and local importance for nature conservation in consultation with the London Wildlife Sites Board;
- b) identify areas deficient in accessible wildlife sites and seek opportunities to address them;
- c) include policies and proposals for the protection of protected/priority species and habitats and the enhancement of their populations and their extent via appropriate BAP targets;
- d) ensure sites of European or National Nature Conservation Importance are clearly identified;
- e) identify and protect and enhance corridors of movement, such as green corridors, that are of strategic importance in enabling species to colonise, re-colonise and move between sites.

The Council's adopted Local Plan policies, CR2 and BR3, require the protection and enhancement of the borough's natural environment including all sites of ecological or geological value (whether or not they have statutory protection) and all protected or priority species.

1.3 SINCs in Barking and Dagenham – current status

A total of 25 sites are currently designated as SINCs in Barking and Dagenham. These comprise three Sites of Metropolitan Importance, seven Sites of Borough Importance Grade 1, eight Sites of Borough Importance Grade 2 and seven Sites of Local Importance.

a) Sites of Metropolitan Importance:

- M031 River Thames and Tidal Tributaries
- M089 The Ripple Nature Reserve (Local Nature Reserve)
- M090 The Chase Nature Reserve (Local Nature Reserve) and Eastbrookend Country Park (Local Nature Reserve)

b) Sites of Borough Importance Grade 1:

- River Roding in Barking B&DBI01
- Furze House Farm B&DBI02
- Dagenham Breach and the lower Beam River B&DBI03
- Beam Parklands (was known as Beam Valley South and the Wantz Stream) B&DBI04
- Beam Valley Country Park (was known as Mid-Beam Valley and Dagenham East Lake) B&DBI05
- Gores Brook and the Ship & Shovel Sewer B&DBI07
- Marks Hedge B&DBI08
- c) Sites of Borough Importance Grade 2:
 - Barking Park and Loxford Water B&DII01
 - Mayes Brook and associated watercourses B&DII02
 - Mayesbrook Park Lakes B&DII03
 - Parsloes Park B&DII04
 - White's Farm B&DII06
 - Wantz Lake B&DII09
 - Scratton's Farm Ecopark B&DII10
 - Romford Line Railsides in Barking & Dagenham B&DII11

d) Sites of Local Importance:

- Barking Abbey Ruins and St Margaret's Churchyard
- Gascoigne Road Pumping Station Rough
- St Chad's Park
- Valence House Gardens
- Pondfield Park and adjacent railside
- St Peter's and St Paul's Churchyard, Dagenham
- Wellgate Community Farm

Appendix 1 presents a map of the borough's current SINCs. Further details of Barking and Dagenham's designated SINCs, Parks and Open Spaces are provided on the Proposals Map which is available on the Council's website.³

1.4 Purpose and objectives

1.4.1 The Biodiversity Survey will form part of the borough's Evidence Base for its new Local Plan. It will provide:

- accurate data for the evidence base for London Borough of Barking & Dagenham's Local Plan;
- recommendations for the protection and enhancement of biodiversity that can be incorporated into Local Plan policies;
- recommendations for new SINCs and Wildlife Corridors (where appropriate) and will show if and how deficiencies in access to nature can be addressed;
- An assessment of (proposed) new sites worthy of SINC/Wildlife Corridor site designation, recommend changes to those already designated, and provide written evidence to support these recommendations.
- Recommendations for enhancement of biodiversity value of existing and potential SINCS and Wildlife corridors.
- Recommendations for further surveys of priority and protected species.

³ http://lbbd.opus3.co.uk/ldf/maps/Local%20Development%20Framework%20Proposals%20Map

1.4.2 Objectives include;

- Recording of all vascular plant types recorded on site and the relative abundance
- Identification of plant species of particular note or rarity and placing them in a geographic context, i.e. important locally, borough-wide, in Greater London and nationally.
- Identification of habitat types present and assessment of their extent and quality.
- Mapping of sites, parcels and features and species of specific note.
- Making observations about current site conditions, management and how the site's biodiversity value could be enhanced.
- Vulnerability and potential threats to the integrity of each site.

1.5 Qualifications and experience of personnel:

1.5.1 Personnel:

The project manager was Denis J Vickers BSc (Hons), FLS, CBiol, MSB, MCIEEM. Habitat surveyors Paul Losse BSc (Hons), MSc, MCIEEM, Jessica Smith BSc (Hons) Grad. CIEEM and Denis Vickers. Report author: Denis Vickers, Mapping and Specialist GIS work: Paul Losse.

1.5.2 Experience:

a) Denis J Vickers is one of the most experienced habitat surveyors in Greater London and particularly skilled in undertaking open space and habitat surveys using the Mayor of London's methodology: Denis carried out his first full London borough survey more than 20 years ago when he completed a survey of Wandsworth in 1992 for the London Ecology Unit. Between 2001 and 2007 Denis worked for the London Wildlife Trust (LWT) including a period as Habitat Survey Manager supervising and carrying out habitat surveys for the Greater London Authority. Whilst working in this capacity he surveyed six complete London boroughs. Denis surveyed LBB&D in 2002/3 and is fully conversant with the layout of the borough, survey methodology and requirements.

b) Paul Losse is an ecological consultant specialising in botanical and habitat survey and a GIS specialist. He was the Regional GIS specialist and delivered training to Natural England members of staff on the use of the MapInfo system. Paul has undertaken phase one and NVC mapping using MapInfo for a variety of clients. He has carried out a range

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of habitat surveys including a number of phase one surveys using the GLA survey protocol. These include surveys of The Regent's Park and Primrose Hill in 2007, Hyde Park & Kensington Gardens in 2013, and The Green Park & St James's Park in 2014. Habitats were mapped using MapInfo GIS. The nature conservation value of each habitat was evaluated and comprehensive management advice was provided.

c) Jessica Smith assisted with the survey, data entry and report. Jessica is a Freelance Ecologist specialising in protected species survey. She has experience of a range of different surveys, including extended phase one surveys, reptile presence/absence surveys, reptile population surveys, reptile translocations, great crested newt bottle trapping/pitfall trapping/eDNA surveys, great crested newt translocations, water vole surveys, bat emergence/re-entry and activity surveys, bat roost inspections, badger surveys and dormice surveys.

1.6 Quality assurance

1.6.1 Denis J Vickers policy is to maintain an effective and efficient quality assurance process planned and developed in conjunction with all associates, sub-contractors and clients, outlined in a series of policies and procedures which are intended to ensure high quality standards (available on request).

1.6.2 The assurance of quality is fundamental for all work undertaken by Denis J Vickers and will be implemented by all associates and sub-contractors in their work.

2. METHODS

2.1 Desktop Study

2.1.1 A desktop study was carried out and the following data sourced and reviewed in preparation for the habitat survey and SINC review:

- georeferenced aerial photographs;
- georeferenced base maps;
- records of protected and notable species from the last ten years were retrieved from Greenspace Information for Greater London (GiGL);
- GIS maps of LBB&D SINCs and other green spaces identified by the 2002/3 GLA Habitat Survey or designated as local nature reserves;
- details of site ownership;
- previous survey reports of the sites and parcels including 1984/5 and 2002 habitat surveys;
- Ecology Handbook 20: Nature Conservation in Barking and Dagenham (London Ecology Unit, 1992);
- London Borough of Barking and Dagenham's Proposals Map and any subsequent changes;
- Mayor of London (2012) Green Infrastructure and Open Environments: The All London Green Grid Supplementary Planning Guidance;
- discussion with council officers from Parks, Rangers and Planning;
- contact with local wildlife organisations/individuals.

2.1.2 Information gathered was used to identify, map and survey current and potential SINCs and Wildlife Corridors.

2.2 Access

Where applicable, access to each site was arranged in advance of each site visit. Where there was no open access provision the Council was approached to attempt to arrange access.

2.3 Open space and habitat survey for Greater London

2.3.1 Each site and composite parcel was visited at least once over the survey period from late May to early September (bearing in mind 2.2 above) and subjected to a Habitat Survey. The survey followed the standard Phase 1 survey methodology (JNCC 2010) as modified by the Open Space and Habitat Survey for Greater London, revised survey specification (Mayor of London, 2004). GLA standard habitat survey forms were used to record open space and habitat data / information.

2.3.2 A description of each site was undertaken. In addition details such as habitat type and percentage coverage, species richness and other categories listed on the GLA survey form were recorded.

2.3.3 The percentage cover of each habitat type within each parcel was estimated with the aid of aerial photography.

2.3.4 Characteristic, dominant or otherwise notable vascular plant species occurring in each habitat parcel were recorded wherever possible, together with an assessment of their abundance using the DAFOR scale⁴. Scientific names follow Stace (2010). A species recording form with the 500 most frequent GiGL records for the London area has been developed to allow efficient recording.

2.3.5 The location of the following species was target noted with a 10 figure grid reference:

- Species protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended).
- Nationally rare species.
- Nationally scarce species.
- Red data book species.
- Species of Principal Importance in England. These species were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be

⁴ This is an estimate of the relative abundance of species in a given area. D=Dominant, A=Abundant, F=Frequent, O=Occasional and R=Rare

regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework (Defra 2012).

- Notable species for the Greater London area. Notable is defined as species which were recorded from 15% or fewer of the 400 two-kilometre recording squares (tetrads) in Greater London in the Flora of the London Area (Burton 1983).
- Trees which are notable because of size or likely antiquity.
- Non-native invasive species listed under schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

2.3.6 In accordance with best recording practice, each target note for a species included the name of surveyor, determiner (if relevant), scientific name, parcel reference or grid reference (if a notable species) and date.

2.3.7 Species listed as species of concern in London (London Invasive Species Initiative, 2013) were recorded to a parcel level.

2.3.8 If a site/habitat was judged to be of particular interest for a taxonomic group (e.g. birds, reptiles, invertebrates and lichens) this was recorded.

2.3.9 An assessment of the vulnerability of the site was undertaken and potential threats to the integrity of each site recorded where appropriate.

2.3.10 Other PPG17 Open Space attributes detailed in the 'revised survey specification' (Mayor of London, 2004) were also recorded during the site survey including:

- Access, including access mode and entry points, footpaths, cycle paths.
- Maintenance and management.
- Facilities including refreshments, litter bins, car parking, play equipment, seating, interpretation.
- Site use.

2.3.11 Site and parcel boundaries of existing sites were mapped and where applicable any changes from previous mapping recorded (mapped and logged in JPEG format).

2.4 Mapping

2.4.1 QGIS was used to create all maps. Digitisation was over OS MasterMap and aerial photography to ensure accuracy.

2.4.2 The maps included site, SINC and parcel boundaries. Where there were new or changed boundaries, these were clearly highlighted.

2.4.3 Parcels within sites were mapped to a resolution of at least 0.25 ha. Where there were two adjacent polygons, common boundaries were snapped together exactly so that each boundary has a common node.

2.4.4 A map for each site was produced which accompanies the appropriate SINC citation (Appendix 4). Each map was provided as a jpeg and with legend, scale and O.S. copyright information. All maps were produced at an appropriate scale to ensure maximum legibility.

2.5 Limitations

2.5.1 The habitat survey was undertaken at the optimum period for vegetation survey (regarded as May to September), and therefore most plant species would have been recorded possibly with the exception of a few early flowering plants. This is not considered to be a significant constraint to habitat assessment. This habitat survey does not constitute a full botanical survey.

2.5.2 Access was gained to most sites but there were a few cases where this was not possible either because of the nature of the land e.g. railway operational land and private land where the landowner / manager could not be contacted or was reluctant to provide access. Railway land was surveyed from moving trains, bridges etc. Where access was not forthcoming, the site was viewed from its perimeter with the aid of binoculars where possible and / or past survey information and aerial photographs reviewed.

2.6.1 Evaluation

2.6.1 Sites recommended for designation as SINCs were selected and the grade of each determined using the criteria (and methodology) detailed in the document *Policy, criteria and procedures for identifying nature conservation sites in London* (London Wildlife Site Board (LWSB) - update March 2013):

- Representation
- Habitat rarity
- Species rarity
- Habitat richness
- Species richness.
- Size
- Important populations of species
- Ancient character
- Recreatability
- Typical urban character
- Cultural or historic character
- Geographic position
- Access
- Use
- Potential
- Aesthetic appeal
- Geodiversity interest

2.6.2 These criteria were used with professional judgement and with adequate information regarding each site and its position within the local, borough or metropolitan context. This stage of the evaluation process also included:

- A review of the reasons for assessing a particular site as a SINC and the rational for the grade suggested.
- Why a site was not recommended for designation as a SINC and the reasons for its rejection

2.6.3 Additionally, where it was applicable, the evaluation of each site took account of the following:

- The distribution of species and habitats of Principle Importance and implications for planning.
- The impact (where appropriate) of historic and current management and use of each site.
- A consideration of the vulnerability and potential threats to the integrity of each site.
- Management or capital works required to maintain or enhance biodiversity value of each site
- Habitat or linkage creation/restoration.
- Sites which have particular potential to contribute to the London habitat creation targets. For any sites falling in this category a summary of the actions needed to create or restore these habitats was provided.

3. EVALUATION

3.1 Overview

Tables 1 to 38 below details the SINC selection criteria for each of the sites considered in this document. Comments on the performance of each site against these criteria are also given. This information was employed in the selection of SINCs and to determine potential grade of each. The selection methodology using these criteria follows that detailed by the London Wildlife Site Board (2013).

Table 1: SINC selection	criteria – River	Thames and	tidal tributaries	

Criteria	Comments
Representation	Excellent example of what is rapidly becoming a post-industrial river
Habitat rarity	Some found nowhere else in London e.g. intertidal mud-flats, shingle beach, salt marsh and river channel
Species rarity	Supports many species from freshwater, estuarine and marine communities some of which are rare in London
Habitat richness	Rich
Species richness	Rich
Size	2304.92 ha in London, 171.22 ha in Barking and Dagenham
Important populations of species	Overwintering wading birds, over 100 species of fish, salt marsh plants
Ancient character	None in Barking and Dagenham
Recreatability	Not recreatable
Typical urban character	Is chiefly flanked with housing and industrial units in Barking and Dagenham
Cultural or historic character	Vitally important to the development of London over the millennia
Geographic position	Runs through the heart of London connecting sea and countryside
Access	Riverside footpath
Use	Remains an important thoroughfare
Potential	To further develop Thameside footpath (bearing in mind any impacts on wildlife)
Aesthetic appeal	Varies widely along its length, parts of which will appeal to the majority of the population
Geodiversity interest	None known

Criteria	Comments
Representation	Post-industrial mature pulverised fuel ash (PFA) site
Habitat rarity	PFA lime-rich habitat is very rare in London
Species rarity	Includes a number of plant species typical of lime-rich and / or grassy places which are rare in London.
Habitat richness	Moderate
Species richness	Rich
Size	8.27 ha
Important populations of species	The Thames Terrace hymenopteran assemblage is particularly well- represented.
Ancient character	None
Recreatability	No longer recreatable
Typical urban character	Post-industrial landscape
Cultural or historic character	Relict of London's industrial past
Geographic position	Lies at the heart of the Barking Riverside Development
Access	Free
Use	Nature reserve
Potential	The biodiversity of meadow and woodland areas can be greatly improved with modest cost and effort
Aesthetic appeal	Parts are aesthetically pleasing
Geodiversity interest	None known

Table 3: SINC selection criteria – The Chase and Eastbrookend Country Park

Criteria	Comments
Representation	Scrub, grassland and wetland habitats developed on former gravel works
Habitat rarity	Includes shallow wetlands and acid grassland which are rare in London
Species rarity	Includes a number of plant species which are rare in London
Habitat richness	Rich
Species richness	Rich
Size	I47.07 ha total, 132.99 ha in Barking and Dagenham
Important populations of species	Lapwing, little ringed plover, little grebe, yellowhammer and skylark are known to breed on site. Overwintering birds include snipe and teal. Several native (female) black poplars (<i>Populus nigra</i> ssp. <i>betulifolia</i>) are located near the Beam River. Mammals include the specially protected water vole
Ancient character	None
Recreatability	Not feasible
Typical urban character	Landscape left behind after gravel extraction
Cultural or historic character	This has long been an important open space for the people of Barking & Dagenham and Havering
Geographic position	Important part of the Dagenham Corridor which links open space at the eastern edge of Barking and Dagenham with the River Thames
Access	Free
Use	Country park and nature reserve
Potential	A change in management particularly with regards grazing / mowing would result in more biodiverse habitats
Aesthetic appeal	Has a feel of the countryside
Geodiversity interest	None known

Table 4: SINC selection criteria - The River Roding in Barking

Criteria	Comments
Representation	River and riparian habitat with dense reed beds to the north
Habitat rarity	River is partly tidal (particularly to the south) and includes narrow zones of sparse salt marsh at the water's edge which is a rare habitat in London
Species rarity	Salt marsh species are rare in London
Habitat richness	Moderate
Species richness	Moderate
Size	5.99 ha
Important populations of species	Supports a good diversity of fish, including eel, stickleback, pike and flounder. Birds include breeding reed warbler and the specially-protected kingfisher
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Flanked by housing, offices and supermarket
Cultural or historic character	Has a long history and was navigable by barge and boat up to llford Hill
Geographic position	Links the River Thames and tidal tributaries to important SINCs in L B Redbridge
Access	A riverside footpath follows the site for part of its length.
Use	No longer used
Potential	To open a continuous riverside walk from Barking to Ilford (bearing in mind wildlife sensitive areas)
Aesthetic appeal	Parts are aesthetically pleasing
Geodiversity interest	None known

Table 5: SINC selection criteria - Furze House Farm

Criteria	Comments
Representation	The only substantial area of productive farmland left in the borough
Habitat rarity	Arable fields are rare in Barking and Dagenham
Species rarity	Locally scarce plants such as chicory, burnet saxifrage and agrimony are known from grassy strips at the edges of this site.
Habitat richness	Poor
Species richness	Poor
Size	51.59 ha
Important populations of species	Breeding birds recorded include yellowhammer, linnet and yellow wagtail, all species of conservation concern, while flocks of golden plovers have been known to occur regularly in winter
Ancient character	None
Recreatability	Not feasible
Typical urban character	No
Cultural or historic character	The farmland dates back to the grubbing up of Hainault Forest in 1851
Geographic position	At the edge of the Metropolitan Green Belt, joins with other open areas in L B Redbridge
Access	Can be viewed from adjacent paths or roads
Use	Agriculture
Potential	Gap up hedges
Aesthetic appeal	Feel of the countryside
Geodiversity interest	None known

Table 6: SINC selection criteria – Dagenham Breach and the Lower Beam River in Barking and Dagenham

Criteria	Comments
Representation	River, Pond/lake, Reed beds
Habitat rarity	Not Rare
Species rarity	Includes a number of plants scarce in London e.g. sea club-rush, false fox- sedge, lesser reedmace, common club-rush, purple loosestrife and common storksbill
Habitat richness	Moderate
Species richness	Moderate
Size	18.04 ha
Important populations of species	Breeding birds include reed warbler, great crested grebe and possibly kingfisher, while wintering waterfowl include substantial numbers of tufted duck and pochard and smaller numbers of shoveler
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Surrounded by the Ford Motor Co works
Cultural or historic character	Lake created by storm flooding from the River Thames in the early 18th century
Geographic position	Important wildlife corridor linking River Thames and the wider Dagenham Corridor
Access	Limited access to western Breach, other areas Ford workers only
Use	The Breach provides opportunities for fishing for Ford employees
Potential	-
Aesthetic appeal	Not particularly aesthetically pleasing
Geodiversity interest	None known

Criteria Comments Representation Acid grassland, Marsh/swamp, Running water, Includes areas of acid grassland which is uncommon in London Habitat rarity Species rarity Includes several species of plant uncommon in London Moderate - Rich Habitat richness Species richness Rich 36.25 ha Size Large areas of drier grassland (some of it acidic) with scattered hawthorn scrub support breeding skylark, linnet (both UK Biodiversity Action Plan Important priority species) and meadow pipit, while tree sparrows are frequent in populations of winter. The area is important for amphibians, including the specially species protected great crested newt. None Ancient character Recreatability Not feasibly recreatable Typical urban Wantz Stream flood defence and abandoned route of Dagenham to character Romford canal Cultural or historic Route of old Dagenham - Romford canal. Includes the site of the now character demolished Dagenham Hospital Geographic Important part of the Dagenham (wildlife) Corridor position Access Free Use Nature Reserve and open space Appropriate management of rough grassland aside the Beam River would Potential increase the biodiversity value Aesthetic appeal Feel of countryside Geodiversity None known interest

Table 7: SINC selection criteria – Beam Parklands

Table 8: SINC selection criteria – Beam Valley Country Park

Criteria	Comments
Representation	Pond/lake, Open mosaic habitat, Running water, Scrub, Wet woodland/carr
Habitat rarity	Includes Open Mosaic habitat which is of principal importance in England and locally uncommon Wet woodland/carr
Species rarity	Includes a number of plant species uncommon in London e.g. curled and broad-leaved pondweeds, spotted medick, common centaury and lesser spearwort
Habitat richness	Rich
Species richness	Rich
Size	34.05 ha
Important populations of species	Kingfishers are seen regularly and reed warblers and reed buntings breed on site. The Open Mosaic habitat area supports an exceptionally large population of cinnabar moths / caterpillars a species of principal importance in England.
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Lies next to railway
Cultural or historic character	Has World War Two anti-tank defences still clearly visible
Geographic position	An important part of the Dagenham (wildlife) Corridor
Access	Free to most of the site (members only for fishing lake)
Use	Open space and nature reserve
Potential	
Aesthetic appeal	Has feel of the countryside once out of view of the railway
Geodiversity interest	None known

Table 9: SINC selection criteria - Gores Brook and Ship & Shovel Sewer

Criteria	Comments
Representation	Includes the important ditch habitats and one of the largest reed beds in the borough
Habitat rarity	Habitats not rare
Species rarity	Species of brackish water occur in the lower Gores Brook which are uncommon in London e.g. dittander, sea aster, sea club-rush and in the water itself, fennel-leaved pondweed
Habitat richness	Moderate
Species richness	Moderate
Size	11.27 ha
Important populations of species	The brook support a population of the specially protected water vole, a priority species in both UK and London Biodiversity Action Plans, as well as interesting invertebrate communities
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Flows through the Barking Riverside development
Cultural or historic character	Once flowed into the historic reed-shore (used for thatching local dwellings) at Horseshoe Corner
Geographic position	Important wildlife corridor reach northwards from the River Thames to Parsloes Park near the centre of the borough
Access	To part of site
Use	Land drainage
Potential	Biodiversity would be increased if Himalayan balsam problem could be tackled
Aesthetic appeal	In places
Geodiversity interest	None known

Table 10: SINC selection criteria - Marks Hedge

Criteria	Comments
Representation	Ancient hedge and the only ancient woodland in the borough
Habitat rarity	Unique in Barking and Dagenham
Species rarity	None recorded
Habitat richness	Moderate
Species richness	Moderate
Size	0.61 ha
Important populations of species	Includes breeding sparrowhawk
Ancient character	Probably dates back to Medieval Period
Recreatability	Not recreatable
Typical urban character	Not typical
Cultural or historic character	Occurred at or near the edge of the now grubbed up part of Hainault Forest
Geographic position	Mostly situated within the new Cranfield Golf Centre
Access	Golf course members only
Use	Not used
Potential	N/a
Aesthetic appeal	Attractive feature within golf course
Geodiversity interest	None known

Table 11: SINC selection criteria - Barking Park and Loxford Water

Criteria	Comments
Representation	Lake, formal parkland with mature trees, wildflower meadow and a section of the Loxford Water (a small stream)
Habitat rarity	Not rare
Species rarity	Notable plant species include sea club-rush (Loxford Water) buck's-horn plantain and common storksbill (in grassland) which are uncommon in London
Habitat richness	Moderate
Species richness	Rich
Size	13.67 ha
Important populations of species	The mature trees and dense shrubberies in the park provide habitat for common birds, including the declining spotted flycatcher and song thrush. The lakes islands provide nest sites for common waterfowl, including mallard, tufted duck, moorhen and coot. The specially protected kingfisher is known to frequent Loxford Water
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Typical urban park
Cultural or historic character	Important open space for the people of Barking adjacent to town centre
Geographic position	Near town centre
Access	Open access to park, restricted along Loxford Water
Use	Park
Potential	Some meadow planting has already been undertaken, perhaps this could be extended? Ways of introducing marginal species to the lake should be investigated.
Aesthetic appeal	Mostly attractive mature parkland
Geodiversity interest	None known

Table 12: SINC selection criteria – Mayes Brook and associated watercourses

Criteria	Comments
Representation	Running water, wet ditches
Habitat rarity	Not rare
Species rarity	Brook and ditches include a number of species scarce in London e.g. lesser spearwort, sea club-rush, fennel-leaved and curled pondweeds, horned pondweed, water dock and dittander
Habitat richness	Moderate
Species richness	Moderate - rich
Size	8.11 ha
Important populations of species	The brook and ditches support a population of the specially protected water vole
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Obviously modified / engineered watercourses
Cultural or historic character	None
Geographic position	Wildlife corridor linking Mayesbrook Park, River Roding and Ship and Shovel Sewer
Access	To brook north of the A13 and parts of the Kingsbridge Ditch only
Use	Land drainage
Potential	Biodiversity value of brook and ditches could be increased if problems with invasive species (particularly Roundabout Sewer) and tipping (Kingsbridge Ditch) are addressed
Aesthetic appeal	N/a
Geodiversity interest	None known

Table 13: SINC selection criteria – Mayesbrook Park Woodland and Floodplain

Criteria	Comments
Representation	Wetlands and acid grassland
Habitat rarity	Acid grassland is an uncommon habitat in London. Restored grassland west of new course of the Mayes Brook is developing as a tufted hair-grass dominated (NVC type MG9) grassland which is also uncommon in London
Species rarity	Includes species uncommon in London e.g. brooklime, hare's-foot clover, spotted medick, rigid hornwort, sea club-rush, purple loosestrife, buck's-horn plantain, yellow-rattle, marsh bedstraw and sneezewort
Habitat richness	Rich
Species richness	Rich
Size	24.49 ha
Important populations of species	Island in North lake has small heronry, breeding reed warblers in reed beds within the restored area
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Within an urban park setting
Cultural or historic character	None
Geographic position	Part of the Mayes Brook wildlife corridor
Access	Free
Use	Park
Potential	Water quality can be further improved by the provision of an inline reed bed filtration system
Aesthetic appeal	View across the lake is attractive
Geodiversity interest	None known

