

**WANSTEAD FLATS,
EPPING FOREST**

PRELIMINARY ECOLOGICAL APPRAISAL

Final Document

July 2019

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species




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ECOSA Quality Assurance Record

The Preliminary Ecological Appraisal has been undertaken with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). This report has been produced in accordance with the CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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**WANSTEAD FLATS,
EPPING FOREST**

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Table of Contents

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	3
1.1 Background.....	3
1.2 The Site	3
1.3 Aims and Scope of Report.....	3
1.4 Site Proposals.....	4
2.0 METHODS.....	5
2.1 Introduction	5
2.2 Zone of Influence	5
2.3 Scoping.....	5
2.4 Desk Study	5
2.4.1 City of London Corporation as Conservators of Epping Forest.....	5
2.4.2 Multi-Agency Geographic Information for the Countryside.....	6
2.4.3 Other Sources of Information	6
2.5 Field Survey.....	6
2.5.1 Phase 1 Habitat Survey.....	7
2.5.2 Protected and Notable Species Appraisal	7
2.6 Field Survey Details.....	9
2.7 Limitations.....	9
3.0 BASELINE ECOLOGICAL CONDITIONS.....	11
3.1 Introduction	11
3.2 Statutory and Non-statutory Designated Sites	11
3.2.1 Statutory Designated Sites	11
3.2.2 Non-Statutory Designated Sites	11
3.3 Habitats.....	11
3.3.1 Desktop Study Results	11
3.3.2 Field Survey Results.....	12
3.3.3 Summary	13
3.4 Notable and Legally Protected Species	14
3.4.1 Bats.....	14
3.4.2 Otter.....	15
3.4.3 Badger	15
3.4.4 Hazel Dormouse	15
3.4.5 Water Vole	16
3.4.6 Birds.....	16
3.4.7 Reptiles.....	17
3.4.8 Great Crested Newt	18
3.4.9 Invertebrates.....	18
3.4.10 Other Relevant Species.....	19
3.5 Summary of Key Ecological Features	19
4.0 POTENTIAL ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS	20
4.1 Introduction	20
4.2 Designated Sites	20
4.2.1 Potential Constraints.....	20
4.2.2 Potential Mitigation and Compensation Measures	20
4.2.3 Enhancement Opportunities	21

4.3	Habitats.....	21
4.3.1	<i>Potential Constraints</i>	21
4.3.2	<i>Potential Mitigation and Compensation Measures</i>	21
4.3.3	<i>Enhancement Opportunities</i>	21
4.4	Bats.....	21
4.4.1	<i>Potential Constraints</i>	21
4.4.2	<i>Potential Mitigation and Compensation Measures</i>	22
4.4.3	<i>Enhancement Opportunities</i>	22
4.5	Badger	22
4.5.1	<i>Potential Constraints</i>	22
4.5.2	<i>Potential Mitigation and Compensation Measures</i>	22
4.5.3	<i>Enhancement Opportunities</i>	22
4.6	Birds.....	22
4.6.1	<i>Potential Constraints</i>	22
4.6.2	<i>Potential Mitigation and Compensation Measures</i>	23
4.6.3	<i>Enhancement Opportunities</i>	23
4.7	Reptiles.....	23
4.7.1	<i>Potential Constraints</i>	23
4.7.2	<i>Potential Mitigation and Compensation Measures</i>	23
4.7.3	<i>Enhancement Opportunities</i>	23
4.8	Other Relevant Species.....	24
4.8.1	<i>Potential Constraints</i>	24
4.8.2	<i>Potential Mitigation and Compensation Measures</i>	24
4.8.3	<i>Enhancement Opportunities</i>	24
5.0	CONCLUSION.....	25
5.1	Conclusion.....	25
5.2	Updating Site Survey.....	25
6.0	REFERENCES	26
Map 1	Site Location Plan	
Map 2	Phase 1 Habitat Map	
Appendix 1	Statutory Designated Sites within the Desktop Study Area	
Appendix 2	Sites Designated for Nature Conservation	
Appendix 3	Wanstead Flats and Bush Wood SINC Citation Extract	
Appendix 4	Appraisal Criteria for Bats	
Appendix 5	Relevant Legislation	

EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal of Wanstead Flats, Epping Forest. The purpose of the appraisal is to assess the site's ecological baseline and identify constraints and opportunities associated with delivering large-scale concerts for up to 50,000 people at the site in order to inform their decision process. The event is planned for September. The site is located in Greater London and comprises part of an extensive open grassland managed as sports pitches with boundary vegetation. The main findings of the Preliminary Ecological Appraisal are:

