

## **Appendix 11.1: HLPC Biodiversity Baseline Report**

# clearthinking

COMMERCIAL PROPERTY ADVICE



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## Baseline Ecology and Biodiversity Report

**Site: Wiggs Farm, Bagworth**

**On Behalf Of: Pall-Ex Group Ltd**

**Prepared By:**

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Job Ref: PE0442

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## Quality Assurance

Date	Version	Author	Checked by
18/10/2024	Draft	Josh Randhawa	Craig Greenwell
06/05/2025	V1	Natalie Walsh	Dr Holly Smith

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development" and in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

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.

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## EXECUTIVE SUMMARY

Harris Lamb was commissioned by Pall-Ex Group Ltd in 2024 to undertake a baseline ecology and biodiversity assessment of land at Wiggs Farm, Station Road, Coalville, Leicestershire (central national grid reference SK 43618 09478). The assessment included phase 2 surveys for protected species including great crested newts, bats, reptiles, badgers and breeding birds.

The Site is comprised of a large arable field, two small areas of broadleaved woodland and a section of Station Road. Hedgerows were present along the majority of the field boundaries. Areas of plantation broadleaved woodland were recorded adjacent to the north, west and east of the field, which are within the wider ownership boundary. Arable land and a cluster of buildings associated with 'SLB Supplies' are located adjacent to the southern site boundary.

An eDNA survey was carried out on a nearby pond P1 that returned a positive result showing that great crested newts are present but the lab result reported only 5 out 12 positive replicates. There are multiple other ponds within 500 m of the site that exhibit suitability for GCN, albeit some are separated by major roads and some are used for private fishing, and the woodland and hedgerow within the site boundary provide suitable terrestrial habitat.

Bat activity surveys were carried out in spring and summer 2024. The results of these surveys indicated that the Site was considered to be of local importance to foraging and commuting bats with the woodland used by low numbers of bats during the surveys.

Reptile surveys were carried out in May and June of 2024. Across the seven survey events, six grass snakes were recorded, indicating that the site is used by low levels of grass snake.

Badger monitoring of identified holes within the woodland adjacent to the site was undertaken between 9 May and 3 June 2024. No badger activity was recorded during the monitoring period, and the holes were considered to be inactive/disused.

Breeding bird surveys were carried out at the site between April and June 2024. The site was considered to be of low value to breeding birds at a local scale.

## 1. INTRODUCTION

### 1.1 Project Background

Harris Lamb was commissioned by Pall-Ex Group Ltd to undertake a baseline ecology and biodiversity assessment of land at Wiggs Farm, Bagworth, Leicestershire (central national grid reference SK 43618 09478), hereafter termed the 'site' (see Figure 1 below). The assessment included a baseline biodiversity assessment and presence/likely absence surveys for protected species including; great crested newts, bats, reptiles, badgers and breeding birds.

This assessment is required to inform a planning application associated with the development of the site. The primary purpose of this assessment is to provide a baseline of all ecological considerations relating to the Proposed Development. At the time of undertaking the surveys the likely application boundary was as shown in Figure 1 below.



Site Name	Wiggs Farm, Bagworth	Drawn By	TJ	75/76 Francis Road   Edgbaston   Birmingham B16 9RE   0121 455 9455 THIS DRAWING MAY NOT BE PRODUCED WITHOUT OUR WRITTEN CONSENT
Client	Pall-Ex	Checked By	JR	
Drawing	Site location	Drawing No	PE0442 - 01 Rev 1	Map Provided By Ordnance Survey Maps. Mapping contains (c) Crown copyright and database rights 2016 Ordnance Survey 100035207
Project No	PE0442	Date	09.10.2024	

Figure 1: Site Location Plan. NTS. Source: [www.google.co.uk](http://www.google.co.uk).

### 1.2 Site Description and Context

The site is approximately 14 ha in extent and is situated within a predominantly semi-rural landscape. The site largely comprised of a large arable field, two small areas of broadleaved woodland and a section of Station Road. Hedgerows were present along the majority of the field boundaries. Areas of plantation broadleaved woodland were recorded adjacent to the north, west and east of the field, which are within the wider ownership boundary. Arable land and a cluster of buildings associated with 'SLB Supplies' (outside the site) are located adjacent to the southern site boundary.

## 2. METHODOLOGY

### 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.

The consultees for the desk study were:

- Natural England - MAGIC website for statutory conservation sites; and
- Leicestershire & Rutland environmental records centre (LRERC)

The desk study included a search for:

- Landscape Scale Conservation Initiatives;
- European statutory nature conservation sites in the UK 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;
- Non-statutory sites and protected/notable habitats and species records within a 2 km radius. Only species records 20 years old or less have been included in this report; and,
- Priority habitat on site or within 1 km of the site boundary.

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

### 2.2 UKHAB Survey

A field survey was conducted following the UKHab Version 2.0<sup>1</sup> methodology and the Institute of Environmental Assessment<sup>2</sup> methodology. The initial survey was undertaken by Josh Randhawa (FISC Level 3) with 8 years professional experience and by Susan Sweetman (FISC Level 4) 20<sup>th</sup> May 2024 with over 15 years botanical survey experience. UK Habitat classification is a standard technique for classifying and mapping British habitats. The aim is to provide a record of baseline habitats that are present on site at the time of survey. During the survey, habitat condition assessments were carried out to determine the ecological status of each habitat recorded.

Additionally, during the survey, the presence or potential presence of protected species was noted where observed. This included a review of suitable habitat opportunities or field signs of notable species groups (amphibians, bats, birds, terrestrial and aquatic invertebrates, terrestrial and aquatic mammals, plants and reptiles).

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<sup>1</sup> UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>).

<sup>2</sup> Institute of Environmental Assessment. (1995). *Guidelines for Baseline Ecological Assessment*, Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall. London.

<sup>3</sup> Defra. (2024) *The Statutory Metric – Technical Annex I: Condition Assessment Sheets and Methodology*.

## 2.3 Fauna

The fauna included within this assessment is based on the habitats present, data from the desk-based searches, and the following legislation<sup>4</sup>:

- The Wildlife and Countryside Act 1981 (as amended);
- The Protection of Badgers Act 1992;
- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Natural Environment and Rural Communities NERC Act 2006 – S41 Species of Principal Importance (SPI) for the conservation of biodiversity; and,
- The Countryside Rights of Way Act 2000.