Table 14: SINC selection criteria – Parsloes Park

Criteria	Comments
Representation	Lake and Semi-improved neutral grassland
Habitat rarity	Not rare
Species rarity	sea club-rush and small-flowered cranesbill are scarce in London and hemlock water-dropwort generally uncommon
Habitat richness	Moderate
Species richness	Moderate
Size	12.97 ha
Important populations of species	Tufted duck among the species nesting on the two wooded islands, and little grebe and shoveler are regular in winter visitors
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Within and urban park setting
Cultural or historic character	Lake area is part of the grounds of Parsloes Manor (demolished in 1925)
Geographic position	Lies more or less at the centre of the borough within an area relatively devoid of wildlife interest
Access	Free
Use	Park
Potential	Appropriate management of The Squatts could re-establish areas of acid grassland. Planting of a dense, species-rich native hedge at the southern edge of the wider park would help establish a wildlife corridor connecting with the northern end of the Gores Brook
Aesthetic appeal	Views across lake
Geodiversity interest	None known

Table 15: SINC selection criteria, Wantz Lake

Criteria	Comments
Representation	Hedge, Running water, Scattered trees, Scrub, Semi-improved neutral grassland
Habitat rarity	Hedge is likely to be ancient in origin therefore rare
Species rarity	Wild marjoram, a scarce species in London is present
Habitat richness	Moderate
Species richness	Moderate
Size	5.11 ha
Important populations of species	None known
Ancient character	Hedge
Recreatability	Not recreatable / feasible recreatable
Typical urban character	Lake is artificially banked within an urban golf course
Cultural or historic character	Ancient hedge aside brook
Geographic position	Adjoins wider golf course which extends into L B Havering
Access	Perimeter footpath only
Use	Driving range / pitch and putt, lake is a balancing pond
Potential	N/a
Aesthetic appeal	N/a
Geodiversity interest	None known

Table 16: SINC selection criteria - Scratton's Farm Ecopark

Criteria	Comments
Representation	An exemplar of urban habitat creation with areas of scrub, semi-improved neutral grassland and wet ditches
Habitat rarity	None
Species rarity	Spotted medick is a notable species in London
Habitat richness	Moderate
Species richness	High
Size	5.3 ha
Important populations of species	Is good for Odonata and common bird species. Common frogs and toads are said to flourish here
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Sandwiched between housing and warehousing
Cultural or historic character	Creation of site championed by local community – created from scratch on a previous marshland and old allotment site
Geographic position	Lies in an area which would otherwise be deficient in publically accessible nature conservation site
Access	Free
Use	Nature reserve and open space
Potential	N/a
Aesthetic appeal	High
Geodiversity interest	None known

Table 17: SINC selection criteria – Romford Line Railsides in Barking & Dagenham

Criteria	Comments
Representation	Railway wildlife corridor including scrub, secondary woodland and semi- improved neutral grassland
Habitat rarity	Not rare
Species rarity	None recorded
Habitat richness	Moderate
Species richness	Not known
Size	4.62 ha
Important populations of species	None known
Ancient character	No
Recreatability	Not feasibly recreatable
Typical urban character	Railway
Cultural or historic character	One of the first railways in east London dating back to 1839
Geographic position	Important wildlife corridor connecting L B Redbridge and LB Havering via Barking and Dagenham
Access	None
Use	Railway
Potential	N/a
Aesthetic appeal	N/a
Geodiversity interest	None known

Table 18: SINC selection criteria – Barking Abbey Ruins and St Margaret's Churchyard

Criteria	Comments
Representation	Open space in the heart of Barking with scattered trees and vegetated wall/tombstones
Habitat rarity	Vegetated wall/tombstones are very rare in Barking and Dagenham
Species rarity	A number of species scarce in the borough and / or London are known from this site e.g. on the old walls fern-grass and thyme-leaved sandwort and; in grassland buck's-horn plantain and field madder. The nationally rare Bermuda-grass has also been recorded here
Habitat richness	Low
Species richness	Moderate
Size	5.79 ha
Important populations of species	None known
Ancient character	Walls and part of church are Medieval in origin
Recreatability	Not recreatable
Typical urban character	In the centre of Barking, enclosed by roads and schools
Cultural or historic character	Is a historic site – the first Abbey was founded here in 666 AD. The Medieval abbey was demolished as a result of the Dissolution 1n 1539
Geographic position	Provides publically accessible areas of greenspace to parts of the borough with a deficiency
Access	Open
Use	Public open space
Potential	Biodiversity could be improved in churchyard area with appropriate planting and management
Aesthetic appeal	Yes
Geodiversity interest	None known

Table 19: SINC selection criteria - Gascoigne Road Pumping Station Rough

Criteria	Comments
Representation	Wasteland
Habitat rarity	Open mosaic habitat is of principal importance in England and a declining in London
Species rarity	None known
Habitat richness	Low
Species richness	Moderate
Size	1.21 ha
Important populations of species	None known
Ancient character	None
Recreatability	Within two to three years if a suitable site and location could be found
Typical urban character	Yes – part of a Thames Water pumping station
Cultural or historic character	None known
Geographic position	Important link in wildlife corridor joining Barking Creek (part of River Thames and its tidal tributaries) and Kingsbridge Ditch (part of Mayes Brook and associated watercourses) sites
Access	None
Use	Unused land associated with water pumping station
Potential	Land could be appropriately managed to increase biodiversity e.g. once or twice yearly cutting regime with cuttings removed and creating a series of superficial bare earth scrapes suitable for recolonisation by ruderal and ephemeral plants and associated invertebrates
Aesthetic appeal	N/a
Geodiversity interest	None known

Table 20: SINC selection criteria - St Chad's Park

Criteria	Comments
Representation	Urban park with a good range of mature scattered trees and native hedge
Habitat rarity	Not rare
Species rarity	None known
Habitat richness	Moderate
Species richness	Moderate
Size	14.23 ha
Important populations of species	The house sparrow, a London BAP and nationally declining species is found here
Ancient character	None
Recreatability	Not feasible recreatable
Typical urban character	Urban park
Cultural or historic character	Was part of Blackheath (later Chadwell Heath) which was enclosed by the Crown in 1860
Geographic position	Largest publically accessible open space in the north of the borough
Access	Free
Use	Public park
Potential	Leave areas of long grass around hedgerows where it is appropriate to do so to improve the site's biodiversity
Aesthetic appeal	Attractive mostly formal park
Geodiversity interest	None known
Table 21: SINC selection criteria - Valence House Gardens

Criteria	Comments
Representation	Formal park with scattered trees and moat
Habitat rarity	Not rare
Species rarity	None known
Habitat richness	Moderate
Species richness	Moderate
Size	1.30 ha
Important populations of species	Includes a veteran 350 year old holm oak (<i>Quercus ilex</i>) which is the oldest tree in the borough possibly the oldest specimen of its type in London. Common waterfowl nest on a small wooded island in the moat. Other birds include nesting dunnock and house sparrow – the latter is a London BAP species which is generally declining in England
Ancient character	Valence House dates back to Medieval times is the only surviving of the five manor houses of Dagenham and is still partially surrounded by a moat
Recreatability	Not recreatable
Typical urban character	No but is situated in an urban park
Cultural or historic character	Part of the grounds of the historic Valence House
Geographic position	Situated in an area of the borough otherwise deficient in accessible Sites of Importance for Nature Conservation
Access	Free
Use	Public park and the manor house is used as a local history resource and museum
Potential	Consider managing selected parts of the park outside the SINC with nature conservation in mind
Aesthetic appeal	The herb garden and manor house itself are attractive
Geodiversity interest	None known

Table 22: SINC selection criteria - Pondfield Park and adjacent railside

Criteria	Comments
Representation	Formal park with a good range of scattered trees and railway bramble bank
Habitat rarity	None
Species rarity	Spotted medick is regarded as notable in London
Habitat richness	Poor to moderate
Species richness	Moderate
Size	3.22 ha
Important populations of species	None recorded
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Urban park and railway bank
Cultural or historic character	None
Geographic position	Provides access to nature to parts of the borough to the west and north of the site which are deficient in accessible Sites of Importance for Nature Conservation
Access	Free to park, no access to land next to railway
Use	Mostly public park
Potential	Access to nature could be enhanced by habitat improvements in the park (leaving areas of longer grass), deculverting the Wantz Stream with marginal planting and by allowing access to the railway land, which is separated from operational railside land by a fence
Aesthetic appeal	The park is attractive
Geodiversity interest	None known

Table 23: SINC selection criteria - St Peter's and St Paul's Churchyard, Dagenham

Criteria	Comments
Representation	Most species diverse burial ground in the borough
Habitat rarity	Old walls and tombstone are an uncommon habitat in the borough and London
Species rarity	Hart's-tongue fern (<i>Phyllitis scolopendrium</i>) is an uncommon species in the borough
Habitat richness	Moderate
Species richness	Rich
Size	0.87 ha
Important populations of species	None known
Ancient character	Parts of the church building
Recreatability	Not recreatable
Typical urban character	Once a country churchyard which is now engulfed in the urban fabric of East London
Cultural or historic character	Parts of the church and churchyard date back about 800 years to the Medieval Period
Geographic position	At the heart of Old Dagenham Village
Access	Free
Use	A closed churchyard now used as a nature reserve
Potential	The site would greatly benefit in biodiversity term and attractiveness from more intensive management such as regular grass cutting (twice per year) and removal of cuttings and more formal management of gardens areas around the church building itself
Aesthetic appeal	The site has the ambience of a country churchyard
Geodiversity interest	None known

Table 24: SINC selection criteria - Wellgate Community Farm

Criteria	Comments
Representation	A community farm specialising in environmental education, with a good range of wildlife habitats
Habitat rarity	None
Species rarity	None known
Habitat richness	Rich (for a small site)
Species richness	Moderate
Size	0.66 ha
Important populations of species	Smooth newts have colonised the pond, and there have been reports of the specially-protected great crested newt
Ancient character	None
Recreatability	20 years in suitable location
Typical urban character	Effectively a 'city farm' at the edge of the Green Belt
Cultural or historic character	Site well used and supported by local community
Geographic position	Edge of Green Belt
Access	Free
Use	Community farm specialising in environmental education and outreach
Potential	N/a
Aesthetic appeal	Yes
Geodiversity interest	None known

Table 25: SINC selection criteria - Buzzard's-mouth Creek and Thames View Ditch

Criteria	Comments
Representation	Extensive reed beds (associated with the network of ditches and creek draining the Thames View Estate)
Habitat rarity	None
Species rarity	Sea beet and sea club-rush which are uncommon in London
Habitat richness	Rich
Species richness	Moderate to rich
Size	5.93 ha
Important populations of species	Habitat suitable for reed warbler and highly likely to support the specially protected water vole
Ancient character	None
Recreatability	If land was available – 5 years
Typical urban character	Flanked by housing estates and industrial land
Cultural or historic character	None
Geographic position	Wildlife corridor linking the drainage ditches of the Thames View Estate with the River Thames
Access	Parts of site
Use	Land drainage – used as a dyke in Thames View Estate and landscaping in the Barking Riverside development which is currently under construction
Potential	Improve permeability of corridor for wildlife by providing surface links (i.e. not in culverts) to River Thames and between drainage dykes / ditches as and when the opportunity arises. Possible potential to enhance the area aside the Thames View Ditch (or dyke) with wetland features such as swales
Aesthetic appeal	Yes, where used as a landscaping feature within the new Barking Riverside estate
Geodiversity interest	None known

Table 26: SINC selection criteria - Cranfield Golf Centre

Criteria	Comments
Representation	Golf course with substantial areas of semi-improved neutral grassland and scattered trees
Habitat rarity	None
Species rarity	None known
Habitat richness	Moderate
Species richness	Moderate
Size	14.22 ha
Important populations of species	None known
Ancient character	Marks Hedge passes diagonally through the site (but is not part of it)
Recreatability	Not feasibly recreatable
Typical urban character	None
Cultural or historic character	None
Geographic position	The majority of the golf course lies within the London Borough of Havering and has good ecological connections with other green spaces in the borough, adding to the site's overall nature conservation value
Access	Members of Golf Centre
Use	Golf course
Potential	Value of the site's habitats will increase as they establish
Aesthetic appeal	Has a feel of the countryside
Geodiversity interest	None known

Table 27: SINC selection criteria – Marks Warren Quarry

Criteria	Comments
Representation	Semi-improved neutral grassland associated with a restored gravel quarry with native hedges (some mature) at periphery
Habitat rarity	None
Species rarity	None
Habitat richness	Poor
Species richness	Moderate
Size	12.05 ha
Important populations of species	The site provides habitat for foraging swallows, nesting house sparrows and skylarks. The last two species are London BAP species and Red Listed as of conservation concern in Britain.
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Not typical although a restored quarrying site
Cultural or historic character	None
Geographic position	Edge of Green Belt
Access	None
Use	None at present
Potential	Appropriate management could ensure the future of breeding skylarks in this area and improve the site's overall biodiversity value
Aesthetic appeal	View spoilt by busy track running horizontally through the site
Geodiversity interest	GLA 37: Mark's Warren Farm Quarry Complex Potential RIGS

Table 28: SINC selection criteria – Padnall Lake

Criteria	Comments
Representation	Balancing pond and surrounding open space offering access to nature for local residents
Habitat rarity	Remnant orchard with six old apple trees from the Padnall Hall Estate
Species rarity	None
Habitat richness	Moderate
Species richness	Moderate
Size	2.03 ha
Important populations of species	Common water fowl such as coots and mallards, and herons – the former two examples breeding
Ancient character	None
Recreatability	Not feasibly recreatable
Typical urban character	Aside busy A12 with extensive housing estate directly to the north and west
Cultural or historic character	Old Padnall Hall Estate orchard
Geographic position	Provides easily accessible contact with nature for residents of the Marks Gate Estate (north of the busy A12)
Access	Open
Use	Balancing pond and part of a very popular open space for local residents
Potential	Reinforce relict orchard with new apple trees of local heritage value and protect
Aesthetic appeal	Yes – other than litter
Geodiversity interest	None known

Table 29: SINC selection criteria - Pond South of Gatward Place

Criteria	Comments
Representation	Small pond with reed bed – part of landscaping in Barking Riverside development
Habitat rarity	None
Species rarity	None
Habitat richness	Low - moderate
Species richness	Poor
Size	0.32 ha
Important populations of species	None known
Ancient character	None
Recreatability	<5 years
Typical urban character	Within new housing estate
Cultural or historic character	None
Geographic position	Part of wetland complex being retained and / or developed as part of the Barking Riverside development. It will provide easy access to nature for local residents
Access	Open
Use	Landscaping and balancing pond within new development
Potential	Will provide common waterfowl and other birds (e.g. reed warbler) together with a range of invertebrates with breeding and foraging opportunities as habitats mature
Aesthetic appeal	Yes
Geodiversity interest	None known

Table 30: SINC selection criteria - Square East of Gatward Place

Criteria	Comments
Representation	An exemplar sustainable urban drainage scheme (SuDS) chiefly planted with common reed within Caspian Quarter of Barking Riverside development
Habitat rarity	None
Species rarity	None
Habitat richness	Moderate
Species richness	Low - moderate
Size	0.19 ha
Important populations of species	None known
Ancient character	None
Recreatability	<5 years
Typical urban character	Effectively a town square surrounded by housing
Cultural or historic character	None
Geographic position	Lies within the Caspian Quarter (an ecologically considerate and sustainable development area) within the new Barking Riverside development. Provides easy access to nature for local residents
Access	Open
Use	SuDS and town square
Potential	With appropriate management habitats will mature and biodiversity increase as time goes by
Aesthetic appeal	Yes
Geodiversity interest	None known

Table 31: SINC selection criteria - Square West of Sedge Gardens

Criteria	Comments
Representation	An exemplar sustainable urban drainage scheme (SuDS) planted with sedges and rushes within Caspian Quarter of Barking Riverside development
Habitat rarity	None
Species rarity	None
Habitat richness	Low
Species richness	Low to moderate
Size	0.28 ha
Important populations of species	None known
Ancient character	None
Recreatability	<5 years
Typical urban character	Effectively a town square surrounded by housing
Cultural or historic character	None
Geographic position	Lies within the Caspian Quarter (an ecologically considerate and sustainable development area) within the new Barking Riverside development. Provides easy access to nature for local residents
Access	Open
Use	SuDS and town square
Potential	With appropriate management habitats will mature and biodiversity increase as time goes by
Aesthetic appeal	Yes
Geodiversity interest	None known

Table 32: SINC selection criteria - Central Park Hedge

Criteria	Comments
Representation	Native hedge within a large park which is generally of little biodiversity interest
Habitat rarity	Not rare
Species rarity	None
Habitat richness	Low
Species richness	Moderate
Size	0.18 ha
Important populations of species	Is a hotspot for house sparrow - a London BAP species, Red Listed in the UK
Ancient character	None
Recreatability	<30 years
Typical urban character	Lies within a large urban park
Cultural or historic character	None
Geographic position	Helps to alleviate a deficiency in accessible SINCs to the north and west of the site. Provides contact with nature for local residents
Access	Open
Use	Is a boundary feature separating a pitch an putt area from the rest of a formal park
Potential	Gap up hedge with appropriate native species other than hawthorn. Encourage a zone of less frequently cut grass at around base of hedge
Aesthetic appeal	Yes
Geodiversity interest	None known

Table 33: SINC selection criteria – Rippleside Cemetery

Criteria	Comments		
Representation	Formal cemetery with young and mature (mostly) non-native scattered trees		
Habitat rarity	Not rare		
Species rarity	None		
Habitat richness	Poor		
Species richness	Moderate		
Size	12.68 ha		
Important populations of species	House sparrow a London BAP and Red Listed species in the UK		
Ancient character	None		
Recreatability	Not feasibly recreatable		
Typical urban character	Urban cemetery largely surrounded by housing estates		
Cultural or historic character	None		
Geographic position	The site occupies a position between Mayesbrook Park and the Mayes Brook and will act as a 'stepping stone' for suitable wildlife between the two. As opportunities arise appropriate habitat improvements can be effected both inside the cemetery and between SINCs e.g. Kier Hardy Estate. Provides contact with nature for local residents		
Access	Free		
Use	Cemetery		
Potential	Instigate appropriate habitat improvements to increase biodiversity value such as slight changes in management regimes and planting of new native species e.g. a hedge along north-west boundary		
Aesthetic appeal	Yes		
Geodiversity interest	None known		

Table 34: SINC selection criteria - Chadwell Heath Cemetery

Criteria	Comments		
Representation	A cemetery with areas of amenity and semi-improved neutral grassland, native hedgerow and mature trees		
Habitat rarity	None		
Species rarity	None known		
Habitat richness	Moderate		
Species richness	Moderate		
Size	9.08 ha		
Important populations of species	None known		
Ancient character	None		
Recreatability	Not feasibly recreatable		
Typical urban character	Edge of large housing estate		
Cultural or historic character	None		
Geographic position	Sits at the edge of / helps alleviate an area deficient in accessible SINCs of appropriate quality. Provides contact with nature for local residents		
Access	Free		
Use	Cemetery		
Potential	Appropriate native planting and slight changes in management regime could improve the area's biodiversity		
Aesthetic appeal	Yes		
Geodiversity interest	None known		

Table 35: SINC selection criteria - Greatfields Park

Criteria	Comments		
Representation	An attractive formal park with good range of mature trees and dense planted shrubberies		
Habitat rarity	None		
Species rarity	None known		
Habitat richness	Low		
Species richness	Moderate		
Size	5.79 ha		
Important populations of species	None known		
Ancient character	None		
Recreatability	Not feasibly recreatable		
Typical urban character	Urban park surrounded by roads and housing		
Cultural or historic character	None		
Geographic position	Lies within and helps alleviate an area deficient in accessible SINCs of appropriate quality and provides contact with nature for local residents.		
Access	Free		
Use	Formal park		
Potential	When the refreshing of planted shrubberies becomes necessary this could specifically employ wildlife attracting species of shrubs and trees		
Aesthetic appeal	Yes		
Geodiversity interest	None known		

Table 36: SINC selection criteria – Castle Green

Criteria	Comments		
Representation	An area of planted native woodland situated within Castle Green recreation ground		
Habitat rarity	None		
Species rarity	None known		
Habitat richness	Low		
Species richness	Moderate		
Size	2.23 ha		
Important populations of species	None known		
Ancient character	None		
Recreatability	<20 years if a suitable site could be found		
Typical urban character	Lies in an urban recreation ground next to the A13		
Cultural or historic character	None		
Geographic position	Helps alleviate Areas of Deficiency in accessible SINCs of appropriate grade north of the A13 providing access to nature for local residents		
Access	Open		
Use	Landscaped buffer aside A13		
Potential	Manage young shrubs and trees by staggered coppicing		
Aesthetic appeal	Improves aesthetics and reduces noise from A13 to the rest of Castle Green Recreation Ground		
Geodiversity interest	None known		

Table 37: SINC selection criteria - Gale Street Organic Gardeners' Association

Criteria	Comments		
Representation	An organically maintained allotment, providing good habitat for birds and reptiles		
Habitat rarity	None		
Species rarity	None		
Habitat richness	Low - moderate		
Species richness	Moderate		
Size	0.23 ha		
Important populations of species	Includes a population of slow-worms which are protected under the Wildlife and Countryside Act 1981 (as amended)		
Ancient character	None		
Recreatability	<20 years		
Typical urban character	Surrounded by more traditionally manage allotment area, railway and housing estate		
Cultural or historic character	None		
Geographic position	South of railway and Parsloes Park SINC, adjoins traditional allotments area to the east		
Access	Gale Street Organic Gardeners' Association		
Use	Organically managed allotment		
Potential	N/a		
Aesthetic appeal	N/a		
Geodiversity interest	None		

Table 38: SINC selection criteria – Panyers Gardens Wildlife Site

Criteria	Comments		
Representation	A small wildlife site offering habitat for birds and possibly reptiles		
Habitat rarity	None		
Species rarity	None known		
Habitat richness	Moderate for small site		
Species richness	Moderate		
Size	0.02 ha		
Important populations of species	None known		
Ancient character	None		
Recreatability	<10 years		
Typical urban character	Lies adjacent to an allotment site within a housing area		
Cultural or historic character	None		
Geographic position	Close to an Area of Deficiency in appropriate accessible SINCs. However the site does not alleviate this deficiency as the site is particularly small and public access to the site is limited		
Access	Key holders		
Use	Wildlife area		
Potential	Access for local residents - Manage habitats for biodiversity as a 'wildlife garden' (in the light of a reptile survey)		
Aesthetic appeal	N/a		
Geodiversity interest	None		

4. **RESULTS and RECOMMENDATIONS**

4.1 Overview

The following section and associated appendices gives an explanation of tiers of sites and Areas of Deficiency (AoD), London BAP habitats in Barking and Dagenham are reviewed as are species considered notable, invasive, or revealed by a GiGL protected species data search. Additionally each proposed site is reviewed including:

- suggesting an appropriate grade of designation;
- giving a brief description (where appropriate) including :
 - Grid reference to the centre of the site
 - the area of site
 - habitats present
 - dominant and frequent species
 - species of conservation interest
 - non-native invasive species (W & C Act 1981 (as amended) S14(2);
 - a map for each site assessed;
- notable species and other features of interest recorded during the survey;
- results of the GiGL data search;
- lists of invasive, notable plant species and species legally protected / or otherwise notable provided by GiGL for the period 2002 to 2016;
- target notes listing each feature of interest with 10 figure grid reference;
- recommendations concerning future management.

4.2 Sites

4.2.1 Tiers of Sites

Three tiers of sites of importance for nature conservation are recognised

 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.

- 2) Sites of Borough Importance are divided into two grades on the basis of their quality, all of 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.
- 3) 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. 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 4.2.2 below) are identified. Further Local 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.

4.2.2 Areas of Deficiency

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.

4.2.3 Review of existing and proposed SINCs

Existing and potential SINCs were selected using the methodology summarised in Chapter 2. Each existing / potential SINC was re-evaluated / evaluated using LWSB criteria (Chapter 3 Evaluation). A citation (with map) was produced for each site (Appendix 4) highlighting key habitats, species and other characteristics which indicate the proposed tier of designation. Section 4.2.4 (SINCs – Grade proposed unchanged) and 4.2.5 (Proposed grading of new SINCs or regraded existing SINCs) below reviews the recommended grades of SINCs identified in this report. Key reasons for the proposed grading of new SINCs or the regrading of existing SINCs are highlighted under 4.2.6. Section 4.2.7 reviews sites rejected from SINC review.