- The site is designated as being part of the wider Wanstead Flats and Bush Wood Site of Importance for Nature Conservation (SINC) of metropolitan importance. However, the site itself comprises a tree line and improved grassland the majority of which is managed as sports fields and does not support the habitats for which the SINC is designated. The site has been assessed as having suitability to support tree roosting bats, foraging and commuting bats, breeding birds, widespread species of reptile, European hedgehog and common toad associated with the tussocky grassland margins and tree line. In the absence of suitable mitigation in respect of bats, widespread species of reptile, European hedgehog and common toad these species could present an ecological constraint to the proposed event.
- Mitigation recommendations include minimising visitors accessing the wider SINC, the erection of Heras fencing (or similar) around the event boundary, maintaining a minimum buffer of 15 metres between the tree line and tussocky grassland along the north-eastern site boundary and event. Further consideration and assessment should be given to species identified and above designated habitats once the layout, timing and access routes of the future event have been established.
- Additionally, recommendations have been made for a sensitive lighting scheme to minimise potential disturbance impacts on foraging and commuting bats. Further consideration will need to be given to bats once the noise levels of any future event are known in order to ensure the species groups will not be disturbed. At this stage, it is considered that subsequent to the findings of such work, there is scope to incorporate suitable mitigation measures in order to allow the event to accord with wildlife legislation.
- If the site boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey

work may be required, particularly if the event does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by City of London Corporation as Conservators of Epping Forest to undertake a Preliminary Ecological Appraisal to identify the ecological constraints and opportunities associated with delivering large-scale concerts at Wanstead Flats, Epping Forest, London E12 5DL (hereafter referred to as the site).

1.2 The Site

The site is located in London, Greater London, located approximately 1.5 kilometres south of Wanstead, Greater London, centred on National Grid Reference (NGR) TQ 4142 8651 (**Map 1**). The Phase 1 habitat map (**Map 2**) depicts the boundary of the site.

The site measures approximately six hectares and comprises part of an extensive open grassland with boundary vegetation along the north-eastern site boundary. The majority of the site is managed as sports pitches. The site is bounded by A116 Aldersbrook Road to the north-east, the wider Wanstead Flats site to the west, east and south with the car park for the site and Alexandra Lake also situated to the east.

The wider area is dominated by an urbanised landscape associated with Greater London. Areas of open green space are located within proximity to the site include other parts of Epping Forest to the north-west of the site, a number of golf courses and Valentines Park to the north-east of the site.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out during June 2019. The objectives of the appraisal are:

- To provide preliminary baseline information on the current habitats, the suitability of the site to support notable and protected species, and evidence of notable and protected species both on site and in the immediate vicinity of the site, where relevant;
- To identify the proximity of any statutory sites designated for nature conservation importance;
- To identify the likely ecological constraints associated with the proposals;

- To identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'¹;
- To identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
- To identify the opportunities offered by the proposals to deliver ecological enhancement

1.4 Site Proposals

City of London Corporation as Conservators of Epping Forest have been approached by event organisers to hold concert style events on land under their ownership. The charitable trust are currently considering hosting a large-scale concert for up to 50,000 people at the site. The event is provisionally planned for a three-day weekend in September 2020.

¹ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

2.0 METHODS

2.1 Introduction

This section details the methods employed during the Preliminary Ecological Appraisal. Any significant limitations to the survey methods are also considered.

2.2 Zone of Influence

To define the total extent of the study area for this appraisal (Zone of Influence²), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the appraisal (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals. Determination of the Zone of Influence is an iterative process and will be regularly reviewed and amended as the project evolves.

2.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 3.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the potential ecological constraints and mitigation measures section (Section 4.0) of this report.

2.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this appraisal.

2.4.1 City of London Corporation as Conservators of Epping Forest

City of London Corporation as Conservators of Epping Forest provided data on 24th June 2019 which included the SINC citation for the site, records of legally protected and notable species (flora and fauna) within the local area, including Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and as listed in the England Biodiversity List (**Appendix 5**).

² The Zone of Influence, as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

2.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2019) was reviewed on 21st June 2019 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European protected species to be present in the local area.

2.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

2.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and comprise a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including boundary features. Habitats described in Section 3.0, have been mapped (**Map 2**) and photographs provided, where relevant. For ease of reference, Target Notes (TN) depict locations of particular ecological interest or features which are too small to map.

2.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010). This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species³ encountered as an incidental result of the survey recorded.

