

**GATWICK GREEN, CRAWLEY,  
WEST SUSSEX**

**UPDATED PRELIMINARY ECOLOGICAL  
APPRAISAL**

A Report to: Savills

Report No: RT-MME-151186-01

Date: February 2020



Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ

Tel: 01676 525880 Fax: 01676 521400

E-mail: [admin@middlemarch-environmental.com](mailto:admin@middlemarch-environmental.com) Web: [www.middlemarch-environmental.com](http://www.middlemarch-environmental.com)

## REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”.

Report Version	Date	Completed by:	Checked by:	Approved by:
DRAFT	23/01/2020	Sophie Moy MSc GradCIEEM (Senior Ecological Consultant), Margarita Smoldareva BSc (Hons) (Ecological Project Officer) and Stephanie Bradbury BSc (Hons) (Senior Ecological Consultant)	Paul Roebuck MSc MCIEEM (South East Manager)	Colin Bundy MCIEEM (Associate Director)
Final	27/02/2020	Sophie Moy MSc GradCIEEM (Senior Ecological Consultant)	Paul Roebuck MSc MCIEEM (South East Manager)	Colin Bundy MCIEEM (Associate Director)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

### DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client’s brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

### VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

## NON-TECHNICAL SUMMARY

Middlemarch Environmental Ltd was commissioned by Savills, on behalf of Wilky Group, to carry out a Preliminary Ecological Appraisal at the site of a proposed development at Gatwick Green in Crawley, West Sussex. To fulfil this brief an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken.

The ecological desk study identified no European statutory sites within 5 km of the survey area, no UK statutory sites within 2 km, 32 ancient woodland sites within 2 km, and five non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. 'Gatwick Woods' Biodiversity Opportunity Area was partially located within the development site. The desk study revealed records of protected/notable species within 1 km of the survey area, including bats, terrestrial mammals, birds and herpetofauna.

The walkover survey was undertaken on 20<sup>th</sup> November 2019 and 25<sup>th</sup> November 2019 by Sophie Moy (Senior Ecological Consultant) and Margarita Smoldareva (Ecological Project Officer). At the time of the survey, the site comprised multiple fields of improved and semi-improved grassland, which were bound by a network of hedgerows, ditches and trees. Small areas of semi-natural broad-leaved woodland and scrub were also present. The site was bisected by Fernhill Road and bordered by the M23 airport spur to the north, Peeks Brook Lane to the east, the B2037 to the south, and the B2036 to the west. The wider landscape was dominated by further farmland. Gatwick Airport was located to the west, and the urban fringes of Crawley and Horley were located to the south and north respectively.

The key ecological features on or surrounding the site in relation to the future development of the site include the 'Gatwick Green' Biodiversity Opportunity Area, ancient woodland sites, Habitats of Principal Importance for Nature Conservation in England (woodland and suitable hedgerows), and intrinsically valuable habitats (semi-mature and mature trees, ditches and hedgerows). The habitats on site have the potential to support a range of protected/notable species, and invasive plants have also been recorded on site.

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made:

- R1 SSSI:** The site lies within a SSSI Risk Impact Zone for Hedgecourt SSSI. SSSI Impact Zones are utilised by Local Planning Authorities to assess planning applications for likely impacts on SSSIs. As such the Local Planning Authority and/or Natural England should be consulted prior to any works commencing.
- R2 Ancient Woodland:** As no detailed development proposals have been produced to date, the ancient woodland and veteran trees standing advice (Natural England and Forestry Commission, 2018) should be consulted in order to avoid negative effects on local ancient woodland sites.
- R3 Non-Statutory Sites:** The proposed works could potentially directly or indirectly impact upon several non-statutory conservation sites. As such, the Local Planning Authority ecologist and / or the local Wildlife Trust should be consulted prior to any works commencing to determine how works may proceed without adversely impacting these sites.
- R4 Biodiversity Enhancement Opportunities:** In order to provide a contribution towards local biodiversity targets for the 'Gatwick Green' BOA, the proposed development should seek to enhance biodiversity. Examples of enhancement measures are provided in Chapter 7.
- R5 Habitat Retention and Protection:** The development proposals should be designed (where feasible) to allow for the retention of existing notable habitats including woodland, trees, hedgerows and ditches. Any retained woodland/trees/hedgerows on or overhanging the site should be protected prior to the commencement of any works on site. For ditches, the Environment Agency Pollution Prevention Guidelines should be adhered to throughout the works. PPG5 (Environment Agency et al, 2007), relating to works and maintenance in or near water, is considered to be of relevance to the proposed project.
- R6 Lighting:** Any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice are provided in Chapter 7.
- R7 Additional Survey Work:** The following additional survey works are recommended prior to a planning application being submitted for the site: Great Crested Newt Habitat Suitability Index Assessment, Breeding Bird Survey, Wintering Bird Survey, Badger Survey, Bat Surveys (including a

Preliminary Ground Level Bat Roost Assessment of Trees, Dusk Emergence and Dawn Re-Entry Surveys if required, and Bat Activity Surveys), Dormouse Survey, and Reptile Survey. All further ecological surveys should be undertaken in accordance with best practice methodologies, during the appropriate survey windows.

- R8 Nesting Birds:** Any vegetation clearance required as part of future development activities should be undertaken outside the nesting bird season. If this is not possible then any vegetation to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing.
- R9 Terrestrial Mammals:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each workday to prevent animals entering/becoming trapped.
- R10 Invasive Species Method Statement:** A Method Statement must be developed for the proposed works to ensure that they do not result in the spread of any invasive non-native species. The method statement should be informed by an updated site walkover survey to identify any changes in the status of invasive species on site.

## CONTENTS

<b>1. INTRODUCTION</b>	<b>5</b>
1.1 PROJECT BACKGROUND	5
1.2 SITE DESCRIPTION AND CONTEXT	5
<b>2. METHODOLOGIES</b>	<b>6</b>
2.1 DESK STUDY	6
2.2 PHASE 1 HABITAT SURVEY	6
<b>3. LEGISLATION AND POLICY</b>	<b>7</b>
3.1 GENERAL BIODIVERSITY LEGISLATION AND POLICY	7
3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE	8
3.3 LOCAL PLANNING POLICY – CRAWLEY BOROUGH	9
<b>4. DESK STUDY RESULTS</b>	<b>11</b>
4.1 INTRODUCTION	11
4.2 NATURE CONSERVATION SITES	11
4.3 BIODIVERSITY OPPORTUNITY AREA	12
4.4 PROTECTED / NOTABLE SPECIES	12
4.5 INVASIVE SPECIES	15
4.6 PREVIOUS SURVEY DATA	16
<b>5. PHASE 1 HABITAT SURVEY</b>	<b>17</b>
5.1 INTRODUCTION	17
5.2 SURVEY CONSTRAINTS AND LIMITATIONS	17
5.3 HABITATS	17
5.4 FAUNA	19
5.5 INVASIVE PLANT SPECIES	19
<b>6. DISCUSSIONS AND CONCLUSIONS</b>	<b>20</b>
6.1 SUMMARY OF PROPOSALS	20
6.2 NATURE CONSERVATION SITES	20
6.3 HABITATS	20
6.4 PROTECTED/NOTABLE SPECIES	22
6.5 INVASIVE PLANT SPECIES	25
6.6 GATWICK WOODS BIODIVERSITY OPPORTUNITY AREA	25
<b>7. RECOMMENDATIONS</b>	<b>27</b>
7.1 NATURE CONSERVATION SITES	27
7.2 HABITATS	27
7.3 PROTECTED / NOTABLE SPECIES	28
7.4 INVASIVE PLANT SPECIES	29
<b>8. DRAWINGS</b>	<b>30</b>
<b>9. PHOTOGRAPHS</b>	<b>32</b>
<b>REFERENCES AND BIBLIOGRAPHY</b>	<b>34</b>
<b>APPENDICES</b>	<b>35</b>
APPENDIX 1	36
APPENDIX 2	40

## **1. INTRODUCTION**

### **1.1 PROJECT BACKGROUND**

In November 2019 Savills, on behalf of Wilky Group, commissioned Middlemarch Environmental Ltd to undertake an updated Preliminary Ecological Appraisal of the site of a proposed development at Gatwick Green in Crawley, West Sussex. It is understood that Savills are promoting the site for future development, and that the Crawley Local Plan identifies the site as part of an 'Area of Search' for a strategic employment site. The land is also part of an area safeguarded for future airport use. The current survey is required to identify possible biodiversity constraints and opportunities associated with any future development of the site. At the time of writing, no detailed development proposals have been produced.

Middlemarch Environmental Ltd has previously carried out a Preliminary Ecological Assessment for Wilky Group at this site in 2015. The findings of this survey are detailed in Report RT-MME-118885.

Due to the amount of time that has elapsed since the previous assessment was completed, an updated survey was required. To assess the existing ecological interest of the site an ecological desk study was carried out, and a walkover survey was undertaken on 20<sup>th</sup> November 2019 and 25<sup>th</sup> November 2019.

In addition, Middlemarch Environmental Ltd has been commissioned to undertake a Hedgerow Regulations (1997) Assessment at this site, the findings of which are detailed in Report RT-MME-151186-02.

### **1.2 SITE DESCRIPTION AND CONTEXT**

The site is located to the east of Gatwick Airport, in Crawley, West Sussex, and is centered at National Grid Reference TQ 299 411. The site is low-lying and generally flat in topography, situated on a largely undeveloped greenfield site. It is an irregular shaped parcel of land that measures approximately 48 ha in size.

At the time of the survey, the site comprised multiple fields of improved and semi-improved grassland, which were bound by a network of hedgerows, ditches and trees. Small areas of semi-natural broadleaved woodland and scrub were also present. The site was bisected by Fernhill Road and bordered by the M23 airport spur to the north, Peeks Brook Lane to the east, the B2037 to the south, and the B2036 to the west.

The wider landscape was dominated by further farmland. Gatwick Airport was located to the west, and the urban fringes of Crawley and Horley were located to the south and north respectively.

## **2. METHODOLOGIES**

### **2.1 DESK STUDY**

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the desk study were:

- Natural England - *MAGIC* website for statutory conservation sites;
- Sussex Biodiversity Record Centre; and,
- Surrey Biodiversity Information Centre.

The desk study included a search for European statutory nature conservation sites within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats), UK statutory sites within a 2 km radius and non-statutory sites and protected/notable species records within a 1 km radius.

The data collected from the consultees is discussed in Chapter 4. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Chapter 3).

### **2.2 PHASE 1 HABITAT SURVEY**

The walkover survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010) and the Institute of Environmental Assessment (IEA, 1995). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, the presence, or potential presence, of protected species was noted.