4.2.4 SINCs – Grade proposed: unchanged since previous review

a) Sites of Metropolitan Importance for Nature Conservation:

- The River Thames and tidal tributaries M031
- Ripple Nature Reserve M089
- The Chase and Eastbrookend M090

b) Sites of Borough Importance Grade 1:

- The River Roding in Barking B&DBI01
- Furze House Farm B&DBI02
- Dagenham Breach & Lower Beam River in B & D B&DBI03
- Gores Brook and the Ship & Shovel Sewer B&DBI07
- Marks Hedge B&DBI08

c) Sites of Borough Importance Grade 2:

- Barking Park and Loxford Water B&DBII01
- Mayes Brook and associated watercourses B&DBII02
- Parsloes Park B&DII04
- Whites Farm B&DBII06
- Wantz Lake B&DBII09
- Romford Line Railsides in Barking & Dagenham B&DBII11

d) Sites of Local Importance:

- Wellgate Community Farm B&DL09
- St. Chads Park B&DL04
- Valence House Gardens B&DL05
- Pondfield Park B&DL07
- St Peter's and St Paul's Churchyard, Dagenham B&DL08
- Barking Abbey Ruins and St Margaret's Churchyard B&DL02

4.2.5 Proposed grading of new SINCs or regrading of existing SINCs

a) Upgrade to Site of Metropolitan Importance for Nature Conservation:

 Beam Valley (This site comprises two current Borough Grade 1 SINCs: Beam Parklands and Beam Valley Country Park (B&DI04/05))

b) Upgrade to Site of Borough Importance for Nature Conservation Grade 1:

- Scratton's Farm Ecopark
- Mayesbrook Park Woodland & Floodplain

c) New borough Grade 1 sites:

- Buzzard's-mouth Creek and Thames View Ditch
- Marks Warren Quarry Restored Area
- Cranfield Golf Centre

d) Upgrade from Local Site:

• Gascoigne Road Pumping Station Rough

e) New Local Sites:

- Gale Street Organic Gardeners' Association
- Castle Green
- Central Park Hedge
- Chadwell Heath Cemetery
- Greatfields Park
- Padnall Lake
- Panyers Gardens Wildlife Site
- Pond south of Gatward Place
- Rippleside Cemetery
- Square west of Gatward Place
- Square east of Sedge Gardens

4.2.6 Reasons for the proposed grading of new SINCs or regrading of existing SINCs

a) Beam Valley – upgrade to Site of Metropolitan Importance for Nature Conservation (Appendix 7: photos 30, 31, 32, 33, 34, 35, 36, 37)

This site comprises two current Borough Grade 1 SINCs: Beam Parklands and Beam Valley Country Park (B&DI04/05). These two sites are combined and the new site upgraded to a Site of Metropolitan Importance. This will take account of the maturing habitats present including areas of scrub rich in birds, specially protected species such as water vole and great crested newt, species and habitats of principal importance for the conservation of biodiversity e.g. cinnabar moth, open mosaic habitat and acid grassland, species of plant notable in Greater London including curled, fennel-leaved and broadleaved pondweeds, common centaury and sea club-rush.

b) Scratton's Farm Ecopark – upgrade to Site of Borough Importance for Nature Conservation Grade 1 (Appendix 7: photos 38, 39, 40)

This site is currently a Borough Grade 2 site (B&DBII10). It is recommended that this is upgraded to Borough Grade 1 to take account of increased site area from original site and the maturing of habitats providing additional niches for birds and invertebrates.

c) Mayesbrook Park Woodland & Floodplain – **upgrade to Site of Borough Importance Grade 1** (Appendix 7: photos 20, 2, 22, 23, 24, 25 & front cover)

This site is currently a Borough Grade 2 site (B&DII03). It is recommended that this site is upgraded to a Borough Grade 1 site to take account of the addition of the climate change restoration area. This area has increased the proportion of acid grassland and semiimproved neutral grassland, created new wetland and freed the Mayes Brook from its concrete banks which now has rich marginal vegetation present (front cover). A number of species notable in Greater London have been introduced or have self-seeded including brooklime, sneezewort, purple loosestrife and sea club-rush.

d) Buzzard's-mouth Creek and Thames View Ditch – **new Borough Grade 1 site** (Appendix 7: Photos 12, 13, 17)

This site includes significant areas of recently created landscaping which includes substantial reed beds and a new channel for Buzzard's-mouth Creek to the north of the new Barking Riverside development. Buzzard's-mouth Creek is connected via a pipe at its northern most extent to the Thames View Ditch. Notable plant species include sea beet and sea club-rush. The area is known to host a population of water vole.

e) Gascoigne Road Pumping Station Rough – **upgrade from Local Site** (Appendix 7: photo 43)

It is proposed that this site (currently B&DL03) is upgraded to a Borough Grade 2 site. There is no public access to this site which makes it a poor choice for designation as a Local Site. However, it is an important link in the River Thames and tidal tributaries to Mayes Brook and associated water courses wildlife corridor.

f) Marks – Warren Quarry Restored Area - **new Borough Grade 1 site** (Appendix 7: Photos 4, 5, 6)

There is no public access to this restored quarry which has recently been seeded. Creeping bent and white clover dominate the grassland area, with abundant bristly oxtongue. A native hedge is located on the northern side of the track crossing the site, comprising species such as hawthorn, dog rose, elder and bramble. A more mature hedge is located in the south of the site, adjacent to the A12, which is dominated by pedunculate oak. The site provides good opportunities for invertebrates and birds, including house sparrows and swallows. The site is also likely to continue to provide suitable habitat for breeding skylarks, with appropriate future management.

g) Cranfield Golf Centre - **new Borough Grade 1 site** (Appendix 7: Photos 7, 8, 9) A golf course (members only access) with a good variety of trees, shrubs, tall herbs, semiimproved neutral grassland and amenity grassland. Sensitive landscaping imparts a feel of the countryside. The majority of the golf course lies within the London Borough of Havering and has good ecological connections with other green spaces in the borough, adding to the overall value for nature conservation of the site.

h) Gale Street Organic Gardeners' Association – **new Local Site** (Appendix 7: photo1) This is a small organically managed allotment site with a good population of slow-worms present. It is proposed that this area is designated as a Local Site

i) Castle Green - new Local Site (Appendix 7: photo3)

This is a small area of biodiversity in an otherwise species-poor recreation ground to which there is free access. The new densely planted woodland comprises native species and potentially supports a range of common birds.

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j) Central Park Hedge – **new Local Site** (Appendix 7, Photo 19)

This is a small area of biodiversity within an extensive and otherwise species-poor park to which there is free access. The hedge comprises native species (dominated by hawthorn) and supports a range of common birds including a good population of house sparrows (a species of principal importance for biodiversity in England). The hedge requires gapping-up here and there. Native species other than hawthorn should be employed. A strip of less frequently-cut, longer grassland should be provided at its base (where appropriate).

k) Chadwell Heath Cemetery - **new Local Site** (Appendix 7, photos 44 and 45) Site with areas of amenity grassland and a few mature scattered trees, has some areas of semi-improved neutral grassland. Trees and hedgerows provide common birds with opportunities to nest and forage. Free access to most of site.

I) Greatfields Park - new Local Site (Appendix 7, photo 2)

This is a well-managed formal park with free access. The park contains a variety of mature trees, mostly London plane and common lime, as well as a few ash and oak. These provide good habitat for common nesting birds. A small wildflower meadow has been created in the north of the site which, alongside other planted shrubs, offers good habitat for invertebrates.

m) Padnall Lake - new Local Site (Appendix 7, photo 11)

Lake and surrounds with open access, small wooded island with breeding opportunities for common waterfowl. Fish are plentiful which offer foraging for grey heron. Has a relict orchard with six apple trees.

n) Panyers Gardens Wildlife Site - **new Local Site** (Appendix 7, photo 42)

A small wildlife site with controlled access believed to originally be part of the adjacent allotment site. The site is dominated by semi-improved neutral grassland, scrub and scattered trees and includes native species such as hawthorn, dogwood, false oat-grass and Yorkshire fog.

o) Pond south of Gatward Place - new Local Site (Appendix 7, photo 15)

This pond, with free public access includes a reed bed at the southern end. Tall herbs are plentiful between and around the planted shrubs and provide good habitat for a variety of invertebrates and some species of bird.

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p) Rippleside Cemetery - new Local Site (Appendix 7, photo 18)

This is a Cemetery with free public access. It includes a range of mature (mostly nonnative) trees and shrubs. It is a wildlife stepping stone between Mayesbrook Park and the Mayes Brook and presents opportunities for habitat enhancement between the two.

q) Square west of Gatward Place - **new Local Site** (Appendix 7, photo 14) New town square with open public access. This is an exemplar of a sustainable urban drainage system planted with common reed and semi-improved neutral grassland.

r) Square east of Sedge Gardens - **new Local Site** (Appendix 7, photo 16) New town square with open public access. This is an exemplar of a sustainable urban drainage system planted with rushes, sedges and semi-improved neutral grassland.

4.2.7 Sites rejected from SINC review

a) Thames View East Swale Renwick Road

This site was gauged to be below the quality threshold for designation as a SINC. Habitats were immature and of limited biodiversity interest with only young trees and species poor habitats present.

b) London Sustainable Industries Park (LSIP)

The habitat improvements planned for this area are currently unfinished and other parts degraded via careless landscaping and parking of vehicles next to swales damaging trees and other habitats. A number of other trees and shrubs have died of drought and need to be replaced.

c) Allotments

The following sites were assessed for nature conservation value via aerial photographs and juxtaposition to Areas of Deficiency (4.2.2). Areas which appeared heavily cultivated and / or small in area were judged as of low biodiversity value and not worthy of further pursuit:

- Hedgemans Road Allotment intensively cultivated not pursued further.
- Gale Street Organic Gardeners' Association has population of slow-worms site designated as of Local Importance (temporary site number PL14).
- Groveway has been brought back into use so not sure of current state partly cultivated, needs to be surveyed at optimum survey time, particularly for reptiles.

- Frizlands the original site before it was built on would have been a Site of Importance for Reptiles because of the large number of slow-worms present. It has been reported that they have since recolonised the remaining part of the site which is small and largely cultivated – needs to be surveyed at optimum survey time for reptiles.
- Temple Avenue intensive cultivated not pursued further.
- Thatches Grove (Marks Gate) does not appear cultivated surveyed as part of Chadwell Heath Cemetery (temporary site number PL12).

4.3 Key changes in existing SINCs since the 2002 borough survey

4.3.1 Overview

The following looks at key (mostly vegetational) changes which have taken place regarding the borough's existing and proposed SINCs since the previous 2002 borough survey. The methodology utilised Google historical aerial imagery and the author's personal knowledge of the area in addition to the 2002 survey results.

4.3.2 Existing SINCs

a) The River Thames and tidal tributaries M031

The composition of salt marsh has changed with more species of higher salt marshes present such as sea aster *Aster tripolium*, wild celery *Apium graveolens* and sea club-rush *Bolboschoenus maritima* at the expense of lower growing species including glasswort *Salicornia* sp., sea milkwort *Glaux maritima* and scurvygrass *Cochlearia* sp. This could be due to changing tidal limits and salinity of water. Barking Bay lies near the river's null point where incoming sea water and the flow of freshwater from upstream are (more or less) balanced.

b) Ripple Nature Reserve M089

Since the 2002 survey, the birch copse has become waterlogged due to compaction of bunds at the north and western edges of the area prohibiting drainage into the Thames Road drainage ditch. Vertical percolation of water through pulverised fuel ash (PFA) which underlies this part of the site, is not possible due to a hard pan formed about 1 m below the top layer of ash. The woodland floor is becoming dominated by common reed *Phragmites australis* and even sea club-rush at the northern extremity (Appendix 7, photo 28). Trees are now over mature and because the soil is so wet, they are not regenerating. As a result of severe waterlogging the marsh orchids *Dactylorhiza* spp. disappeared from the woodland floor more than 10 years ago.

c) The Chase and Eastbrookend M090

The Chase Nature Reserve now has serious problems with invasive species particularly New Zealand pigmyweed *Crassula helmsii* which in places is particularly severe (Appendix 7, photo 29). The infestation is spread over most of the area south of Chase Road. An interesting observation is that the population of notable species, lesser spearwort *Ranunculus flammula* seems to have reached some sort of equilibrium with New Zealand pigmyweed. The former example seems to remain abundant where New Zealand pigmyweed is dominant! The Chase and Eastbrookend also have a problem with Japanese knotweed and Himalayan balsam next to the Beam River.

The grassland of Eastbrookend Country Park is becoming increasingly dominated by false oat-grass *Arrhenatherum elatius* which tends towards monoculture and does not support good populations of invertebrates and other species. False oat-grassland itself represents an early successional stage of progression to scrub and woodland, which will become ever harder to control. Fels Field would greatly benefit from the introduction of grazing.

Alder Pond to the north-west of Fels Field has developed an infestation of New Zealand pigmyweed. Scrub, particularly willows, is invading scrub in damp areas and ponds leading to the loss of wet grassland and marginal plant species.

d) The River Roding in Barking B&DBI01

The riverside walk from Barking towards the District line is becoming increasingly scrubbed up near the railway and is now impenetrable at its northern most extreme

e) Furze House Farm B&DBI02

The roadside native hedge has become thin and a little gappy in places.

f) Dagenham Breach & Lower Beam River in B & D B&DBI03

This privately owned site is largely unchanged from the previous review.

g) Gores Brook and the Ship & Shovel Sewer B&DBI07

Himalayan balsam *Impatiens glandulifera* is now frequent to abundant over much of the stream's length. It is particularly bad within the island of reeds where the Gores Brook divides and rejoins just north of its confluence with the Thames. However, a stretch of the Gores Brook, Orion Park aside Chequers Lane has been reprofiled / landscaped to enhance biodiversity. Marginal species have been planted on a series of shelves aside

the channel, and drier areas seeded with native wildflower species. A number of trees have been planted along this stretch of the brook⁵.

h) Marks Hedge B&DBI08

Part of this hedge south of the A12 is now contained within the new Cranfield Golf Centre where it is protected by a fence and seems to be thriving. However the northern part of the site (i.e. north of the A12) is possibly at risk through its proximity to of the giant car boot sale site. Its composition seems largely unchanged from 2002 comprising abundant elm *Ulmus* sp. scrub (mature trees are rare).

i) Barking Park and Loxford Water B&DBII01

New meadow area is an excellent and insect-rich addition to the site

j) Mayes Brook and associated watercourses B&DBII02

The norther stretch of the Mayes Brook was reassigned to the proposed Mayesbrook Park Woodland and Floodplain SINC as the brook now meanders across the western side of the site. Within the Mayes Brook Ditch (aka Roundabout Ditch) is possibly the most serious case of Japanese knotweed *Fallopia japonica* infestation in the borough. Additionally, serious fly-tipping has occurred in the vicinity of Kingsbridge Ditch.

k) Parsloes Park B&DII04

The Squatts area has become covered in rough (false oat-grass) dominated grassland which is the result of insufficient management.

I) Whites Farm B&DBII06

Access to this site was not forthcoming despite exhaustive effort. With the use of Google historical images it appears no perceivable change has taken place over a period of 14 years from the previous survey. A review of data gathered previously shows access to the site was not forthcoming at the time of the previous survey either! The Citation site description (Appendix 4) dates from 2002 but does not seem to align with any of the historical imagery.

m) Wantz Lake B&DBII09 No significant changes observed

⁵ A five-year management plans includes the treatment and removal pernicious weed growth from the channel and new planting areas.

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n) Romford Line Railsides in Barking & Dagenham B&DBII11

A small part of this site has been lost to storage of materials and machinery associates with Crossrail but not significant to the site's SINC status.

o) Wellgate Community Farm B&DL09 No significant changes observed

p) St. Chads Park B&DL04

Google historical imagery from 2002 shows a pitch and putt area to the north of the park contained within a hawthorn hedge. This has been replaced by an area of grassland with a more relaxed cutting regime.

q) Valence House Gardens B&DL05

No significant changes observed

r) Pondfield Park B&DL07No significant changes observed

s) St Peter's and St Paul's Churchyard, Dagenham B&DL08

This site has become covered in rough (false oat-grass) dominated grassland and tall herb vegetation. This is a successional stage in the progression to scrub and woodland.

t) Beam Valley (This site comprises two current Borough Grade 1 SINCs: Beam Parklands and Beam Valley Country Park (B&DI04/05))

A series of swales / ponds have been created aside the Wantz Stream, which has greatly added to the site's wetland habitats. As well marginal vegetation these have significant beds of reed and great reedmace present. In addition extensive areas of once species poor grassland have been reseeded with a wildflower mix and planted with trees and shrubs and are now relatively biodiverse.

u) Scratton's Farm Ecopark

A new area of grassland, tall herbs shrubs and trees has been added to the west of the community centre adding to the site's overall biodiversity value.

v) Mayesbrook Park Woodland & Floodplain

The site has been extended to include an area north of the lakes. A habitat restoration and creation project undertaken in 2011 has given rise to significant changes and new habitats, including removing the concrete channel of The Mayes Brook and creating a

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series of interconnected swales, backwaters and a seasonal pond, with beds of common reed and marginal planting. There are also areas of semi-improved neutral grassland and patches of acid grassland. Tree planting (with the exception of whips) was largely unsuccessful.

w) Gascoigne Road Pumping Station RoughNo significant changes observed.

x) Barking Abbey Ruins and St Margaret's Churchyard No significant changes observed.

4.3.3 New SINCs

a) Marks - Warren Quarry Restored Area

This site was being quarried at the time of the last survey and was chiefly occupied by a large partly water-filled excavation. This has now been restored and topsoiled and seeded with a mixture of grasses, and some wildflowers (particularly legumes).

b) Cranfield Golf Centre

In 2002 the western part of the site was occupied by a golf course and the eastern part abandoned allotments. The whole site has now been re-landscaped as a new golf course which extends into L B Havering.

c) Buzzard's-mouth Creek and Thames View Ditch

New reed beds and areas of open water have been created and landscaped directly east of the Creek just north of the Riverside Centre at Barking Riverside. The northern part of the Creek has been landscaped. Fencing separating the Thames View Ditch from the adjacent open space has been removed. The Ditch (which is really a concrete bottomed dyke) has revegetated after being cleared of vegetation some years ago.

d) Gale Street Organic Gardeners' Association

No significant change noted.

e) Castle Green

Native trees and shrubs are now considerably denser and more mature,

f) Central Park Hedge

Hedge is more mature but also gappier since the last survey with evidence of recent shrub dieback.

g) Chadwell Heath Cemetery

Now includes a large area of former grassland as an extension to the cemetery at the northern end. Additionally, an abandoned allotment has been added to the SINC to the south-west of the site (this might find future use for grazing sheep from Wellgate Community Farm).

h) Greatfields Park

The construction of the A13, River Road - Movers Lane underpass was in progress in 2002 which resulted in the clipping off of a small area at the south-eastern corner of the park.

i) Padnall Lake

Extensive works were carried out on the lake and its surrounds between 2003 and 2006 including desilting the lake, naturalisation and planting of marginal species along the bank, a new route around the lake that is Disability Discrimination Act compliant, planting of more fruit trees in the old orchard and landscaping next to the A12 to reduce the impact of the road (LBB&D, 2005).

j) Panyers Gardens Wildlife Site

This was part of the redevelopment of the Frizlands Allotment site, which required the relocation of a large number of slow worms.

k) Pond south of Gatward Place

This was part of an area of derelict land associated with the development of Barking Riverside.

I) Rippleside Cemetery

No significant change noted.

m) Square west of Gatward Place

This was part of an area of derelict land associated with the development of Barking Riverside.

n) Square east of Sedge Gardens

This was part of an area of derelict land associated with the development of Barking Riverside.

4.4 London's BAP priority habitats

4.4.1 Overview

a) The London Biodiversity Action Plan (BAP) identifies priority habitats that are of particular importance for biodiversity in London. Many of these habitats are covered by Habitat Action Plans (HAPs).

b) The London BAP has eleven Habitat Action Plans. Nine of these are for named habitat types, while another two are for land uses. Only those plans applicable to Barking and Dagenham are considered here. Most HAPs cover just one priority habitat, but others are broad habitat types that cover several priority habitats – for instance, Ponds, Lakes and Canals are all featured in the Standing Water HAP. Some other important habitats do not have their own HAPs at present. There are targets to maintain the extent, enhance and/or increase the extent of all of our priority habitats.

4.4.2 Acid grassland

The main areas of Barking and Dagenham's acid grasslands are associated with Thames terrace gravels and alluvial soils south of Chase Road within the Chase Nature Reserve, Beam Parklands and Mayesbrook Park Woodland & Floodplain. Smaller areas of acid grassland have now disappeared due to lack of appropriate management at The Squatts in Parsloes Park and St Peter's and St Paul's Churchyard in Dagenham. There is a possibility these areas can be encouraged with a change in management.

4.4.3 Parks & urban green spaces

a) The borough's parks, nature reserves and burial places constitute an easily accessible interface between the borough's residents and wildlife. They provide greenspace where young and old alike can explore the natural world.

b) Barking and Dagenham have a number of SINCs in this category which are distributed across the borough including Barking Park, Barking Abbey Ruins and St Margaret's Churchyard, Greatfields Park, Chadwell Heath Cemetery, Rippleside Cemetery and St Peter's and St Paul's Churchyard in Dagenham.

4.4.4 Reed Beds

a) Reed beds are naturally unstable, sensitive to recreation, invasive species, pollution and sea-level rise.

b) The largest area of reed beds in the borough is located just north of the River Thames where the Gorse Brook forks and re-joins. Although common reed dominates this area invasive Himalayan balsam has become abundant since the last survey in 2002. Other sizeable reed beds are located at The Chase Nature Reserve, Eastbrookend Country Park, Beam Valley Country Park, Beam Parklands, River Roding and Buzzard's-mouth Creek (Barking Riverside).

4.4.5 Rivers and Streams

a) A number of rivers and streams drain Barking and Dagenham by emptying into the River Thames. Principally these are the River Roding, Loxford Water, Mayes Brook, Gores Brook, Beam River and Wantz Steam. These are representative of over 600 kilometres of watercourses which flow through the London area, a large part of which forms the city's sewage system. Now outdated flood management methodology such as – straightening, boxing-in and burying rivers – has greatly diminished the wildlife and recreational value of these watercourses. Contrasting examples are available from Barking and Dagenham which illustrate just what can be achieved via appropriate management:

- 1) Loxford Water where the stream has long been constrained via a sparsely vegetated, species-poor concrete channel, and
- 2) Mayesbrook Park Woodland and Floodplain where restoration of the Mayes Brook and its floodplain was undertaken in 2011 giving rise to a more natural and biodiverse landscape on an area previously occupied by species-poor amenity grassland with the Mayes Brook constrained at the edge of the park within a concrete channel.

4.4.6 Standing water (ponds, lakes and canals)

a) These habitats, much enjoyed by anglers and walkers, are home to a variety of fish, amphibians, birds and a host of other wildlife. The biodiversity and recreational value of these habitats are sometimes threatened by invasive species, pollution, natural infilling and climate change.

b) The larger areas of standing water in the borough are located in Barking Park, Mayesbrook Park, Parsloes Park, The Chase Nature Reserve, Eastbrookend Country Park, Beam Valley Country Park, Beam Parklands, Dagenham Breach (Ford Motor Co.) and Buzzard's-mouth Creek (at Barking Riverside).

4.4.7 Tidal Thames

a) The Tidal Thames has been referred to as London's 'wildlife superhighway', linking green spaces and smaller waterways, and supporting species and habitats not found anywhere else in the London area.

b) Salt marsh, intertidal mudflats and open water are particularly scarce habitats associated with the Thames located at the southern boundary of the borough.

4.4.8 Wasteland

a) Wasteland (open mosaic) habitat develops on previously used land and can accommodate a remarkable diversity of species – providing informal space for wildlife and people. However wastelands receive little protection and often disappear under new development.

b) The borough's main areas of wasteland are currently located at the Ripple Nature Reserve and the Beam Valley Country Park (east of the Angling Lake and south of the District Line).

4.4.9 Woodland

a) Thousands of years of land management have dramatically reduced London's woodland cover. As the timber market declined, so too did positive woodland management. Just less than five percent of London's habitat cover is still by woodland, but its quantity and health is under threat.

b) The chief areas of woodland in Barking and Dagenham are not extensive and secondary in nature. These occur at the Ripple Nature Reserve birch copse, Eastbrookend Country Park (Eastbrook Grove), Dagenham Chase (Willow Woodland and Black Poplar Woods). A tiny area of ancient woodland associated with the 13th century Marks Hedge occurs within Cranfield Golf Centre site. A small area of relict orchard occurs at Padnall Lake.

4.4.10 Meadows and pastures

a) The chief areas of meadows and pastures within Barking and Dagenham occur at Eastbrookend Country Park, The Chase Nature Reserve, Beam Valley Country Park, Beam Parklands, Cranfield Golf Centre and Marks-Warren Quarry (Restored Area) and The Squatts (Parsloes Park).

4.4.11 Fen, marsh and swamp

a) The chief areas of fen, marsh and swamp within Barking and Dagenham occur at Eastbrookend Country Park, The Chase Nature Reserve, Beam Valley Country Park, and Beam Parklands,

4.5 Species

4.5.1 Notable Species

a) A range of notable species were recorded as part of the borough survey. None were nationally rare but are regarded as London Species of Conservation Concern (LSOCC). A full list of sites, species and grid references appears under Appendix 5. Table 39 (below) analyses the number of notable species records per hectare for each existing and / or proposed SINCs and assisted in evaluating the grades of sites.

Table 39: Distribution of Notable species across SINCs⁶

Site	spp./ha	No. spp.	Area (ha)
Parsloes Park	0.08	1	12.97
The River Thames and tidal tributaries	0.15	26	171.22
Barking Abbey Ruins and St Margaret's Churchyard	0.17	1	5.79
Scratton's Farm Ecopark	0.19	1	5.3
Wantz Lake	0.20	1	5.11
Beam Parklands / Beam Valley Country Park	0.23	16	70.29
Barking Park and Loxford Water	0.29	4	13.67
Pondfield Park	0.31	1	3.22
Dagenham Breach & Lower Beam River in B & D	0.33	6	18.04
The River Roding in Barking	0.33	2	5.99
The Chase and Eastbrookend	0.34	50	147.07
Gores Brook and the Ship & Shovel Sewer	0.35	4	11.27
Mayes Brook and associated watercourses	0.62	5	8.11
Buzzard's-mouth Creek and Thames View Ditch	0.67	4	5.93
Mayesbrook Park Woodland & Floodplain	0.77	19	24.49
Ripple Nature Reserve	1.21	10	8.27

Table 39 shows the number of notable species records / ha is highest for the Ripple Nature Reserve at 1.21 as it is a small site with a relatively high number of notable species recorded. However the highest numbers of notable species recorded (i.e. 50) were

⁶ Notable species are taken as species covering 15% or under of the 400 tetrads covering the Flora of the Greater London Area (Burton, 1983). Hence some data were gathered in the 1970s and not always as up-to-date as one would like. The London Flora Project which aims to update the Flora is currently ongoing.
associated with The Chase and Eastbrookend where records were distributed over a considerable site area. It is important to note that the presence of notable species is not the only criteria used in determining the grade of a SINC, there are other factors such as important populations of species, habitat types and location (see 2.6.1).

4.5.2 Invasive species

a) Invasive species here are regarded as species specifically listed under Schedule 9 (2) of the Wildlife and Countryside Act 1981 (as amended). All species in this category were recorded under Appendix 6, species name, grid reference and notes on distribution were recorded.

b) The worst cases are an infestation of New Zealand pigmyweed *Crassula helmsii* at the Chase Nature Reserve which covers a large part of the site south of The Chase Road. This area was largely New Zealand pigmyweed free when last surveyed in 2002. Virtually all damp soils and wetlands have some infestation. The worst case was Mint Pond (Appendix 7, photo 29) where carrion crows were walking across the surface of the pond. There is also an invasion New Zealand pigmyweed beginning at Alder Pond to the north of Fels Field (Eastbrookend Country Park).

c) There are frequent clumps of Japanese knotweed *Fallopia japonica* along the Beam River from Great Cullings southwards to the A1306. Other infestation occurs in Beam Valley Country Park and Barking Creek Town Quay to A13. The worst example however was located along the Mayes Brook Ditch (aka Roundabout Ditch) where along its entire length Japanese knotweed is dominant.

d) Himalayan balsam *Impatiens glandulifera* is frequent to abundant along the course of the Beam River and Wantz Steam from Great Cullings to the A1306 at New Road. It is abundant along the River Roding from the Town Quay to Barking Railsides. By far the worst infestation recorded is along the Gorse Brook from the District Line to the island of reeds just north to the River Thames where the infestation is best described as frequent to abundant.

e) Floating pennywort *Hydrocotyle ranunculoides* is frequent at the edges of Hooks Hall Pond on the Chase Nature Reserve

f) Occasional clumps of giant hogweed *Heracleum mantegazzianum* are located at Creekmouth Barrier, Ripple Nature Reserve, Dagenham Breach and Scratton's Farm Ecopark.