2.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as holes, cracks, splits, loose bark and ivy cladding for trees.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 3**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

³ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable

for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 2.4.3), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species⁴, specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

2.6 Field Survey Details

The field survey was carried out by Richard Chilcott, Principal Ecologist of ECOSA and Lucy Bartlett, Ecologist of ECOSA, on 19th June 2019. The weather conditions were mild and overcast with 100% cloud cover, an ambient temperature of 18°C and a gentle breeze.

During the survey, the surveyor was equipped with, 10x40 binoculars, a high powered torch and a digital camera.

2.7 Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of

⁴ LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

The desk study data originates from City of London Corporation as Conservators of Epping Forest. A more exhaustive desktop study was not undertaken at this stage. The data search results cannot be taken as an exhaustive list of species present in the area.

A large proportion of the desk study data is historic and, therefore, the purposes of this report only the most recent and relevant records have been referenced within this report.

Given the large number of trees present along the site boundaries, it was not possible to fully inspect each tree for bat roosting suitability. Therefore, potential bat roosting features may be present which were not identified during the survey.

Not all potential bat roosting features are accessible to the surveyor, e.g. gaps beneath roof materials or holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

3.0 BASELINE ECOLOGICAL CONDITIONS

3.1 Introduction

This section details the results of the Preliminary Ecological Appraisal undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey.

3.2 Statutory and Non-statutory Designated Sites

3.2.1 Statutory Designated Sites

There is a single statutory designated sites of nature conservation interest situated within one kilometre of the site boundary. This is:

- Epping Forest (SSSI) – Located approximately 720 metres west of the site and designated for supporting notable habitats, invertebrate assemblages and amphibians and breeding birds.

Further details of the statutory designations listed above are provided in **Appendix 1**.

3.2.2 Non-Statutory Designated Sites

The site is designated as being part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance for supporting notable habitats including acid grassland, ancient woodland, ponds and scrub.

Further information on sites designated for nature conservation are provided in **Appendix 2** with an extract of the citation provided in **Appendix 3**.

3.3 Habitats

3.3.1 Desktop Study Results

The site is part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance, which is partly designated for its botanical importance, and, therefore is considered to be of high ecological value.

Consultation with MAGIC also identified the site as being the Habitat of Principal Importance wood-pasture and parkland. MAGIC also identified the reliability of the interpretation to be “medium”.

No recent notable plant species have been recorded at the site based on the information provide by City of London Corporation as Conservators of Epping Forest.

3.3.2 Field Survey Results

Habitats within the site are shown on the Phase 1 Habitat Map (**Map 2**), Target Notes and photographs have been provided as appropriate, Target Notes are cross referenced to **Map 2**. Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Tree Line

A number of scattered London Plane *Platanus x hispanica* form a tree line along the north-eastern site boundary (**Figure 1**). Understorey species present include hawthorn *Crataegus monogyna*, plum *Prunus* species, sycamore *Acer pseudoplatanus*, copper beech *Fagus sylvatica* form *purpurea*, apple *Malus* species, elder *Sambucus nigra* sapling, pedunculate oak *Quercus robur* sapling and holly *Ilex aquifolium* sapling.



Figure 1: Tree line along the north-eastern site boundary

Improved Grassland

The majority of the site comprises regularly mown improved grassland with perennial rye-grass *Lolium perenne* being the dominant grass species (**Figure 2**). The grassland is managed as sports pitches. Other species present include red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus*, ribwort plantain *Plantago lanceolata*, common ragwort *Senecio jacobaea*, dandelion *Taraxacum officinale* aggregate, red clover *Trifolium pratense*, black medick *Medicago lupulina*, bristly oxtongue *Helminthotheca echinoides*, cat's-ear *Hypochaeris radicata*, cleavers *Galium aparine*, herb-Robert *Geranium robertianum*, yarrow *Achillea millefolium* and daisy *Bellis perennis*.

A strip of tussocky grassland is present along the north-eastern site boundary (**Figure 3**) and the northern section of the south-eastern site boundary (**Figure 4**). The species composition is largely the same with additional species recorded including wall barley *Hordeum murinum*, soft brome *Bromus hordeaceus*, false-oat grass *Arrhenatherum elatius*, barren brome *Bromus sterilis*, creeping bent *Agrostis stolonifera*, soft rush *Juncus effusus* and pendulous sedge *Carex pendula*. Additional herbaceous species

include broad-leaved dock *Rumex obtusifolius*, dove's-foot crane's-bill *Geranium molle*, common mallow *Malva Sylvestris*, spear thistle *Cirsium vulgare*, common mugwort *Artemisia vulgaris*, green alkanet *Pentaglottis sempervirens* and wood avens *Geum urbanum*. Ivy *Hedera helix* and bramble *Rubus fruticosus* aggregate are also present within the tussocky grassland areas.