Whilst every effort is made to notify the client of any plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended) present on site, it should be noted that this is not a specific survey for these species.

Data recorded during the field survey are discussed in Chapter 5.

### 3. LEGISLATION AND POLICY

This chapter provides an overview of the framework of legislation and policy which underpins nature conservation and is a material consideration in the planning process in England. The reader should refer to the original legislation for the definitive interpretation.

#### 3.1 GENERAL BIODIVERSITY LEGISLATION AND POLICY

##### **Conservation of Habitats and Species Regulations 2017 (The Habitats Regulations 2017)**

The Habitats Regulations 2017 consolidate and update the Habitats Regulations 2010 (as amended). The Habitat Regulations 2017 are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law.

The Habitats Regulations 2017 place duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Habitats Regulations 2017 also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

##### **The Wildlife and Countryside Act (WCA) 1981 (as amended)**

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2017, offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

##### **The Countryside and Rights of Way (CRoW) Act 2000**

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

##### **The Natural Environment and Rural Communities (NERC) Act 2006**

Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CRoW Act 2000.

##### **The Hedgerow Regulations 1997**

The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.



### **UK Post-2010 Biodiversity Framework**

The UK Biodiversity Action Plan (BAP), published in 1994, was the UK Government's response to signing the Convention on Biological Diversity (CBD) at the 1992 Rio Earth Summit. The new UK Post-2010 Biodiversity Framework replaces the previous UK level BAP. The UK Post-2010 Biodiversity Framework covers the period 2011-2020 and forms the UK Government's response to the new strategic plan of the United Nations Convention on Biological Diversity (CBD), published in 2010 at the CBD meeting in Nagoya, Japan. This includes five internationally agreed strategic goals and supporting targets to be achieved by 2020. The five strategic goals agreed were:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
- Reduce the direct pressures on biodiversity and promote sustainable use;
- To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
- Enhance the benefits to all from biodiversity and ecosystem services; and,
- Enhance implementation through participatory planning, knowledge management and capacity building.

The Framework recognises that most work which was previously carried out under the UK BAP is now focused on the four individual countries of the United Kingdom and Northern Ireland, and delivered through the countries' own strategies. Following the publication of the new Framework the UK BAP partnership no longer operates but many of the tools and resources originally developed under the UK BAP still remain of use and form the basis of much biodiversity work at country level. In England the focus is on delivering the outcomes set out in the Government's 'Biodiversity 2020: a Strategy for England's Wildlife and Ecosystem Services' (DEFRA, 2011). This sets out how the quality of our environment on land and at sea will be improved over the next ten years and follows on from policies contained in the Natural Environment White Paper.

### **Species and Habitats of Material Consideration for Planning in England**

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

## **3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE**

In February 2019, the National Planning Policy Framework (NPPF) was updated, replacing the previous framework published in 2012 and revised in 2018. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing existing sites of biodiversity value;
- minimising impacts on and providing net gains for biodiversity; and,
- establishing coherent ecological networks.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused. With respect to development on land within or outside of a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect (either alone or in-combination with other developments) would only be permitted where the benefits of the proposed development clearly outweigh the impacts on the SSSI itself, and the wider network of SSSIs. Development resulting in the loss of deterioration of irreplaceable habitats (such as ancient woodland and ancient or

veteran trees) should be refused unless there are wholly exceptional reasons for the development, and a suitable compensation strategy is provided.

Chapter 15 identifies that development whose primary objective is to conserve or enhance biodiversity should be supported and opportunities to incorporate biodiversity improvements in and around development should be encouraged, especially where this can secure measurable net gains for biodiversity.

Chapter 11, making effective use of the land, sets out how the planning system should promote use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Substantial weight should be given to the value of using suitable brownfield land within settlements for homes and other identified needs. Opportunities for achieving net environmental gains, including new habitat creation, are encouraged.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG). This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England.

The guidance includes a section entitled 'Natural Environment: Biodiversity, geodiversity and ecosystems and green infrastructure', which was updated in July 2019. This document sets out information with respect to the following:

- the statutory basis for seeking to conserve and enhance biodiversity;
- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;
- how plan-making bodies identify and safeguard Local Wildlife Sites, including Standard Criteria for Local Wildlife Sites;
- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how policy should be applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured;
- definitions of biodiversity net gain including information on how it can be achieved and assessed; and,
- the consideration of ancient woodlands and veteran trees in planning decisions and how potential impacts can be assessed.

The NPPG July 2019 issue also includes a section entitled 'Appropriate assessment: Guidance on the use of Habitats Regulations Assessment' which provides information in relation to Habitats Regulations Assessment processes, contents and approaches in light of case law. This guidance will be relevant to those projects and plans which have the potential to impact on European Sites and European Offshore Marine Sites identified under the Conservation of Habitats and Species Regulations 2017 (as amended).

### **3.3 LOCAL PLANNING POLICY – CRAWLEY BOROUGH**

#### **Local Plan: Crawley 2030**

Crawley's Local Plan, Crawley 2030, was adopted on the 16<sup>th</sup> December 2015. It forms the council's development plan and sets the planning policies under which development control decisions will be taken. The policies of relevance to ecology are:

#### **Policy ENV1: Green Infrastructure**

Crawley's multi-functional green infrastructure network will be conserved and enhanced through the following measures:

- i. Development which protects and enhances green infrastructure will be supported;
- ii. Development proposals should take a positive approach to designing green infrastructure, utilising the council's supplementary planning documents to integrate and enhance the green infrastructure network;

- iii. Proposals which reduce, block or harm the functions of green infrastructure will be required to be adequately justified, and mitigate against any loss or impact or as a last resort compensate to ensure the integrity of the green infrastructure network is maintained;
- iv. The strategic green infrastructure network is afforded the highest protection due to its high value from existing or identified potential multiple functions, for example as recreation, routeways, access to the countryside, wildlife and climate mitigation;
- v. Proposals should maximise the opportunity to maintain and extend green infrastructure links to form a multi-functional network of open space, providing opportunities for walking and cycling, and connecting to the urban/rural fringe and the wider countryside beyond;
- vi. Large proposals will be required to provide new and/or create links to green infrastructure where possible.

### **Policy ENV2: Biodiversity**

All development proposals will be expected to incorporate features to encourage biodiversity where appropriate, and where possible enhance existing features of nature conservation value within and around the development.

Habitat and species surveys and associated reports will be required to accompany planning applications which may affect the areas listed below or sites showing likely ecological value based on past ecological surveys.

#### Hierarchy of Biodiversity Sites

To ensure a net gain in biodiversity, the following areas will be conserved and enhanced where possible and the council will support their designation and management:

1. Nationally designated sites:
  - Sites of Special Scientific Interest (SSSI)

SSSI will receive the highest level of protection for habitat conservation value in line with national legislation, policy and guidance.

2. National Planning Policy Framework Sites:
  - Ancient Woodland, and aged or veteran trees

Planning permission will not be granted for development that results in the loss or deterioration of ancient woodland and aged or veteran trees unless the need for, and benefits of, the development in that location clearly outweigh the loss. A buffer zone between development and ancient woodland will be required in line with Natural England Standing Advice.

3. Locally designated sites, and habitats and species outside designated sites:
  - Local Nature Reserves
  - Sites of Nature Conservation Importance
  - Nature Improvement Areas
  - Habitats of Principle Importance identified in S41 of the Natural Environment and Rural Communities Act 2006 or Biodiversity Action Plans
  - Biodiversity Opportunity Areas
  - Where Protected Species are present
  - Where Species of Principal Importance are present, as identified in S41 of the Natural Environment and Rural Communities Act 2006.

Proposals which would result in significant harm to biodiversity will be refused unless:

- i. this can be avoided by locating on an alternative site with less harmful impact; or
- ii. the harm can be adequately mitigated, or, as a last resort, compensated for.

## 4. DESK STUDY RESULTS

### 4.1 INTRODUCTION

The data search was carried out in December 2019 by Sussex Biodiversity Record Centre and Surrey Biodiversity Information Centre. All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised in Sections 4.2 to 4.4. Selected data are provided in Appendix 1.

### 4.2 NATURE CONSERVATION SITES

The desk study revealed no statutory sites within the search areas. Non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 4.1.

Site Name	Designation	Proximity to Survey Area	Description
<b>Non-statutory Sites</b>			
Bridges Wood	pSNCI	290 m east	On the basis of information available at the time, this site has been identified as a potential site of importance as it is considered likely to contain flora or fauna of county or regional importance. However, it has not yet been surveyed to confirm this.
The Roughs	SNCI	370 north-east	Ancient semi-natural woodland and damp, semi-improved grassland. Selected as ancient semi-natural woodland supporting at least 18 ancient woodland indicator species. Fine-leaved water-dropwort <i>Oenanthe aquatica</i> , a species shown as Locally Rare on the Surrey Rare Plant Register, is present.
Bridges Fields	pSNCI	390 m north-east	On the basis of information available at the time, this site has been identified as a potential site of importance as it is considered likely to contain flora or fauna of county or regional importance. However, it has not yet been surveyed to confirm this.
Horleyland Wood	LWS	590 m south-west	This is a good example of an ancient coppice-with-standards Bluebell Wood. Although frequent in West Sussex, this woodland type is virtually confined to Britain, so remaining areas are of considerable importance. The site also includes a recently constructed pond.
Kiln Heath	pSNCI	960 m south-east	On the basis of information available at the time, this site has been identified as a potential site of importance as it is considered likely to contain flora or fauna of county or regional importance. However, it has not yet been surveyed to confirm this.
<b>Key:</b> LWS: Local Wildlife Site. SNCI: Site of Nature Conservation Importance. pSNCI: Potential Site of Nature Conservation Importance.			

**Table 4.1: Summary of Nature Conservation Sites**

Although no Sites of Special Scientific Interest (SSSIs) are located within a 2 km radius of the survey area, the survey area does fall within a SSSI Impact Risk Zone for Hedgecourt SSSI which is located 4.64 km to the south-east.

The desk study revealed 32 parcels of ancient woodland within a 2 km radius of the survey area. The nearest of these was an unnamed woodland (ID 1476396) located 135 m to the south-west.

#### 4.3 BIODIVERSITY OPPORTUNITY AREA

The survey area forms a part of the 'Gatwick Woods' Biodiversity Opportunity Area (BOA). BOAs are a non-statutory landscape-scale designation, designed as a mechanism through which the targets of the Sussex Biodiversity Action Plan (BAP) can be achieved. BOA sites in Sussex are designated by Sussex Biodiversity Partnership and are areas of land where it is considered that the greatest opportunities for habitat creation and restoration lie. The sites were allocated based on a review of existing areas of biodiversity value in Sussex, e.g. BAP habitat types and mapped data. BOAs do not represent a constraint to development activities but indicate where there may be opportunities to make positive changes for biodiversity.