4.5.3 GiGL records

a) A number of records were returned by Greenspace Information for Greater London (GiGL) covering the period from the last borough habitat survey (undertaken in 2002) to this review of SINCs (completed in 2016). The excerpts below give an indication of the range of records available and in brackets conservation status and legislation in a national context (HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c), and in local London context (LBAP, LSOCC). A full list of status abbreviations appears immediately below:

- HSD2p, HSD4, HSD5 = European Legislation: Habitat & Species Directive
- WCA8, WCA5/9.1k/I = UK Legislation: Wildlife & Countryside Act 1981 (& amendments)
- PBA = UK legislation: Protection of Badgers Act 1992
- Sect 41 = UK Legislation: Natural Environment and Rural Communities Act (NERC) 2006
- BAP = Biodiversity Action Plan local, London, national
- RLGB.Lr (NT) = International Union for Conservation of Nature (IUCN)
- NS, Nb = Nationally Notable Species: scarce/rare
- Berne =Convention on the Conservation of European Wildlife and Natural Habitat
- Bonn = Convention on the Conservation of Migratory Species of Wild Animal
- LSOCC = London Species of Conservation Concern
- BRed = Bird, Red List

b) Amphibians:

- Great crested newt *Triturus cristatus* (HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c), LBAP, LSOCC). Has been recorded at the Chase and Eastbrookend and Beam Parkland.
- Common Toad *Bufo bufo* (Sect.41, UKBAP), (LBAP, LSOCC) has been recorded at the Chase and Eastbrookend and Beam Parkland.

c) Reptiles:

 Common lizard Zootoca vivipara, grass snake Natrix natrix and slow-worm Anguis fragilis (Sect.41, UKBAP, WCA5/9.1k/I), LBAP, LSOCC) have been recorded at the Chase and Eastbrookend. Slow-worm has also been recorded at St Peter's and St Paul's Churchyard, Dagenham and common lizard at River Thames and it tidal tributaries. d) Bats:

- Noctule bat Nyctalus noctula (HabRegs2, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c), (LBAP LSOCC) has been recorded at The Ripple Nature Reserve, and The Chase and Eastbrookend.
- Common pipistrelle Pipistrellus pipistrellus (HabRegs2, WCA5/9.4b, WCA5/9.4c), LBAP recorded at River Thames and it tidal tributaries
- Daubenton's Bat Myotis daubentonii (HabRegs2, HSD4, WCA5/9.4b, WCA5/9.4c), (LBAP, LSOCC) recorded at Barking Park and Loxford Water.
- Lesser Noctule Nyctalus leisleri (HabRegs2, HSD4, WCA5/9.4b, WCA5/9.4c), (LBAP, LSOCC) recorded at Barking Park and Loxford Water.
- Nathusius's Pipistrelle *Pipistrellus nathusii* (HabRegs2, HSD4, WCA5/9.4b, WCA5/9.4c), (LBAP LSOCC) recorded at Barking Park and Loxford Water.
- Serotine *Eptesicus serotinus* (HabRegs2, HSD4, WCA5/9.4b, WCA5/9.4c), (LBAP, LSOCC) recorded at Barking Park and Loxford Water
- Soprano pipistrelle *Pipistrellus pygmaeus* (HabRegs2, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c), (LBAP, LSOCC) recorded at The Chase and Eastbrookend, Valence House Gardens, The River Thames and tidal tributaries and Cranfield Golf Centre.

e) Birds:

 A range of birds specifically protected under the Schedule 1 of the Wildlife and Countryside Act 1981 are recorded from site in Barking and Dagenham e.g. redwing *Turdus iliacus* and fieldfare *T. pilaris* (Barking Abbey Ruins & St Margaret's Churchyard), kingfisher *Alcedo atthis* (Barking Park and Loxford Water), red kite *Milvus milvus* (Furze House Farm). From the River Thames and its Tidal Tributaries little ringed plover *Charadrius dubius*, black redstart *Phoenicurus ochruros*, peregrine *Falco peregrinus*, sandpiper *Tringa ochropus* and black-tailed godwit *Limosa limosa*. Kingfisher, black redstart and whimbrel *Numenius phaeopus* have been recorded at The Chase and Eastbrookend.

- There are a good number of records of European Water Vole Arvicola amphibious (Sect.41, UKBAP, WCA5/9.1k/I, WCA5/9.1t, WCA5/9.4.a, WCA5/9.4b, WCA5/9.4c), (LBAP, LSOCC) from Beam Parklands. Other sites include Buzzard's-mouth Creek and Thames View Ditch, and the Chase and Eastbrookend.
- European badger *Meles meles* (PBA), (LSOCC) has been recorded in the borough however the exact location is withheld.

4.6 Wildlife Corridors and Opportunity Areas

4.6.1 Wildlife Corridors

a) For the purposes of this report wildlife corridors are relatively continuous series of SINCs leading through the built environment which link to each other and to the Green Belt and / or River Thames (Appendix 3). This differs from the concept of Green Corridors (Mayor of London, 2004) in that only SINCs or proposed SINCs are employed and not just open space with a natural surface. The overall premise is wildlife corridors will be generally more permeable for a number of species if the quality of connecting habitat is higher.

b) SINCs comprising the networks include vegetated railsides, areas of scrub and woodland, hedgerows, grasslands (usually excluding amenity grasslands), lakes, rivers and streams. These features may allow animals and plants to occur further into a built-up area than would otherwise be the case and may provide an extension to any habitats these sites join.

c) The chief criteria for the recognition of land as part of a corridor network are summarised: The minimum habitat requirement is a natural surface: water or vegetation within a SINC. The corridor network connects to the Green Belt, Metropolitan Open Land or River Thames. Small discontinuities, such as division by a road, are allowed, but larger gaps are not unless there is a suitable 'stepping stone' which may help to bridge the gap. Corridor elements are not required to be any particular shape, to link sites, or link together into any particular geometry.

d) Most of the networks recognised here also closely align with those depicted in the All London Green Grid (Mayor of London, 2012) i.e. the Epping Forest and Roding Valley or Thames Chase, Beam and Ingrebourne Green Grid areas.

4.6.2 Stepping Stones

a) Only one wildlife stepping stone is recognised here: Rippleside Cemetery, which would help bridge the gap between the Mayes Brook (to the south) and Mayesbrook Park (to the north). Stepping stones will assist the movement between sites of a relatively small group of species with intermediate dispersal powers (Dawson D, 1994) most of these are likely to be birds and insects. The planting of native trees and shrubs and more wildlife friendly management regimes within Habitat Improvement Area 21 (Appendix 3) would improve the range of wildlife the cemetery and adjoining Kier Hardy Estate could accommodate and strengthen the link provided by this stepping stone.

4.6.3 **Opportunity Areas**

a) These are areas adjacent to individual SINCs within a wildlife corridor network where habitat enhancement would be likely to improve the nature conservation value of that particular SINC or its links to nearby areas. Habitat improvements can include tree, shrub and hedge planting, establishment of a positive nature conservation management regime, deculverting of stream, and construction of swales and other wetlands.

b) Examples of Habitat Improvement Areas (Appendix 3) are: Parsloes Park (area 16) which would benefit from the planting of a dense native hedge and additional native tree planting along its southern edge in order to establish a connection between the Gores Brook and current SINCs located to the west of the park; Pondfield Park (area 17) where northern reaches of the Wantz Stream could be deculverted and swales constructed and planted with native marginal plants; Buzzard's-mouth Creek and Thames View Ditch (areas 30 and 33) where, if the opportunity arises in the future these linking features could be reconstructed as surface features with reed and marginal planting. Some of these projects are long-term and will take many years before the Habitat Improvement Areas become available. However, if these links are ever to be improved they need to be considered now.

4.7 Local Nature Reserves

a) Section 21 of the National Parks and Access to the Countryside Act 1949 gives local authorities the power to acquire, declare and manage nature reserves. The term 'Local

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Nature Reserve' is not used in the Act but this has become the term in common usage for nature reserves managed by local authorities in accordance with the Act (Natural England, 2014).

b) The responsibility for selecting, acquiring and making arrangements for management of these reserves lies with local authorities. Section 21(6) of the Act says that a local authority can only declare an LNR after consultation with Natural England (*ibid*).

c) Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it (*Ibid*).

d) LNRs play a key role in engaging and involving communities, especially children, in securing healthy places where they want to live. They can also help local authorities meet their biodiversity duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, and Local Area Agreement targets across a wide range of national indicators (*Ibid*).

e) Local Nature Reserve - definition

A Local Nature Reserve (LNR) is a protected area of land designated by a local authority because of its local special natural interest and, where possible, educational and community value (Natural England, 2010).

f) Legislative requirements

Schedule 11 (12) of the Natural Environment and Rural Communities Act 2006, which replaced Section 15 of the National Parks and Access to the Countryside Act 1949, describes a 'nature reserve' as: land managed solely for a conservation purpose, or land managed not only for a conservation purpose but also for a recreational purpose, if the management of the land for the recreational purpose does not compromise its management for the conservation purpose (*Ibid*).

g) In the light of the guidance from Natural England (above) the author of this report sees the following sites in Barking and Dagenham as potential candidates for declaration as Local Nature Reserves:

h) Existing SINCs

- Barking Park and Loxford Water SINC
- St Chads Park
- Ripple Nature Reserve (all of site)
- Mayesbrook Park Woodland and Floodplain (all of SINC)

i) Proposed SINCs

- Buzzards Mouth Creek and Thames View Ditch
- Padnall Lake
- Chadwell Heath Cemetery
- Greatfields Park

4.8 Management and maintenance recommendations for SINCs

4.8.1 Overview

a) This section of the report looks at management and maintenance of SINCs and other ways of enhancing their biodiversity value. Where a site is already managed, this means actions in addition or as an alternative to those already being carried out. The few occurrences where no recommendations are forthcoming are also included below.

b) It is worth mentioning here that there are a number of cases where there has been a recent deterioration of habitats within some SINCs due to lack of proper maintenance i.e. parts of The Chase Nature Reserve and Eastbrookend Country Park, Beam valley, The Squats and Dagenham Parish Churchyard. In these places, more delicate habitats are succumbing to invasion with rank grasses and scrub. These areas require attention if biodiversity values are to be maintained or enhanced.

c) Recommendations are not given for areas of parks for example, which currently do not enjoy SINC status or are not proposed SINCs. The local authority should be looking at ways of enhancing the biodiversity of these areas too. Measures could include leaving areas of less frequently cut grass, meadow creation, tree, shrub and hedge planting and the erection of bird and bat boxes in suitable locations.

4.8.2 The River Thames and tidal tributaries M031

• The riverside footpath (no. 47) is likely to be developed in the light of the Barking Riverside project. Thus, there needs to be careful consideration for wading birds

which are easily disturbed and can take flight when people come within 200 m. Such disturbance will reduce time and opportunities the birds have for foraging on the area's mudflats and foreshore. Any footpath parallel to the foreshore needs to be sensitively screened so as to reduce human impact on wading birds. Path lighting should be subdued to prevent disturbance to birds and bats. An exemplar riverside lighting scheme was undertaken in the London Borough of Richmond upon Thames (London's Arcadia, 2009).

4.8.3 Ripple Nature Reserve M089

- a) The Woodland (16306/01)
 - <u>Current situation</u>: this area of the Reserve has become severely waterlogged leading to a loss of biodiversity.
 - <u>Recommended management</u>: a shallow ditch (0.5 m x 0.5 m) needs to be excavated along the entire western edge of the woodland and backfilled with aggregate. The new ditch needs to drain into the Thames Road Ditch (via a connecting pipe under the old PFA lagoon bank). As the woodland area dries out and recovers trees and shrubs should begin to regenerate. Displaced PFA from the new drainage ditch should be left on the woodland floor and is likely to encourage the regeneration of herbaceous plants on freshly exposed ash soil.

b) Meadow (16306/03)

- <u>Current situation</u>: This area is in a poor state of management having been overcome with tall herb vegetation which would have resulted in the loss of more uncommon mammals and invertebrates.
- <u>Recommended management</u>: A regular cutting regime needs to be commenced coupled with the removal of arisings. Two cuts per year in March/April and August/September are recommended.
- c) Roughland (16306/04)
 - <u>Current situation</u>: This area, which is of greatest nature conservation value for plants and bees, wasps and ants (hymenoptera) is becoming overtaken by buddleia scrub.
 - <u>Recommended management</u>: A programme of staggered cutting back of Buddleia scrub (on a three-year cycle) and treatment of stumps with glyphosate or Icade⁷

⁷ Or other suitable permitted herbicide should these be withdrawn

herbicide is recommended to control the problem. In future years selected areas could be controlled by flailing. Cutting and flailing should be undertaken in late autumn / early winter.

d) Thames Road Ditch and Renwick Road Ditch (16306/06)

- <u>Current situation</u>: These ditches have been subjected to heavy littering and dumping. The Renwick Road Ditch has become closed in scrub and the native hedge next to Thames Road is outgrown and unmanaged.
- Recommended management: This should include clearance of litter and dumped materials – this needs to be regularly undertaken, as and when it arises. Scrub needs to be cut-back and the hedge brought back under control (autumn / winter). There needs to be staggered cutting of reeds e.g. one third of the reeds each year on a three year rotation. This operation must not take place between March and the end of August (inclusive).

4.8.4 The Chase and Eastbrookend M090

a) New Zealand Pigmyweed

 <u>Current situation</u>: The Chase Nature Reserve has serious problems with invasive species generally but in places New Zealand pigmyweed is particularly severe. The infestation is spread over most of the area south of Chase Road particularly at pond edges, wet hollows and damp grassland. It is likely that horses have been the chief distribution vector.

Recommended control measures:

- A useful and informative report Ewald, N.C. (2014) looking at *Crassula helmsii* in the New Forest suggest that none of the control techniques examined are particularly effective in controlling infestation. Moreover a combination of methods, one of which of which uses glyphosate, is only marginally more effective than using any one method.
- A high level of biosecurity and public education is also recommended e.g. individual anglers and angling clubs using the lakes in the country park. A comprehensive bio-security plan needs to be formulated for containing and controlling New Zealand pigmyweed. The thought that it could infest the angling lakes of Eastbrookend Country Park is daunting to say the least. The spread of New Zealand pigmyweed needs to be contained and controlled and treated as it appears in any surrounding areas.

b) Japanese knotweed and Himalayan balsam

- <u>Current situation</u>: The Chase and Eastbrookend also have a problem with Japanese knotweed and Himalayan balsam next to the Beam River (locations are quoted in Appendix 6).
- <u>Recommended control</u>: Japanese knotweed will respond well to Glyphosate injection or spraying with Icade; Himalayan balsam can be pulled from the river bank just prior to flowering (June / early July). In order to use herbicides to control weeds in water or on the banks next to a waterbody or watercourse the Environment Agency's *Form AqHerb01: Agreement to use herbicides in or near water* will need to be downloaded⁸ and completed.

c) Overgrazing

- The Chase Nature Reserve (south of Chase Road) is overgrazed by horses the grazing pressure needs to be reduced as it did when it was previously surveyed.
- d) Unmanaged grassland (particularly 16521/01 and 16519/01)
 - <u>Current situation</u>: The grassland over parts of the country park are becoming increasingly dominated by false oat-grass *Arrhenatherum elatius* which tends towards monoculture and does not support good populations of invertebrates and other species. False oat-grassland itself represents an early successional stage of progression to scrub and woodland, which will become ever harder to control.
 - <u>Recommended management</u>: A cutting regime for the grassland within the Country Park (parcel 16521/01, south of Dagenham Road) needs to be established. Areas of rough grassland require the introduction of a rotational cutting regime with cutting and the collection of arisings being undertaken in August / September. The sward should be cut to 10 cm height. A different 10% of the area's grass should remain uncut each year.
 - Fels Field (parcel 16519/01) would greatly benefit from the introduction of grazing. To bring back a more species-rich grassland sward this would require up to six months grazing between May and November employing 20 and 25 head of cattle (preferably native breeds). The existing fencing seems adequate although a water supply and suitable grazier would need to be sourced. As an interim measure a cutting regime as described immediately above could be introduced.

⁸ <u>https://www.gov.uk/government/publications/application-to-use-herbicides-in-or-near-water</u>

e) New Zealand pigmyweed – Fels Field

- <u>Current situation</u>: Alder Pond (16519/05) to the north-west of Fels Field has developed an infestation of New Zealand pigmyweed
- <u>Recommended control</u>: This will require spraying out with Glyphosate <u>as soon as</u> <u>possible</u> – this process will no doubt required several times and the area temporarily fenced.

f) Scrub invasion in seasonal pond

- <u>Current situation</u>: Invading scrub in seasonal pond / damp grassland area (parcel 16519/02). Alder and willow scrub is also encroaching around the ponds to the north of the site (parcels 16519/04 and 05).
- <u>Recommended control</u>: Requires staggered coppicing and appropriate stump treatment with Glyphosate / Icade.

4.8.5 The River Roding in Barking B&DBI01

- <u>Current situation</u>: The riverside walk from Barking towards the District line is becoming increasingly scrubbed up near the railway and is now impenetrable at its northern most extreme
- <u>Recommended management</u>: Scrub needs to be cut-back and stumps treated with Glyphosate / Icade (firstly it will have to be established in who's care this part of the actually Roding resides with).

4.8.6 Furze House Farm B&DBI02

- Current situation: The roadside native hedge has become thin and a little gappy in places.
- Recommended action: Replant gaps with native species.

4.8.7 Dagenham Breach & Lower Beam River in B & D B&DBI03

• There is a little giant hogweed which needs to be sprayed out with Glyphosate / lcade at the north-western edge of parcel 16321/02. The possibility of arranging some access for public enjoyment should be investigated.

4.8.8 Gores Brook and the Ship & Shovel Sewer B&DBI07

- <u>Current situation</u>: Himalayan balsam *Impatiens glandulifera* is now frequent to abundant over much of the stream's length. It is particularly bad within the island of reeds where the Gores Brook divides and rejoins just north of its confluence with the Thames.
- <u>Recommended action</u>: Removal of balsam north of the Merrielands Crescent could commence as soon as possible with pulling of the weed being undertaken in June / early July as it flowers (i.e. before it sets seed). This will need to be removed along successive stretches of the brook starting near the District Line working southwards to Orion Park (see below). Because of the extent of the problem south of the A13 it is suggested here that a contractor specialising in invasive species control is recruited and a detailed method statement for removal of Himalayan Balsam is prepared.
- Orion Park: A stretch of the Gores Brook, Orion Park south of Merrielands Crescent aside Chequers Lane has reprofiled / landscaped to enhance biodiversity. Marginal species have been planted on a series of shelves aside the channel, and drier areas seeded with native wildflower species. A five-year management plan has been prepared for this area which includes the removal of pernicious weeds. As Himalayan balsam remains a serious problem upstream no doubt this action will be an ongoing.

4.8.9 Marks Hedge B&DBI08

- <u>Current situation</u>: The hedge south of the A12 is protected within the new Cranfield Golf Centre. The short length of hedge north of the A12 is possibly at risk through its proximity to of the giant car boot sale site. Its composition seems largely unchanged from 2002 comprising abundant elm scrub (mature trees are rare).
- <u>Possible solution</u>: Investigate possible installation of post and rail fencing to prevent encroachment into this area.

4.8.10 Barking Park and Loxford Water B&DBII01

- <u>Current situation</u>: The biodiversity value of the concrete margins of lake and islands is currently poor where vegetation exists it is dominated by tall herbs.
- <u>Possible solutions</u>: Some marginal planting is already present at the water inlet to the lake. Consider planting additional native marginal species in baskets in selected locations along the edges of the banks and islands. If funding could be

found, shelves could be constructed at the bankside just below the waterline and planted with marginal species.

- A scheme needs to be initiated to educate well meaning public regarding the feeding of waterfowl with bread e.g. attracting rats, removing oxygen from water and that it is a bad diet for birds. Perhaps alternative less harmful foods could be suggested (and where to get them from)? Lakeside signage is required.
- <u>Meadow areas</u>: The new meadow area and other areas of longer grassland should be cut twice per year in early July and late August / September to a height of 10 cm and the arisings removed to maintain and enhance biodiversity.
- <u>Bird and bat boxes</u>: could be placed on suitable trees between Loxford Water and The Lake.

4.8.11 Mayes Brook and associated watercourses B&DBII02

- <u>Current situation</u>: Mayes Brook Ditch (aka Roundabout Ditch) is possibly the most serious case of Japanese knotweed *Fallopia japonica* infestation in the borough. Serious fly-tipping has occurred in the vicinity of Kingsbridge Ditch. <u>Recommended actions</u>:
- Because of the seriousness of Japanese knotweed infestation in the ditch it is recommended here that a contractor specialising in invasive species control is recruited and a detailed method statement for removal of this species is prepared.
- Fly-tipping along the Kingsbridge Ditch needs to be removed from site. A plan is required for regular clearance and prevention of further tipping. The use of CCTV, fencing, bollards etc. should be investigated.

4.8.12 Parsloes Park B&DII04

- <u>Current situation</u>: The Squatts area has become covered in rough (false oat-grass) dominated grassland and previous area of acid grassland (an uncommon habitat) has disappeared.
- <u>Recommended management</u>: the grassland cutting regime should be increased to two cuts per year undertaken in April and July. Cuttings need to lay for two or three days, then be raked-up and removed from site. The biodiversity of the sward should increase. If residual in the sward, species characteristic of acid grassland species could reappear.

4.8.13 Whites Farm B&DBII06

• Access to this site was not forthcoming despite exhaustive effort – a further attempt to survey should be undertaken.

4.8.14 Wantz Lake B&DBII09

- <u>Current situation</u>: The Lake is poor in biodiversity with almost no marginal vegetation present around its concrete banks. The lake forms part of the driving range for the golf club which uses this site. Golf balls are regularly scooped off the surface of the lake as wind carries them to the bank.
- <u>Possible solution</u>: The Lake is the area of this site where the greatest biodiversity gains could be achieved. Native marginal species planted in baskets in selected locations along the edges of the banks would help alleviate the lack of biodiversity. However, while the lake forms part of the driving range it is unlikely that any marginal species planted in this way, would persist.

4.8.15 Romford Line Railsides in Barking & Dagenham B&DBII11

• No management suggested.

4.8.16 Wellgate Community Farm B&DL09

• No management suggested.

4.8.17 St. Chads Park B&DL04

• Areas of longer grassland should be cut twice per year in April / May and July to a height of 10 cm and the arisings removed to maintain and enhance biodiversity.

4.8.18 Valence House Gardens B&DL05

• No management suggested.

4.8.19 Pondfield Park B&DL07

 <u>Possible enhancements</u>: There may be an opportunity to de-culvert the Wantz Stream through the park thereby improving biodiversity and habitat. This would also present an opportunity to carry out planting with native marginal species which would further enhance biodiversity.

4.8.20 St Peter's and St Paul's Churchyard, Dagenham B&DL08

• <u>Current situation</u>: This site has become covered in rough (false oat-grass) dominated grassland and tall herb vegetation. This is a successional stage in the

progression to scrub and woodland which is accompanied by a reduction in biodiversity.

- <u>Trees and shrubs</u>: These may need to be cut-back and stumps treated with herbicide where they are invading grassland areas⁹
- <u>Recommended management</u>: Areas of rough grassland require the introduction of a rotational cutting regime with cutting and the collection of arisings being undertaken in August / September. The sward should be cut to 10 cm height. A different 10% of the area's grass should remain uncut each year.
- Formal Garden Area requires regular maintenance e.g. weeding.

4.8.21 Barking Abbey Ruins and St Margaret's Churchyard

• <u>Recommended enhancements</u>: St Margaret's Churchyard could be sown with a native woodland wildflower seed mix. This should be reinforced with native bulb and plug planting.

4.8.22 Beam Valley (This site comprises two current Borough Grade 1 SINCs: Beam Parklands and Beam Valley Country Park (B&DI04/05))

a) Invasive species:

- <u>Current situation</u>: There is a problem with Japanese knotweed and Himalayan balsam mostly (but not exclusively) next to the Beam River (locations are quoted in Appendix 6).
- <u>Recommended control</u>: Japanese knotweed will respond well to Glyphosate injection or spraying with Icade; Himalayan balsam can be pulled from the river bank and other areas just prior to flowering (June / early July). In order to use herbicides to control weeds in water or on the banks next to a waterbody or watercourse the Environment Agency's Form AqHerb01: Agreement to use herbicides in or near water will need to be downloaded and completed.

b) Unmanaged grassland (particularly 16530/04 and 16533/03)

• <u>Current situation</u>: The grassland over parts of the area are becoming increasingly dominated by false oat-grass *Arrhenatherum elatius* which tends towards monoculture and does not support good populations of invertebrates and other

⁹ Note that trees on this site are protected by a Tree Preservation Order and the site is in a Conservation Area. An Application for Tree Works should be made and permission obtained to carry out tree works

species. False oat-grassland itself represents an early successional stage of progression to scrub and woodland, which will become ever harder to control.

 <u>Recommended management</u>: Areas of rough grassland require the introduction of a rotational cutting regime with cutting and the collection of arisings being undertaken in August / September. The sward should be cut to 10 cm height. A different 10% of the area's grassland should remain uncut each year.

c) Ponds:

• There needs to be staggered cutting of reeds and *Typha* e.g. one third of the reeds each year on a three-year rotation. This will help maintain biodiversity. This operation must not take place between March and the end of August (inclusive).

4.8.23 Scratton's Farm Ecopark

 <u>Recommended management</u>: Treatment of giant hogweed *Heracleum mantegazzianum* (location quoted in Appendix 6) with Glyphosate (or Icade) needs to be continued until this invasive weed is eliminated. Strimming of the new area of grassland (west of the site) should be considered. This should be undertaken in August / September and the arisings removed from site. This will help arrest succession to rank grasses and shrubs and enhance site's overall biodiversity value.

4.8.24 Mayesbrook Park Woodland and Floodplain

- <u>Grassland management</u>: Recently restored grassland areas need to be mowed once per year in late August / September and arisings removed from site. The sward should be reduced to 10 cm height to allow overwintering of invertebrates. There is scope to increase the area of grassland managed this way particularly in the area between the Plantation and the North Lake where unnecessarily wide amenity verges flank the footpath. These verges primarily comprise acid grassland in these acid grasslands which will be lost if the mowing regime is not adjusted.
- <u>Tree planting</u>: Generally additional tree planting would detract from more valuable grasslands; however, there is scope for planting several native poplar cuttings (from the Chase Nature Reserve?) within the grassy plain to the west of the new course of the Mayes Brook. Here a number of inappropriate trees species were planted as part of the restoration most of which have died. This part of the restored area is seldom used by the public and the new cuttings will stand a reasonable chance of survival.