### 2.4.1 Amphibians

Waterbodies up to 500 m from the site boundary were identified using online Ordnance Survey maps and aerial imagery<sup>5</sup> and were assessed for their suitability to support great-crested newts *Triturus cristatus* using a Habitat Suitability Index (HSI)<sup>6</sup>.

#### Terrestrial Habitat

An assessment was completed of the suitability of terrestrial habitats within the site to support GCN. Terrestrial habitat providing suitable shelter includes scrub and rank vegetation, whereas rubble piles, tussock grassland and tree/shrub roots provide potential opportunities for hibernation.

#### Habitat Suitability Index

Prior to the start of the GCN surveys a Habitat Suitability Index (HSI) assessment was undertaken of those suitable waterbodies present locally where accessible. This assessment provides a measure of the likely suitability that a waterbody has for supporting newts<sup>15,16</sup>. Whilst not a direct indication of whether or not a waterbody will support GCN, generally those with a higher score are more likely to support this species than those with a lower score. There is also a positive correlation between his scores and ponds in which GCN are recorded.

Ten separate attributes are assessed for each pond to assess its suitability to support GCN:

<ul style="list-style-type: none"> <li>• Location within the UK</li> <li>• Pond area</li> <li>• Frequency of pond drying</li> <li>• Water quality</li> <li>• % shade</li> </ul>	<ul style="list-style-type: none"> <li>• Presence of water-fowl</li> <li>• Presence of fish</li> <li>• Number of other ponds within 1km</li> <li>• Quality of surrounding terrestrial habitat</li> <li>• % cover by macrophytes</li> </ul>
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<sup>4</sup> See [www.legislation.gov.uk](http://www.legislation.gov.uk)

<sup>5</sup> [www.bing.com/maps](http://www.bing.com/maps) accessed March 2018

<sup>6</sup> Oldham et al., 2000. Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10, 143-155

A score is assigned according to the most appropriate criteria level set within each attribute and a total score calculated of between 0 and 1. The pond suitability to support breeding GCN is then determined according to the following scale:

**Table 1: HSI Scores as a Measure of Pond Suitability for use by GCN**

Result	Description
Positive	A positive result means that eDNA from GCN was detected, confirming the species has been present within the water in the 20 days preceding sampling. An eDNA score would be provided indicating the number of positive replicates from a series of twelve.
Negative	DNA from GCN was not detected; in the case of negative samples the DNA extract is further tested for PCR inhibitors and degradation of the sample.
Inconclusive	Controls indicate degradation or inhibition of the sample, therefore the lack of detection of GCN DNA is not conclusive evidence for determining the absence of the species in the sample provided. Inhibition can occur through unexpected chemicals in the sample.

#### Environmental DNA (eDNA) Sampling & Analysis

Sampling was completed on 16<sup>th</sup> May 2024 by appropriately licenced ecologists who collected water samples from each waterbody. Sampling was undertaken using kits obtained from SureScreen Scientifics. The methodology comprised taking samples of agitated water from 20 locations around each waterbody and mixing thoroughly. 15ml of this water was then placed into each of 6 sterile sample tubes containing preservative, precipitates and a DNA sequence that was used for degradation control. All samples were stored in accordance with the protocols provided by the laboratory. The samples were then transported under suitable conditions to SureScreen Scientifics laboratory for analysis. SureScreen Scientifics Ltd are listed as a quality provider by Natural England and participate in their proficiency testing scheme. Following analysis, results provided by the laboratory could have one of three outcomes which are described in Table 2 below.

**Table 2: Descriptions of eDNA Results**

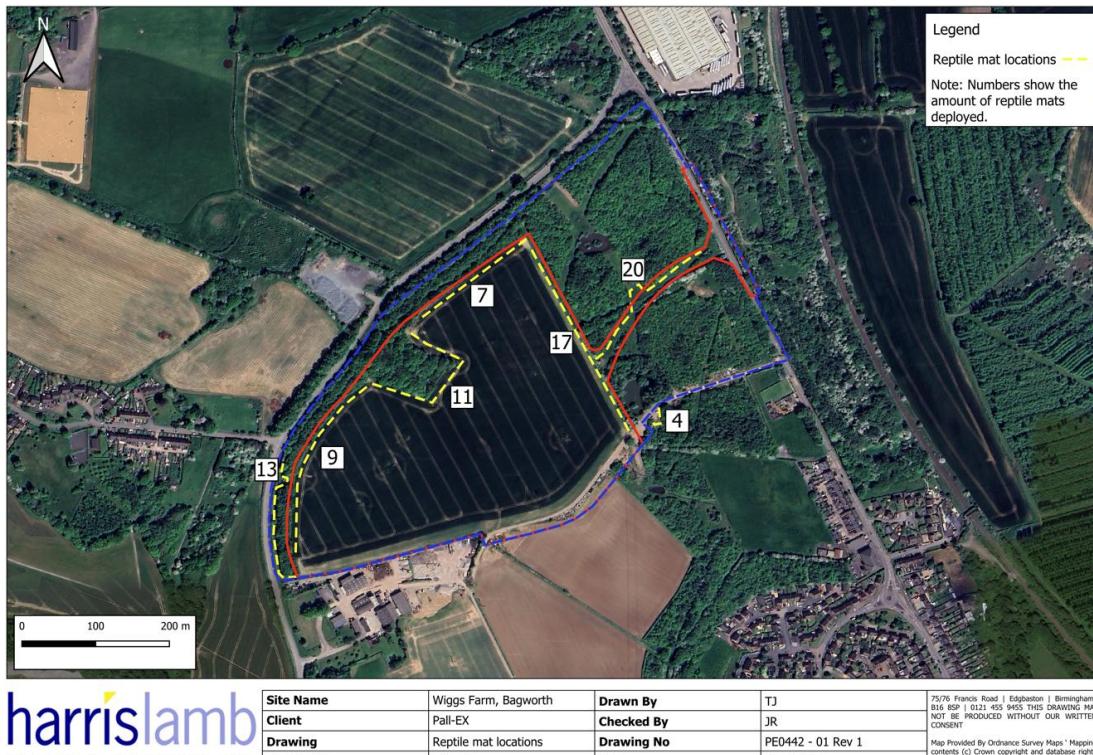
Result	Description
Positive	A positive result means that eDNA from GCN was detected, confirming the species has been present within the water in the 20 days preceding sampling. An eDNA score would be provided indicating the number of positive replicates from a series of twelve.
Negative	DNA from GCN was not detected; in the case of negative samples the DNA extract is further tested for PCR inhibitors and degradation of the sample.
Inconclusive	Controls indicate degradation or inhibition of the sample, therefore the lack of detection of GCN DNA is not conclusive evidence for determining the absence of the species in the sample provided. Inhibition can occur through unexpected chemicals in the sample.