The 'Gatwick Woods' BOA covers approximately 133 ha and forms part of the Gatwick Airport landscape. It is designated as it supports areas of woodland. The BOA also contains Horleyland Wood LWS (see Table 4.1).

#### 4.4 PROTECTED / NOTABLE SPECIES

Table 4.2 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
<b>Mammals – bats</b>					
Common pipistrelle <i>Pipistrellus pipistrellus</i>	113	2017	260 m south-west	-	ECH 4, WCA 5, WCA 6
Noctule <i>Nyctalus noctula</i>	16	2016	260 m south-west	✓	ECH 4, WCA 5, WCA 6
Unidentified bat <i>Chiroptera</i> sp.	19	2016	300 m south-west	#	ECH 2 #, ECH 4, WCA 5, WCA 6
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	17	2016	300 m south-west	✓	ECH 4, WCA 5, WCA 6
Unidentified Myotis <i>Myotis</i> sp.	22	2014	300 m south-west	#	ECH 2 #, ECH 4, WCA 5, WCA 6
Pipistrelle species <i>Pipistrellus</i> sp.	20	2011	300 m south-west	#	ECH 4, WCA 5, WCA 6
Long-eared bat species <i>Plecotus</i> sp.	3	2011	490 m south-west	#	ECH 4, WCA 5, WCA 6
Brandt's bat <i>Myotis brandtii</i>	2	2011	530 m south-west	-	ECH 4, WCA 5, WCA 6
Brown long-eared bat <i>Plecotus auritus</i>	5	2016	630 m south-west	✓	ECH 4, WCA 5, WCA 6
Daubenton's bat <i>Myotis daubentonii</i>	1	2005	630 m south-west	-	ECH 4, WCA 5, WCA 6
Natterer's bat <i>Myotis nattereri</i>	4	2010	910 m south-west	-	ECH 4, WCA 5, WCA 6
Barbastelle bat <i>Barbastella barbastellus</i>	1	2004	Potentially within 1 km*	✓	ECH 2, ECH 4, WCA 5, WCA 6
Vesper bat <i>Vespertilionidae</i> sp.	1	2000	Potentially within 1 km*	#	ECH 2 #, ECH 4, WCA 5, WCA 6
Whiskered bat <i>Myotis mystacinus</i>	1	1992	Potentially within 1 km*	-	ECH 4, WCA 5, WCA 6
Bechstein's bat <i>Myotis bechsteinii</i>	1	2008	Potentially within 1 km**	✓	ECH 2, ECH 4, WCA 5, WCA 6
<b>Mammals – other</b>					
Dormouse <i>Muscardinus avellanarius</i>	6	2016	170 m south-west	✓	ECH 4, WCA 5, WCA 6
Hedgehog <i>Erinaceus europaeus</i>	5	2015	400 m south	✓	WCA 6

**Table 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (cont)**

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
<b>Amphibians</b>					
Common frog <i>Rana temporaria</i>	22	2017	330 m south-west	-	WCA 5 S9(5)
Common toad <i>Bufo bufo</i>	14	2017	350 m south-west	✓	WCA 5 S9(5)
Great crested newt <i>Triturus cristatus</i>	33	2019	400 m south-west	✓	ECH 2, ECH 4, WCA 5
Palmate newt <i>Lissotriton helveticus</i>	8	2017	410 m south-west	-	WCA 5 S9(5)
Smooth newt <i>Lissotriton vulgaris</i>	11	2017	410 m south-west	-	WCA 5 S9(5)
<b>Reptiles</b>					
Grass snake <i>Natrix natrix</i>	79	2017	310 m south-west	✓	WCA 5 S9(1) WCA 5 S9(5)
Common lizard <i>Zootoca vivipara</i>	1	2006	770 m south-east	✓	WCA 5 S9(1) WCA 5 S9(5)
Slow worm <i>Anguis fragilis</i>	2	2016	780 m south-west	✓	WCA 5 S9(1) WCA 5 S9(5)
<b>Birds</b>					
Barn owl <i>Tyto alba</i>	3	2018	290 m south-west	-	WCA1i
Kingfisher <i>Alcedo atthis</i>	11	2017	290 m south-west	-	WCA1i
Hobby <i>Falco subbuteo</i>	4	2017	620 m west	-	WCA1i
Red kite <i>Milvus milvus</i>	4	2019	630 m south-west	-	WCA1i
Little ringed plover <i>Charadrius dubius</i>	1	2004	660 m south-west	-	WCA1i
Fieldfare <i>Turdus pilaris</i>	1	2008	Potentially within 1 km*	-	WCA1i
Redwing <i>Turdus iliacus</i>	1	2008	Potentially within 1 km*	-	WCA1i
<b>Fish</b>					
Bullhead <i>Cottus gobio</i>	1	2015	990 m south-west	-	ECH 2
<b>Invertebrates</b>					
Brown hairstreak butterfly <i>Thecla betulae</i>	5	2018	270 m south-west	✓	WCA 5 S9(5)
White-letter hairstreak butterfly <i>Satyrion w-album</i>	1	1997	320 m north-west	✓	WCA 5 S9(5)
Jersey tiger moth <i>Euplagia quadripunctaria</i>	1	2015	630 m south-west	-	ECH 2
<b>Plants</b>					
Bluebell <i>Hyacinthoides non-scripta</i>	53	2016	On site	-	WCA 8 S13(2)
Pennyroyal <i>Mentha pulegium</i>	3	2019	620 m west	✓	WCA 8

Table 4.2 (cont'd): Summary of Protected/Notable Species Records Within 1 km of Survey Area (cont)

**Key:**

#: Dependent on species.

\*: Grid reference provided was four figures only.

\*\*: Grid reference provided was two figures only.

ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.

ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection.

WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times.

WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds).

WCA 5 S9(1): Schedule 5 Section 9(1) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to intentional killing, injury or taking.

WCA 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal.

WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods.

WCA 8: Schedule 8 of Wildlife and Countryside Act 1981 (as amended). Protected plants and fungi.

WCA 8 S13(2): Schedule 8 Section 13(2) of Wildlife and Countryside Act 1981 (as amended). Protection limited to selling, offering for sale, possessing or transporting for purpose of sale, or advertising for sale, any live or dead plant, or any part of, or anything derived from, such plant.

Species of Principal Importance: Species of Principal Importance for Nature Conservation in England.

Note. This table does not include reference to the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention on the Conservation of Migratory Species of Wild Animals or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

**Table 4.2 (cont'd): Summary of Protected/Notable Species Records Within 1 km of Survey Area**

In addition, the desk study revealed records of the following notable species within 1 km of the survey area:

**Birds**

Species of Principal Importance

Thirteen bird species, comprising bullfinch *Pyrrhula pyrrhula*, dunnock *Prunella modularis*, hawfinch *Coccothraustes coccothraustes*, herring gull *Larus argentatus*, house sparrow *Passer domesticus*, lapwing *Vanellus vanellus*, lesser spotted woodpecker *Dendrocopos minor*, linnet *Linaria cannabina*, marsh tit *Poecile palustris*, skylark *Alauda arvensis*, song thrush *Turdus philomelos*, starling *Sturnus vulgaris* and yellowhammer *Emberiza citronella*.

Red List

Two bird species, comprising grey wagtail *Motacilla cinerea* and mistle thrush *Turdus viscivorus*,

Amber List

Twelve bird species, including common gull *Larus canus*, house martin *Delichon urbicum*, kestrel *Falco tinnunculus*, lesser black-backed gull *Larus fuscus*, mallard *Anas platyrhynchos*, mute swan *Cygnus olor*, redshank *Tringa tetanus*, redstart *Phoenicurus phoenicurus*, stock dove *Columba oenas*, swift *Apus apus*, tawny owl *Strix aluco* and willow warbler *Phylloscopus trochilus*.

**Invertebrates**

Records of multiple notable invertebrates, including Araneae (spiders), Coleoptera (beetles), Diptera (flies), Hemiptera (true bugs), Hymenoptera (ants, bees and wasps), Lepidoptera (butterflies and moths), Odonata (dragonflies and damselflies) and Orthoptera (grasshoppers and crickets).

**Plants**

Species of Principal Importance

One record of eyebright *Euphrasia pseudokernerii*, which is also listed as Endangered on the IUCN Red List.

### Sussex Rare Species Inventory

Records of two plants listed on the Sussex Rare Species Inventory, comprising floating club-rush *Eleogiton fluitans* and greater burnet-saxifrage *Pimpinella major*.

### Fungi

Records of seven fungi listed on the Sussex Rare Species Inventory, comprising common porecrust *Schizophyllum commune*, false chanterelle *Hygrophoropsis aurantiaca*, leafy brain *Tremella foliacea*, oak toothcrust *Radulomyces molaris*, pipe club *Macrotyphula fistulosa*, rusty crust *Skeletocutis amorpha* and white knight *Tricholoma album*.

## 4.5 INVASIVE SPECIES

Table 4.3 provides a summary of invasive species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Legislation / Conservation Status
Himalayan balsam <i>Impatiens glandulifera</i>	11	2017	On site (south-west)	WCA 9
Least duckweed <i>Lemna minuta</i>	3	2013	On site (south-west)	INNS
Spanish bluebell <i>Hyacinthoides hispanica</i>	2	2005	On site (south-west)	INNS
Cherry laurel <i>Prunus laurocerasus</i>	11	2013	170 m south-west	INNS
Variegated yellow archangel <i>Lamium galeobdolon</i> subsp. <i>argentatum</i>	3	2013	170 m south-west	WCA 9
New Zealand pygmyweed <i>Crassula helmsii</i>	2	2012	430 m south-west	WCA 9
Rhododendron <i>Rhododendron ponticum</i>	9	2016	480 m south-west	WCA 9
False virginia creeper <i>Parthenocissus inserta</i>	2	2003	480 m south-west	WCA 9
Montbretia <i>Crocsmia x crocosmiiflora</i>	4	2014	530 m east	WCA 9
Japanese rose <i>Rosa rugosa</i>	2	2014	720 m east	WCA 9
Floating pennywort <i>Hydrocotyle ranunculoides</i>	1	2004	740 m east	WCA 9
Nuttall's waterweed <i>Elodea nuttallii</i>	1	2016	Potentially within 1 km*	WCA 9
Hybrid bluebell <i>Hyacinthoides x massartiana</i>	1	2013	Potentially within 1 km**	INNS
Himalayan cotoneaster <i>Cotoneaster simonsii</i>	1	2007	Potentially within 1 km**	WCA 9
Japanese knotweed <i>Fallopia japonica</i>	1	2005	Potentially within 1 km**	WCA 9
American skunk-cabbage <i>Lysichiton americanus</i>	1	2004	Potentially within 1 km*	INNS
Winter heliotrope <i>Petasites fragrans</i>	1	2004	Potentially within 1 km**	INNS
<p><b>Key:</b>  *: Grid reference provided was four figures only.  **: Grid reference provided was two figures only.</p> <p>WCA 9: Schedule 9 of Wildlife and Countryside Act 1981 (as amended). Invasive, non-native, plants and animals.  INNS: Sussex Invasive Non-Native Species.</p>				

**Table 4.3: Summary of Invasive Species Records Within 1 km of Survey Area**



#### 4.6 PREVIOUS SURVEY DATA

Previous ecological surveys have been undertaken on the land to the north-east of Gatwick Airport, West Sussex and north and south of M23 in 2019. The results of these surveys are within the Preliminary Environmental Information Report provided by Your London Gatwick Airport (February 2020). The majority of this land surveyed is outside of the current survey area for these proposed works. Only a small section of the survey area for the previous ecological surveys was Wilky owned land, which is the area of land to the north-west of the site, located directly to the south of the M23 spur road and to the east of Balcombe Road. The rest of the Wilky owned land has not been previously surveyed.