- <u>Reed bed¹⁰</u>: could be established at the water inlet to the North Lake to further improve the quality of water entering from the Mayes Brook.
- <u>Public education</u>: A scheme needs to be initiated to educate well-meaning members of the public regarding the implications of feeding of waterfowl with bread e.g. attracting rats, removing oxygen from water and that it is a bad diet for birds. Perhaps alternative less harmful foods could be suggested (and where to get them from)? Lakeside signage is required.
- <u>Fencing and planting</u>: Low inconspicuous (invisable green or similar recessive colour) wire netting fence or alternatively three to four strands of wire could be placed around islands on which geese (the main culprits) rest or nest. The overall height of the fencing / wire should be no greater than 1 metre. A gap beneath this and the ground of no greater than 20 cm could be retained via which smaller waterbirds such as coots and moorhens etc could gain access. Tough native marginal species including rushes (*Juncus* spp.) and sedges (*Carex* spp.) could be planted on the islands (behind and protected by the fencing / wire) as a further deterant. Similar but more sturdily fenced planting areas could be considered for bank areas where excessive trampling by people and geese have led to erosion.
- <u>Terrestrial management</u>: Geese prefer grazing regularly cut grassland and feel more secure if clear sight lines are maintained to the edges of nearby waterbodies. Therefore, possible deterants could include staggered shrub planting between lake edges and amenity grassland areas and more areas of less intensively manage grassland wherever appropriate.
- <u>Further information</u>: An Integrated Management Strategy (IMS) for the borough's lakes requires consideration. This concept is touched upon in the paper *Shallow urban lakes: a challenge for lake management* by Birch & McCaskie, 1999.

4.8.25 Gascoigne Road Pumping Station Rough

<u>Management recommendation</u>: This area would benefit from the introduction of a cutting regime. Vegetation needs to be cut once per year in late August / September and arisings removed from site.

¹⁰ Reeds must be from a *bona fide* source to avoid the accidental introduction of alien species

4.8.26 Marks – Warren Quarry Restored Area

 <u>Management recommendation</u>: Restored grassland should be cut once per year in August / September to a height of 10 cm and the arisings removed to maintain and enhance biodiversity.

4.8.27 Cranfield Golf Centre

 <u>Management recommendation</u>: Mow roughs no more than once per year in August / September to a height of 10 cm and remove arisings to maintain and enhance biodiversity.

4.8.28 Buzzard's-mouth Creek and Thames View Ditch

- <u>Management recommendation</u>: Reed beds should be cut in staggered rotation with a different one third of reeds being cut back every other year. There may also be a need to prevent reeds from colonising any areas of open water by cutting or lifting at the water margin. Reed cutting should take place between September and February (inclusive). This should help prevent colonisation of reed beds by woody species and help maintain diversity in reed bed growth.
- <u>The Thames View Ditch</u>: This is actually a canalised dyke with a concrete base. Barking and Dagenham would like to try to progress a scheme to de-canalise the dyke and turn it into a more naturalised channel with associated wetlands and flood water storage. This aim and likely gains for biodiversity which could be associated are fully supported here. Such gains will be maximised if new wetlands are planted with appropriate native marginal species of plant.

4.8.29 Gale Street Organic Gardeners' Association

• No additional management recommended.

4.8.30 Castle Green

 <u>Staggered coppicing</u> of some of the composite trees and shrubs should be considered to maintain and improve woodland structure which will benefit a variety of common birds. Preferably coppicing should be undertaken in January / February.

4.8.31 Central Park Hedge

• <u>Gapping up</u>: Native species of trees and shrubs which produce nectar-rich blossom and / or are fruit bearing should be chosen for this purpose. To maximise the diversity of species comprising the hedge these should not include hawthorn.

4.8.32 Chadwell Heath Cemetery

- <u>Recommendations</u>: As much long-grass as possible should be retained particularly aside the native hedge at the northern end of the cemetery. Herbicides should only be used where absolutely necessary.
- An abandoned allotment has been added to the SINC to the south-west of the site which might find future use for grazing sheep from Wellgate Community Farm.

4.8.33 Greatfields Park

Biodiversity enhancements:

- When and as planted shrubbery at the park's perimeter needs to be refreshed the biodiversity value of new plantings should be considered. These do not have to be exclusively native. A useful list of wildlife attracting plants is produced by the RSPB¹¹
- Areas of longer grassland or new meadow areas should be considered where appropriate i.e. if significant areas can be found to accommodate such use as the park is relatively small and well used.
- Bird and bat boxes can be erected in suitable trees in appropriate positions.

4.8.34 Padnall Lake

- A scheme needs to be initiated to educate the public regarding feeding waterfowl with bread e.g. attracting rats, removing oxygen from water and that it is a bad diet for birds. Perhaps alternative less harmful foods could be suggested (and where to get them from)? Lakeside signage is required.
- There is at least one red-eared terrapin in the lake which needs to be removed.
- The Urban Orchard Project has funds to renovate the old orchard. Fruit trees should be heritage varieties of local origin if at all possible. These should be protected by metal tree guards.

¹¹ <u>https://www.rspb.org.uk/birds-and-wildlife/bird-and-wildlife-guides/a-z-of-a-wildlife-garden/plants.aspx</u>

4.8.35 Panyers Gardens Wildlife Site

• This and the adjacent Frizlands Allotments needs to be surveyed for slow-worms and if present this needs to be taken into account in how the sites are managed.

4.8.36 Pond south of Gatward Place

• No specific management currently required until reed beds and bankside vegetation is properly established.

4.8.37 Rippleside Cemetery

- A new native hedge could be established along the north-western edge of the site to improve the cemetery's function as a stepping stone for wildlife between Mayesbrook Park and the Mayes Brook (see Appendix 3).
- The use of herbicides should be avoided unless absolutely necessary.

4.8.38 Square west of Gatward Place

 <u>Management recommendation</u>: The occasional cutting-back of reeds should be undertaken, say one to two years or as necessary at points of access or egress. This will prevent the growth of woody plants and help maintain biodiversity.

4.8.39 Square east of Sedge Gardens

• <u>Management recommendation</u>: The vegetation in the swales should be strimmed (August / September) and arisings removed. This will prevent the growth of woody plants and help maintain biodiversity.

4.9 Recommended surveys and resurveys

4.9.1 The resurvey and review of SINCs should be undertaken every 5 to 10 years (LWSB, 2013).

4.9.2 Amphibian, reptile, small mammal (including water vole) and bat surveys should be undertaken in The Chase and Eastbrookend, Ripple Nature Reserve and Beam Valley to establish their current distribution and importance in these areas.

4.9.3 An invertebrate survey particularly regarding bees, wasps and ants should be conducted at the Ripple Nature Reserve to assess its current value for these groups.

4.9.4 A bat survey is recommended within Mayesbrook Park SINC to monitor any changes in species populations post restoration works.

4.9.5 A bat survey along the Thames Foreshore should be undertaken to help inform the development of Barking Riverside in this area.

4.9.6 A reptile survey should be undertaken in Panyers Gardens Wildlife site (and adjacent Frizlands Allotments) and management adjusted accordingly.

4.9.7 Monitoring of areas of grassland with revised cutting (or grazing) regimes should be carried out. An adapted Natural England condition assessment would be of use and relatively easy to devise and undertake.

4.9.8 London Sustainable Industries Park should be habitat surveyed in 5 years' time to assess the quality and condition of new swales, wetlands, tree and hedge planting and its potential as a SINC.

4.9.9 Groveway - has been brought back into use and is partly cultivated, its current condition is unclear. The area needs to be surveyed at optimum survey time, particularly for reptiles.

4.9.10 The spread of invasive species needs to be carefully monitored and mapped. Advice from a specialist consultant needs to be sought regarding New Zealand pigmyweed at the Chase Nature Reserve, Japanese knotweed in the Mayes Brook Ditch snd Himalayan balsam in the Gores Brook. New outbreaks of the first example should be treated ASAP before they take hold. A biosecurity strategy needs to be compiled.

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Appendix 1: Whole Borough Map – Existing SINCs

Key:

No.	Site name	Site number
1	Wellgate Community Farm	B&DL09
2	Whites Farm	B&DBII06
3	Marks Hedge and Hainault Road Allotments	B&DBI08
4	St. Chads Park	B&DL04
5	Romford Line Railsides in Barking & Dagenham	B&DBII11
6	Wantz Lake	B&DBII09
7	Valence House Gardens	B&DL05
8	Barking Park and Loxford Water	B&DBII01
9	Mayesbrook Park Lakes	B&DBII03
10	Mayes Brook and associated watercourses	B&DBII02
11	Parsloes Park	B&DII04
12	Pondfield Park	B&DL07
13	St Peter's and St Paul's Churchyard, Dagenham	B&DL08
14	Mid Beam Valley in B&D and Dagenham East Lake	B&DI05
15	Beam Valley South in Dagenham and the Wantz Stream	B&DBI04
16	Dagenham Breach & Lower Beam River in B & D	B&DBI03
17	Gores Brook and the Ship & Shovel Sewer	B&DBI07
18	Scratton's Farm Ecopark	B&DBII10
19	Ripple Nature Reserve	M089
21	Barking Abbey Ruins and St Margaret's Churchyard	B&DL02
22	The River Roding in Barking	B&DBI01
23	The Chase and Eastbrookend	MO90
24	The River Thames and tidal tributaries	MO31
25	Furze House Farm	B&DBI02
26	Gascoigne Road Pumping Station Rough	B&DL03

No. = Number on map



Appendix 2: Whole Borough – Proposed SINCs

Key:

No.	Site name	Site number	Proposed Grade
1 2 3	Wellgate Community Farm Whites Farm Marks Hedge	B&DL09 B&DBII06 B&DBI08	
4	St Chads Park	B&DI 04	
5	Romford Line Railsides in Barking & Dagenham	B&DBII11	
6	Wantz Lake	B&DBII09	
7	Valence House Gardens	B&DL05	
8	Barking Park and Loxford Water	B&DBII01	
9	Mayesbrook Park Woodland & Floodplain	B&DBII03	PB1
10	Mayes Brook and associated watercourses	B&DBII02	
11	Parsloes Park	B&DII04	
12	Pondfield Park	B&DL07	
13	St Peter's and St Paul's Churchyard, Dagenham	B&DL08	
14	Beam Valley	B&DI04/05	PM
16	Dagenham Breach & Lower Beam River in B & D	B&DBI03	
1/	Gores Brook and the Ship & Shovel Sewer	B&DBI07	
18	Scratton's Farm Ecopark	B&DBII10	PB1
19	Ripple Nature Reserve		
21	Barking Abbey Ruins and St Margaret's Churchyard		
22	The Chase and Easthrookend		
23	The Diver Thames and tidal tributaries	MO31	
2 4 25	Furze House Farm	B&DBI02	
26	Gascoigne Road Pumping Station Rough	B&DL03	PB2
27	Gale Street Organic Gardeners' Association	Dadeeoo	PI
28	Buzzards-mouth Creek and Thames View Ditch		PB1
29	Castle Green		PL
30	Central Park Hedge		PL
31	Chadwell Heath Cemetery		PL
32	Greatfields Park		PL
33	Padnall Lake		PL
34	Panyers Gardens Wildlife Site		PL
35	Pond south of Gatward Place		PL
36	Rippleside Cemetery		PL
37	Square west of Gatward Place		PL
38	Square east of Sedge Gardens		PL
39	Marks – Warren Quarry Restored Area		PB2
40	Cranfield Golf Centre		PB2

No. = Number on map, PM=Proposed Metropolitan Site, PB1=Proposed Borough Grade 1 Site, PB2=Proposed Borough Grade 2 Site, PL=Proposed Local Site



Appendix 3: Wildlife Corridors and Opportunity Areas

Key:

No	Identity	
1	Furze House Farm	Wider
2	Padnall Lake	Wider
3	Opportunity Area	Padna
4	Marks-Warren Quarry	Wider
5	Cranfield Golf Course	Wider
6	Marks Hedge	Cranfie
7	Romford Line Railsides in B & D	L B Re
8	Wantz Lake	L B Ha
9	The Chase and Eastbrookend	Part of
10	Opportunity Area	Barkin
11	Barking Park & Loxford Water	Loxfor
12	Opportunity Area	Mayes
13	Mayesbrook Park	Mayes
14	Opportunity Area	Parslo
15	Parsloes Park	
16	Opportunity Area	Parslo
17	Opportunity Area	
18	Beam Valley Country Park	Part of
19	River Roding	River I
20	The River Thames and tidal tributaries	Sea, c
21	Opportunity Area	Mayes
22	Rippleside Cemetery	Mayes
23	Beam Parklands	Part of
24	Gascoigne Road Pumping Station	River
25	Opportunity Area	D · T
26	Mayes Brook	River I
27	Thames View Ditch	Buzzai
28	Opportunity Area	Thame
29	Gores Brook and Ship & Shovel Sewer	River I
30	Opportunity Area	Buzzai
31	Opportunity Area	Buzzai
32	Buzzard's-mouth Creek	Iname
33	Opportunity Area	
34 25	Beam KIVer	K. Ina
35	River I names & I Idal I ributaries	веат
36	Ripple Nature Reserve	

Links

Green Belt (L B Redbridge) Green Belt (L B Redbridge) III Lake – Marks-Warren Quarry Green Belt (L B Havering) Green Belt (L B Havering) eld Golf Course edbridge & L B Havering vering Dagenham Corridor g Park – River Roding d Water (L B Redbridge) brook Park – Goodmayes Park Brook via Rippleside Cemetery es Park SINCs

es Park SINCs – Gorse Brook

Dagenham Corridor Thames & Tidal Tributaries, Mayes Brook ity and countryside brook Park – Mayes Brook brook Park – Mayes Brook Dagenham Corridor Thames & Tidal Tributaries, Mayes Brook

Fhames & Tidal Tributaries rd's-mouth Creek es View Ditch & Ship & Shovel Sewer Thames & Tidal Tributaries rd's-mouth Creek – Thames View Ditch rd's-mouth Creek – Ripple Nature Reserve es View Ditch – River Thames mes – Buzzard's-mouth Creek mes & Tidal Tributaries – Beam Parklands River, Gores Brook & River Roding



Appendix 4: Maps and Citations for proposed SINCs

Metropolitan	
Site Reference:	M031
Site Name:	River Thames and tidal tributaries
Summary:	The Thames, London's most famous natural feature, is home to many fish and birds, creating a wildlife corridor running right across the capital.
Grid ref:	TQ 302 806
Area (ha):	2304.92 ha in London, 171.22 ha in Barking and Dagenham
Borough(s):	Barking and Dagenham, Bexley, City of London, Greenwich, Hammersmith and Fulham, Havering, Hounslow, Kensington and Chelsea, Kingston upon Thames, Lambeth, Lewisham, Newham, Richmond upon Thames, Southwark, Tower Hamlets, Wandsworth, Westminster
Habitat(s):	Intertidal, Marsh/swamp, Pond/Lake, Reed bed, Running water, Saltmarsh, Secondary woodland, Vegetated wall/tombstones, Wet ditches, Wet grassland, Wet woodland/carr
Access:	Free public access (part of site)
Ownership:	Port of London Authority (Tidal banks) and Private (Riparian owners (non tidal banks))

Site Description:

The River Thames and the tidal sections of creeks and rivers which flow into it comprise a number of valuable habitats not found elsewhere in London. The mud-flats, shingle beach, inter-tidal vegetation, islands and river channel itself support many species from freshwater, estuarine and marine communities which are rare in London. The site is of particular importance for wildfowl and wading birds. The river walls, particularly in south and east London, also provide important feeding areas for the nationally rare and specially-protected black redstart. The Thames is extremely important for fish, with over 100 species now present. Many of the tidal creeks are important fish nurseries, including for several nationally uncommon species such as smelt. Barking Creek supports extensive reed beds. Further downstream are small areas of saltmarsh, a very rare habitat in London, where there is a small population of the nationally scarce marsh sow-thistle (Sonchus palustris). Wetlands beside the river in Kew support the only London population of the nationally rare and specially-protected cut-grass (Leersia oryzoides). The numerous small islands in the upper reaches support important invertebrate communities, including several nationally rare snails. as well as a number of heronries. Chiswick Eyot, one of the islands, is a Local Nature Reserve. The towpath in the upper reaches is included in the site, and in places supports a diverse flora with numerous London rarities, both native and exotic. Ninety per cent of the banks of the tidal Thames and its creeks are owned by the Port of London Authority, whereas the riparian owners are responsible for the non tidal (upriver) banks. The water is not owned by anybody. The River Thames upriver of the Thames Barrier is followed by the Thames Path National Trail.

Site first notified:	01/04/1986	Boundary last changed:	30/11/2005
Citation last edited:	13/04/2006	Mayor Agreed:	25/11/2002
Defunct:	Ν		
Last Updated:	30/05/2007		



Biodiversity Survey of the London Borough of Barking and Dagenham 2016 – December 2016

Biodiversity Survey of the London Borough of Barking and Dagenham 2016 - December 2016

Metropolitan

Site Reference:	M089
Site Name:	The Ripple Nature Reserve
Summary:	A fine example of how nature can reclaim former industrial land, these 8 hectares of birch woodland, scrub and grassland.
Grid ref:	TQ 466 822
Area (ha):	8.27
Borough(s):	Barking and Dagenham
Habitat(s):	Reed bed, Ruderal, Secondary woodland, Semi-improved neutral grassland, Tall herbs, Wet ditches
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham and National Grid plc

Site Description:

An area of Thames-side ex-industrial land, now supporting a mosaic of important habitats developed over former fly ash lagoons. Much of the site is open, consisting of early successional habitats, damp neutral and some drier, calcareous grassland, with drainage ditches and areas of willow (Salix spp.) scrub and birch (Betula sp.) woodland. Locally rare and uncommon plants include common cornsalad (Valerianella locusta) yellow-wort (Blackstonia perfoliata), common centaury (Centaurium erythraea), viper's-bugloss (Echium vulgare), carline thistle (Carlina vulgaris) and slender thistle (Caduus tenuifolius) on drier grassland, with sea club-rush (Bolboschoenus maritimus) in wetland habitats. The invertebrate fauna is also important and includes many nationally rare and scarce species, such as the scarce emerald damselfly (Lestes dryas). The Thames Terrace hymenopteran assemblage is particularly well-represented. The breeding avifauna is diverse and includes song thrush and linnet, both UK Biodiversity Action Plan priority species. Reptiles and amphibians include smooth newt, grass snake and slow-worm. The northern part of the site is a Local Nature Reserve. The area is managed by the London Borough of Barking and Dagenham.

Buddleia davidii scrub invasion is a major problem over parts of the site.

Site first notified:	19/09/1988	Boundary last changed:	01/11/2002
Citation last edited:	25/11/2016	Mayor Agreed:	25/11/2002
Defunct:	Ν		
Last Updated:	25/11/2016		



Biodiversity Survey of the London Borough of Barking and Dagenham 2016 – December 2016

Metropolitan	
Site Reference:	M090
Site Name:	The Chase and Eastbrookend Country Park
Summary:	This extensive area of grassland and former gravel works contains a variety of aquatic plants and attracts numerous waterfowl and wading birds.
Grid ref:	TQ 511 860
Area (ha):	147.07 ha total, 132.99 ha in Barking & Dagenham
Borough(s):	Barking and Dagenham, Havering
Habitat(s):	Acid grassland, Marsh/swamp, Pond/lake, Running water, Scrub, Secondary woodland, Semi-improved neutral grassland, Wet grassland
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham, London Borough of Havering and Private

Site Description:

A large area of former gravel workings beside the River Rom, comprising a mosaic of grazed wetland and terrestrial habitats. The country park was restored later than the Chase, although the two sites are complementary in terms of their habitat diversity. Shallow pools support a rich aquatic vegetation, including the London rarities sea club-rush (Bolboschoenus maritima), lesser reedmace (Typha angustifolia) and common and thread-leaved water-crowfoots (Ranunculus aguatilis, R. trichophyllus), and attract numerous waterfowl and waders. The dry acid grassland supports one of London's few populations of spiny restharrow (Ononis spinosa), while other uncommon species include sand spurrey (Spergularia rubra) and hare's-foot clover (Trifolium arvense). Lapwing, little ringed ployer, little grebe, vellowhammer and skylark all breed. Blocks of scrub and secondary woodland add further habitat diversity. Beds of reed sweet-grass (Glyceria maxima) and tall herbaceous vegetation beside the river attract breeding warblers and water rail. Birds wintering here include snipe, teal and many others. The site is also regularly visited by a long list of passage species, some nationally rare. Several mature black poplars (Populus nigra ssp. betulifolia) grow near the river, at one of the very few native London sites for this nationally declining tree (a UK and London Biodiversity Action Plan priority species). Rare invertebrates include the hornet robber-fly (Asilus crabroniformis), a BAP Priority Species. Mammals include the declining harvest mouse and the specially-protected water vole. There is a visitor centre and the site attracts many visitors for education and informal recreation. The Chase and Eastbrookend Country Park are Local Nature Reserves managed by the London Borough of Barking & Dagenham.

New Zealand pigmyweed (Crassula helmsii) is a major problem within the Chase Nature Reserve part of the site.

Site first notified:	19/09/1988	Boundary last changed:	01/11/2002
Citation last edited:	24/11/2016	Mayor Agreed:	25/11/2002
Defunct:	Ν		
Last Updated:	24/11/2016		

Biodiversity Survey of the London Borough of Barking and Dagenham 2016 – December 2016


Proposed Metropolitan (an upgraded site which combines two former Borough Grade I sites, Beam Valley Country Park and Beam Parklands)

Site Reference:	B&DBI04/05
Site Name:	Beam Valley
Summary:	Large area of open land in the valleys of the Beam River and Wantz Stream (the area of open space extends into the L B of Havering).
Grid ref:	TQ 506 843itself
Area (ha):	70.29
Borough(s):	Barking and Dagenham
Habitat(s):	Acid grassland, Reed beds, Marsh/swamp, Open mosaic habitat, Pond/lake, Roughland, Running water, Scattered trees, Scrub, Semi-improved neutral grassland, Wet woodland/carr
Access:	Free public access (all/most of site)
Ownership:	Environment Agency, London Borough of Barking & Dagenham and Private.

Site Description:

Stretches of the Beam River are characterised by dense marginal vegetation dominated by branched bur-reed (Sparganium erectum). Species scarce in London include curled and broad-leaved pondweeds (Potamogeton crispus and P.natans). Kingfishers frequent the area and reed warblers and reed buntings breed. The floodplain supports a wide diversity of habitats including one small area of willow woodland, which is scarce in London. The Wantz Stream supports both watercress (Rorippa nasturtium-aquatica) and fool's watercress (Apium nodiflorum). Other wet areas host a wide variety of wetland plants including lesser reedmace (Typha angustifolia), reed sweet-grass (Glyceria maxima) and yellow iris (Iris pseudacorus),). The area is important for the specially protected water vole and great crested newt. A series of swales / ponds have been created aside the Wantz Stream, which has significantly added to the site's wetland habitats. As well marginal vegetation these have sizeable beds of reed (Phragmites australis) and great reedmace (Typha latifolia) present. To the south of the area are areas of drier grassland (some of it acidic) with scattered hawthorn (Crataegus monogyna) scrub which support breeding skylark, linnet (both UK BAP priority species) and meadow pipit, while tree sparrows are frequent in winter. Areas of acidic grassland support the notable species hare's-foot clover (Trifolium arvense).

There is a large angling lake to the north which supports breeding great crested grebes and attracts pochard and shoveler in winter. Marsh ragwort (Senecio aquaticus), a species rare in London, is known from smaller ponds. An area of Open Mosaic Habitat lies east of the Lake and south of the railway. A number of locally and / or regionally scarce species occur including spotted medick (Medicago arabica), common centaury (Centaurium erythraea) and welted thistle (Carduus crispus). The site also supports an exceptionally large population the cinnabar moths / caterpillars, a species of principal importance in England. The area is part of the Beam Valley Local Nature Reserve and is mostly managed by the Land Trust but the freehold is owned by the London Borough of Barking and Dagenham and the Environment Agency.

Site first notified:	01/01/1992	Boundary last changed:	30/06/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Borough Grade I	
Site Reference:	B&DBI01
Site Name:	River Roding in Barking
Summary:	A stretch of the River Roding, important for fish and birds.
Grid ref:	TQ 436 843
Area (ha):	5.99
Borough(s):	Barking and Dagenham
Habitat(s):	Reed bed, Running water, Semi-improved neutral grassland
Access:	Free public access (part of site)
Ownership:	Various

Site Description:

The river in this section is semi-tidal, with considerable areas of exposed mud at low tide. The river supports a good diversity of fish, including eel, stickleback, pike and flounder. Extensive fringes of reeds occur in places, supporting nesting reed warblers. Other birds present include the specially-protected kingfisher, and small numbers of migrant ducks and waders. Other water's edge vegetation includes sea aster (Aster tripolium), wild celery (Apium graveolens), purple loosestrife (Lythrum salicaria), water dock (Rumex hydrolapathum) and hemlock water dropwort (Oenanthe crocata), all rather scarce in London. Himalayan balsam (Impatiens glandulifera) is abundant.

A riverside footpath follows the site for part of its length.

Site first notified:	01/01/1992	Boundary last changed:	01/12/2002
Citation last edited:	05/04/2006	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		



Borough Grade I	
Site Reference:	B&DBI02
Site Name:	Furze House Farm
Summary:	The only substantial area of productive farmland left in the borough of Barking & Dagenham.
Grid ref:	TQ 482 904
Area (ha):	51.59
Borough(s):	Barking and Dagenham
Habitat(s):	Arable, Hedge
Access:	Can be viewed from adjacent paths or roads only
Ownership:	Private

Site Description:

The only substantial area of productive farmland in Barking and Dagenham, this represents a relic of a landscape which would have covered most of the borough in the past. The hedgerows, dominated by hawthorn (Crataegus monogyna) with some young oak (Quercus robur), are somewhat patchy but contain a good range of shrubs, and narrow grassy strips have been known to support locally scarce plants such as chicory (Cichorium intybus), burnet saxifrage (Pimpinella saxifraga) and agrimony (Agrimonia eupatorium). Breeding birds recorded include yellowhammer, linnet and yellow wagtail, all species of conservation concern, while flocks of golden plovers have been known to occur regularly in winter.