#### **2.4.2 Reptiles**

An assessment of the suitability of the habitats present to support common reptile species was undertaken. In accordance with current guidance, this assessment involved a review of habitats and habitat structure for suitable shelter for reptiles such as areas of scrub and woodpiles,

grassland with well-developed and varied structure, areas suitable for basking, large tussocks etc.

A presence/absence reptile survey using Artificial Cover Objects (ACO's) or refugia, in accordance with Froglife guidelines (1999) was undertaken in spring 2024. ACOs were distributed in optimal reptile habitat and were placed on top of short vegetation in sunny areas where reptiles may bask, near to cover. The approximate location and distribution of the refugia deployed is shown in Figure 2.



**Figure 2: 2024 Reptile refugia locations. NTS. Source: [www.google.co.uk](http://www.google.co.uk). Note site boundary at time of survey.**

ACOs were constructed of c. 0.5 m<sup>2</sup> sheets using bitumen roofing felt as recommended by Froglife. In addition, natural refugia features already present, i.e., rubble/brick piles and wooden planks, were searched. For areas that were inaccessible the refugia were placed on immediately adjacent where safe to do so.

The ACOs were left to 'bed in' for approximately two weeks, after which time seven non-consecutive survey visits were carried out during ideal weather conditions between May 2024 and early June 2024. During each visit, the ACOs were checked visually from a distance to determine whether reptiles were basking on their surface. The artificial refugia were then carefully approached and lifted to check for reptiles sheltering beneath them.

Weather during the survey visits was conducive for surveying for reptiles, being dry and warm or mild. Froglife guidelines (1999) recommend ideal temperatures for reptile survey between 9°C and 18°C. Details on the survey timings and weather conditions are given in Table 3.

**Table 3: Reptile Survey Details and Weather Conditions**

Date	Time (h)	Weather conditions	Air Temperature (°C)
07.05.24	09:30 – 10:30	Dry, partially cloudy, still	14
09.05.24	09:30 – 10:30	Dry, sunny, light breeze	16
20.05.24	08:50 - 09:50	Dry, cloudy, light breeze	13
24.05.24	09:00 – 10:00	Dry, partially cloudy, light breeze	15
03.06.24	09:30 – 10:30	Dry, overcast, light breeze	16
07.06.24	08:50 – 09:50	Dry, sunny, very light breeze	13
14.06.24	09:00 – 10:00	Dry, partially cloudy, light breeze	15

#### 2.4.3 Birds

A four-visit breeding bird survey (BBS) was undertaken by an experienced ornithologist provided by Falco Ecology between April and June 2024. The surveys were carried out within the indicative site boundary (arable field) as it was not known at that stage what the final application boundary would be and along the existing track within the eastern woodland and a c. 100 m buffer. Species heard and seen within the buffer were recorded as accurately as possible. Accurate territory counts outside the site were not obtained; however, the data collected provides a useful indication of what key species are in the vicinity of the site.

Surveys involved transects based on a reduced Common Bird Census Methodology, as described in both Gilbert et al. (1998)<sup>7</sup> and Bibby et al. (2000)<sup>8</sup>. The routes were walked at a steady pace with each bird identified by sight or song/call and marked on a field map using standard BTO symbols and behaviour codes. Each route was reversed on alternate visits to prevent any temporal bias. All habitats were surveyed with all parts of the site including a 100 m buffer where access was available. Full methodology is provided in Appendix 2.

#### 2.4.4 Bats

A daytime bat walkover (DBW) was undertaken during the initial ecology survey, by licensed bat ecologist Josh Randhawa (2023-11797-CL18-BAT). Trees which were anticipated to be impacted by the development were assessed for potential to support roosting bats. Assessments were undertaken from ground level, with the aid of a torch and binoculars, where required. Potential Roosting Features (PRF) for bats following current best practice<sup>9,10,11</sup>, were searched for and trees were assigned a level of suitability from the following categories: NONE, FAR (Further Assessment Required) and PRF (tree with at least one PRF).

The potential for the site and immediate surrounds to support foraging and commuting bats was also assessed, with particular regard given to the presence of linear habitat features such as continuous treelines, hedgerows and tree lined watercourses which provide potential flight lines, and continuous habitat connected to the wider landscape.

HLPC carried out seasonal (spring, summer and autumn) Nighttime Bat Walkovers (NBW), in accordance with the methodologies contained within Collins, 2023. Surveyors were stationed on

<sup>7</sup> Gilbert, G., Gibbons, D.W. & Evans, J. 1998. Bird Monitoring Methods. Royal Society for the Protection of Birds. Pelagic Publishing Limited: Exeter.

<sup>8</sup> Bibby, C.J., Burgess, N.D. & Hill, D.A. 2000. Bird Census Techniques. Second edition. London: Academic Press.

<sup>9</sup> Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. ISBN-978-1-73951

<sup>10</sup> Mitchell-Jones, A.J. & McLeish, A.P. Ed. 2004. Bat Workers' Manual 3rd Edition

<sup>11</sup> BCT (2015) Surveying for Bats in Trees and Woodland – Guide

potential flight lines near potential roost sources or interest features at sunset and remained in position for at least 30 minutes, observing behaviour and making acoustic recordings of commuting and foraging bats. Surveyors then walked a predetermined transect route at a steady pace, sampling all habitats within the site, and recorded nocturnal bat activity across the site. The transect route was adapted as necessary in response to observed bat activity during the survey. Point counts of at least eight minutes were included at six suitable locations along the transect route.

The surveys were carried out during suitable weather conditions (low wind, little to no rain and temperatures of at least 10°C). The surveyors were equipped with Echo Meter Touch 2 bat detectors and high-powered torches. The dates, timings and weather condition during the surveys are given in Table 4.