These previous surveys were conducted to inform a Preliminary Environmental Information Report (PEIR) and the results for the Wilky Land: Fields North and South of M23, east of B2036 were provided in February 2020. The following surveys were conducted on the Wilky owned land: Phase 1 Habitat survey, hedgerow survey, breeding bird surveys, reptile surveys, dormouse surveys and badger surveys.

During these surveys conducted on site no hedgerows surveyed comprised important hedgerows. A total of three bird species which qualify as being of interest were confirmed to be breeding within the Wilky owned land: Song Thrush, Bullfinch and Dunnock. No evidence of reptiles, badger or dormouse was identified within this small section of the survey area. A pond located to the north of the M23 spur road was identified as having average habitat suitability score for Great Crested Newts.

## 5. PHASE 1 HABITAT SURVEY

### 5.1 INTRODUCTION

The results of the Phase 1 Habitat Survey are presented in the following sections. An annotated Phase 1 Habitat Survey Drawing (Drawing C151186-01-01) is provided in Chapter 8. This drawing illustrates the location and extent of all habitat types recorded on site. Any notable features or features too small to map are detailed using target notes. Photographs taken during the field survey are presented in Chapter 9.

The survey was carried out over two visits conducted on 20<sup>th</sup> November 2019 and 25<sup>th</sup> November 2019 by Sophie Moy (Senior Ecological Consultant) and Margarita Smoldareva (Ecological Project Officer). Table 5.1 details the weather conditions at the time of the survey.

Parameter	Condition	
	20/11/2019	25/11/2019
Temperature (°C)	7	12
Cloud (%)	90	100
Wind (Beaufort)	F2	F0
Precipitation	Nil	Light rain

**Table 5.1: Weather Conditions During Field Survey**

### 5.2 SURVEY CONSTRAINTS AND LIMITATIONS

December is not an optimal time for completing botanical assessments however, given the nature of the habitats present, this was not considered to be a significant constraint to a robust initial site assessment.

Due to the presence of electric fencing and livestock within the fields located in the north-east and north-west of the site, it was considered unsafe to access these fields. Therefore, they were not fully assessed.

### 5.3 HABITATS

The following habitat types were recorded on site during the field survey:

- Bare ground;
- Dense scrub;
- Dry ditch;
- Ephemeral / short perennial vegetation;
- Fencing;
- Improved grassland;
- Other habitat: earth bund;
- Poor semi-improved grassland;
- Scattered scrub;
- Scattered trees;
- Semi-natural broad-leaved woodland;
- Species-poor hedgerow; and,
- Species-rich hedgerow.

These habitats are described below. They are ordered alphabetically, not in order of ecological importance.

#### **Bare ground**

A bare ground access path was located in the north-western corner of the site. It entered the site from the west and crossed the site towards the east. It also branched off and headed south towards some agricultural buildings located off site.

### Dense scrub

Small areas of dense scrub were located within the fields (Plate 9.1). These areas were dominated by bramble, with occasional blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*, ivy *Hedera helix*, thistle *Cirsium* sp. and traveller's-joy *Clematis vitalba*. Within the scrub there was occasional oak and ash saplings.

### Dry ditch

A network of ditches ran alongside hedgerows within the site boundary (Plate 9.2). Some of these ditches were inundated with water during the site visit (Plate 9.3). Whilst water is expected to be present in these ditches at times of high rainfall, it is anticipated these ditches are generally dry for the majority of the year.

### Ephemeral / short perennial vegetation

This habitat comprised short, patchy plant associations typical of disturbed ground. The vegetation typically lacked a clear dominant species, but consisted of a mixture of low-growing plants, often less than 25 cm in height. Ephemeral / short perennial vegetation was situated in the north-western part of the site. Species included Canadian fleabane *Conyza canadensis*, greater plantain *Plantago major*, hedge mustard *Sisymbrium officinale*, ragwort *Senecio* sp. and thistle.

### Fencing

Sections of the site were delineated by wooden, chain-link, barbed wire and heras fencing measuring approximately 1-2 m in height. This habitat was generally clear of vegetation.

### Improved grassland

The site was dominated by heavily grazed fields of improved grassland, with only a very limited range of grasses and a few common forbs present, mainly those demanding of nutrients and resistant to grazing (Plate 9.4). Dominant species included Yorkshire fog *Holcus lanatus*, annual meadow-grass *Poa annua*, crested dog's-tail *Cynosurus cristatus*, perennial rye-grass *Lolium perenne*, clover *Trifolium* sp., creeping buttercup *Ranunculus repens*, dandelion *Taraxacum officinale* agg., sorrel *Rumex* sp. and vetch *Vicia* sp., with occasional common nettle *Urtica dioica*, dock *Rumex* sp. and thistle present around the edges of the fields. Many of the fields were damp at the time of the survey. In these damper areas, soft rush *Juncus effusus* was present (Plate 9.5).

### Other habitat: earth bund

A landscaped bund at Rivington Farm abuts the southern part of the survey area (Plate 9.6). The bund generally comprised piles of earth devoid of vegetation, with occasional scrub and ephemeral species such as buddleia and thistle. A large log pile was located immediately to the north of this bund, situated on the western edge of the woodland.

### Poor semi-improved grassland

Areas of poor semi-improved grassland were located in the north-western and southern parts of the site. This habitat was not as heavily affected by grazing as the improved grassland fields (Plate 9.7). There was a low sward which included cock's-foot *Dactylis glomerata*, Yorkshire fog, crested dog's-tail, meadow foxtail *Alopecurus pratensis*, yarrow *Achillea millefolium*, creeping buttercup, daisy *Bellis perennis*, dandelion, greater plantain, pineappleweed *Matricaria discoidea*, red clover *Trifolium pratense*, ribwort plantain *Plantago lanceolata*, cut-leaved cranesbill *Geranium dissectum*, cinquefoil *Potentilla reptans*, stitchwort *Stellaria* sp. and shepherd's purse *Capsella bursa-pastoris*. Bristly oxtongue *Picris echioides*, broadleaved dock *Rumex obtusifolius* and redshank *Persicaria maculosa* were also present at the fringes of the fields. Many of the fields were damp at the time of the survey. In these damper areas, soft rush was present.

### Scattered scrub

Scattered scrub was encroaching in areas of poor semi-improved grassland which had not been grazed, most notably in the north-western part of the site. Dominant species included bramble *Rubus fruticosus* agg. and hawthorn with occasional non-scrub species such as burdock *Arctium* sp., common nettle, fat-hen *Chenopodium album*, gorse *Ulex europaeus*, mallow *Malva sylvestris*, teasel *Dipsacus* sp., thistle, cleavers *Galium aparine* and traveller's-joy.

### Scattered trees

Individual scattered trees were located within the site boundary (Plate 9.8). Five mature oaks were situated in the southern part of site, to the west of Rivington Farm, and two mature oaks were located within the eastern field, to the south of Fernhill Road. These trees were considered to provide potential features that

could be exploited by fauna including bats and birds (Plate 9.9). Other species included beech *Fagus sylvatica*, hawthorn, silver birch *Betula pendula* and sycamore *Acer pseudoplatanus*. In general, these trees were semi-mature to mature in age, measured between 5-10 m in height and were in good condition.

#### **Semi-natural broad-leaved woodland**

Two small areas of semi-natural broad-leaved woodland were present on site (Plate 9.10). The first was a linear area of woodland located between two fields to the south of Fernhill Road. This woodland comprised hawthorn, horse chestnut *Aesculus hippocastanum*, oak *Quercus* sp. and sycamore, with bramble and common nettle dominating the ground flora. The second woodland was located along the southern boundary adjacent to the B2037. This woodland comprised horse chestnut, oak, silver birch and sycamore, with an understorey of blackthorn, hazel *Corylus avellana* and holly.

Patches of cotoneaster *Cotoneaster* sp. were growing within the northern extent of the first woodland and along its western edge.

#### **Species-poor hedgerow**

A Hedgerow Regulations (1997) Assessment has recently been carried out at the site, the findings of which are detailed in Report RT-MME-151186-02. The majority of the hedgerows on site were identified as being species-poor due to their limited diversity of native woody species (Plate 9.11). For further details, please refer to Report RT-MME-151186-02.

#### **Species-rich hedgerow**

A Hedgerow Regulations (1997) Assessment has recently been carried out at the site, the findings of which are detailed in Report RT-MME-151186-02. A small number of species-rich hedgerows were present on site. For further details, please refer to Report RT-MME-151186-02.

### **5.4 FAUNA**

During the survey field signs of faunal species were recorded. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

#### **Birds**

The following bird species were observed on site during the field survey: blackbird *Turdus merula*, great tit *Parus major*, robin *Erithacus rubecula* and woodpigeon *Columba palumbus*.

#### **Mammals**

Small mammal burrows were present alongside one of the hedgerows and ditches in the southern half of the site. In addition, rabbit droppings were present within the woodland on site.

### **5.5 INVASIVE PLANT SPECIES**

Patches of cotoneaster were growing within the northern extent of the woodland and along the western edge at the southern end of the woodland. This cotoneaster could not be identified to species level, and therefore it is possible that it might be a hybrid. Many cotoneaster species and their hybrids are considered to be invasive under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

## 6. DISCUSSIONS AND CONCLUSIONS

### 6.1 SUMMARY OF PROPOSALS

The site is identified in the Crawley Local Plan as being part of an 'Area of Search' for strategic employment land and is also part of an area safeguarded for future airport use. Savills are currently promoting the site for future development, although at the time of writing no detailed development proposals have been produced.