Figure 2: Improved grassland viewed to the north-west



Figure 3: Tussocky improved grassland along the north-eastern site boundary



Figure 4: Tussocky improved grassland along the northern part of the south-eastern site boundary

3.3.3 Summary

Wanstead Flats and Bush Wood SINC of metropolitan importance is partly designated for its botanical importance, and, therefore is considered to be of high ecological value. The site has also been identified as being the habitat of principal importance wood-pasture and parkland on the MAGIC website. However, given that the site comprises a tree line and improved grassland of which the majority is regularly mown and managed as sports fields the site does not comprise wood-pasture or parkland. None of the notable habitats for which the SINC is designated were recorded within the site itself with only common plant species recorded during the field survey. The mature tree line and tussocky improved grassland being of relatively greater ecological interest in the context of the site.

3.4 Notable and Legally Protected Species

3.4.1 Bats

Desktop Study Results

No granted European Protected Species Mitigation (EPSM) licences in respect of bats were identified within a two kilometre radius of the site.

Records common pipistrelle *Pipistrellus pipistrellus*, serotine *Eptesicus serotinus* and noctule *Nyctalus noctula* were returned from 1985 within the Wanstead Flats site and the eastern Alexandra Lakes site. More recently a single record of noctule was recorded in 2010 within Alexandra Lakes site.

Tree Assessment

Given the large number of trees present along the north-eastern site boundary, it was not possible to fully inspect each tree for bat roosting suitability during the survey undertaken. The majority of the trees were of the size and age that they may have developed features suitable for roosting bats if not immediately visible from the ground level.

A mature London plane (TN1) was recorded as supporting cavities on the north-eastern and south-western aspect and was therefore assessed as having suitability to support roosting bats (**Figure 5** and **Figure 6**).

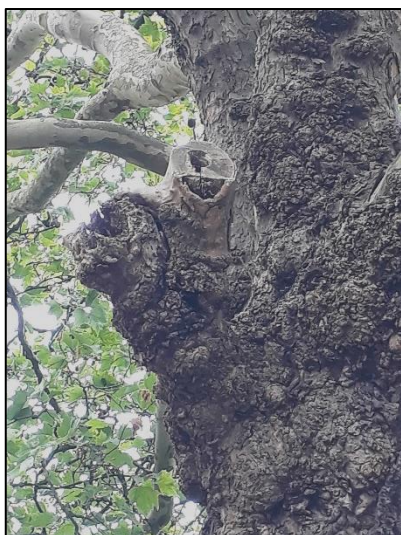


Figure 5: TN1 London plane with cavity



Figure 6: TN1 London plane with cavity

Foraging and Commuting Habitat

The tree line and tussocky grassland within the site offer good foraging and commuting habitat for bats. These features also allow connectivity into the wider landscape including blocks of woodland and open green space. Given the extent of suitable

habitats in the vicinity of the site, it is likely that the site is used by bats as part of a larger foraging and commuting route. Overall, the site is assessed as having moderate suitability to support foraging and commuting bats.

3.4.2 Otter

Desktop Study Results

No granted EPSM licences in relation to otter *Lutra lutra* were identified within two kilometres of the site boundary. However, this does not confirm the absence of the species in the local area.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of otter within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site or immediately adjacent habitat does not support suitable habitat for resting otter or for holt creation. The habitat on site is unsuitable for otter and therefore the species is not considered further in this report.

3.4.3 Badger

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of badger *Meles meles* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

No evidence of foraging or resident badger was recorded during the survey undertaken. The site provides limited suitability to support resident badger given the lack of sloping topography which the species requires for sett construction. The site provides suitable foraging habitat for the species in the form of the improved grassland. Suitable habitat for badger is present in the wider area in the form of woodland blocks, and grassland fields.

3.4.4 Hazel Dormouse

Desktop Study Results

No granted EPSM licences in respect of hazel dormouse *Muscardinus avellanarius* were identified within a two kilometre radius of the site.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of hazel dormouse within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The habitats within the site are considered unsuitable to support hazel dormouse. The tree line along the north-eastern site boundary is species-poor and lacks any significant shrub layer, and, therefore lacking the continuum of food resources which the species requires at different times of the year. The site and immediately surrounding area is isolated from any further suitable habitat, without the connectivity into the wider area that the species requires for dispersal, it is highly unlikely that the site supports the species. The habitat on site is unsuitable for hazel dormouse and therefore the species is not considered further in this report.