**Table 4: Transect Survey Details and Weather Conditions**

Date	Sunset (h)	Start Time (h)	End Time (h)	Air Temperature (°C)	Weather
15.05.24	20:56	20:56	23:00	16	Dry, partially cloudy, very light breeze
17.08.24	20:26	20:26	22:56	19	Dry, partially cloudy, very light breeze
18.09.24	19:12	19:12	21:24	16	Dry, clear, light breeze

In addition, automated static bat detectors were deployed on site for the purpose of providing additional bat activity data between April 2024 and October 2024. The static detector units were deployed to capture a minimum of five consecutive nights' worth of activity captured for each deployment period (Tables 13-14 overleaf). Data was analysed by a suitably experienced ecologist using Anabat Insight and assessed to species/genus level through sonogram identification. This was supported by species guidance produced by Russ (2012).

The transect route and static detector locations are shown in Figure 3 below.



Site Name	Wiggs Farm	Drawn By	GS	7576, Francis Road   Edgbaston   Birmingham B16 8SP   0121 455 8455 THIS DRAWING MAY NOT BE PRODUCED WITHOUT OUR WRITTEN CONSENT
Client	Pall-Ex	Checked By	JR	
Drawing	Transect Route Plan	Drawing No	Figure 3	Map Provided By Ordnance Survey Maps © Mapping contents (c) Crown copyright and database rights 2016 Ordnance Survey 100035207
Project No	PE0442	Date	15/10/2024	

**Figure 3: NBW observation points, transect route, point count locations and static detector locations. NTS. Source: [www.google.co.uk](http://www.google.co.uk). Note site boundary at time of survey.**

#### 2.4.5 Badger

Evidence of badger *Meles meles* activity in the form of mammal paths, setts, snuffle holes, latrines etc were recorded as seen.

A badger survey was undertaken in accordance with best practice survey guidance from the Mammal Society<sup>12</sup> in April 2024, with all badger activity and all badger setts found on site recorded. During the surveys, the level of activity associated with badger hole/s was graded into one of three categories as described below:

- Well used – clear of any debris or vegetation, are obviously in regular use and may or may not have been excavated recently.
- Partially used – Not in regular use and have debris such as leaves and twigs in entrance or have moss or other plants growing around entrance. Partially used holes could be in regular use after a minimal amount of clearance.
- Appears disused – Do not appear to have been used for some time and are partially or completely blocked.

A thorough site walkover was completed to ensure all possible sett locations could be observed. Key signs that were searched for included:

- sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;

<sup>12</sup> Harris S, Cresswell P and Jefferies D (1989) Surveying Badgers, Mammal Society.

- large spoil heaps outside sett entrances;
- bedding outside sett entrances;
- badger footprints;
- badger paths;
- latrines;
- badger hairs on fences or bushes;
- signs of digging for food (snuffle holes).

One H60 Apeman trail camera was deployed on site between 9<sup>th</sup> May 2024 to 3<sup>rd</sup> June 2024 to monitor the identified mammal holes within the woodland adjacent to site and record evidence of use by badgers. The camera is equipped with motion sensors, has infrared capabilities and records footage when movement is detected day or night.

#### **2.4.6 Other notable species**

Signs of other notable species were recorded as seen. Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended was recorded as seen.

#### **2.4.7 Scoped out**

Due to a lack of suitable habitat the following species were scoped out: otters *Lutra lutra*, water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes*.

As the site is not within the known distribution of hazel dormice *Muscardinus avellanarius* and as no records were identified by the local biological records centre, hazel dormice have been scoped out of this assessment.

### **2.4 Constraints and Limitations**

The assessment for designated sites is based on site citations provided by the local biological record holder and no visits have been made to designated sites.

Any absence of desk study records cannot be relied upon to infer absence of a species/habitat as the absence of records may be a result of under-recording within the given search area.

The UK Habitat Classification Survey aims to characterise the habitat on site and is not intended to give a complete list of plant species present. It represents a snapshot in time and does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species.

Ecological surveys are limited by factors that affect the presence of plants and animals, such as the time of year, weather, migration patterns and behaviour.

Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, and hence the absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.

Due to dense vegetation, it was not possible to survey all of the site thoroughly for evidence of badger but signs of badger in proximity to hedgerows could be observed, e.g. paths.

The daytime bat walkover was undertaken in summer when the trees were in leaf. As tree assessments for bat roost potential were undertaken from the ground, potential roosting features within the canopy may have been obscured. However, it was noted that the majority of trees were young and less likely to have development suitable roosting features. Additionally, a precautionary approach was undertaken and trees which were of large size and/or old age were categorised as 'FAR'. No large, old trees are anticipated to be impacted by the proposed development.

The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for one to two years, assuming no significant considerable changes to the site conditions.

Owing to the dynamic nature of the work undertaken, if more than twelve months have elapsed since this report was written, advice should be sought to determine whether update work is required. The findings of this report should not be relied upon without such updated advice, and we shall not be liable for any losses stemming from reliance on any report more than 12 months after it was produced.

### 3. DESK STUDY

#### 3.1 Landscape Initiatives

Part of the site lies within a fringe GCN Strategic Opportunity Area (Leicestershire, Rutland, Rushcliffe and South Kesteven) produced by Natural England<sup>13</sup>. Leicestershire County Council are in the process of developing a Local Nature Recovery Strategy.

#### 3.2 National Character Area

National Character Areas (NCA) divide England into 159 distinct natural areas. Each is defined by a unique combination of landscape, biodiversity, geodiversity, history, and cultural and economic activity. The National Character Area (NCA) that the site lies within has been identified using the British Government NCA webpage<sup>14</sup>. The site lies within the Leicestershire and South Derbyshire Coalfield NCA which consists of a plateau with unrestricted views of shallow valleys and gentle ridges that become less pronounced in the south due to a layer of glacial till.

#### 3.3 Nature Conservation Sites

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 5.