The following discussion identifies potential biodiversity opportunities and constraints that could apply to any future development of the site. The discussion, conclusions and recommendations should be reviewed as design proposals for the site evolve.

### 6.2 NATURE CONSERVATION SITES

The desk study exercise identified no European statutory sites within 5 km of the survey area, no UK statutory sites within 2 km, 32 ancient woodland sites within 2 km, and five non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The significance of these sites to the proposed development is discussed below.

#### UK Statutory Sites

No Sites of Special Scientific Interest (SSSIs) are located within a 2 km radius of the survey area, however the survey area does fall within a SSSI Impact Risk Zone for Hedgecourt SSSI which is located 4.64 km to the south-east. If the proposals for the site are for airport use, then the development will fall within the 'Infrastructure' risk category as detailed in Appendix 1, which relates to airports, helipads and other aviation proposals. In order to establish the likely risks to this SSSI, a recommendation is made in Section 7.1.

#### Ancient Woodland Sites

The desk study revealed 32 parcels of ancient woodland within a 2 km radius of the survey area. The nearest of these was an unnamed woodland (ID 1476396) located 135 m to the south-west. Whilst no direct impacts on these ancient woodland sites are anticipated as a result of future development at Gatwick Green, there is the potential for indirect impacts by reducing the amount of semi-natural habitats next to the ancient woodland, increasing the amount of pollution (including, dust, light, air and water), and increasing disturbance from additional traffic and visitors. As no detailed development proposals have been produced to date, the ancient woodland and veteran trees standing advice (Natural England and Forestry Commission, 2018) should be consulted in order to avoid negative effects on ancient woodland sites. A recommendation is made in Section 7.1.

#### Non-Statutory Sites

The desk study revealed five non-statutory sites within a 1 km radius of the survey area. The nearest of these was Bridges Wood, which is designated as a Potential Site of Nature Conservation Importance (pSNCI) and is located 290 m to the east. Whilst no direct impacts on these non-statutory sites are anticipated as a result of future development at Gatwick Green, there is the potential for indirect impacts by reducing the amount of semi-natural habitats next to the sites, increasing the amount of pollution (including, dust, light, air and water), and increasing disturbance from additional traffic and visitors. As no detailed development proposals have been produced to date, the Local Planning Authority should be consulted in order to avoid negative effects on non-statutory sites. A recommendation is made in Section 7.1.

### 6.3 HABITATS

The ecological importance of the habitats present on site is determined by their presence on the list of Habitats of Principal Importance in England and on the Local BAP. It also takes into account the intrinsic value of the habitat. Those habitats which are considered to be of intrinsic importance and have the potential to be impacted by the site proposals are highlighted as notable considerations.

A discussion of the implications of the site proposals with regard to the habitats present on site is provided in the text below. A separate discussion of the value of the habitats on site to protected or notable species is provided in Section 6.4.

### Ditches

The site currently supports a network of field boundary ditches, which are considered to be of intrinsic value as they contribute to the permeability of the site to wildlife. It is understood that any future development of the site will require the provision of drainage features as part of a Sustainable Urban Drainage System (SUDS) for the scheme, however it is not known whether the existing ditches will be retained. Recommendations regarding the retention or reinstatement of ditch habitats are made in Section 7.2.

### Hedgerows

'Hedgerows' are a Habitat of Principal Importance for Nature Conservation in England if they measure over 20 m in length and less than 5 m in width, consist predominantly of at least one woody UK native species, and any gaps measure less than 5 m in width. The hawthorn-dominated hedgerows on site fulfill these criteria, however the Leyland cypress hedgerows do not as they comprise a non-native species. Nevertheless, all of the hedgerows on site are of intrinsic value as they provide habitat connectivity within the survey area.

Any net loss of hedgerow resource on site has the potential to adversely impact on the permeability of the site to wildlife, and also the connectivity of the site to other notable habitat areas outside of the survey area but within the wider 'Gatwick Woods' BOA. It is understood, however, that future design aspirations for any development will be informed by the need to maintain features of biodiversity value, including maintaining a network of hedgerow features. Recommendations regarding the retention, protection and enhancement of the existing hedgerow network are made in Section 7.2. It is also recommended that the site is subject to a Hedgerow Regulations (1997) survey to allow any 'important' hedgerow features to be identified.

### Scattered trees

The mature and semi-mature trees on site are of intrinsic value as they cannot be easily replaced in the short to medium term. Any net loss of scattered trees as a result of future development could have an adverse impact on local biodiversity. Recommendations regarding the retention, protection and enhancement of the scattered tree resource on site are made in Section 7.2.

### Semi-natural broad-leaved woodland

The survey area supports small pockets of semi-natural broad-leaved woodland. 'Lowland mixed deciduous woodland' is a Habitat of Principal Importance for Nature Conservation in England, and woodland is also listed as a reason for the designation of the 'Gatwick Woods' BOA. This habitat type is of intrinsic value as it is not readily replaced if lost or damaged.

Any future development of the site has the potential to cause the loss, damage or fragmentation of areas of existing woodland habitat; however, it is understood that future design aspirations for any development will be informed by the need to maintain features of biodiversity value. Recommendations regarding the retention, protection and enhancement of woodland habitats are made in Section 7.2.

### Remaining habitats

The remainder of the site is dominated by grazed improved pasture and other habitat types that are generally well represented in the local area and easily replicated if lost to future development.

Habitats considered to be of relevance to any future development of the site are summarised in Table 6.1.

Habitat Type	Habitat of Principal Importance?	Summary of Potential Impacts
Ditches	-	Habitat loss, degradation, fragmentation.
Hedgerows	#	Habitat loss, damage, fragmentation.
Scattered trees	-	Habitat loss, damage.
Semi-natural broad-leaved woodland	✓	Habitat loss, damage, fragmentation.
<b>Key:</b> #: Dependent on hedgerow.		

**Table 6.1: Summary of Potential Impacts on Notable Habitats**

## 6.4 PROTECTED/NOTABLE SPECIES

The following paragraphs consider the likely impact of the site proposals on protected or notable species. This is based on those species highlighted in the desk study exercise (Chapter 4) and other species for which potentially suitable habitat occurs within or adjacent to the survey area.

### **Mammals – bats**

The desk study revealed records of ten species of bat, as well as records of five unidentified species of bat, within a 1 km radius of the survey area. The nearest records were of common pipistrelle and noctule located 260 m to the south-west. Although the majority of the trees on site were observed to be in good condition, the woodland areas and the scattered mature oaks in the southern region of the site all provided potential features that could be exploited by roosting bats. In addition, the network of hedgerows and ditches, the woodland areas and the scattered trees are all likely to provide features of potential value to foraging and commuting bats, especially as much of the site is currently unlit. The site also has connectivity to areas of habitat beyond the boundaries that are likely to be of value to bats, particularly mature woodland areas.

Any future development of the site has the potential to impact upon bats through the loss of potential roosting habitat and loss or fragmentation of foraging and commuting habitats. Indirect fragmentation as a result of inappropriate lighting could also be detrimental to bat species. It is considered that, with appropriate design, the value of the site to bat species could be maintained despite any future development. The detailed design for the site should be informed by bat surveys, to include both daytime and dusk/dawn assessments for bat roosts and overall activity surveys to assess the usage of the site by bats. The results of these surveys should inform the site layout and identify any mitigation that may be required. A recommendation is made in Section 7.3.

### **Mammals – other**

#### Badger

The desk study did not provide any records of badger within a 1 km radius of the survey area. During the 2015 Preliminary Ecological Assessment, a potential historical badger sett was identified within an adjacent area of woodland located to the north of Fernhill Road. Whilst the site itself is mostly unsuitable for sett creation due to its predominantly flat topography, micro topographical changes (i.e. smaller areas of spoil heaps, slopes and landscaped bunds) may provide opportunities for the excavation of setts, particularly within wooded areas. In addition, it is considered that the mosaic of habitats on site provide a suitable foraging resource for badgers. No evidence of badger activity was recorded on site during the 2019 survey.

Any future development of the site could impact upon badgers by causing loss of or disturbance to setts, and also through loss or fragmentation of foraging areas. It is understood that the future design aspirations propose to retain features of greatest ecological value, including the adjacent area of woodland containing the potential historical badger sett. Recommendations regarding the retention and protection of areas of badger habitat are made in Section 7.3. General recommendations regarding the protection of terrestrial mammals during the construction phase of any development works are also made in Section 7.3.

#### Brown hare

The desk study did not provide any records of brown hare within a 1 km radius of the survey area. The woodland edges, hedgerows and farmland on site provide potential habitat for brown hare. It is understood that any future development on site will reduce the availability of suitable habitat for brown hare. Suitable farmland habitat is, however, widespread in the local area, and therefore it is not considered that development would have a significant impact on the favourable conservation status of this species. A recommendation regarding the protection of terrestrial mammals is made in Section 7.3.

#### Dormouse

The desk study revealed six records of dormouse within a 1 km radius of the survey area, the nearest of which was located 170 m to the south-west. The hedgerows on site are generally species-poor, with a low diversity of native woody species and limited hedgerow bottom flora. However, the network of these habitats, along with small areas of semi-natural woodland, may provide suitable habitat and food sources for dormouse. More suitable habitat (e.g. pockets of woodland and further hedgerows) is located in close proximity to the site and habitat connectivity in the local area is generally good, although the site is surrounded by roads which could provide barriers to dormouse dispersal.

Overall the potential for dormouse to occur within the site cannot be discounted, although the level of risk is considered to be low. Any development of the site could impact upon dormouse, if present, as a result of habitat loss and fragmentation, although as detailed above it is understood that future design aspirations propose to retain a network of green connectivity through the site. Prior to the detailed design of a development layout for the site, it is recommended that a survey for evidence of this species be undertaken. The results of this survey will allow potential impacts to be assessed, and any mitigation required to be designed. A recommendation is made in Section 7.3.

#### Harvest mouse

The desk study did not provide any records of harvest mouse within a 1 km radius of the survey area. The woodland edges and hedgerows on site provide potentially suitable habitat for harvest mouse, and therefore the future development of the site could impact this species through habitat loss and fragmentation. By retaining areas of key habitat and ensuring a strong green network through the site, however, it should be possible to ensure that the favourable conservation status of this species, if present, is maintained. Recommendations regarding habitat retention and protection are made in Section 7.2.

#### Hedgehog

The desk study provided four records of hedgehog within a 1 km radius of the survey area, the nearest of which was located 400 m to the south. The woodland edges, hedgerows and scrub provide good quality habitat for hedgehog. Therefore, it is considered that the loss of areas of habitat to future development could have an adverse impact on this species. It is understood, however, that the future design aspirations propose to retain valuable habitat features, and as such it should be possible to ensure that the site remains of value to hedgehogs during any future development. Recommendations regarding the retention of habitats are made in Section 7.2, and a recommendation regarding the protection of terrestrial mammals is made in Section 7.3.