Site first notified:	01/01/1992	Boundary last changed:	01/12/2002
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Borough Grade I	
Site Reference:	B&DBI03
Site Name:	Dagenham Breach and the lower Beam River in Dagenham
Summary:	A popular angling lake in a region historically subject to flooding, and a stretch of the Beam that runs through the Ford car plant.
Grid ref:	TQ 500 822
Area (ha):	18.04
Borough(s):	Barking and Dagenham
Habitat(s):	Pond/lake, Reed bed, Running water, Scrub, Semi-improved neutral grassland, Tall herbs
Access:	Access on public footpaths only
Ownership:	Private

Site Description:

Dagenham Breach is a lake created by storm flooding from the River Thames in the early 18th century. Its margins contain a fringe of common reed (Phragmites australis) and great reedmace (Typha latifolia). This is widest at the south-western end. Other wetland plants growing among the reeds include sea club-rush (Bolboschoenus maritimus), false fox-sedge (Carex otrubae), lesser reedmace (Typha angustifolia) and common club-rush (Schoenoplectus lacustris), all rather scarce in London. The lake supports several species of common dragonflies. It also holds a good population of fish, including eels, carp, tench and roach, and is popular with anglers. Breeding birds include reed warbler, great crested grebe, mute swan and possibly kingfisher, while wintering waterfowl include substantial numbers of tufted duck and pochard and smaller numbers of shoveler.

The Beam River runs through the Ford Works between strips of amenity grassland until the southernmost 500 metres of the site, where it is fringed by reed beds, tall herbs, rough grassland and scattered scrub. Parts of the river are known to support species such as purple loosestrife (Lythrum salicaria), sea aster (Aster tripolium), spotted medick (Medicago arabica) and common storksbill (Erodium cicutarium) which are uncommon in London. Stonechat and black redstart have bred in this area. The wildlife habitats extend across the river into the Borough of Havering, where the site is known as Lower River Beam and Ford Works Ditches.

There are areas along the river which support invasive species such as Himalayan balsam (Impatiens glandulifera), giant hogweed (Heracleum mantegazzainum) and Japanese knotweed (Fallopia japonica).

Site first notified:	01/01/1992	Boundary last changed:	01/12/2002
Citation last edited:	25/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	25/11/2016		



Borough Grade I	
Site Reference:	B&DBI07
Site Name:	Gores Brook and the Ship & Shovel Sewer
Summary:	The Gores Brook stream flows through Goresbrook Park, and joins the important ditch habitats of the Ship & Shovel Sewer.
Grid ref:	TQ 481 782
Area (ha):	11.27
Borough(s):	Barking and Dagenham
Habitat(s):	Marsh/swamp, Reed beds, Running water, Tall herbs, Wet ditches
Access:	Free public access (part of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

The northern end of the Gores Brook begins life as a damp patch just north of the District Line. The area is planted with poplars (Populus spp) and willows (Salix spp). It continues southwards through allotments and Goresbrook Park, then through more built surrounds. The banks of the brook, particularly through the park, have been planted with trees such as willows (Salix spp.), alder (Alnus glutinosa) and hawthorn (Crataegus monogyna) over tall herbs and semi-improved neutral grassland. A number of wetland plants occur in the stream itself, including fool's watercress (Apium nodiflorum), branched bur-reed (Sparganium erectum), reed canary-grass (Phalaris arundinacea), galingale (Cyperus longus), lesser pond-sedge (Carex acutiformis) and yellow iris (Iris pseudacorus).

South of the railway the Gores Brook widens and as a result is quite sluggish. Plants characteristic of brackish water make an appearance including dittander (Lepidium latifolium), sea aster (Aster tripolium) and sea club-rush (Bolboschoenus maritimus). Common reed (Phragmites australis) is abundant and branched bur-reed frequent. In the water is fennel-leaved pondweed (Potamogeton pectinatus) and 'blanket-weed'. The brook splits into two forks, which rejoin just before entering the River Thames. Within this area an island of reeds has formed. At the northern end succession is beginning with the reed being joined by tall herbs.

The Ship & Shovel Sewer joins the Gores from the west just south of the railway. It has a very modest flow and has been counted as 'standing water' here. It is the richest ditch in the borough. Wetland plants include common reed, gypsywort (Lycopus europaeus), common duckweed (Lemna minor), floating sweet-grass (Glyceria fluitans), reed sweet-grass, common club-rush (Schoenoplectus lacustris) and branched bur-reed. The western end of the Sewer has been planted with alder, willows and hawthorn over neutral grassland and tall herbs. Elsewhere naturally occurring scattered trees and scrub replace planted trees. The brook supports a population of the specially protected water vole, a priority species in UK and London Biodiversity Action Plans, as well as interesting invertebrate communities.

Himalayan balsam (Impatiens glandulifera) is a major problem along the entire length of the Gores Brook.

Site first notified:	01/12/2002	Boundary last changed:	01/12/2002
Citation last edited:	31/01/2006	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		

Biodiversity Survey of the London Borough of Barking and Dagenham 2016 – December 2016



Borough Grade I	
Site Reference:	B&DBI08
Site Name:	Marks Hedge
Summary:	An ancient hedge and the only ancient woodland in the borough
Grid ref:	TQ 487 889
Area (ha):	0.61
Borough(s):	Barking and Dagenham
Habitat(s):	Ancient woodland, Hedge
Access:	Can be viewed from adjacent paths or roads only
Ownership:	Crown Estate / Cranfield Golf Centre

Site Description:

The site includes the remnants of the ancient 'Marks Hedge', which once marked the perimeter of Hainault Forest and the Manor of Barking with the Liberty of Havering. This begins along the northern fringe of Warren Fields and can be followed in a north-eastern direction into the Cranfield Golf Centre site. Here it widens to the only ancient woodland in the borough, a small area dominated by pedunculate oak (Quercus robur) with hornbeam (Carpinus betulus), elm (Ulmus sp.), hazel (Corylus avellana) and hawthorn (Crataegus monogyna) also present. The woodland area continues on the other side of the A12. A good number of other trees and shrubs occur in the hedge and woodland, indicating its great antiquity. These include field maple (Acer campestre), blackthorn (Prunus spinosa), grey willow (Salix cinerea) and goat willow (S. caprea). The hedge is accompanied by a ditch and earth bank, characteristic of the Medieval period. This site provides good habitat for common bird species and sparrowhawks have been reported as breeding in this area.

Site first notified:	01/12/2002	Boundary last changed:	12/08/2003
Citation last edited:	12/01/2006	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	31/01/2006		



Borough Grade I (Upgraded from Borough Grade II)

Site Reference:	B&DBII10
Site Name:	Scratton's Farm Ecopark
Summary:	A recently created wildlife site on land previously occupied by old overgrown allotments.
Grid ref:	TQ 480 832
Area (ha):	5.3
Borough(s):	Barking and Dagenham
Habitat(s):	Scattered trees, Scrub, Semi-improved neutral grassland, Tall herbs, Wet ditches
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

This is a newly created wildlife site on land once occupied by old overgrown allotments. It makes use of previously existing vegetation and new planting/clearing.

Most of the area is covered in tall herb and scrub (elder (Sambucus nigra)) vegetation. The eastern and southern edges have been planted with trees and shrubs, including white willow (Salix alba), aspen (Populus tremula) and hazel (Corylus avellana). A grassy plain has been created at the south-eastern end. There are two damp to wet ditches running north-south cross the area. The most easterly of these is clothed in common reed (Phragmites australis), and the other in reed sweet-grass (Glyceria maxima). A ditch marks the southern boundary of the site. Most of this is too shaded to be vegetated, however at the extreme western end reed sweet-grass and great reedmace (Typha latifolia) are present in this still wet ditch.

The site has recently been extended west to include an area of neutral grassland, tall herbs and scrub, which supports spotted medick (Medicago arabica), an uncommon species in London. The site provides good habitat for invertebrates, such as speckled wood butterflies and Odonata including southern hawker dragonflies, as well as birds such as goldfinch and blackcap.

The Ecopark has been declared a Local Nature Reserve by the borough which manages the site.

Site first notified:	01/12/2002	Boundary last changed:	02/08/2016
Citation last edited:	05/04/2006	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		



Borough Grade I (Upgrade from Borough Grade II)

Site Reference:	B&DBII03		
Site Name:	Mayesbrook Park Woodland and Floodplain		
Summary:	Two lakes and surrounding mosaic of habitats, some of which has been recently created or restored.		
Grid ref:	TQ 462 846		
Area (ha):	24.49		
Borough(s):	Barking and Dagenham		
Habitat(s):	Acid grassland, Native hedge, Scattered trees, Secondary woodland, Semi- Improved neutral grassland, Standing water, Running water, Tall herbs, Reed bed		
Access:	Free public access (all/most of site)		
Ownership:	London Borough of Barking & Dagenham		

Site Description:

This includes a large lake with three islands, dominated by willows (Salix spp) and a diverse, wellstructured edge vegetation, including a variety of trees, shrubs, tall herbs, grassland (some of which is acidic) and marginal vegetation. Notable species include-brooklime (Veronica beccabunga), rigid hornwort (Ceratophyllum demersum), sea club-rush (Bolboschoenus maritimus), hare's-foot clover (Trifolium arvense) and spotted medick (Medicago arabica. The lake provides a good habitat for waterfowl, including little egret, little grebe, pochard and greylag goose. One of the islands is a nesting site for grey heron.

A second lake is surrounded by a number of mature weeping willows (Salix sepulcralis). There are patches of sea club-rush and great reedmace (Typha latifolia), as well as other marginal species.

To the south of the lakes, an area once occupied by a pitch and putt course has now been planted with native (and a few other) trees and hedgerows. Species include sweet chestnut (Castanea sativa), birch (Betula spp), oak (Quercus petraea), hazel (Corylus avellana), hawthorn (Crataegus monogyna), elder (Sambucus nigra), whitebeam (Sorbus aria) and sea buckthorn (Hippophae spp). The lakes (and area described immediately above) have been declared a Local Nature Reserve by the borough.

The site has been extended to include an area north of the lakes. A recent habitat restoration and creation project has given rise to significant changes and new habitats, including removing the concrete channel of The Mayes Brook and creating a series of interconnected swales, backwaters and a seasonal pond, with frequent occurrences of common reed (Phragmites australis). There are also areas of semi-improved neutral grassland, planted shrubbery, and patches of acid grassland, dominated by red fescue (Festuca rubra), common bent (Agrostis capillaris) and sheep's-sorrel (Rumex acetosella). Notable species recorded within the swales include purple loosestrife (Lythrum salicaria), brooklime, buck's-horn plantain (Plantago coronopus), yellow-rattle (Rhinanthus minor), marsh bedstraw (Galium palustre) and sneezewort (Achillea ptarmica).

Site first notified:	01/01/1992	Boundary last changed:	08/07/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Borough Grade I (New Site)

Site Reference:	PBI04
Site Name:	Buzzard's-mouth Creek and Thames View Ditch
Summary:	Creek and ditches draining the Thames View Estate, with extensive reed beds, tall herbs, planted trees and shrubs.
Grid ref:	TQ 462 824
Area (ha):	5.93
Borough(s):	Barking and Dagenham
Habitat(s):	Planted shrubbery, Reedswamp, Scattered trees, Scrub, Semi-improved neutral grassland, Standing water, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

Buzzard's-mouth Creek and Thames View Ditch drains the southern part of the Thames View Estate.

The northern reaches of the creek have been planted with young trees, including poplars (Populus spp) and white willow (Salix alba), and planted shrubbery. A mosaic of scrub, tall herbs and semiimproved neutral grassland has built up between the plantings, supporting uncommon species in London such as sea beet (Beta vulgaris) and sea club-rush (Bolboschoenus maritimus). Common reed (Phragmites australis) is abundant within the channel, which could support the specially protected water vole.

The ditch to the north of the creek is dominated by common reed, with some great reedmace (Typha latifolia). The banks support scrub and tall herb habitats and offer suitable habitat for a variety of invertebrates and bird species, including reed warbler.

To the east of the creek, there is an area of recent origin with planted shrubbery, scrub, scattered trees and a pond with extensive reed beds. Wooden bridges and walkways allow pedestrian access through parts of the site.

Effectively, this site links the ditches of the Thames View Estate with the River Thames.

Site first notified:	12/09/2016	Boundary last changed:	12/09/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Borough Grade II	
Site Reference:	B&DBII01
Site Name:	Barking Park and Loxford Water
Summary:	Popular recreation ground with parkland, a lake and small stream.
Grid ref:	TQ 446 850
Area (ha):	13.67
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Pond/lake, Running water, Scattered trees, Semi- improved neutral grassland, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

Barking Park is a well-used recreation ground containing a lake, formal parkland with mature trees, and a section of the Loxford Water, a small stream. The Loxford Water, on the western edge of the park, forms the borough boundary with Redbridge. It has been known to support a few clumps of reed canary-grass (Phalaris arundinacea), sea club-rush (Bolboschoenus maritimus), Nuttall's waterweed (Elodea nuttallii) and branched bur-reed (Sparganium erectum) in the margins, and is bordered by a strip of rough grassland and tall herbs. Kingfishers are known to use this stretch of water. The lake has little or no aquatic vegetation, but its three islands provide nest sites for common waterfowl, including mallard, tufted duck, moorhen and coot. Little egrets have also been recorded in this lake. The mature trees and dense shrubberies in the park provide habitat for common birds, including the declining spotted flycatcher and song thrush. Notable species include buck's-horn plantain (Plantago coronopus) and common storksbill (Erodium cicutarium).

A recent addition to the site includes a newly created wildflower meadow, which support species such as common knapweed (Centaurea nigra), kidney vetch (Anthyllis vulneraria), birds-foot-trefoil (Lotus corniculatus), crested dogstail (Cynosurus cristatus) and spotted medick (Medicago arabica).

Site first notified:	01/01/1992	Boundary last changed:	06/06/2016
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Borough Grade II	
Site Reference:	B&DBII02
Site Name:	Mayes Brook and associated watercourses
Summary:	Watercourse and ditches with considerable scope for wildlife to flourish - wildlife corridor linking Mayesbrook Park, River Roding and Ship and Shovel Sewer
Grid ref:	TQ 459 834
Area (ha):	8.11
Borough(s):	Barking and Dagenham
Habitat(s):	Marsh/swamp, Running water, Semi-improved neutral grassland, Wet ditches
Access:	Free public access (part of site)
Ownership:	Environment Agency and London Borough of Barking & Dagenham

Site Description:

South of Ripple Road the brook is characterised by narrow strips of fringing grassland and areas of reed canary-grass (Phalaris arundinacea). A flood relief channel supports more interesting wetland vegetation, known to include lesser spearwort (Ranunculus flammula), sea club-rush (Bolboschoenus maritimus) and rushes. South of the A13, the brook flows in a two-stage channel, this allows for more riparian vegetation, with frequent sea club-rush. The brook supports the uncommon fennel-leaved and curled pondweed (Potamogeton pectinatus and crispus). Kingfishers are often seen in this section.

Several drainage ditches join the Mayes Brook in this southern section, the largest known as the Roundabout Sewer. This supports abundant vegetation; several species which are scarce in London have been recorded here, such as horned pondweed (Zanichellia palustris), water dock (Rumex hydrolapathum), dittander (Lepidium latifolia) and galingale (Cyperus longus). The smaller ditches contain similarly diverse flora. The brook and ditches support a population of the specially protected water vole.

Japanese knotweed (Fallopia japonica) is a major problem in the Roundabout Sewer.

The Mayes Brook at the western limb of Mayebrook Park (north of the District Line) has been deleted and integrated in the proposed Mayesbrook Park Woodland and Floodplain SINC.

Site first notified:	01/01/1992	Boundary last changed:	22/08/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Borough Grade II	
Site Reference:	B&DBII04
Site Name:	Parsloes Park
Summary:	Large park with a lake and an area of grassland important for wildlife.
Grid ref:	TQ 477 849
Area (ha):	12.97
Borough(s):	Barking and Dagenham
Habitat(s):	Pond/lake, Secondary woodland, Semi-improved neutral grassland, Native hedge, Scattered trees
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

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Two parts of this large park are of particular interest for wildlife. The lake in the south-west corner of the park supports good numbers of common waterfowl, with tufted duck among the species nesting on the two wooded islands, and little grebe and shoveler regular in winter. Marginal vegetation is quite diverse, and includes sea club-rush (Bolboschoenus maritimus) and hemlock water-dropwort (Oenanthe crocata) as well as the more common great reedmace (Typha latifolia), hard rush (Juncus inflexus), and gypsywort (Lycopus europaeus). The small-flowered cranesbill (Geranium pusilum) which is scarce in London is found in this area.

A little to the north of the lake is an area of rough grassland known as 'The Squatts'. Largely dominated by false oat-grass (Arrhenatherum elatius), Yorkshire fog (Holcus lanatus) and cock's-foot (Dactylis glomerata), the grassland contains typical meadow flowers including hairy tare (Vicia hirsuta) and meadow vetchling (Lathyrus pratensis), as well as hemlock water-dropwort, more usually associated with watersides. It supports many invertebrate species, particularly butterflies such as meadow brown, large white and various skippers. Skylarks have nested in The Squatts, and meadow pipits are frequent in winter. The rest of the park consists of wide expanses of amenity grassland of limited value to wildlife. These are not included in the site. However, there is considerable potential for enhancement of the nature conservation value of these areas, particularly where elements of acid grassland still survive. The Squatts has been declared a Local Nature Reserve by the borough.

Site first notified:	01/01/1992	Boundary last changed:	01/01/1992
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Borough Grade II	
Site Reference:	B&DBII09
Site Name:	Wantz Lake
Summary:	Golf club grounds, with a lake, surrounding grassland and an ancient hedge.
Grid ref:	TQ 495 872
Area (ha):	5.11
Borough(s):	Barking and Dagenham
Habitat(s):	Hedge, Pond/lake, Running water, Scattered trees, Scrub, Semi-improved neutral grassland, Tall herbs
Access:	Perimeter footpath only
Ownership:	London Borough of Barking & Dagenham

Site Description:

Wantz Lake is artificially banked with very sparse vegetation growing in cracks within the concrete. Although the greater part of the lake's surrounds are covered in amenity grassland there is an area of young trees, scrub (including ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), alder (Alnus glutinosa) and silver birch (Betula pendula) and semi-improved neutral grassland, dominated by creeping bent (Agrostis stolonifera) to the west. There are rows of hybrid black poplars (Populus x canadensis) at the northern and eastern boundary of the driving range area.

The triangle of land to the north (the pitch and putt area) is chiefly covered in amenity grassland but with a strip of neutral grassland with tall herbs at its western perimeter, providing habitat for invertebrates and potentially reptiles. This area is dominated by false-oat grass (Arrhenatherum elatius), with frequent common bent (Agrostis capillaris) and Yorkshire fog (Holcus lanatus) and a small population of wild marjoram (Origanum vulgare), a notable species in London. There is an ancient hedge running north-south along the course of the Wantz Stream. This probably dates back to at least the 1300s. As a result, a good diversity of trees and shrubs occur, including hawthorn, elder (Sambucus nigra), pedunculate oak (Quercus robur), ash (Fraxinus excelsior), silver birch, hazel (Corylus avellana), hornbeam (Carpinus betulus) and blackthorn (Prunus spinosa).

The whole of this site is managed by Crowlands Golf Course. The area surrounding the lake (and the lake itself) forms part of the driving range. This will probably discourage waterbirds from breeding there, although mute swans have been seen using the lake. The triangle of land to the north is used for pitch and putt.

Japanese knotweed (Fallopia japonica) is present on site.

Site first notified:	01/01/1992	Boundary last changed:	01/12/2002
Citation last edited:	10/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2006		



Borough Grade II	
Site Reference:	B&DBII06
Site Name:	White's Farm
Summary:	Two fields, periodically grazed by horses, along with hedges and a pond.
Grid ref:	TQ 485 900
Area (ha):	1.58
Borough(s):	Barking and Dagenham
Habitat(s):	Hedge, Pond/lake, Semi-improved neutral grassland
Access:	No public access
Ownership:	Private

Site Description:

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This site consists of two fields, periodically grazed by horses, along with hedges and a pond. The fields contain moderately diverse grassland, with typical meadow flowers such as common knapweed (Centaurea nigra), meadow buttercup (Ranunculus acris) and black medick (Medicago lupulina) all frequent. Between the two fields is a hawthorn (Crataegus monogyna) hedge which expands into a copse. An older hedge, marking the historic boundary of Hainault Forest, runs along the eastern edge of the site, and contains hawthorn, blackthorn (Prunus spinosa), elm (Ulmus sp.), elder (Sambucus nigra) and hazel (Corylus avellana). A pond at the southern edge of the site is fringed by reed sweet-grass (Glyceria maxima), great willowherb (Epilobium hirsutum) and yellow iris (Iris pseudacorus) and supports breeding moorhens. It may be of value to amphibians.

NB. No access was possible to this site -. Google historical imagery indicates that no change has occurred over 14 years. However the site description does not match what was described then or as it is now – site requires resurvey if access can be achieved.

Site first notified:	01/01/1992	Boundary last changed:	01/12/2002
Citation last edited:	13/09/2005	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		



Biodiversity Survey of the London Borough of Barking and Dagenham 2016 – December 2016

Borough	Grade II
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Site Reference:	B&DBII11
Site Name:	Romford Line Railsides in Barking & Dagenham
Summary:	Part of an important green corridor leading into London from the Havering countryside.
Grid ref:	TQ 482 877
Area (ha):	4.62
Borough(s):	Barking and Dagenham
Habitat(s):	Scrub, Secondary woodland, Semi-improved neutral grassland
Access:	Can be viewed from adjacent paths or roads only
Ownership:	Network Rail

Site Description:

The Liverpool Street to Shenfield line forms an important green corridor leading into London from the Havering countryside. Within Barking and Dagenham, the railsides are characterised by steep narrow cuttings either side of the broad unvegetated tracks. The northern bank is covered in a mosaic of bramble (Rubus fruticosus agg.), rough grassland dominated by false oat-grass (Arrhenatherum elatius), and clumps of sycamore (Acer pseudoplatanus) woodland. To the south there are areas of similar vegetation, intermingled with patches of bare ground. Network Rail takes nature conservation into account in their management of railside vegetation, but the needs of safety and efficient operation of the railway must always be paramount.

Site first notified:	01/12/2002	Boundary last changed:	01/12/2002
Citation last edited:	12/01/2006	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		



Borough Grade II (New Site)

Site Reference:	PBII01
Site Name:	Cranfield Golf Centre
Summary:	A golf course with habitats extending into Havering which together forms a significant area of importance for nature conservation value.
Grid ref:	TQ 486 888
Area (ha):	14.22
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Scattered trees, Semi-improved neutral grassland, Tall ruderal
Access:	Limited access (members only)
Ownership:	Private

Site Description:

A golf course with a good variety of trees, shrubs and tall herbs, giving a sense of the countryside.

The site comprises amenity grassland with some areas of semi-improved neutral / species poor acid grassland, often dominated by perennial rye grass (Lolium perenne), red fescue (Festuca rubra) and creeping bent (Agrostis stolonifera). Areas of tall herbs provide habitat for invertebrates such as red admirals and comma butterflies. Mature trees and shrubs, including ash (Fraxinus excelsior), blackthorn (Prunus spinosa), pedunculate oak (Quercus robur) and wild cherry (Prunus avium) provide good habitat for nesting birds.

The majority of the golf course lies within the London Borough of Havering and has good ecological connections with other green spaces in the borough, adding to the overall nature conservation value of the site.

Site first notified:	21/07/2016	Boundary last changed:	21/07/2016
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Borough Grade 2 (New Site)

Site Reference:	PBII02
Site Name:	Marks Warren Quarry
Summary:	A restored quarry, grassland area and native hedgerows.
Grid ref:	TQ 487 892
Area (ha):	12.05
Borough(s):	Barking and Dagenham
Habitat(s):	Non-native Hedge, Semi-improved neutral grassland, Tall herbs
Access:	No public access (all/most of site)
Ownership:	Private

Site Description:

Two areas of restored quarry which have recently been seeded. Creeping bent (Agrostis stolonifera) and white clover (Trifolium repens) dominate the grassland area, with abundant bristly oxtongue (Picris echioides). A native hedge is located on the northern side of the site, including species such as hawthorn (Crataegus monogyna), dog rose (Rosa canina), elder (Sambucus nigra) and bramble (Rubus fruticosus agg.). A more mature hedge is located in the south of the site, adjacent to the A12, which is dominated by pedunculate oak (Quercus robur).

The site provides good opportunities for invertebrates and birds, including house sparrows and swallows. The site is likely to continue to provide suitable habitat for breeding skylarks with appropriate future management.

Site first notified:	21/07/2016	Boundary last changed:	21/07/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		





Borough Grade 2 (Upgrade from Local Site)

Site Reference:	B&DL03
Site Name:	Gascoigne Road Pumping Station Rough
Summary:	A small area of 'wasteland', rich in habitat for insects and birds.
Grid ref:	TQ 447 829
Area (ha):	1.21
Borough(s):	Barking and Dagenham
Habitat(s):	Scrub, Semi-improved neutral grassland, Tall herbs
Access:	No public access
Ownership:	Thames Water

Site Description:

A small area of 'wasteland', a valuable habitat which is declining in London. The site is largely dominated by common nettle (Urtica dioica) and field bindweed (Convovulus arvensis). The intricate mix of rough grassland, tall herbs and scrub provides habitat for a good diversity of common birds and invertebrates such as speckled wood butterflies. Kestrels have been known to hunt over the site, suggesting the presence of small mammals and/or reptiles. The site acts as an important link in the Mayes Brook and associated watercourses to Barking Creek (River Thames and its tidal tributaries) wildlife corridor

Site first notified:	01/01/1992	Boundary last changed:	01/01/1992
Citation last edited:	10/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		


Site Reference:	B&DL02
Site Name:	Barking Abbey Ruins and St Margaret's Churchyard
Summary:	This valuable open space, right in the heart of Barking town centre, has some rare plants on the Abbey ruins and in the adjacent grassland.
Grid ref:	TQ 440 839
Area (ha):	5.79
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Scattered trees, Semi-improved neutral grassland, Vegetated wall/tombstones
Access:	Free public access (all/most of site)
Ownership:	Diocese of Chelmsford and London Borough of Barking & Dagenham

Site Description:

This site provides valuable open space right in the heart of Barking town centre. The abbey ruins and adjacent churchyard have been known to support two plants which are worthy of note in Barking & Dagenham: fern-grass (Catapodium rigidum), which is scarce in London, and pellitory-of-the-wall (Parietaria judaica), which is of rather scattered distribution in the borough. Thyme-leaved sandwort (Arenaria serpyllifolia) has also been recorded to grow on the ruins.