**Table 5: Summary of Nature Conservation Sites**

Site Name	Designation	Proximity to the Survey Area (km)	Description
<b>European Statutory Sites</b>			
None identified			
<b>UK Statutory Sites</b>			
None identified			
<b>Non-statutory Sites</b>			
Bagworth, Clay Quarry Wood pond	cLWS	Within ownership boundary	Small pond in young native-species National Forest plantation, with Broad-leaved pondweed.
The Batram Lane Turn	cLWS	0.18 km north	Large Typha swamp, surrounded by recent plantation of native trees and shrubs, with small area of species-rich mesotrophic grassland. Open access.
The Beacon, Bagworth	cLWS	0.67 km south	Mesotrophic grassland, and heathland (created), scrub and woodland, open access.
Bagworth Wood small stream and ponds	cLWS	0.7 km east	Small stream/ditch, with gravelly substrate, and 3 associated ponds, the largest of which is a large Typha swamp. Also present is marshy grassland and tall herbs, and two potential veteran trees (Ash and Oak) close to middle pond.

<sup>13</sup> GCN Strategic Opportunity Areas (Leicestershire, Rutland, Rushcliffe and South Kesteven) | Natural England Open Data Geoportal ([arcgis.com](http://arcgis.com))

<sup>14</sup> <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles>

Site Name	Designation	Proximity to the Survey Area (km)	Description
Ellistown, Tower Hayes Farm veteran Oak	pLWS	0.81 km north-east	Large veteran oak in arable field.
Battleflat Railway Line	cLWS	1.06 km north	Railway cutting, verges and banks with species-rich mesotrophic grassland, with some lime-loving species. Including Common Spotted Orchids and Fairy Flax. Scattered scrub.
Battram Wood pond and grassland	cLWS	1.14 km west	Created 'wildlife pond' in open access land; diverse aquatic vegetation, surrounded by species-rich tall grassland, unmanaged and probably from wildflower seed. Good for dragonflies.
Stanton under Bardon, Wood Farm pond	cLWS	1.33 km north-east	Large pond with extensive <i>Potamogeton</i> .
Ibstock Grange lake and ponds	cLWS	1.58 km west	Three large ponds/small lakes, along stream through Battram Wood and adjoining plantations. Broad-leaved Pondweed.
Ellistown, hedgerows adj to Ibstock Brickworks	cLWS	1.6 km north-west	Two field hedges, the one to south having average 5spp/30m, with ditch and standard trees; hedge to west with 4.5spp./30m plus ditch and standard trees (meeting secondary habitat criteria).
Manor Farm, Bagworth	nLWS	1.76 km south-east	Mesotrophic grassland and mature trees - 2 <i>Fraxinus excelsior</i> , 1 <i>Quercus</i> sp., with pond.
Bagworth Park farm drive, veteran beech	cLWS	1.9 km south-east	Large beech, no access to measure, but est. 4m girth.
Ellistown Hedgerows	cLWS	1.91 km north	Four species-rich hedgerows.
Bagworth, veteran beeches, Ivanhoe Railway embankment	cLWS	1.94 km south-east	Two large beeches, close together, with coalesced crowns. No access to measure, but est. at c. 4m girth each. One tree has had major limb removed.
<b>Key:</b>			
cLWS: Candidate Local Wildlife Site			
pLWS: Potential Local Wildlife Site			
nLWS: Notified Local Wildlife Site			

### 3.4 Habitats

Table 6 summarises known priority or notable habitats within a 1 km radius of the site.

**Table 6: Summary of Priority/Notable Habitats**

Habitat Type	Location of Nearest Record (km)
Deciduous woodland	On-site
Ancient woodland	0.86 km south-west

### 3.5 Protected/Notable Species

Table 7 and the following text provide a summary of protected and notable species records within a 2 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.

**Table 7: Summary of Protected/Notable Species Records**

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area (km)
<b>Mammals - Bats</b>			
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	16	2020	0.78 km south
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	8	2020	0.78 km south
Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>	2	2019	1.85 km north-east
Unidentified Pipistrelle <i>Pipistrellus</i> sp.	1	2019	1.68 km south-east
Noctule <i>Nyctalus noctula</i>	8	2020	1.14 km north-east
Serotine <i>Eptesicus serotinus</i>	2	2019	1.85 km north-east
Leisler's bat <i>Nyctalus leisleri</i>	2	2019	1.85 km north-east
Brown Long-eared Bat <i>Plecotus auritus</i>	7	2020	1.14 km north-east
Whiskered bat <i>Myotis mystacinus</i>	3	2017	0.78 km north
Unidentified Myotis <i>Myotis</i> sp.	7	2020	1.14 km north-east
<b>Mammals – Badger</b>			
Badger <i>Meles meles</i>	27	2022	0.12 km west
<b>Other mammals</b>			

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Survey Area (km)
Otter <i>Lutra lutra</i>	1	2019	1.99 km north-east
Polecat <i>Mustela putorius</i>	1	2022	2 km south
<b>Herpetofauna</b>			
Great crested newt <i>Triturus cristatus</i>	146	2021	0.72 km south-west
Common Toad <i>Bufo bufo</i>	42	2022	0.33 km north-west
Grass Snake <i>Natrix helvetica</i>	6	2020	1.53 km north
<b>Birds</b>			
Greylag Goose <i>Anser anser</i>	1	2012	0.46 km south-west
Little Ring Plover <i>Charadrius dubius</i>	9	2020	0.86 km south-west
Quail <i>Coturnix coturnix</i>	6	2020	1.58 km south
Whooper Swan <i>Cygnus cygnus</i>	1	2006	1.64 km north
Merlin <i>Falco columbarius</i>	4	2019	1.64 km north
Hobby <i>Falco subbuteo</i>	5	2021	0.42 km west
Brambling <i>Fringilla montifringilla</i>	7	2022	0.48 km west
Crossbill <i>Loxia curvirostra</i>	1	2020	0.48 km west
Whimbrel <i>Numenius phaeopus</i>	1	2000	1.4 km north
Greenshank <i>Tringa nebularia</i>	1	2021	0.82 km north
Green Sandpiper <i>Tringa ochropus</i>	3	2012	0.82 km north
Redwing <i>Turdus iliacus</i>	20	2021	0.42 km west
Fieldfare <i>Turdus Pilaris</i>	15	2021	0.67 km east
Barn Owl <i>Tyto alba</i>	11	2021	0.66 km west
Peregrine <i>Falco peregrinus</i>	9	2021	0.42 km west

The habitats on site such as hedgerows and broadleaved woodland provide foraging and nesting opportunities for these bird species protected by the Wildlife and Countryside Act 1981.