3.4.5 Water Vole

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of water vole *Arvicola amphibius* within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The habitat within the site is unsuitable to support water vole without the presence of sloping banks adjacent to water in which to burrow and, therefore, the species is not considered further in this report.

3.4.6 Birds

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced records of 43 notable bird species within the local area. Of these species, the red listed⁵ song thrush *Turdus philomelos* and the amber listed⁶ meadow pipit *Anthus pratensis* are the most likely to breed on site. Skylark *Alauda arvensis* are known to breed within the wider Wanstead Flats site within rough grassland. A number of

⁵ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Red List criteria include species which are: globally threatened; have been subject to historical population decline in UK during 1800–1995; are in severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period, or; subject to severe (at least 50%) contraction of UK breeding range over last 25 years, or longer-term period.

⁶ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Amber list criteria include species which are: in unfavourable conservation status in Europe; subject to historical population decline during 1800–1995, but recovering; subject to moderate (25-49%) decline in UK breeding population or contraction of UK breeding range over last 25 years, or the longer-term period; subject to moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period; rare breeders (1–300 breeding pairs in UK); rare non-breeders (less than 900 individuals), or; internationally important species with at least 20% of European breeding or non-breeding population in UK.

territories known to be within the vicinity of the site, the nearest of which is located approximately 170 metres south-east of the site.

A number of wintering bird records were also returned by City of London Corporation as Conservators of Epping Forest as previously being recorded within the Wanstead Flats site including the red listed redwing *Turdus iliacus* and woodcock *Scolopax rusticola* and the amber listed great black-backed gull *Larus marinus*, green sandpiper *Tringa ochropus*, gadwall *Anas strepera*, mallard *Anas platyrhynchos*, redshank *Tringa tetanus*, shelduck *Tadorna tadorna*, shoveler *Anas clypeata*, snipe *Gallinago gallinago*, teal *Anas crecca* and wood sandpiper *Tringa glareola*,

Field Survey Results

Carrion crow *Corvus corone* and blackbird *Turdus merula* were recorded during the survey. The site contains habitat suitable for supporting breeding birds in the form of the tree lines. A variety of suitable habitats for supporting a range of bird species are also present in the vicinity of the site in the form of woodland blocks, rough grassland and residential gardens.

The site contains limited suitability for wintering birds being subject to regular disturbance by recreational users including dog walkers. The site is likely to support only small numbers of wintering species. Therefore, wintering birds are not considered further in this report.

3.4.7 Reptiles

Desktop Study Results

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of reptiles within the local area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The majority of the site is subject to regular mowing and is of insufficient structure, providing poor suitability for supporting widespread species of reptiles. The tussocky grassland along the north-eastern and south-western site boundaries are subject to less management and have developed a long sward height, providing suitability for supporting foraging, sheltering and basking reptiles. The wider Wanstead Flats also has suitability for supporting widespread species of reptile in the form of areas of tussocky grassland although these areas are not well connected to suitable habitat within the site itself.

3.4.8 Great Crested Newt

Desktop Study Results

No granted EPSM licences in respect of great crested newt *Triturus cristatus* were identified within a two kilometre radius of the site. However, this does not confirm the absence of the species in the local area.

Consultation with City of London Corporation as Conservators of Epping Forest produced no records of great crested newt within the local area, however, this does not confirm the absence of the species. It is understood that a targeted survey of Alexandra Lake was undertaken in 1999 and no great crested newt were recorded.

A review of online 1:25,000 OS mapping and aerial imagery concluded that there is a single waterbody present within a 500 metre radius of the site, located approximately 45 metres south-east of the site.

Field Survey Results

The site contains no waterbodies, and, therefore the site is unsuitable to support breeding great crested newt. The site provides generally sub-optimal terrestrial habitat for supporting terrestrial great crested newt with the vast majority of the site comprising regularly mown grassland. However, the tussocky grassland along the north-eastern and south-eastern site boundaries provide suitable foraging and refuge opportunities for the species during their terrestrial life stage. Great crested newt are found within terrestrial habitats of up to 500 metres from their breeding ponds (English Nature, 2001). The absence of a network of ponds in the surrounds reduces the likelihood of great crested newt utilising the waterbody located to the south-west of the site and therefore the terrestrial habitat afforded by the site. The habitat within the site is unsuitable for great crested newt, and, therefore the species is not considered further in this report.