The neutral grassland in the churchyard and park to the north is dominated by false-oat grass (Arrhenatherum elatius) and cock's foot (Dactylis glomerata) and contains further unusual plants, including chicory (Cichorium intybus) and buck's-horn plantain (Plantago coronopus). The nationally rare Bermuda-grass (Cynodon dactylon) has also been recorded here, as well as field madder (Sherardia arvensis) and dwarf mallow (Malva neglecta), both uncommon in the borough.

There is free public access to the site, which is popular for informal recreation.

Site first notified:	01/01/1992	Boundary last changed:	01/01/1992
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Local

Site Reference:	B&DL04
Site Name:	St Chad's Park
Summary:	An attractive formal park offering contact with nature for residents of Chadwell Heath.
Grid ref:	TQ 478 883
Area (ha):	14.23
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Hedge, Planted shrubbery, Scattered trees, Semi- improved neutral grassland
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

An attractive formal park offering the best contact with nature for residents of Chadwell Heath, in the north of the Borough of Barking & Dagenham.

The park contains a good number and range of mature trees, mostly London plane (Platanus x hispanica) and common lime (Tilia x europaea), with a few silver birch (Betula pendula), Swedish whitebeam (Sorbus intermedia), poplars (Populus spp) and wild cherry (Prunus avium). Hedges and shrubbery provide further habitat for common birds.

In the north of the park is an area of long grassland, surrounded by a native hedgerow and a variety of scattered trees. The semi-improved neutral grassland is dominated by cock's foot (Dactylis glomerata), wall barley (Hordeum murinum) and Yorkshire fog (Holcus lanatus). The hedgerow consists of native species such as hawthorn (Crataegus monogyna), dog rose (Rosa canina) and elder (Sambucus nigra) and, alongside the mature trees, provides good habitat for nesting birds, such as blackbird and house sparrow, and possibly roosting / foraging bats.

There is free public access to the park, which is well used for informal recreation.

Site first notified:	01/01/1992	Boundary last changed:	01/01/1992
Citation last edited:	10/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		



Local	
Site Reference:	B&DL05
Site Name:	Valence House Gardens
Summary:	The former grounds of a moated manor house; this is now an attractive park, with most of the wildlife interest close to the house and moat.
Grid ref:	TQ 480 865
Area (ha):	1.3
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Flower beds, Planted shrubbery, Pond/lake, Scattered trees, Secondary woodland
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

The former grounds of a moated manor house; this is now an attractive park, with most of the wildlife interest close to the house and moat. Two sides of the moat now form a pond, with waterside vegetation dominated by ribwort plantain (Plantago lanceolata), thistle (Cirsium spp) and hedge woundwort (Stachys sylvatica). Yellow iris (Iris pseudacorus), false fox-sedge (Carex otrubae) and gypsywort (Lycopus europaeus) have also been recorded amongst the marginal vegetation here. Mallards and coots nest on a small wooded island.

There are numerous mature trees around the house, including some fine old oaks (Quercus robur), a veteran 350 year old holm oak (Quercus ilex) which is possibly the oldest specimen in London and numerous sycamore (Acer pseudoplatanus). An understorey of hazel (Corylus avellana) and holly (Ilex aquifolium) produces a woodland structure in places. Many bird species use the site for nesting, including dunnock and house sparrow.

A new feature of interest is a recently-restored herb garden, which provides suitable habitat for a variety of invertebrates. There is free public access to the site, which is popular for informal recreation. The old manor house is now home to Barking & Dagenham's local history museum.

Site first notified:	01/01/1992	Boundary last changed:	01/12/2002
Citation last edited:	08/03/2006	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	26/01/2007		



Local

Site Reference:	B&DL07
Site Name:	Pondfield Park and adjacent railside
Summary:	Pondfield Park is a formal park providing important green space for residents of the Becontree Estate.
Grid ref:	TQ 498 849
Area (ha):	3.22
Borough(s):	Barking and Dagenham
Habitat(s):	Neutral grassland (semi-improved), Amenity grassland, Scattered trees, Scrub
Access:	Free public access (part of site)
Ownership:	London Borough of Barking & Dagenham and Network Rail

Site Description:

Pondfield Park is a formal park providing an important green space for residents of the Dagenham East. The site is dominated by amenity grassland and scattered trees. Spotted medick (Medicago arabica) a species regarded as notable in London occurs. To the south east of the park, a small wooded area has been planted with native species such as rowan (Sorbus aucuparia), ash (Fraxinus excelsior) and field maple (Acer campestre). This woodland provides good nesting habitat for common birds.

An adjacent area of land owned by Network Rail provides dense banks of bramble (Rubus fruticosus agg.) which are attractive to a variety of common birds and invertebrates.

Public access to nature could be enhanced by habitat improvements in the park, and by allowing access to the railway land, which is separated from operational railside land by a fence.

Site first notified:	01/01/1992	Boundary last changed:	25/04/2003
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



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Local

Site Reference:	B&DL08
Site Name:	St Peter's and St Paul's Churchyard, Dagenham
Summary:	This site has the ambience of a country churchyard, despite its location among the housing estates of Dagenham.
Grid ref:	TQ 500 844
Area (ha):	0.87
Borough(s):	Barking and Dagenham
Habitat(s):	Scattered trees, Planted Shrubbery, Semi-improved neutral grassland, Tall herbs, Vegetated wall/tombstones
Access:	Free public access (all/most of site)
Ownership:	Diocese of Chelmsford

Site Description:

This site has the ambience of a country churchyard, despite its location among the housing estates of Dagenham. Several fine old ash (Fraxinus excelsior) trees to the north of the church provide shade where hart's-tongue fern (Phyllitis scolopendrium) thrives - this is a rare plant in the borough. There are good range of scattered trees which circle the church building, including lime (Tilia x europaea) and sycamore (Acer pseudoplatanus). A more formal garden area is located around the church itself, parts of which are less intensively manage and allowed to grow wild.

There is a small area of false oat grass (Arrhenatherum elatius) dominated grassland to the south of the site which once comprised acid grassland which through appropriate management it might be possibly reinstate. Elsewhere, there is a mix of more persistent rough grassland, tall herbs and scrub, supporting a good range of invertebrates and common birds. An avenue of mature common lime trees flanks the churchyard's central pathway. The site has been declared a Local Nature Reserve by the local authority which is also responsible for its management. There is free public access.

Site first notified:	01/01/1992	Boundary last changed:	01/01/1992
Citation last edited:	10/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	10/11/2016		



Local

Site Reference:	B&DL09
Site Name:	Wellgate Community Farm
Summary:	A community farm specialising in environmental education, with a good range of wildlife habitats.
Grid ref:	TQ 487 905
Area (ha):	0.66
Borough(s):	Barking and Dagenham
Habitat(s):	Flower beds, Hedge, Planted shrubbery, Pond/lake, Scattered trees, Semi- improved grassland, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

This is an environmentally aware community farm with a variety of features for wildlife, including nest boxes in trees and hibernacula for bats. It is a well-used resource for local schools both on site and as a result of outreach work. Additionally, after school and summer holiday activities regularly take place where training and volunteering opportunities are offered.

The farm is a relatively small area but includes a number of habitats. There is a small, created pond planted with native aquatic plants, including yellow iris (Iris pseudacorus). Smooth newts have colonised the pond, and there have been reports of the specially-protected great crested newt. There is a reasonably mature hedge (particularly along the western edge of the site) dominated by hawthorn (Crataegus monogyna) but also includes bullace (Prunus domestica ssp. insititia), Midland hawthorn (Crataegus laevigata) and a little ash (Fraxinus excelsior) and oak (Quercus robur).

Other parts are cultivated as flower beds (with insect attractive herbs included) and vegetables. There are also areas of semi-improved grassland dominated by creeping bent (Agrostis stolonifera) and rye-grass (Lolium perenne) but also supporting some herb species including birds-foot-trefoil (Lotus corniculatus) and selfheal (Prunella vulgaris).

The farm is open to the public daily from 9am to 3.30pm, and is fully accessible to wheelchair users. Schools and other groups wanting a formal visit must book in advance by phoning 01708 747850.

Site first notified:	01/12/2002	Boundary last changed:	27/01/2003
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Local (New Site)	
Site Reference:	PL05
Site Name:	Padnall Lake
Summary:	A pond and surrounding land offering contact with nature for local residents.
Grid ref:	TQ 476 891
Area (ha):	2.03
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Scattered trees, Scrub, Semi-improved neutral grassland, Lake/pond, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

A pond which proves popular with local residents, surrounded by some marginal vegetation including yellow iris (Iris pseudacorus), great pond sedge (Carex riparia) and pendulous sedge (Carex pendula). Young trees surround the pond edges, including willows (Salix spp) and alder (Alnus glutinosa). Within the pond is a narrow wooded island covered in willows. The pond provides habitat for common water fowl such as coots and mallards. Grey herons are often seen predating on the abundant fish present.

The land surrounding the pond has relatively sparse flora, however, six apple trees are present as a remnant orchard from the Padnall Hall Estate. Some native trees and shrubs have been planted between the site and the A12, providing opportunities for common nesting birds.

There is free public access to the site, which is well used for informal recreation.

Site first notified:	25/08/2016	Boundary last changed:	25/08/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Local (New Site)	
Site Reference:	PL06
Site Name:	Pond South of Gatward Place
Summary:	A pond offering some habitat for invertebrates and some bird species.
Grid ref:	TQ 4760 824
Area (ha):	0.32
Borough(s):	Barking and Dagenham
Habitat(s):	Pond/lake, Reedswamp, Planted shrubbery, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	Barking Riverside

Site Description:

A pond with good marginal vegetation, including a reed bed, dominated by common reed (Phragmites australis) and some planted shrubbery. Tall herbs are plentiful between and around the planted shrubs and provide good habitat for a variety of invertebrates and some species of bird.

Site first notified:	12/09/2016	Boundary last changed:	12/09/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



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Local (New Site)	
Site Reference:	PL07
Site Name:	Square East of Gatward Place
Summary:	A new sustainable development site, supporting a mixture of reed beds and tall herb habitats.
Grid ref:	TQ 459 825
Area (ha):	0.19
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Reedswamp, Scattered trees, Semi-improved neutral grassland, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	Barking Riverside

Site Description:

A town square situated within a sustainable development area. This example of a Suds (Sustainable Urban Drainage System) comprises swales of common reed (Phragmites australis), areas of semi-improved neutral grassland and tall herbs. This is an exemplar of this type of drainage system within the locality.

The site has potential to sustain a good range of invertebrate species. Swales between roadside and housing are crossed via a series of wooden bridges which helps protect these sensitive wetland habitats from disturbance.

Site first notified:	10/09/2016	Boundary last changed:	10/09/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Local (New Site)	
Site Reference:	PL08
Site Name:	Square West of Sedge Gardens
Summary:	A new sustainable development site, supporting marginal vegetation and tall herb habitats.
Grid ref:	TQ 461 825
Area (ha):	0.28
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Semi-improved neutral grassland, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	Barking Riverside

Site Description:

A town square within a sustainable development area. This exemplar of a SUDS (Sustainable Urban Drainage System) comprises swales of marginal vegetation, tall herbs and areas of semi-improved and amenity grassland.

Species recorded include pendulous sedge (Carex pendula), soft rush (Juncus effusus), hard rush (Juncus inflexus), chives (Allium schoenoprasum) and yellow iris (Iris pseudacorus). The site is likely to support a variety of invertebrates particularly as it matures.

Site first notified:	12/09/2016	Boundary last changed:	12/09/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Local (New Site)	
Site Reference:	PL09
Site Name:	Central Park Hedge
Summary:	A native hedge, providing nesting and foraging opportunity for small birds.
Grid ref:	TQ 502 869
Area (ha):	0.18
Borough(s):	Barking and Dagenham
Habitat(s):	Hedge, Planted shrubbery
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

A native hedge, dominated by hawthorn (Crataegus monogyna). Other species include field maple (Acer campestre), ash (Fraxinus excelsior) and elder (Sambucus nigra). The western end of the site is characterised by planted shrubbery.

The site provides good habitat for nesting and foraging birds and is a hot spot for house sparrow a London Biodiversity Action Plan species and Red List species in the UK, Has some invertebrate interest.

Site first notified:	13/09/2016	Boundary last changed:	13/09/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Local (New Site)	
Site Reference:	PL10
Site Name:	Rippleside Cemetery
Summary:	A formal cemetery with some good opportunities for common bird species.
Grid ref:	TQ 462 839
Area (ha):	12.68
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Scattered trees
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

A formal cemetery with a fair number of young and mature trees, the majority of which are species of cedar (Cedrus spp,) common lime (Tilia x vulgaris) and horsechestnut (Aesculus hippocastanum). There is also a large specimen of eastern plane (Platanus orientale).

Most grave stones are un-vegetated and surrounded by amenity grassland, dominated by perennial rye grass (Lolium perenne). The cemetery is so placed that it forms a `stepping stone` between Mayesbrook Park and the Mayes Brook and provides opportunities to strengthen connectivity between the two.

The site provides habitat for nesting birds, including green woodpecker, carrion crow and house sparrow.

There is free public access to the cemetery.

Site first notified:	02/08/2016	Boundary last changed:	02/08/2016
Citation last edited:	22/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	22/11/2016		



Local (New Site)	
Site Reference:	PL11
Site Name:	Chadwell Heath Cemetery
Summary:	A cemetery with areas of amenity and semi-improved neutral grassland, native hedgerow and mature trees.
Grid ref:	TQ 483 897
Area (ha):	9.08
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Improved grassland, Hedge, Scattered trees, Secondary woodland, Semi-improved neutral grassland, Tall herbs
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

The cemetery is predominantly amenity grassland, dominated by perennial rye-grass (Lolium perenne) and red fescue (Festuca rubra). In some areas where mowing is relaxed, the sward is more species-rich with indicators of more unimproved conditions, such as ladies bedstraw (Galium verum), common knapweed (Centaurea nigra) and cat's-ear (Hypochaeris radicata). Scattered planted trees are dotted around the site and a line of hybrid black poplars (Populus x canadensis) form the southern boundary.

Kingston Hill Open-space, a northern extension to the cemetery, also supports regularly cut amenity grassland. A mixed species hedgerow forms the northern and western boundary.

The land to the west of the cemetery is characterised by tall herb vegetation with a few mature boundary trees and some semi-improved grassland. The hedgerows and mature trees on site provide nesting opportunities for birds and possibly bats.

There is free public access to the cemetery.

Site first notified:	30/06/2016	Boundary last changed:	30/06/2016
Citation last edited:	24/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	24/11/2016		



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Site Reference:	PL12
Site Name:	Greatfields Park
Summary:	An attractive formal park offering contact with nature for local residents.
Grid ref:	TQ 450 834
Area (ha):	5.79
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Planted shrubbery, Scattered trees
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

A well-managed formal park offering contact with nature for local residents.

The park contains a variety of mature trees, mostly London plane (Platanus x hispanica) and common lime (Tilia x europaea), as well as a few ash (Fraxinus excelsior) and oak (Quercus spp). These provide good habitat for common nesting birds.

A small wildflower meadow has been created in the north of the site which, alongside other planted shrubs, offers good habitat for invertebrates.

There is free public access to the park, which is well used for informal recreation.

Site first notified:	03/08/2016	Boundary last changed:	03/08/2016
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



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Local (New Site)	
Site Reference:	PL13
Site Name:	Castle Green
Summary:	An area of planted native woodland situated within Castle Green recreation ground.
Grid ref:	TQ 474 836
Area (ha):	2.23
Borough(s):	Barking and Dagenham
Habitat(s):	Amenity grassland, Planted woodland, Scrub
Access:	Free public access (all/most of site)
Ownership:	London Borough of Barking & Dagenham

Site Description:

An area of planted native woodland and scrub, situated within Castle Green, an area of amenity grassland and recreation ground which runs alongside the A13. The site offers the best contact with nature for nearby residents.

The site contains a good number and range of native species, including hawthorn (Crataegus monogyna), hazel (Corylus avellana), elder (Sambucus nigra) and a range of poplars (Populus spp). This habitat provides good opportunity for common nesting birds, which have very little opportunity in the surrounding area.

There is free public access to the site and surrounding area, which is well used for informal recreation.

Site first notified:	03/08/2016	Boundary last changed:	03/08/2016
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		

Denis J Vickers – Consultant Ecologist



Local (New Site)	
Site Reference:	PL14
Site Name:	Gale Street Organic Gardeners' Association
Summary:	An organically maintained allotment, providing good habitat for birds and reptiles
Grid ref:	TQ 477 844
Area (ha):	0.23
Borough(s):	Barking and Dagenham
Habitat(s):	Allotments, Roughland, Scattered trees, Scrub
Access:	Limited access (members only)
Ownership:	London Borough of Barking & Dagenham

Site Description:

An organically maintained allotment, dominated by tall herbs and rough grassland species such as false oat-grass (Arrhenatherum elatius), white campion (Silene latifolia) and curled dock (Rumex crispus).

Towards the north-east of the site, scattered trees and scrub are present, dominated by hawthorn (Crataegus monogyna), ash (Fraxinus excelsior) and various fruit trees. There is also a large area dominated by bramble (Rubus fruitcosus agg.) and field bindweed (Convolvulus arvensis) which provides suitable habitat for small mammals and various invertebrates.

The site overall provides good habitat for nesting birds, invertebrates, small mammals, amphibians and reptiles. The specially-protected slow worm is known to use this site.

The site can only be accessed by members of the Gale Street Organic Gardeners' Association.

Site first notified:	18/07/2016	Boundary last changed:	18/07/2016
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Local (New Site)	
Site Reference:	PL15
Site Name:	Panyers Gardens Wildlife Site
Summary:	A small wildlife site offering habitat for birds and possibly reptiles
Grid ref:	TQ 497 860
Area (ha):	0.02
Borough(s):	Barking and Dagenham
Habitat(s):	Scattered trees, Scrub, Semi-improved neutral grassland
Access:	Limited access
Ownership:	London Borough of Barking & Dagenham

Site Description:

A small wildlife site believed to originally be part of the adjacent allotment site. The site is dominated by semi-improved grassland, scrub and scattered trees and includes native species such as hawthorn (Crataegus monogyna), dogwood (Cornus sanguinea), ash (Fraxinus excelsior), false oat-grass (Arrhenatherum elatius) and Yorkshire fog (Holcus lanatus).

The site offers good opportunities for common nesting birds and perhaps a small population of slow-worm.

Site first notified:	06/09/2016	Boundary last changed:	06/09/2016
Citation last edited:	16/11/2016	Mayor Agreed:	
Defunct:	Ν		
Last Updated:	16/11/2016		



Appendix 5: Notable Species

Table abbreviations

% tetrads London = Percentage of tetrads covering the Greater London area in which the species is recorded by Burton (1983) in the Flora of the London Area

Recorders:

Denis = Denis Vickers

Paul = Paul Losse

Jess = Jess Smith

SINC/Proposed SINC Name	Site name and parcels	English Name	Scientific Name	Grid reference	Notes	% tetrads London	Recorders
The River Thames and tidal tributaries	16300/01 - Creekmouth Seawall	Sea aster	Aster tripolium	TQ4569681681	Abundant	0.00	Denis
The River Thames and tidal tributaries	16300/01 - Creekmouth Seawall	Sea couch	Elytrigia atherica	TQ4569681681	Frequent	0.00	Denis
The River Thames and tidal tributaries	16300/01 - Creekmouth Seawall	Wild celery	Apium graveolens	TQ4569681681	Frequent	0.00	Denis
The River Thames and tidal tributaries	16300/01 - Creekmouth Seawall	Sea beet	Beta vulgaris maritimus	TQ4569681681	Rare	7.75	Denis
The River Thames and tidal tributaries	16300/01 - Creekmouth Seawall	Sea club-rush	Bolboschoenus maritimus	TQ4569681681	Occasional	5.50	Denis
The River Thames and tidal tributaries	16300/04 - Salt Marsh	Sea club-rush	Bolboschoenus maritimus	TQ4723182069	Tidal zone in which dominant	5.50	Denis
The River Thames and tidal tributaries	16300/04 - Salt Marsh	Sea aster	Aster tripolium	TQ4723182069	Tidal zone in which dominant	0.00	Denis
The River Thames and tidal tributaries	16300/04 - Salt Marsh	Sea couch	Elytrigia atherica	TQ4723182069	Tidal zone in which dominant	0.00	Denis
The River Thames and tidal tributaries	16300/04 - Salt Marsh	Wild celery	Apium graveolens	TQ4723182069	Tidal zone in which dominant	0.00	Denis
The River Thames and tidal tributaries	16300/04 - Salt Marsh	Mud rush	Juncus geradii	TQ4723182069	Frequent - bare mud	0.00	Denis
The River Thames and tidal tributaries	16300/07 - Mudflats and salt marsh south of Fords	Sea aster	Aster tripolium	TQ4942881504	Small areas near seawall	0.00	Paul
The River Thames and tidal tributaries	16300/08 - River Thames bank Barking Riverside	Sea couch	Elytrigia atherica	TQ4747682138	Occasional	0.00	Paul
The River Thames and tidal tributaries	16300/08 - River Thames bank Barking Riverside	Dittander	Lepidium latifolia	TQ4725582159	Rare	1.50	Paul
The River Thames and tidal tributaries	16300/08 - River Thames bank Barking Riverside	Dittander	Lepidium latifolia	TQ4719682113	Rare	1.50	Paul
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Viper's-bugloss	Echium vulgare	TQ4564481867	Rare	2.50	Paul
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Cornflower	Centaurea cyanus	TQ4564181877	Rare	0.00	Paul
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Hare's-foot Clover	Trifolium arvense	TQ4559881813	Rare	8.50	Paul
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Hare's-foot Clover	Trifolium arvense	TQ4562481779	Rare	8.50	Paul
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The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Wild basil	Clinopodium vulgare	TQ4563781799	Rare	9.25	Paul
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Wild marjoram	Origanum vulgare	TQ4563781799	Rare	7.25	Paul
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Wild marjoram	Origanum vulgare	TQ4568981823	Rare	7.25	Paul
The River Thames and tidal tributaries	16302/01 - Barking Creek A13 to Thames	Sea aster	Aster tripolium	TQ4519282495	Occasional	0.00	Paul
The River Thames and tidal tributaries	16302/01 - Barking Creek A13 to Thames	Sea club-rush	Bolboschoenus maritimus	TQ4519282495	Occasional	5.50	Paul
The River Thames and tidal tributaries	16302/01 - Barking Creek A13 to Thames	Sea beet	Beta vulgaris maritimus	TQ4519282495	Rare	7.75	Paul
The River Thames and tidal tributaries	16302/01 - Barking Creek A13 to Thames	Wild celery	Apium graveolens	TQ4519282495	Occasional	0.00	Paul
The River Thames and tidal tributaries	16302/02 - Barking Creek Town Quay to A13	Sea aster	Aster tripolium	TQ4407883426	Clumped - on wrecked boat	0.00	Paul
Ripple Nature Reserve	16306/01 - Ripple Nature Reserve - Woodland	Sea club-rush	Bolboschoenus maritimus	TQ4671282726	Clumped - occasional	5.50	Denis
Ripple Nature Reserve	16306/01 - Ripple Nature Reserve - Woodland	Common centuary	Centaurium erythraea	TQ4671282726	Rare	11.25	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Common cornsalad	Valerianella locusta	TQ4663082140	Rare	0.00	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Common centuary	Centaurium erythraea	TQ4667682361	Occasional	11.25	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Viper's-bugloss	Echium vulgare	TQ4667682361	Frequent	2.50	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Yellow-wort	Blackstonia perfoliata	TQ4667682361	Frequent	2.25	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Common stork's-bill	Erodium cicutarium	TQ4663082140	Occasional	8.75	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Carline thistle	Carlina vulgaris	TQ4667682361	Occasional	2.25	Denis
Ripple Nature Reserve	16306/04 - Ripple Nature Reserve - Roughland	Slender thistle	Caduus tenuifolius	TQ4667682361	Occasional	1.50	Denis

Ripple Nature Reserve	16306/06 - Ripple Nature Reserve - Perimeter Ditches	Sea club-rush	Bolboschoenus maritimus	TQ4683782729	Rare	5.50	Denis
The Chase and Eastbrookend	16323/05 - Beam River - Chase Road to District Line	Curled pondweed	Potamogeton crispus	TQ5180885866	In water - occasional	12.00	Denis
The Chase and Eastbrookend	16323/06 - Beam River - YMCA to Chase Road	Curled pondweed	Potamogeton crispus	TQ5152886814	Occasional	12.00	Denis
The Chase and Eastbrookend	16519/01 - Eastbrookend Country Park, Fels Field - Main	Common centuary	Centaurium erythraea	TQ5080986179	Clumped - occasional	11.25	Denis
The Chase and Eastbrookend	16519/01 - Eastbrookend Country Park, Fels Field - Main	Hare's-foot Clover	Trifolium arvense	TQ5066386413	Clumped - frequent	8.50	Denis
The Chase and Eastbrookend	16519/01 - Eastbrookend Country Park, Fels Field - Main	Great horsetail	Equisetum telmateia	TQ5056386463	Clumped - abundant	?	Denis
The Chase and Eastbrookend	16519/04 - Eastbrookend Country Park, Fels Field - Small Seasonal Pond	Common spike-rush	Eleocharis palustris	TQ5071686649	Frequent	11.50	Denis
The Chase and Eastbrookend	16519/05 - Eastbrookend Country Park, Fels Field - Alder Pond	Lesser spearwort	Ranunculus flammula	TQ5059586594	Occasional	10.75	Denis
The Chase and Eastbrookend	16519/05 - Eastbrookend Country Park, Fels Field - Alder Pond	Common spike-rush	Eleocharis palustris	TQ5057286618	Occasional	11.50	Denis
The Chase and Eastbrookend	16520/02 - Eastbrookend Country Park - The Chase Front Lake	Sea club-rush	Bolboschoenus maritimus	TQ5092786254	Marginal - occasional	5.50	Denis
The Chase and Eastbrookend	16520/02 - Eastbrookend Country Park - The Chase Front Lake	Common spike-rush	Eleocharis palustris	TQ5092786254	Marginal - occasional	11.50	Denis
The Chase and Eastbrookend	16521/01 - Eastbrookend Country Park - Main Area	Buck's-horn plantain	Plantago coronopus	TQ5104885877	On paths - abundant	14.75	Denis
The Chase and Eastbrookend	16521/04 - Eastbrookend Country Park - Tom Thumb Lake	Hemp agrimony	Eupatorium cannabinum	TQ5086885708	Clump - island	9.50	Denis
The Chase and Eastbrookend	16521/04 - Eastbrookend Country Park - Tom Thumb Lake	Purple loosestrife	Lythrum salicaria	TQ5086885708	Marginal - occasional	14.00	Denis
The Chase and Eastbrookend	16521/04 - Eastbrookend Country Park - Tom Thumb Lake	Grey club-rush	Schoenoplectus lacustris	TQ5086885708	Marginal - occasional	4.00	Denis
The Chase and Eastbrookend	16529/01 - Chase Nature Reserve - Grazed Area (Main)	Purple loosestrife	Lythrum salicaria	TQ5155985877	Occasional	14.00	Denis
The Chase and Eastbrookend	16529/01 - Chase Nature Reserve - Grazed Area (Main)	Lesser spearwort	Ranunculus flammula	TQ5155985877	Wet areas - abundant	10.75	Denis