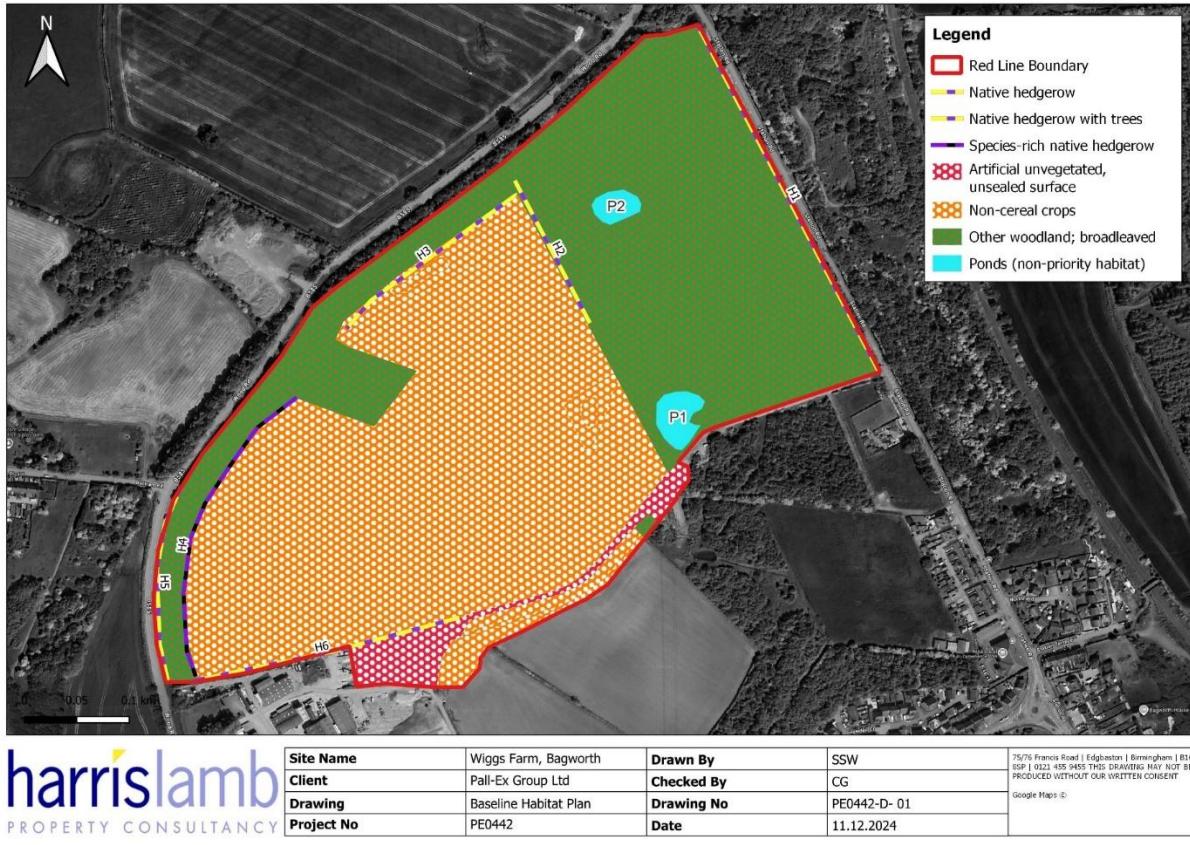
### **3.6 Invasive Species**

No records of invasive species on site were returned from the data consultation.

## 4. SURVEY RESULTS

### 4.1 Introduction

A Baseline Habitat Plan (Figure 4), illustrating the location and extent of all habitat types recorded on site in 2024.



**Figure 4: Baseline habitat plan (2024). NTS. Source [www.google.co.uk](http://www.google.co.uk). Note: Site boundary at time of survey.**

### 4.2 Habitats

Table 8 details the types, extent and ecological condition of the habitats which were recorded on site during the field survey visit.

**Table 8: Summary of Habitats Recorded on Site**

Habitat
Non-cereal crops
Other woodland; broadleaved / Other neutral grassland
Ponds (non-priority)
Artificial unvegetated, unsealed surface
Native hedgerow

### 5.2.1 Non-cereal crops

The central area of the site comprised arable land that had been recently sown prior to the survey. The arable field margins were very limited in size, approximately 0.5 m wide and characterised by abundant Yorkshire fog *Holcus lanatus*, false oat grass *Arrhenatherum elatius* with occasional cock's foot and perennial rye grass. The herb species were limited to occasional spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, broad-leaved dock *Rumex obtusifolius*, groundsel *Senecio vulgaris*, common ragwort *Jacobaea vulgaris* and locally abundant nettle *Urtica dioica*.



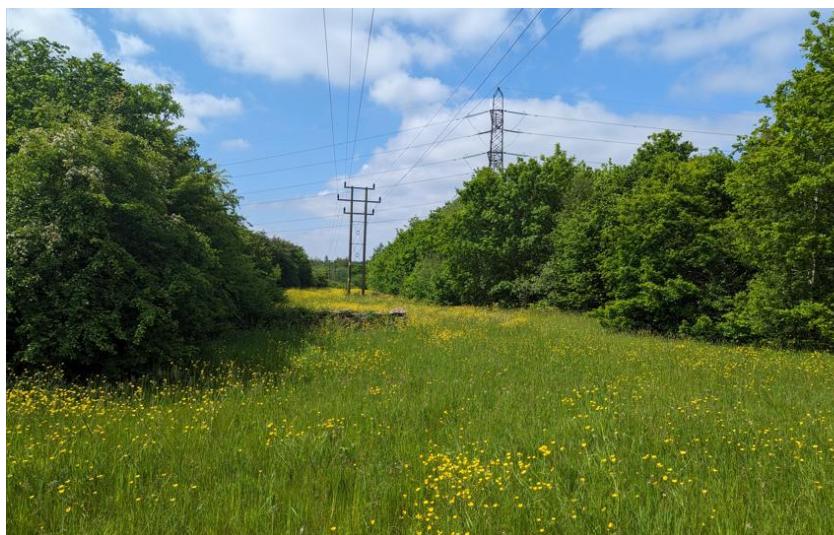
Plate 5.1: Arable field

### 5.2.2 Other woodland; broadleaved / Other Neural Grassland

The arable field was surrounded by mature woodland on the northern and eastern boundaries. The woodland canopy was composed of willow *Salix* sp., wild cherry *Prunus avium*, pedunculate oak *Quercus robur*, silver birch *Betula pendula*, field maple *Acer campestre* and ash *Fraxinus excelsior*. There was an understorey of immature and semi-mature pedunculate oak, silver birch and ash with hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, dogwood *Cornus sanguinea*.