3.4.9 Invertebrates

Desktop Study Results

A number of notable terrestrial invertebrates were returned by City of London Corporation as Conservators of Epping Forest within the local area, including a record of the Species of Principal Importance⁷ stag beetle *Lucanus cervus* from 2009. The majority of records related to Lepidoptera (butterflies and moths) and Hymenoptera (bees, wasps and ants).

⁷ As listed on NERC Act 2006

Field Survey Results

The site offers suitable habitat for supporting invertebrates in the form of the tree lines and improved grassland. The site largely supports common and widespread species which are unlikely to support any rare or notable assemblages of invertebrates.

3.4.10 Other Relevant Species

Desktop Study Results

Four records of European hedgehog *Erinaceus europaeus* were returned by City of London Corporation as Conservators of Epping Forest within the site and local area. Three records of common toad *Bufo bufo* were recorded within the local area in 1998.

Field Survey Results

No evidence of any other relevant species was recorded within the site during the survey undertaken. The site supports suitable habitat for European hedgehog in the form of the tussocky grassland.

3.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- Habitat of principal importance wood-pasture and parkland;
- Tree line and tussocky grassland along the north-eastern and south-eastern site boundaries;
- Suitability to support tree roosting bats;
- Suitability to support foraging and commuting bats;
- Suitability to support foraging badger;
- Suitability to support breeding birds;
- Suitability to support widespread species of reptiles; and
- Suitability to support European hedgehog and common toad.

4.0 POTENTIAL ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

4.1 Introduction

This section identifies potential constraints of holding a large-scale concert event on the site and is based on the key ecological features as identified in Section 3.0 and summarised in Paragraph 3.5. Recommendations are included for mitigation and compensation based on the identified ecological constraints, and opportunities for enhancement are discussed.

4.2 Designated Sites

4.2.1 *Potential Constraints*

The site is designated as being part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance for supporting notable habitats including acid grassland, ancient woodland, ponds and scrub.

The site itself is managed as sports pitches and is subject to regular mowing with the exception of the tussocky grassland margins. None of the notable habitats for which the SINC is designated were recorded within the site itself with only common plant species recorded during the field survey.

The movement of people to and from the event, trampling effects and littering has the potential to reduce the diversity and ecological value of the notable habitats for which the SINC is designated for. Any vehicle movements could also result in damage to the SINC if inappropriately managed.

4.2.2 *Potential Mitigation and Compensation Measures*

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding SINC, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site. This should be designed in consultation with a suitably qualified ecologist.

The wider Wanstead Flats and Bush Wood SINC should be protected by erecting high visibility fencing, such as Heras fencing (or similar) around the event site boundary.

Access to and from the event should minimise visitors accessing the wider Wanstead Flats and Bush Wood SINC. It is recommended that further consideration and assessment is given to designated sites once the layout of the future event has been established.

Any vehicular access to the event for set up would need to be restricted to existing access points from Aldersbrook Road and no machinery, vehicles or other storage should take place outside of the event area.

4.2.3 Enhancement Opportunities

No enhancements in respect of designated sites are recommended.

4.3 Habitats

4.3.1 Potential Constraints

The site has been identified as supporting the habitat of principal importance wood-pasture and parkland. The habitats of importance include the tree line along the north-eastern site boundary and the tussocky grassland along the north-eastern and south-eastern site boundaries. Any damage to the tree line and tussocky grassland during the operational phase in any forthcoming event would reduce the diversity and ecological value of the habitats within the site.

The movement of people to and from the event, trampling effects and littering has the potential to result in the degradation of the existing habitats at the site. The access routes to the site used by both the site set up team and attendees has the potential to degrade habitats in the surrounds.

4.3.2 Potential Mitigation and Compensation Measures

An appropriate environmental management plan will need to be implemented at the event to ensure that the site, and surrounding habitats, are fully cleared of any equipment, litter and waste following the completion of the event. This would also need to include appropriate, managed, access routes to the site. This should be designed in consultation with a suitably qualified ecologist.

The tree line and tussocky grassland along the north-eastern site boundary should be buffered by a minimum of 15 metres between the event area and habitats with no access to this buffer during the site set up or operational phase. The exclusion zone will be marked by high visibility fencing, such as Heras fencing (or similar).

4.3.3 Enhancement Opportunities

No enhancements in respect of habitats are recommended.

4.4 Bats

4.4.1 Potential Constraints

Any future event at the site has the potential to result in disturbance to roosting, foraging and commuting bats through increased noise levels.

The introduction of external lighting has the potential to result in increased light spill on roosting, foraging and commuting features, resulting in the disturbance of bats.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Refer to **Appendix 5** for details.