#### Otter and water vole

The desk study did not provide any records of otter or water vole within a 1 km radius of the survey area. Whilst there is a network of ditches across the site, not all of these contained water at the time of the survey, and it is anticipated that the majority temporarily dry out. Furthermore, the ditches did not contain any marginal vegetation or provide any feeding opportunities for either otter or water vole. Reference to Ordnance Survey mapped data indicates that the site is isolated from watercourses that are likely to support these species, and therefore neither are considered likely to occur on site. No recommendations are made with regard to either species.

#### **Amphibians**

The desk study revealed 33 records of great crested newt within a 1 km radius of the survey area, the nearest of which was located 400 m to the south-west. There were also multiple records of common frog, common toad, palmate newt and smooth newt within 1 km of the survey area. There are no ponds on site, although the site does support a network of drainage ditches that could provide potential breeding habitat for amphibians. Reference to Ordnance Survey mapped data indicates the presence of a small number of ponds within a 500 m radius of the site, although some of these are fragmented from the site by the local motorway network and are therefore unlikely to be of significance. The site largely offers little habitat for amphibians during the terrestrial phase of their annual cycle; however, suitable terrestrial habitat is present in the form of the boundary hedgerow network, woodland areas and scrub.

Any future development of the site has the potential to have an adverse impact on amphibians; however, there is the opportunity to ensure the long-term provision of suitable habitat for amphibians. Prior to the detailed design of a development layout for the site, further survey work will be required to allow the status of amphibians on site to be assessed and to allow the extent of any impacts to be determined and mitigation to be incorporated into the design. A recommendation is made in Section 7.3.

#### **Reptiles**

The desk study revealed multiple records of common lizard, grass snake and slow worm within a 1 km radius of the survey area, the nearest of which was grass snake located 310 m to the south-west. The site is largely unsuitable for reptiles as it is dominated by grazed pasture. However, in the northern part of the site (i.e. where the fields are less heavily grazed, the semi-improved grassland has a longer sward and there are sections of scrub) the habitat is more suitable for reptiles.



Any development of these areas could adversely impact on any reptiles present through direct harm during construction and habitat loss/fragmentation. Future development could, however, have a favourable impact on local reptile populations through creation of new areas of higher quality habitat. Prior to the detailed design of a development layout for the site, a targeted survey of areas of suitable reptile habitat should be undertaken to assess the status of this species group on site, and to inform any mitigation that may be required. A recommendation is made in Section 7.3.

### **Birds**

The desk study revealed records of multiple bird species within a 1 km radius of the site, including protected species such as hobby and notable species such as dunnock and house sparrow. The woodland, trees, hedgerow and scrub on site provide suitable nesting habitat, as well as foraging resources, for a range of bird species. Any future development of the site has the potential to impact upon the availability of nesting and wintering habitat for bird species; however, conversely the development also has the potential to retain existing features of potential value and to provide additional bird habitat. Prior to the detailed design of a development layout for the site, breeding and wintering bird surveys should be undertaken to allow the existing value of the site to birds to be assessed. The results of this survey work should inform the design of any mitigation required. A recommendation is made in Section 7.3. A recommendation is also made regarding the avoidance of disturbance to nesting birds through appropriate timing of works.

### **Fish**

The desk study revealed one record of bullhead within a 1 km radius of the survey area; this was located 990 m to the south-west. Whilst there is a network of ditches across the site, not all of these contained water at the time of the survey, and it is anticipated that the majority temporarily dry out. Reference to Ordnance Survey mapped data indicates that the site is isolated from watercourses that are likely to support fish, and therefore fish are considered unlikely to occur on site. No recommendations are made with regard to fish.

### **Invertebrates**

The desk study revealed records of numerous terrestrial invertebrate species within a 1 km radius of the survey area. This included several butterflies and moths that are listed as Species of Principal Importance. Woodland, ephemeral/short perennial vegetation and areas of semi-improved grassland and scrub are likely to be of value to a range of invertebrates, and the site could feasibly support small heath butterfly. However, the majority of the site is likely to be of low value to invertebrate species.

Overall it is considered that any development of the site should not have an adverse impact on local invertebrate populations provided that existing habitat features of value are retained and areas of new habitat are designed to be of value to invertebrates. Recommendations regarding habitat retention and enhancement are provided in Section 7.2.

### **Plants**

The desk study revealed records of six protected/notable plant species within a 1 km radius of the survey area. Bluebell is protected from sale only and as such, it is not a notable consideration in relation to the proposed development. The current survey was undertaken in November, which is outside of the peak season for recording botanical diversity. The improved grassland habitat is considered highly unlikely to support notable plant species. Therefore, provided that woodland areas and hedgerows are retained and enhanced, no impacts on notable plant species are anticipated. Future development has the potential to improve botanical diversity through creation of diverse native habitats, and habitat recommendations are made in Section 7.2.

### **Fungi**

The desk study revealed records of three notable fungi species within a 1 km radius of the site. No notable fungi were recorded on site, although due to the timing of the survey not all fungal species would have been apparent. The majority of the site is likely to be of negligible value to fungi. Therefore, provided that the woodland areas on site are maintained, it is considered that any future development is unlikely to be of detriment to local populations of fungi.

## Other Species

The following protected species are not considered to be material considerations due to the lack of desk study records and absence of suitable habitats within the development site and its surroundings:

- Pine marten *Martes martes*;
- Polecat *Mustela putorius*;
- Red squirrel *Sciurus vulgaris*; and,
- Notable aquatic invertebrates including white-clawed crayfish *Austropotamobius pallipes*.

## Summary

Species considered to be of relevance to the proposed development are summarised in Table 6.2.

Species / Species Group	Species of Principal Importance?	Summary of Potential Impacts
Bats	#	Potential loss of suitable roosting and foraging/commuting habitat, harm/injury, habitat fragmentation as a result of habitat removal and increased lighting.
Badger	-	Potential loss of suitable sett building and foraging/commuting habitat, harm/injury, habitat fragmentation as a result of habitat removal.
Brown hare	✓	Potential loss of suitable refuge and foraging/commuting habitat, harm/injury, habitat fragmentation as a result of habitat removal.
Dormouse	✓	Potential loss of suitable refuge and foraging/commuting habitat, harm/injury, habitat fragmentation as a result of habitat removal.
Harvest mouse	✓	Potential loss of suitable refuge and foraging/commuting habitat, harm/injury, habitat fragmentation as a result of habitat removal.
Hedgehog	✓	Potential loss of suitable refuge and foraging/commuting habitat, harm/injury, habitat fragmentation as a result of habitat removal.
Amphibians	#	Potential loss of suitable terrestrial habitat, harm/injury, habitat fragmentation as a result of habitat removal.
Reptiles	✓	Potential loss of suitable habitat (e.g. refuge, basking, foraging, commuting), harm/injury, habitat fragmentation as a result of habitat removal.
Birds	#	Potential loss of suitable nesting and foraging habitat, harm/injury, disturbance.
<b>Key:</b> #: Dependent on species.		

**Table 6.2: Summary of Potential Impacts on Notable Species**

## 6.5 INVASIVE PLANT SPECIES

The desk study revealed records of multiple invasive plant species within a 1 km radius of the survey area, the nearest of which were located on site (records of Himalayan balsam, least duckweed and Spanish bluebell were located along the ditch/hedgerow in the south-western part of the site which extends from the earth bund to the B2036). None of these species were recorded on site during the survey. However, the current survey was undertaken in November, which is outside of the peak season for recording botanical diversity. An unidentified cotoneaster species was recorded within the woodland on site. This cotoneaster could not be identified to species level, and therefore it is possible that it might be a hybrid. Many cotoneaster species and their hybrids are considered to be invasive under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Any future development of the site has the potential to cause invasive plant species to spread. Prior to the detailed design of a development layout for the site, further survey work will be required to allow the status of invasive plants on site to be assessed and to allow the extent of eradication to be determined. A recommendation for a walkover survey during the spring/summer to identify invasive plant species is made in Section 7.4. There is also a recommendation for a method statement to ensure that any development does not cause invasive plant species to grow or spread.

## 6.6 GATWICK WOODS BIODIVERSITY OPPORTUNITY AREA

As highlighted in Section 4.3, the survey area forms part of the 'Gatwick Woods' BOA, although it is noted that the most ecologically valuable features of the BOA (e.g. Horleyland Wood and other ancient woodland areas) are located outside of the survey area. The most notable habitats within the survey area are the

broadleaved woodland, hedgerows, scattered trees and ditches, all of which make the site permeable to wildlife despite the dominance of low-value improved grassland habitat. The area surrounding the site also has good habitat connectivity despite the presence of a network of major roads and the nearby Gatwick Airport.

The BOA designation provides a non-statutory mechanism for contributing towards local BAP habitat and species targets, although it is stated in the explanatory text provided on the Sussex Biodiversity Partnership website (<http://www.biodiversitysussex.org.uk/landscapes/>) that designation as a BOA does not represent a constraint to development. It is clear, therefore, that the opportunities and constraints presented by the future development aspirations for the site are a key driver in designing biodiversity enhancement contributions for the survey area. As described in Section 1.1 Savills are promoting the land as a site for development, and the recently submitted Crawley Local Plan (Crawley 2030) identifies the site as part of an 'Area of Search' for a strategic employment site. The land is also part of an area safeguarded for future airport use. The following constraints to biodiversity enhancement have therefore been identified:

- The need to deliver a strategic employment site within the land limits the area of the site that is available for achieving biodiversity gain.
- The future safeguarding of the site for airport use further limits the area available for achieving biodiversity gain.
- The proximity of the site to Gatwick Airport means that aerodrome safeguarding must be taken into account when considering biodiversity enhancement proposals for the site. The need to avoid increasing the risk of bird strike with aircraft means that the creation of large expanses of bird-attracting habitat such as woodland, open water and reedbed should be avoided.

Despite these constraints, the future development of the site also presents opportunities for biodiversity enhancement. These include:

- Retention and protection of existing features of biodiversity value, including the woodland, hedgerows and scattered trees.
- Enhancement of the existing hedgerow network on site through new native species planting, in order to ensure the site remains permeable to wildlife and continues to provide connectivity to areas of greenspace in the local area.
- Creation of pockets of greenspace within the development to provide 'stepping stones' for wildlife. These should include native habitat types of local biodiversity value, including wildflower rich grassland, native trees and shrubs and native orchard planting.
- Implementation of a SUDS scheme, comprising features designed to minimise bird strike risk. Low-risk features of biodiversity value include provision of a network of drainage swales (either retaining or replacing the existing ditch network), creation of small ponds or scrapes designed to be of wildlife value but not large enough to attract significant groups of birds, and design of any culverts to include ledges to allow the passage of wildlife.
- Design of a wildlife-friendly lighting scheme for any development to ensure that the site remains permeable to nocturnal fauna such as bats. This may include, for example, the use of low-level and directional lighting.
- Implementation of a long term programme of habitat management to ensure that the value of retained and newly created habitats is maximised in the medium to long term.
- Provision of a programme of signage along footpaths within the development to communicate the ecological value of habitat features and contribute to education and community engagement targets.