The ground flora comprised of bramble *Rubus fruticosus* agg., ivy *Hedera helix* and cleavers *Galium aparine*. There were rides present in the eastern area of woodland to provide access through the area and space for telegraph poles and wiring.

The rides comprised of well-established other neutral grassland that supporting a rich assemblage of species. The sward was approximately 40-50 cm high comprising frequent false oat, sweet vernal *Anthoxanthum odoratum*, rough meadow grass *Poa trivialis* and meadow foxtail *Alopecurus pratensis* with occasional to rare cock's foot *Dactylis glomerata*, crested dog's tail *Cynosurus cristatus*, meadow fescue *Festuca pratensis* and perennial rye grass *Lolium perenne* and soft brome *Bromus hordeaceus*. Herb species comprised frequent creeping cinquefoil *Potentilla reptans*, ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens* and red clover *Trifolium pratense* with occasional to rare common vetch *Vicia sativa*, yarrow *Achillea millefolium*, common chickweed *Stellaria media*, herb robert *Geranium robertianum*, foxglove *Digitalis purpurea*, hedge woundwort *Stachys sylvatica*, germander speedwell *Veronica chamaedrys*, broad leaved dock *Rumex obtusifolius*, hogweed *Heracleum sphondylium*, cat's ear *Hypochaeris radicata*, hedge bindweed *Calystegia sepium* and white clover *Trifolium repens*.



**Plate 5.2: Other woodland; broadleaved (eastern block) looking westwards**

### **5.2.3 Ponds (non-priority)**

There were two ponds on site (P1 and P2 on the Baseline Habitat Plan).

Pond P1 – located on the southern boundary of the site, this pond of dimensions 55 x 50 m was in use as a fishing pond and is presumably stocked with fish. Fishing platforms were present around the sides and a small, vegetated island was present in the centre. The bank vegetation comprising yellow flag iris *Iris pseudacorus*, pendulous sedge *Carex pendula*, greater willowherb *Epilobium hirsuta*, cow parsley *Anthriscus sylvestris* and bulrush *Typha latifolia*. Some semi-mature and mature trees were also present on the banks and the island comprising alder *Alnus glutinosa* and willow *Salix* sp.

Pond P2 – located in the north-eastern extent of the site within the area of woodland, this pond of dimensions 45 x 30 m with gently sloping banks supporting soft rush *Juncus effusus*, cuckoo flower *Cardamine pratensis* and bulrush. A small island was present in the centre with immature alder and willow growing upon it.

### **5.2.4 Artificial unvegetated, unsealed surface**

An access track was present along the southern boundary of the site that linked to Station Road to the east and a yard to the south-west. Some building material had been stored along the side of the track in places. The track comprised compacted gravel and dirt.



**Plate 5.3: Developed land; sealed surface looking south-eastwards**

### 5.2.5 Hedgerows

There were six native hedgerows present on site labelled H1 to H7 on the Baseline Habitat Plan in Section 8 and are described in Table 9.

**Table 9: Summary of hedgerows**

Hedgerow Ref.	Hedgerow Type	Description
H1	Native hedgerow with trees	Unmanaged hedge 3-4 m high and 2 m wide present along the north-eastern boundary along Station Road. Species recorded comprised immature and semi-mature pedunculate oak, hawthorn, holly <i>Ilex aquifolia</i> , willow, blackthorn <i>Prunus spinosa</i> and field rose <i>Rosa arvensis</i> .
H2	Native hedgerow	Managed hedge 2 m high and 3 m wide. Hawthorn was frequent with occasional elder <i>Sambucus nigra</i> , dog rose <i>Rosa canina</i> and immature pedunculate oak. Ground flora limited to bramble and common nettle.
H3	Native hedgerow	Recently planted immature hawthorn hedgerow 1 m high and 0.5 m wide.
H4	Species-rich native hedgerow	Mature, managed, species-rich hedgerow 3-4 m high and 2 m wide comprised of hawthorn, blackthorn, guelder rose <i>Viburnum opulus</i> , pedunculate oak, hazel <i>Corylus avellana</i> , holly, goat willow <i>Salix caprea</i> , dogwood, ash and bramble.
H5	Native hedgerow	Managed hedgerow 2 m high and 2 m wide in the south-western boundary of the site adjacent to Wood Road. Species comprised blackthorn, hawthorn, pedunculate oak, sycamore <i>Acer pseudoplatanus</i> , ivy and black bryony <i>Dioscorea communis</i> .
H6	Native hedgerow	Mature hedgerow along part of the southern boundary 3-4 m high and 3 m wide comprised hawthorn, field maple <i>Acer campestre</i> , pedunculate oak, holly, blackthorn and bramble.