The Chase and Eastbrookend	16529/02 - Chase Nature Reserve - Grazed Area (East)	Water crowfoot	Ranunculus aquatilis	TQ5169186158	Wet area - occasional	3.25	Denis
The Chase and Eastbrookend	16529/02 - Chase Nature Reserve - Grazed Area (East)	Lesser spearwort	Ranunculus flammula	TQ5169186158	Wet area - frequent	10.75	Denis
The Chase and Eastbrookend	16529/02 - Chase Nature Reserve - Grazed Area (East)	Lesser spearwort	Ranunculus flammula	TQ5167385818	Wet area - abundant	10.75	Denis
The Chase and Eastbrookend	16529/02 - Chase Nature Reserve - Grazed Area (East)	Water crowfoot	Ranunculus aquatilis	TQ5167385818	Wet area - occasional	3.25	Denis
The Chase and Eastbrookend	16529/02 - Chase Nature Reserve - Grazed Area (East)	Sand spurrey	Spergularia rubra	TQ5165685899	Bare sandy area - rare	11.25	Denis
The Chase and Eastbrookend	16529/03 - Chase Nature Reserve - Black Poplar Woodland	Black poplar	Populus nigra	TQ5177486132	Several female (over mature) trees	8.00	Denis
The Chase and Eastbrookend	16529/04 - Chase Nature Reserve - Mint Pond	Lesser spearwort	Ranunculus flammula	TQ5158586094	Occasional	10.75	Denis
The Chase and Eastbrookend	16528/05 - Chase Nature Reserve - Hooks Hall Pond	Lesser reedmace	Typha angustifolia	TQ5144986050	Beds at pond edges - abundant	6.00	Denis
The Chase and Eastbrookend	16528/05 - Chase Nature Reserve - Hooks Hall Pond	Lesser spearwort	Ranunculus flammula	TQ5144986050	Rare	10.75	Denis
The Chase and Eastbrookend	16529/06 - Chase Nature Reserve - The Slack	Round-fruited rush	Juncus compressus	TQ5149485893	Edges - occasional	0.00	Denis
The Chase and Eastbrookend	16529/06 - Chase Nature Reserve - The Slack	Lesser spearwort	Ranunculus flammula	TQ5149485893	Edges - occasional	10.75	Denis
The Chase and Eastbrookend	16529/06 - Chase Nature Reserve - The Slack	Water crowfoot	Ranunculus aquatilis	TQ5149485893	Edges - rare	3.25	Denis
The Chase and Eastbrookend	16529/06 - Chase Nature Reserve - The Slack	Spotted medick	Medicago arabica	TQ5149485893	Drier areas - occasional	9.25	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Spotted medick	Medicago arabica	TQ5130385400	Clumped - occasional	9.25	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Common centuary	Centaurium erythraea	TQ5120285508	Rare	11.25	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Round-fruited rush	Juncus compressus	TQ5139785570	Clumped - abundant	0.00	Denis

The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Early hair-grass	Aira praecox	TQ5139785570	Occasional	15.00	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Marsh ragwort	Senecio aquaticus	TQ5122285531	Occasional	9.00	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Lesser spearwort	Ranunculus flammula	TQ5122685521	Wet places - dominant	10.75	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	Water crowfoot	Ranunculus aquatilis	TQ5131785387	Rare	3.25	Denis
The Chase and Eastbrookend	16529/08 - Chase Nature Reserve - Crow's-foot Marsh (North)	Lesser spearwort	Ranunculus flammula	TQ5153485607	Dominant	10.75	Denis
The Chase and Eastbrookend	16529/08 - Chase Nature Reserve - Crow's-foot Marsh (North)	Marsh ragwort	Senecio aquaticus	TQ5153485607	Occasional	9.00	Denis
The Chase and Eastbrookend	16529/09 - Chase Nature Reserve - Crow's-foot Marsh (Central Area)	Marsh ragwort	Senecio aquaticus	TQ5139085494	Frequent	9.00	Denis
The Chase and Eastbrookend	16529/09 - Chase Nature Reserve - Crow's-foot Marsh (Central Area)	Water crowfoot	Ranunculus aquatilis	TQ5139085494	Frequent	3.25	Denis
The Chase and Eastbrookend	16529/09 - Chase Nature Reserve - Crow's-foot Marsh (Central Area)	Round-fruited rush	Juncus compressus	TQ5139085494	Occasional	0.00	Denis
The Chase and Eastbrookend	16529/09 - Chase Nature Reserve - Crow's-foot Marsh (Central Area)	Lesser spearwort	Ranunculus flammula	TQ5139085494	Occasional	10.75	Denis
The Chase and Eastbrookend	16529/10 - Chase Nature Reserve - Crow's-foot Marsh (Railway Pond)	Water crowfoot	Ranunculus aquatilis	TQ5137185399	Frequent	3.25	Denis
The Chase and Eastbrookend	16529/10 - Chase Nature Reserve - Crow's-foot Marsh (Railway Pond)	Curled pondweed	Potamogeton crispus	TQ5137185399	Frequent	12.00	Denis
The Chase and Eastbrookend	16529/10 - Chase Nature Reserve - Crow's-foot Marsh (Railway Pond)	Lesser spearwort	Ranunculus flammula	TQ5137185399	Edge - occasional	10.75	Denis
The Chase and Eastbrookend	16529/11 - Chase Nature Reserve - South-East Parcel	Hare's-foot Clover	Trifolium arvense	TQ5142885424	Rare	8.50	Denis

The Chase and Eastbrookend	16529/11 - Chase Nature Reserve - South-East Parcel	Yellow-rattle	Rhinanthus minor	TQ5149185426	Rare - escape from railway banks	3.75	Denis
The Chase and Eastbrookend	16529/11 - Chase Nature Reserve - South-East Parcel	Common storksbill	Erodium cicutarium	TQ5163385619	Occasional	8.75	Denis
The Chase and Eastbrookend	16545/01 - Compound	Purple loosestrife	Lythrum salicaria	TQ5120085490	By fence - rare	14.00	Denis
The Chase and Eastbrookend	16545/01 - Compound	Vervain	Verbena officinalis	TQ5124285413	By fence - rare	6.75	Denis
The River Roding in Barking	16302/03 - Town Quay to Barking Railsides	Purple loosestrife	Lythrum salicaria	TQ4386083726		14.00	Paul
The River Roding in Barking	16302/03 - Town Quay to Barking Railsides	Purple loosestrife	Lythrum salicaria	TQ4363384222		14.00	Paul
Dagenham Breach & Lower Beam River in B & D	16320/01 - Dagenham Breach - Perimeter Open Space	Spotted medick	Medicago arabica	TQ4969682632		9.25	Paul
Dagenham Breach & Lower Beam River in B & D	16320/01 - Dagenham Breach - Perimeter Open Space	Common storksbill	Erodium cicutarium	TQ4972082613		8.75	Paul
Dagenham Breach & Lower Beam River in B & D	16323/01 - Dagenham Breach to River Thames	Purple loosestrife	Lythrum salicaria	TQ4997282958		14.00	Paul/Denis
Dagenham Breach & Lower Beam River in B & D	16323/01 - Dagenham Breach to River Thames	Purple loosestrife	Lythrum salicaria	TQ5010382575		14.00	Paul/Denis
Dagenham Breach & Lower Beam River in B & D	16323/01 - Dagenham Breach to River Thames	Purple loosestrife	Lythrum salicaria	TQ5011582651		14.00	Paul/Denis
Dagenham Breach & Lower Beam River in B & D	16323/01 - Dagenham Breach to River Thames	Sea aster	Aster tripolium	TQ4990281498		0.00	Paul/Denis
Beam Parklands	16533/03 - Beam Parklands - South-East	Hare's-foot Clover	Trifolium arvense	TQ5026284149	Patches - rare	8.50	Denis
Beam Parklands	16533/03 - Beam Parklands - South-East	Spotted medick	Medicago arabica	TQ5026284149	Patches	9.25	Denis
Beam Parklands	16533/03 - Beam Parklands - South-East	Hare's-foot Clover	Trifolium arvense	TQ5027083893	Patches - rare	8.50	Denis
Beam Parklands	16533/03 - Beam Parklands - South-East	Sea club-rush	Bolboschoenus maritimus	TQ5028183413	Occasional	5.50	Denis
Beam Parklands	16533/03 - Beam Parklands - South-East	Common spike-rush	Eleocharis palustris	TQ5028183413	Occasional	11.50	Denis
Beam Parklands	16533/03 - Beam Parklands - South-East	Common spike-rush	Eleocharis palustris	TQ5021283542	Occasional	11.50	Denis
Beam Parklands	16533/04 - Beam Parklands - North-East	Purple loosestrife	Lythrum salicaria	TQ5073384317	Occasional	14.00	Denis
Beam Parklands	16533/04 - Beam Parklands - North-East	Viper's-bugloss	Echium vulgare	TQ5026584295	Rare - planted	2.50	Denis

Beam Parklands	16533/04 - Beam Parklands - North-East	Wild marjoram	Origanum vulgare	TQ5026584295	Rare - planted	7.25	Denis
Beam Valley Country Park	16323/04 - Beam River - Stretch 4	Curled pondweed	Potamogeton crispus	TQ5120084784	Occasional	12.00	Denis
Beam Valley Country Park	16530/01 - Beam Valley Country Park - BDAS Fishing Lake	Spotted medick	Medicago arabica	TQ5079785033	Banks - frequent	9.25	Denis
Beam Valley Country Park	16530/02 - Beam Valley Country Park - Dagenham East Pond	Broadleaved pondweed	Potamogeton natans	TQ5046485033	Rare	13.50	Denis
Beam Valley Country Park	16530/03 - Beam Valley Country Park - Central Area	Spotted medick	Medicago arabica	TQ5108385158	Footpaths - dominant	9.25	Denis
Beam Valley Country Park	16530/03 - Beam Valley Country Park - Central Area	Common centuary	Centaurium erythraea	TQ5112385268	N-W of parcel - frequent	11.25	Denis
Beam Valley Country Park	16530/05 - Beam Valley Country Park - Dagenham East Land	Spotted medick	Medicago arabica	TQ5051485020	Abundant	9.25	Denis
Beam Valley Country Park	16530/06 - Beam Valley Country Park - Dragonfly Pond	Lesser spearwort	Ranunculus flammula	TQ5097585023	Frequent	10.75	Denis
Gores Brook and the Ship & Shovel Sewer	16311/02	Fennel-leaved pondweed	Potamogeton pectinatus	TQ4820282930	Abundant	10.00	Denis
Gores Brook and the Ship & Shovel Sewer	16311/02	Sea aster	Aster tripolium	TQ4820282930	Frequent	0.00	Denis
Gores Brook and the Ship & Shovel Sewer	16311/02	Dittander	Lepidium latifolia	TQ4820282930	Occasional	1.50	Denis
Gores Brook and the Ship & Shovel Sewer	16311/02	Sea club-rush	Bolboschoenus maritimus	TQ4820282930	Frequent	5.50	Denis
Barking Park and Loxford Water	16391/02 - Memorial Gardens	Buck's-horn plantain	Plantago coronopus	TQ4464085098	Rare	14.75	Jess
Barking Park and Loxford Water	16391/02 - Memorial Gardens	Common storksbill	Erodium cicutarium	TQ4453784908	Rare	8.75	Jess
Barking Park and Loxford Water	16391/05 - The Meadow	Spotted medick	Medicago arabica	TQ4502685219	Rare	9.25	Jess
Barking Park and Loxford Water		Kidney vetch	Anthyllis vulneraria	TQ4502685219	Introduced - rare	2.75	Jess
Mayes Brook and associated watercourses	16326/01 - Mayes Brook - River Road to River Riding	Fennel-leaved pondweed	Potamogeton pectinatus	TQ4526683056	Frequent	10.00	Denis
Mayes Brook and associated watercourses	16326/03 - Mayes Brook - Ripple Road to A13	Fennel-leaved pondweed	Potamogeton pectinatus	TQ4585183697	Dominant	10.00	Denis
Mayes Brook and associated watercourses	16326/03 - Mayes Brook - Ripple Road to A13	Sea club-rush	Bolboschoenus maritimus	TQ4585183697	Frequent	5.50	Denis
Mayes Brook and associated watercourses	16326/03 - Mayes Brook - Ripple Road to A13	Curled pondweed	Potamogeton crispus	TQ4585183697	Occasional	12.00	Denis

Mayes Brook and associated watercourses	16372/01 - Mayes Brook Ditch	Dittander	Lepidium latifolia	TQ4641883328	Clumped - frequent	1.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/05 - North Lake	Brooklime	Veronica beccabunga	TQ4625684606	Lakeside - frequent	13.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/05 - North Lake	Sea club-rush	Bolboschoenus maritimus	TQ4625684606	Lakeside - occasional	5.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/05 - North Lake	Hare's-foot Clover	Trifolium arvense	TQ4625684606	Clumped - frequent	8.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/06 - South Lake	Spotted medick	Medicago arabica	TQ4642684463	Edges - occasional	9.25	Denis
Mayesbrook Park Woodland and Floodplain	16392/06 - South Lake	Sea club-rush	Bolboschoenus maritimus	TQ4642684463	Edges - frequent	5.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/06 - South Lake	Rigid hornwort	Ceratophyllum demersum	TQ4642684463	In water - frequent	7.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/06 - South Lake	Spotted medick	Medicago arabica	TQ4632284402	Occasional	9.25	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Buck's-horn plantain	Plantago coronopus	TQ4625184817	Occasional	14.75	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Brooklime	Veronica beccabunga	TQ4618784812	Occasional	13.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Brooklime	Veronica beccabunga	TQ4621784864	Wet edges of brook - abundant	13.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Purple loosestrife	Lythrum salicaria	TQ4641185032	Occasional	14.00	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Purple loosestrife	Lythrum salicaria	TQ4630484892	Occasional	14.00	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Purple loosestrife	Lythrum salicaria	TQ4618784812	Occasional	14.00	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Sea club-rush	Bolboschoenus maritimus	TQ4625184817	Wet areas - rare	5.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Rigid hornwort	Ceratophyllum demersum	TQ4625184817	In brook - frequent	7.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Yellow-rattle	Rhinanthus minor	TQ4625184817	Rare	13.75	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Marsh bedstraw	Galium palustre	TQ4625184817	Rare	10.00	Denis

Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Sneezewort	Achillea ptarmica	TQ4626284868	Rare	13.50	Denis
Mayesbrook Park Woodland and Floodplain	16392/08 - Restoration Area	Sneezewort	Achillea ptarmica	TQ4618784812	Rare	13.50	Denis
Parsloes Park	16402/04 - Lakeside	Small-flowered cranesbill	Geranium pusillum	TQ4785284724	Rare	4.75	Paul & Jess
Wantz Lake	16474/01 - Crowlands Heath Golf Club pitch and putt	Wild marjoram	Origanum vulgare	TQ4955587357	Clumped - occasional	7.25	Paul
Scratton's Farm Ecopark	16350/01 - Scratton's Farm Ecopark	Spotted medick	Medicago arabica	TQ4809583278	Occasional	9.25	Denis
Barking Abbey Ruins and St Margaret's Churchyard	16447/01 - St Margaret's Churchyard & Barking Abbey Ruins	Buck's-horn plantain	Plantago coronopus	TQ4403083944	Rare	14.75	Paul
Pondfield Park	16423/01 - Park Area	Spotted medick	Medicago arabica	TQ4992884989	Frequent	9.25	Jess
Buzzard's-mouth Creek and Thames View Ditch	16704/01 - Buzzard's-mouth Creek - The Creek	Sea beet	Beta vulgaris maritimus	TQ4613982379	One plant - rare	7.75	Denis
Buzzard's-mouth Creek and Thames View Ditch	16704/02 - Buzzard's-mouth Creek - Habitat Creation Areas	Sea club-rush	Bolboschoenus maritimus	TQ4630982371	Occasional	5.50	Denis

Appendix 6: Invasive Species

Recorders:

Denis = Denis Vickers

Paul = Paul Losse

SINC/Proposed SINC Name	Site name and parcels	English Name	Scientific Name	Grid reference	Notes	Recorder
The River Thames and tidal tributaries	16301/01 - Creekmouth Barking Barrier	Giant hogweed	Heracleum mantegazzianum	TQ4570781958	One plant	Paul
The River Thames and tidal tributaries	16302/02 - Barking Creek Town Quay to A13	Japanese knotweed	Fallopia japonica	TQ4432183174	Clump	Paul
Ripple Nature Reserve	16306/01 - Ripple Nature Reserve - Woodland	Giant hogweed	Heracleum mantegazzianum	TQ4672782685	Clumped - occasional	Denis
Ripple Nature Reserve	16306/01 - Ripple Nature Reserve - Woodland	Cotoneaster	Cotoneaster sp.	TQ4672082537	Rare but spreading	Denis
The Chase and Eastbrookend	16323/05 - Beam River - Chase Road to District Line	Himalayan balsam	Impatiens glandulifera	TQ5180885866	Frequent	Denis
The Chase and Eastbrookend	16323/05 - Beam River - Chase Road to District Line	Japanese knotweed	Fallopia japonica	TQ5177086215	Clump	Denis
The Chase and Eastbrookend	16323/05 - Beam River - Chase Road to District Line	Japanese knotweed	Fallopia japonica	TQ5184986113	Clump	Denis
The Chase and Eastbrookend	16323/06 - Beam River - YMCA to Chase Road	Himalayan balsam	Impatiens glandulifera	TQ5152886814	Frequent	Denis
The Chase and Eastbrookend	16323/06 - Beam River - YMCA to Chase Road	Japanese knotweed	Fallopia japonica	TQ5170386355	Clump	Denis
The Chase and Eastbrookend	16519/02 - Eastbrookend Country Park, Fels Field - Damp Grassland	Japanese knotweed	Fallopia japonica	TQ5079886148	Clump - small	Denis
The Chase and Eastbrookend	16519/05 - Eastbrookend Country Park, Fels Field - Alder Pond	New Zealand pigmyweed	Crassula helmsii	TQ5056886590	Abundant	Denis
The Chase and Eastbrookend	16520/02 - Eastbrookend Country Park - The Chase Front Lake	Japanese rose	Rosa rugosa	TQ5098786130	Rare	Denis
The Chase and Eastbrookend	16521/03 - Eastbrookend Country Park - Eastbrook Grove	Japanese knotweed	Fallopia japonica	TQ5085285835	Clump - small	Denis
The Chase and Eastbrookend	16529/01 - Chase Nature Reserve - Grazed Area (Main)	New Zealand pigmyweed	Crassula helmsii	TQ5155985877	Severe - dominant - wet areas	Denis
The Chase and Eastbrookend	16529/02 - Chase Nature Reserve - Grazed Area (East)	New Zealand pigmyweed	Crassula helmsii	TQ5177485950	Wet areas - abundant	Denis
The Chase and Eastbrookend	16529/03 - Chase Nature Reserve - Black Poplar Woodland	Himalayan balsam	Impatiens glandulifera	TQ5177486132	Near Beam River - occasional	Denis

The Chase and Eastbrookend	16529/03 - Chase Nature Reserve - Black Poplar Woodland	Japanese knotweed	Fallopia japonica	TQ5177486132	Two clumps near Beam River	Denis
The Chase and Eastbrookend	16529/04 - Chase Nature Reserve - Mint Pond	New Zealand pigmyweed	Crassula helmsii	TQ5158586094	Severe problem - dominant	Denis
The Chase and Eastbrookend	16528/05 - Chase Nature Reserve - Hooks Hall Pond	New Zealand pigmyweed	Crassula helmsii	TQ5144986050	Severe problem - abundant	Denis
The Chase and Eastbrookend	16528/05 - Chase Nature Reserve - Hooks Hall Pond	Floating pennywort	Hydrocotyle ranunculoides	TQ5144986050	Edges - frequent	Denis
The Chase and Eastbrookend	16529/06 - Chase Nature Reserve - The Slack	New Zealand pigmyweed	Crassula helmsii	TQ5149485893	Edges - dominant in places	Denis
The Chase and Eastbrookend	16529/07 - Chase Nature Reserve - Crow's-foot Marsh (excluding wet depressions)	New Zealand pigmyweed	Crassula helmsii	TQ5139785570	Clumped, wet places - dominant	Denis
The Chase and Eastbrookend	16529/08 - Chase Nature Reserve - Crow's-foot Marsh (North)	New Zealand pigmyweed	Crassula helmsii	TQ5153485607	Dominant	Denis
The Chase and Eastbrookend	16529/09 - Chase Nature Reserve - Crow's-foot Marsh (Central Area)	New Zealand pigmyweed	Crassula helmsii	TQ5139085494	Dominant	Denis
The Chase and Eastbrookend	16529/10 - Chase Nature Reserve - Crow's-foot Marsh (Railway Pond)	New Zealand pigmyweed	Crassula helmsii	TQ5137185399	Edges - frequent	Denis
The River Roding in Barking	16302/03 - Town Quay to Barking Railsides	Himalayan balsam	Impatiens glandulifera	TQ4368184219		Paul
The River Roding in Barking	16302/05 - Reedbed (North)	Himalayan balsam	Impatiens glandulifera	TQ4353884677	Abundant	Paul
Furze House Farm	16490/01 - Furze Farm West	Giant hogweed	Heracleum mantegazzianum	TQ4847990735	Small patch	Paul
Dagenham Breach & Lower Beam River in B & D	16320/01 - Dagenham Breach - Perimeter Open Space	Giant hogweed	Heracleum mantegazzianum	TQ4933382617		Paul
Dagenham Breach & Lower Beam River in B & D	16321/01 - Dagenham Breach - West Lake	Giant hogweed	Heracleum mantegazzianum	TQ4952482604		Paul
Beam Parklands	16323/03 - Beam River - Stretch 3	Japanese knotweed	Fallopia japonica	TQ5053583633	Several clumps	Denis
Beam Parklands	16323/03 - Beam River - Stretch 3	Himalayan balsam	Impatiens glandulifera	TQ5053583633	Edge	Denis
Beam Parklands	16354/01 - Wantz Stream	Himalayan balsam	Impatiens glandulifera	TQ5020083741	Frequent	Denis
Beam Parklands	16534/01 - Beam Parklands - South-West	Japanese knotweed	Fallopia japonica	TQ5016383929	Clump - small	Denis
Beam Valley Country Park	16323/04 - Beam River - Stretch 4	Himalayan balsam	Impatiens glandulifera	TQ5120084784	Frequent	Denis

Beam Valley Country Park	16530/03 - Beam Valley Country Park - Central Area	Japanese knotweed	Fallopia japonica	TQ5097985109	Clump	Denis
Beam Valley Country Park	16530/03 - Beam Valley Country Park - Central Area	Japanese knotweed	Fallopia japonica	TQ5120085284	Clump	Denis
Beam Valley Country Park	16530/04 - Beam Valley Country Park - West Beam Pond	Himalayan balsam	Impatiens glandulifera	TQ5123185109	Occasional	Denis
Beam Valley Country Park	16530/05 - Beam Valley Country Park - Dagenham East Land	Japanese knotweed	Fallopia japonica	TQ5041585022	Clump	Denis
Beam Valley Country Park	16530/05 - Beam Valley Country Park - Dagenham East Land	Japanese knotweed	Fallopia japonica	TQ5049285047	Clump	Denis
Beam Valley Country Park	16530/05 - Beam Valley Country Park - Dagenham East Land	Japanese knotweed	Fallopia japonica	TQ5052785057	Clump	Denis
Beam Valley Country Park	16530/05 - Beam Valley Country Park - Dagenham East Land	Japanese knotweed	Fallopia japonica	TQ5053785064	Clump	Denis
Gores Brook and the Ship & Shovel Sewer	16311/01	Himalayan balsam	Impatiens glandulifera	TQ4803182401	Reedbed - abundant	Denis
Gores Brook and the Ship & Shovel Sewer	16311/02	Himalayan balsam	Impatiens glandulifera	TQ4820282930	Frequent	Denis
Gores Brook and the Ship & Shovel Sewer	16311/03	Himalayan balsam	Impatiens glandulifera	TQ4878983221	Abundant	Denis
Gores Brook and the Ship & Shovel Sewer	16311/04	Himalayan balsam	Impatiens glandulifera	TQ4869783936	Dominant	Denis
Gores Brook and the Ship & Shovel Sewer	16311/05	Himalayan balsam	Impatiens glandulifera	TQ4864284440	Dominant	Denis
Barking Park and Loxford Water	16449/01 - Loxford Water	Nuttall's waterweed	Elodea nuttallii	TQ4469285155	Abundant	Paul
Mayes Brook and associated watercourses	16372/01 - Mayes Brook Ditch	Japanese knotweed	Fallopia japonica	TQ4626983361	Severe, dominant - entire ditch	Denis
Wantz Lake	16474/01 - Crowlands Heath Golf Club pitch and putt	Japanese knotweed	Fallopia japonica	TQ4942487405	Clump	Paul
Scratton's Farm Ecopark	16350/01 - Scratton's Farm Ecopark	Giant hogweed	Heracleum mantegazzianum	TQ4820883277	Clumped - frequent	Denis

Appendix 7: Photographs













Photo 14: Square west of Gatward Place

Photo 15: Pond south of Gatward Place







Photo 22: Mayesbrook Park Woodland and Floodplain – new swale





Photo 23: Mayesbrook Park Woodland and Floodplain – Looking across new route of the Mayes Brook

Photo 24: Mayesbrook Park Woodland and Floodplain - Plantation



Photo 25: Mayesbrook Park Woodland and Floodplain – looking north over North Lake





Photo 26: Ripple Nature Reserve – viper'sbugloss

Photo 27: Ripple Nature Reserve – Yellow-wort







Photo 30: Beam Valley (Beam Parklands) semi-improved neutral grassland









Photo 32: Beam Valley (Beam Parklands) – new swale with abundant marginal vegetation

Photo 33: Beam Valley (Beam Parklands) – River Beam – branched bur-reed and curled pondweed





Denis J Vickers – Consultant Ecologist