It is considered that, despite the constraints presented by the proposed allocation of the site for employment use and proximity to Gatwick Airport, there are still a wide range of achievable biodiversity contributions that can be included within a well-designed development scheme and can provide a positive contribution towards national and local biodiversity targets.

The site and habitat recommendations made in Chapter 6 are informed by the BOA designation and need to provide a positive biodiversity contribution. Chapter 6 also includes recommendations about additional ecological survey and assessment works that will be required to inform a future planning application for development.

## 7. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

The ecological mitigation hierarchy should be applied when considering development which may have a significant effect on biodiversity. The ecological mitigation hierarchy, as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG) should follow these principles:

- **Avoidance** – development should be designed to avoid significant harm to valuable wildlife habitats and species.
- **Mitigation** – where significant harm cannot be wholly or partially avoided, it should be minimised by design or through the use of effective mitigation measures.
- **Compensation** – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, compensation should be used to provide an equivalent value of biodiversity.

### 7.1 NATURE CONSERVATION SITES

The following recommendations are made regarding nature conservation sites:

- R1 SSSI:** The site lies within a SSSI Risk Impact Zone for Hedgecourt SSSI. SSSI Impact Zones are utilised by Local Planning Authorities to assess planning applications for likely impacts on SSSIs. As such the Local Planning Authority and/or Natural England should be consulted prior to any works commencing.
- R2 Ancient Woodland:** As no detailed development proposals have been produced to date, the ancient woodland and veteran trees standing advice (Natural England and Forestry Commission, 2018) should be consulted in order to avoid negative effects on local ancient woodland sites.
- R3 Non-Statutory Sites:** The proposed works could potentially directly or indirectly impact upon several non-statutory conservation sites. As such, the Local Planning Authority ecologist and / or the local Wildlife Trust should be consulted prior to any works commencing to determine how works may proceed without adversely impacting these sites.

### 7.2 HABITATS

The following recommendations are made regarding the habitats present on site:

- R4 Biodiversity Enhancement Opportunities:** In order to provide a contribution towards local biodiversity targets for the 'Gatwick Green' BOA, and in accordance with the provision of Chapter 15 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, the proposed development should seek to:
- Retain and protect existing features of biodiversity value on site, specifically woodland, hedgerows and scattered trees.
  - Enhance the existing hedgerow network in order to provide a strong, coherent green network through the site. New native species hedgerow planting should be incorporated into any development design.
  - Retain existing ditch features or replace ditches with drainage swales as part of a SUDS for the site. Any SUDS should be designed to be of wildlife value, including native species planting and creation of small scrapes and ponds (if possible within aerodrome safeguarding restrictions).
  - Create pockets of greenspace within the development supporting a mosaic of notable habitat types including wildflower grassland, native tree planting and native orchard planting.
  - Maximise the opportunity to include additional habitat creation features, such as bird boxes, bat boxes and deadwood piles, within any soft landscaping proposed.

- Ensure that any lighting strategy for the site is designed sensitively so that the site remains permeable to nocturnal species, particularly bats.
- Produce a Landscape and Ecological Management Plan (LEMP) detailing medium and long-term site management and monitoring proposals to ensure that the site continues to be of value to biodiversity.
- Implement a programme of signage/interpretation boards to communicate the ecological value and sensitivity of various habitat types and receptors, to provide a positive contribution to education and community engagement.

- R5 Habitat Retention and Protection:** The development proposals should be designed (where feasible) to allow for the retention of existing notable habitats including woodland, trees, hedgerows and ditches. Protection measures comprise:
- **Woodland/Trees/Hedgerows:** Any woodland/trees/hedgerows on or overhanging the site, which are retained as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site. If retention is not possible, appropriate replacement planting should be incorporated into the soft landscape scheme in accordance with the ecological mitigation hierarchy. Only native and/or wildlife attracting species should be planted.
  - **Ditches:** Environment Agency Pollution Prevention Guidelines should be adhered to throughout the works. Although formerly withdrawn in December 2015, the guidelines provide a framework for the design of working practices to avoid pollution and siltation. PPG5 (Environment Agency et al, 2007), relating to works and maintenance in or near water, is considered to be of relevance to the proposed project.

- R6 Lighting:** In accordance with best practice guidance relating to lighting and biodiversity (Miles *et al*, 2018; Gunnell *et al*, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat species. Examples of good practice include:
- Avoiding the installation of new lighting in proximity to key ecological features, such as hedgerows and woodland edges.
  - Using modern LED fittings rather than metal halide or sodium fittings, as modern LEDs emit negligible UV radiation.
  - The use of directional lighting to reduce light spill, e.g. by installing bespoke fittings or using hoods or shields. For example, downlighting can be used to illuminate features such as footpaths whilst reducing the horizontal and vertical spill of light.
  - Where the use of bollard lighting is proposed, columns should be designed to reduce horizontal light spill.
  - Implementing controls to ensure lighting is only active when needed, e.g. the use of timers or motion sensors.
  - Use of floor surface materials with low reflective quality. This will ensure that bats using the site and surrounding area are not affected by reflected illumination.
  - For internal lights, recessed light fittings cause significantly less glare than pendant type fittings. The use of low-glare glass may also be appropriate where internal lighting has the potential to influence sensitive ecological receptors.

### 7.3 PROTECTED / NOTABLE SPECIES

To ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made:

- R7 Additional Survey Work:** In order to provide an assessment of the ecological impacts of any future development of the site, and to inform the design of any development layout, the following additional survey works are recommended prior to a planning application being submitted for the site:
- Great Crested Newt Habitat Suitability Index Assessment.
  - Breeding Bird Survey.
  - Wintering Bird Survey.
  - Badger Survey.

- Bat Roost Surveys (including a Preliminary Ground Level Bat Roost Assessment of Trees, and Dusk Emergence and Dawn Re-Entry Surveys if required).
- Bat Activity Surveys (including manual and automated surveys).
- Dormouse Survey (to include habitat assessment, nut search and full presence/absence survey if required).
- Reptile Survey.

All further ecological surveys should be undertaken in accordance with best practice methodologies, during the appropriate survey windows.

- R8 Nesting Birds:** Any vegetation clearance required as part of future development activities should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.
- R9 Terrestrial Mammals:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each workday to prevent animals entering/becoming trapped.

#### 7.4 INVASIVE PLANT SPECIES

The following recommendation is made regarding invasive plant species:

- R10 Invasive Species Method Statement:** A Method Statement must be developed for the proposed works to ensure that they do not result in the spread of any invasive non-native species. This method statement should be discussed with the Environment Agency. The method statement should be informed by an updated site walkover survey to identify any changes in the status of invasive species on site.

## 8. DRAWINGS

Drawing C151186-01-01 – Phase 1 Habitat Map



**Legend**

- - - Site boundary
- X Scattered scrub
- Scattered broad-leaved tree
- - - Dry ditch
- ||||| Fence
- Species-poor intact hedgerow
- - - Species-rich intact hedgerow
- Bare ground
- X Dense scrub
- X Ephemeral/short perennial
- I Improved grassland
- / Inaccessible due to A21
- SI Poor semi-improved grassland
- Semi-natural broad-leaved woodland

- ⊙ Target note
- 1 Line of mature oak trees
- 2 Ditch with high water
- 3 *Cotoneaster* sp.
- 4 Log piles
- 5 Small mammal burrows
- 6 Boggy grassland
- 7 Rabbit droppings

Project <b>Gatwick Green, West Sussex</b>	
Drawing <b>Phase 1 Habitat Map</b>	
Client <b>Savills</b>	
Drawing Number C151186-01-01	Revision 00
Scale @ A3 1:4,000	Date December 2019
Approved By SM	Drawn By GT
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ T:01676 525880 F:01676 521400 E:admin@middlemarch-environmental.com	
This map is reproduced from the Ordnance Survey material with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction is illegal. Crown copyright and may lead to prosecution of civil proceedings. License Number: 100045019	

C151186-01-01



## 9. PHOTOGRAPHS



**Plate 9.1: Dense scrub**



**Plate 9.2: Dry ditch**



**Plate 9.3: Ditch inundated with water**



**Plate 9.4: Grazed improved grassland**



**Plate 9.5: Rushes growing in damper area of grassland**



**Plate 9.6: Earth bund at Rivington Farm, adjacent to survey area**





**Plate 9.7: Ungrazed area of poor semi-improved grassland**



**Plate 9.8: Scattered trees**



**Plate 9.9: Potential roosting features**



**Plate 9.10: Semi-natural broad-leaved woodland**



**Plate 9.11: Species-poor hedgerow**

## REFERENCES AND BIBLIOGRAPHY

British Standards Institution (2013). *British Standard 42020: 2013. Biodiversity – Code of practice for planning and development*. British Standards Institution, London.

British Standards Institution. (2012). *British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations*. British Standards Institution, London.

Institute of Environmental Assessment. (1995). *Guidelines for Baseline Ecological Assessment, Institute of Environmental Assessment*. E&FN Spon, An Imprint of Chapman and Hall. London.

Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint)*. Joint Nature Conservation Committee, Peterborough.

Joint Nature Conservation Committee (2012). *UK Post-2010 Biodiversity Framework*. Available: [http://jncc.defra.gov.uk/pdf/UK\\_Post2010\\_Bio-Fwork.pdf](http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf)

Middlemarch Environmental Ltd (2015) *Preliminary Ecological Assessment: Gatwick Green, Crawley, West Sussex*. Report RT-MME-118885.

Middlemarch Environmental Ltd (2019) *Hedgerow Regulations (1997) Assessment: Gatwick Green, West Sussex*. Report RT-MME-151186-02.

Ministry of Housing, Communities and Local Government (2019). *National Planning Policy Framework*. Available: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Natural England and Forestry Commission (2018) *Ancient woodland, ancient trees and veteran trees: protecting them from development*. Available: <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

## APPENDICES

APPENDIX 1: Summary of Statutory Nature Conservation Sites

APPENDIX 2: Overview of Relevant Species-Specific Legislation

**APPENDIX 1**

Summary of Statutory Nature Conservation Sites

**Site Check Report**

Report generated on Mon Dec 16 2019.