4.4.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 15 metres between the event area and tree line and tussocky grassland along the north-eastern site boundary as discussed in Paragraph 4.3.2 in order to avoid disturbing bats, should they be present. It is recommended that further consideration and assessment is given to bats once the layout and noise levels of the future event have been established.

The tree line should not be lit. Lighting should be restricted to the event itself and not during site set-up or closure. A further assessment of the potential lighting impacts should be undertaken once lighting plans are known.

4.4.3 Enhancement Opportunities

No enhancements in respect of bats are recommended.

4.5 Badger

4.5.1 Potential Constraints

Any future event at the site will result in the loss of badger foraging habitat short-term.

4.5.2 Potential Mitigation and Compensation Measures

Given that the loss of badger foraging habitat is only short-term, no mitigation or compensation measures are recommended.

4.5.3 Enhancement Opportunities

No enhancements in respect of badger are recommended.

4.6 Birds

4.6.1 Potential Constraints

At the time of preparing this report, it has been assumed that the tree line and tussocky grassland will be retained in any forthcoming event, and, therefore there will be no loss of suitable nesting bird habitat. During the operational phase, the event has the potential to result in harm to nesting birds through accidental damage.

At the time of preparing this report, the event is planned for September, and, therefore there will be no significant constraints in relation to breeding birds. However, timing

constraints apply if the event is brought forward and planned to occur during the breeding bird season of March to August, inclusive. Any future event at the site during the breeding bird season has the potential to result in disturbance to nesting birds through increased noise levels and disturbance from attendees traveling to and from the event if planned for

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981. Refer to **Appendix 5** for details.

4.6.2 Potential Mitigation and Compensation Measures

Given the lack of potential constraints in relation to breeding birds, no mitigation or compensation measures are considered necessary. It is recommended that further consideration is given to breeding birds if the proposed timing of the event is altered to occur within the breeding bird season of March to August, inclusive.

4.6.3 Enhancement Opportunities

No enhancements in respect of birds are recommended.

4.7 Reptiles

4.7.1 Potential Constraints

At the time of preparing this report, it has been assumed that the tussocky grassland will be retained in any forthcoming event, and, therefore there will be no loss of suitable reptile habitat. During the operational phase and site set-up, the event has the potential to result in direct effects on widespread species of reptile, if present, if the event affected suitable habitat.

Widespread reptile species (slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara*, grass snake *Natrix helvetica* and adder *Vipera berus*) are protected under the Wildlife and Countryside Act 1981 against harm, see **Appendix 5** for details.

4.7.2 Potential Mitigation and Compensation Measures

Recommendations have been made for maintaining a minimum buffer of 15 metres between the event area and tree line and tussocky grassland as discussed in Paragraph 4.3.2 in order to avoid harm to widespread species of reptile, should they be present.

4.7.3 Enhancement Opportunities

No enhancements in respect of reptiles are recommended.

4.8 Other Relevant Species

4.8.1 *Potential Constraints*

At the time of preparing this report, it has been assumed that the tussocky grassland will be retained in any forthcoming event, and, therefore there will be no loss of suitable habitat for European hedgehog and common toad. During the operational phase and site set up, the event has the potential to result in direct effects on both species, if present, if the event is allowed to encroach onto tussocky grassland.

4.8.2 *Potential Mitigation and Compensation Measures*

Recommendations have been made for maintaining a minimum buffer of 15 metres between the event area and tree line and tussocky grassland as discussed in Paragraph 4.3.2 in order to avoid harm to European hedgehog and common toad, should they be present.

4.8.3 *Enhancement Opportunities*

No enhancements in respect of European hedgehog and common toad are recommended.

5.0 CONCLUSION

5.1 Conclusion

The site is designated as part of the wider Wanstead Flats and Bush Wood SINC of metropolitan importance. The site has also been identified wood-pasture and parkland, a habitat of principal importance on the MAGIC website. However, the majority of the grassland within the site is regularly mown and is managed as sports fields, and, therefore the site itself is not wood-pasture or parkland nor does it support any of the habitats for which the SINC is designated.

The site has been assessed as having suitability to support tree roosting bats, foraging and commuting bats, breeding birds, widespread species of reptile, European hedgehog and common toad associated with the tussocky grassland margins and tree line. The site has also been assessed as having suitability to support foraging badger.

The key issues are timing of the event, access routes, compaction and trampling, noise, lighting and layout of the event. Recommendations made including a sensitive lighting scheme, a minimum 15 metre buffer from the adjacent tree line, perimeter fencing, an environmental management plan and controlled access routes.