Centroid Grid Ref: TQ29884114.

The following features have been found in your search area:

**Ramsar Sites (England)**

No Features found

**Proposed Ramsar Sites (England)**

No Features found

**Special Areas of Conservation (England)**

No Features found

**Possible Special Areas of Conservation (England)**

No Features found

**Special Protection Areas (England)**

No Features found

**Potential Special Protection Areas (England)**

No Features found

**Ancient Woodland (England)**

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476369

**Area (Ha):** 1.245167

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476372

**Area (Ha):** 1.711795

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476396

**Area (Ha):** 2.268457

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476397

**Area (Ha):** 6.38026

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476398

**Area (Ha):** 0.624934

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476400

**Area (Ha):** 1.612809

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476401

**Area (Ha):** 7.356459

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476405

**Area (Ha):** 1.541474

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1476423

**Area (Ha):** 0.488632

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1493088

**Area (Ha):** 0.810318

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1493089

**Area (Ha):** 1.16028

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1493090

**Area (Ha):** 5.389403

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1492868

**Area (Ha):** 2.226778

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1493475

**Area (Ha):** 1.240542

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1494246

**Area (Ha):** 0.84243

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland

**Theme ID:** 1494065

**Area (Ha):** 2.710168

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1494140  
**Area (Ha):** 6.233314

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1493880  
**Area (Ha):** 2.197604

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1494789  
**Area (Ha):** 2.850161

**Wood Name:** BLACK CORNER WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1476368  
**Area (Ha):** 1.64933

**Wood Name:** BLACK CORNER WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1476390  
**Area (Ha):** 1.263317

**Wood Name:** BRIDGELANDS SHAW

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1480556  
**Area (Ha):** 2.753824

**Wood Name:** HEATHYGROUND WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1480646  
**Area (Ha):** 10.067749

**Wood Name:** WELLFIELD COPSE

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1480553  
**Area (Ha):** 5.417228

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1494144  
**Area (Ha):** 4.779882

**Wood Name**

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1493881  
**Area (Ha):** 1.210697

**Wood Name**

**Theme Name:** Ancient Replanted Woodland  
**Theme ID:** 1494418  
**Area (Ha):** 0.550496

**Wood Name:** BLACK CORNER WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1476382  
**Area (Ha):** 0.451462

**Wood Name:** BLACK CORNER WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1476399  
**Area (Ha):** 0.549164

**Wood Name:** FORGE WOOD, THREE ACRE  
PLANTATION, THE BIRCHES

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1476404  
**Area (Ha):** 9.924652

**Wood Name:** TITCHMERES WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1476394  
**Area (Ha):** 7.135205

**Wood Name:** SHIPLEY BRIDGE WOOD

**Theme Name:** Ancient & Semi-Natural Woodland  
**Theme ID:** 1480554  
**Area (Ha):** 1.511692

**Local Nature Reserves (England)**

No Features found

**National Nature Reserves (England)**

No Features found

**Sites of Special Scientific Interest (England)**

No Features found

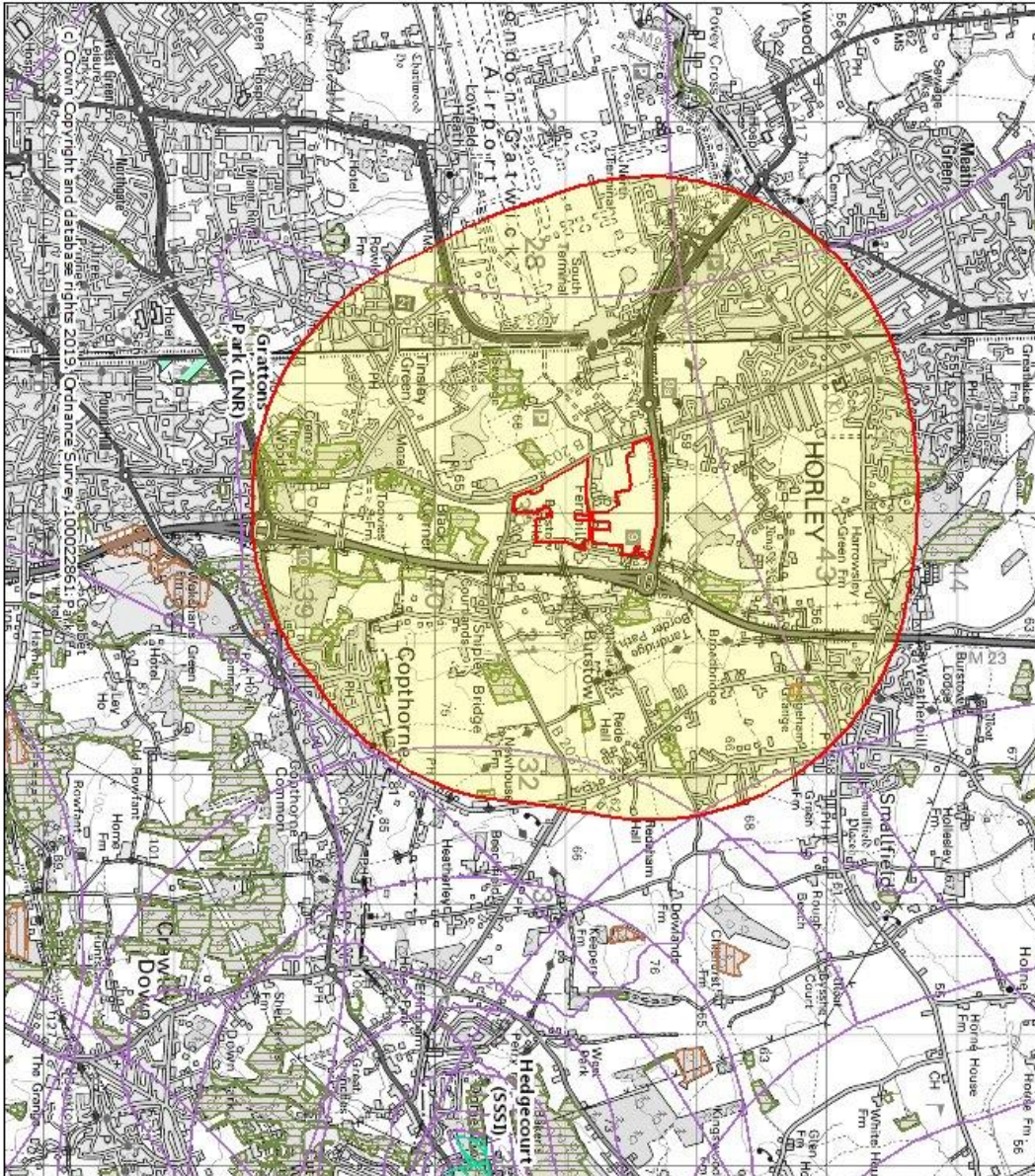
**SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)**

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?
2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

**Infrastructure:** Airports, helipads and other aviation proposals.

**GUIDANCE - How to use the Impact Risk Zones:** [/Metadata for magic/SSSI IRZ User Guidance MAGIC.pdf](#)





**Legend**

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
- Ancient Woodland (England)
- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36  
 xmin = 519100  
 ymin = 134900  
 xmax = 542100  
 ymax = 146500

Map produced by MAGiC on 16 December 2019.  
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGiC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

0 0.85 1.7  
 km



## APPENDIX 2

### Overview of Relevant Species-Specific Legislation

The reader should refer to the original legislation for definitive interpretation.

### Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992. The Protection of Badgers Act 1992 is based primarily on the need to protect badgers from baiting and deliberate harm or injury, badgers are not protected for conservation reasons. The following are criminal offences:

- To intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.
- To wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so.

A badger sett is defined in the legislation as: '*Any structure or place that displays signs indicating current use by a badger*'. 'Current use' is not synonymous with current occupation and a sett is defined as such (and thus protected) as long as signs of current usage are present. Therefore, a sett is protected until such a time as the field signs deteriorate to such an extent that they no longer indicate 'current usage'.

Badger sett interference can result from a multitude of operations including excavation and coring, even if there is no direct damage to the sett, such as through the disturbance of badgers whilst occupying the sett. Any intentional or reckless work that results in the interference of badger setts is illegal without a licence from Natural England. In England a licence must be obtained from Natural England before any interference with a badger sett occurs.

### Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly\** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly\** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

\*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, Noctule Bat *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros*.

## Birds

The Conservation of Habitats and Species Regulations 2017 places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally or recklessly:

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

## Common amphibians

Common frogs, common toad, smooth newt and palmate newt are protected in Britain under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species.

Common toad is listed as a Species of Principal Importance for Nature Conservation in England.

## Dormouse

Dormice and the places they use for shelter or protection receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that dormice, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a dormouse;
- deliberately disturb dormice; or
- damage or destroy a breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead dormouse, part of a dormouse or anything derived from a dormouse, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly\** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly\** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

\*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

Dormice are listed as a Species of Principal Importance for Nature Conservation in England.

### Great crested newt

Great crested newts (GCN) and the places they use for shelter or protection receive European protection under The Conservation of Habitats and Species Regulations 2017, (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that GCN, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a GCN;
- deliberately disturb GCN;
- deliberately take or destroy eggs of a GCN; or
- damage or destroy a GCN breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead GCN, part of a GCN or anything derived from GCN, which has been unlawfully taken from the wild. This legislation applies to all life stages of GCN.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to intentionally kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to intentionally or recklessly\* damage or destroy, or obstruct access to, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to intentionally or recklessly\* disturb any protected species while it is occupying a structure or place which it uses for shelter or protection.

\*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

### Hedgehog

Hedgehogs receive some protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); this section of the Act lists animals which may not be killed or taken by certain methods, namely traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Humane trapping for research purposes requires a licence.

Hedgehogs are a Species of Principal Importance for Nature Conservation in England and are thus capable of being material considerations in the planning process.

### Invasive plants

The Wildlife and Countryside Act 1981 provides the primary controls on the release of non-native species into the wild in Great Britain. It is an offence under section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. This list contains 36 plant species and their hybrids. The Infrastructure Act 2015 makes it possible, under certain circumstances, to compel landowners or occupiers to carry out control or eradication operations, or to allow them to be carried out by the issuing authority.

### Reptiles

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* – benefit from the greatest protection; however, these two species have a limited geographical distribution and special habitat requirements that are not met on this site. Common lizard, slow-worm, adder and grass snake are protected under the Wildlife and Countryside Act 1981 as amended from intentional killing or injuring.

In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties. The Natural Environment and Rural Communities (NERC) Act 2006

places a duty on Government Departments to have regard for the conservation of biodiversity and maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England and Wales. All native reptile species are included on these lists.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.