Further consideration will need to be given to designated sites once the layout and access routes of any future event is known. Further consideration will also need to be given to bats once the noise levels and layout of any future event are known in order to ensure this species group will not be disturbed. At this stage, it is considered that subsequent to the findings of such work, there is scope to incorporate suitable mitigation measures in order to allow the event to accord with wildlife legislation.

5.2 Updating Site Survey

If the site boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if event does not commence within 18 months of the date of the most recent relevant survey.

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Map 1 Site Location Plan



WANSTEAD FLATS, EPPING FOREST, ESSEX

PRELIMINARY ECOLOGICAL APPRAISAL

Map 1 - Site Location Plan

Client:	City of London Corporation as Conservators of Epping Forest
Date:	July 2019
Status:	Final

KEY

 Site Boundary



Source: Esri, DigitalGlobe,
GeoEye, Earthstar
Geographics, CNES/Airbus
DS, USDA, USGS,

Scale at A4: 1:10,000

0 100 200 400
Metres



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Map 2 Phase 1 Habitat Map







**WANSTEAD FLATS,
EPPING FOREST, ESSEX**

PRELIMINARY ECOLOGICAL APPRAISAL

Map 2 - Phase 1 Habitat Map

Client:	City of London Corporation as Conservators of Epping Forest
Date:	July 2019
Status:	Final

KEY

-  Site Boundary
-  Target Note
-  Scattered Trees
-  Improved Grassland

Scale at A4: 1:3,000

0 25 50 100 Metres



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Appendix 1 Statutory Designated Sites within the Desktop Study Area

Details of statutory designated sites within the desktop study area, as listed in Paragraph 3.2.1, are provided in **Table 1**.

Table 1: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
Epping Forest	SSSI	720 metres west	<p>Epping Forest is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain and has retained habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland. The seminatural woodland is particularly extensive, forming one of the largest coherent blocks in the country. The Forest plains are also a major feature and contain a variety of unimproved acid grasslands which have become uncommon elsewhere in Essex and the London area.</p> <p>In addition, Epping Forest supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.</p>

Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) form a network of protected sites across the European Union called Natura 2000 sites. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to Natura 2000 sites.

SACs are sites which support internationally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds listed in the annexes of the Birds Directive. SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on Natura 2000 sites or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an “Appropriate Assessment” to fully assess the plan or project against the site’s conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a Natura 2000 site or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSIs) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNRs) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNRs) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Non-Statutory Sites

Locally Designated Sites

In addition to statutory designations, local authorities often designate sites of nature conservation importance at the local level. Such designations are named differently by each local authority and may be referred to as Local Wildlife Sites (LWSs), Sites of Importance for Nature Conservation (SINCs) or Sites of Nature Conservation Importance (SNCIs), amongst others. The exact level of protection afforded to these sites varies and is normally defined through local planning policy.

Appendix 3 Wanstead Flats and Bush Wood SINC Citation Extract

M109 Wanstead Flats and Bush Wood

Grid ref: TQ 406 607 Area in Redbridge: 172 ha

Habitats: Acid grassland, ancient woodland, ponds and scrub.

Notes: Almost all of this Metropolitan site is now in Redbridge, with a small part in Newham and a tiny area in Waltham Forest. This site contains some of London's best acid grassland with uncommon plant species. There are large areas dominated by wavy hair grass, various fescues and bents with patches of mat-grass, heath rush and heath wood-rush. There are areas of heather, and petty whin still occurs. There are good record of insects and spiders, with a particularly important assemblage of hymenoptera including the Red Data Book sphecid wasp *Diodontus insidiosus* and the bee wolf *Philanthus triangularum*. Bush Wood is a small area of ancient woodland, mostly oak with some very large sweet chestnuts and an acid ground flora.

Appendix 4 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 2**⁸.

Table 2: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
Moderate	A structure of tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat).</p> <p>Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.</p>
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

⁸ Table adapted from (Collins, 2016)

Appendix 5 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
- To impair its ability to survive, breed, or rear or nurture their young;
- To impair its ability to hibernate or migrate;
- To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread species of reptile that are native to Britain, namely common or viviparous lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix natrix*, are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence to:

- Intentionally kill or injure any of these species.

The remaining native species of British reptile (sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*) receive a higher level of protection via inclusion under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations (in England and Wales only) and the Wildlife and Countryside Act 1981 (as amended). The distribution of these species are restricted to only a few sites in England.

Species and Habitats of Principal Importance in England

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The England Biodiversity List is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. There are currently 943 species of principal importance and 41 habitats of principal importance included on the England Biodiversity List.