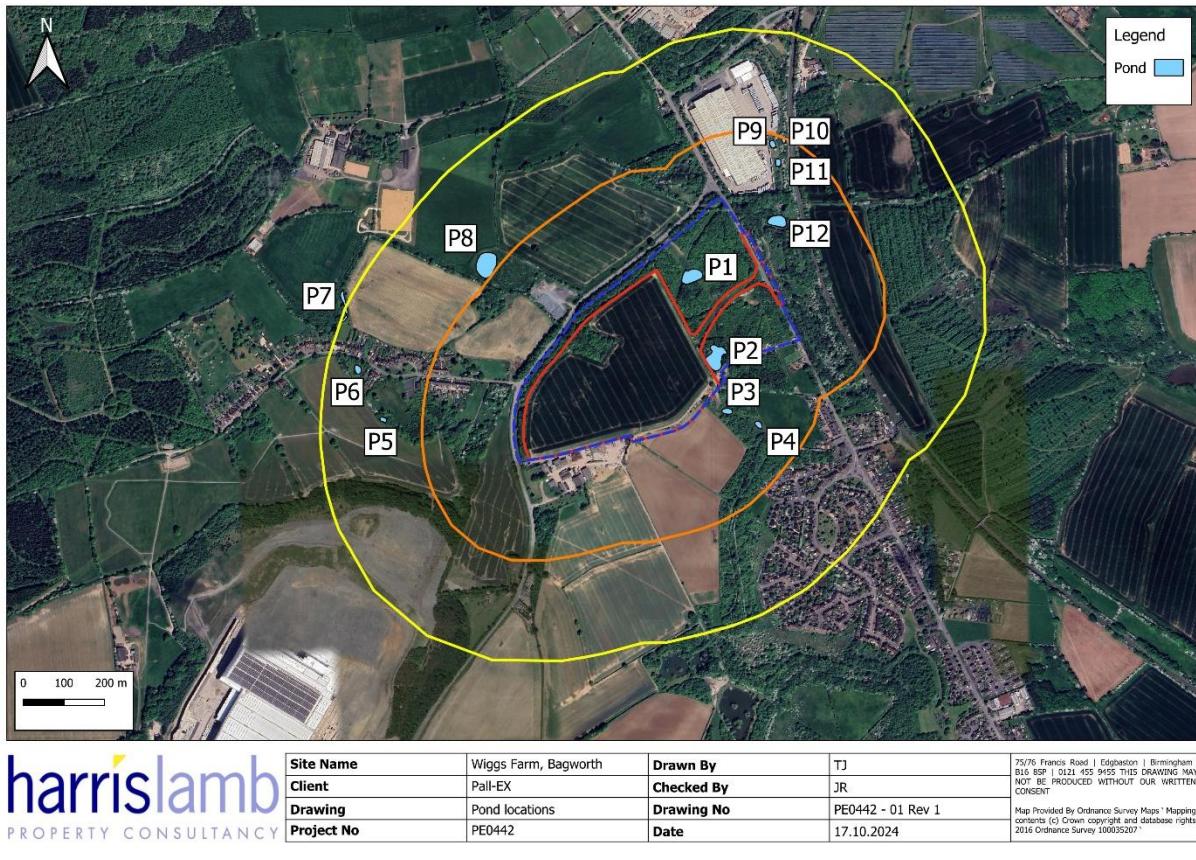
**Plate 5.5: H2 looking northwards**

## 4.3 Protected/notable Species

### 4.3.1 Amphibians

No waterbodies have been recorded on site. Four waterbodies were identified off site with within a 250 m radius (Figure 5). All are located within the National Forest plantation woodland located adjacent to the site. Pond 2 (P2) is located adjacent to the site and is a known fishing pond. Pond 1 (P1), Pond 3 (P3) and Pond 4 (P4) are located between 50 m and 130 m away from the site, with suitable terrestrial habitat linking them with the site. In addition eight waterbodies were recorded within a 500 m radius. Pond 5 (P5), Pond 6 (P6), Pond 7 (P7) and Pond 8 (P8) are located to the north-west/west of the site, separated from the site by Wood Road (B585). Pond 9 (P9), Pond 10 (P10), Pond 11 (P11) and Pond 12 (P12) are situated to the north-east of the site and are separated from the site by Station Road. P9, P10 and P11 are hydrologically connected but separated from the site by Station Road. Both Wood Road and Station Road are considered to provide a potential barrier to amphibian dispersal.

The majority of the site was considered suboptimal to support amphibians due to the dominance of arable habitat. However, woodland and hedgerow habitats on site were considered suitable to support common amphibians. Incidental sighting of smooth newts within P3 were recorded whilst undertaking the habitat surveys. Smooth newts were also recorded on site during the reptile surveys.



**Figure 5: Ponds identified within 500 m of the site. NTS. Source: [www.google.co.uk](http://www.google.co.uk). Note site boundary at time of survey.**

HSI assessments were undertaken on P1 – P4. The results are summarised in Table 10 below. Detailed results are provided in Appendix 1.

**Table 10: HSI results**

Pond	Suitability for Great Crested Newt
P1	Excellent
P2	Poor
P3	Good
P4	Average
P5	Average
P6	No access
P7	No access
P8	No access
P9	Good
P10	Average
P11	Dry at time of eDNA survey
P12	Good

The results from the water environmental DNA (eDNA) sampling are summarised in Table 11. Full details of positive results are provided in Appendix 1.

**Table 11: Environmental DNA results**

Pond	Environmental DNA Results
P1	Positive
P2	Negative
P3	Negative
P4	Negative
P5	Negative
P6	No access
P7	No access
P8	No access
P9	Negative
P10	Negative
P11	Waterbody dry
P12	Negative

#### 4.3.2 Reptiles

The majority of the site was considered suboptimal to support reptiles due to the dominance of arable habitat and lack of complex habitat structure typically required by reptile populations. However, the arable margins, hedgerows and woodland edge/ride habitats were considered suitable to provide some sheltering/foraging opportunities for reptiles.

The reptiles survey undertaken in May and June 2024 recorded a total of six grass snakes over the survey visits. A peak count of three was recorded on 3<sup>rd</sup> June 2024. A low population<sup>12</sup> of grass snakes is considered to be supported by the site and wider area. Table 12 shows the results of the survey. Figure 6 shows the location of the grass snakes recorded.

<sup>12</sup> Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth

**Table 12: Reptile survey results**

Survey Date	Survey Result
07.05.24	No reptiles recorded
09.05.24	No reptiles recorded
20.05.24	1 grass snake
24.05.24	1 grass snake, 1 smooth newt
03.06.24	3 grass snakes, 2 smooth newts
07.06.24	No reptiles recorded
14.06.24	1 grass snake



**Figure 6: Location of grass snakes recorded during the reptile survey. . NTS. Source: [www.google.co.uk](http://www.google.co.uk). Note site boundary at time of survey.**

#### 4.3.3 Birds

The breeding bird survey undertaken by Falco Ecology recorded thirty-two species in total. Twenty-one green listed bird species (not of conservation concern) were recorded and were considered likely to be breeding or holding territory within wider survey area, but none were recorded in particularly notable numbers or densities. Eleven species of conservation concern were recorded, seven of which were considered to be holding territory and potentially breeding within the site, including skylark *Alauda arvensis*, linnet *Linaria cannabina* and yellowhammer *Emberiza citrinella*.

The breeding assemblage of species of conservation concern are relatively common and widespread throughout England and none of the species were present in significantly high numbers, indicating that the existing habitats are like other arable farms. Falco Ecology considered the site to be of low value to breeding birds at a local scale. The full report is provided

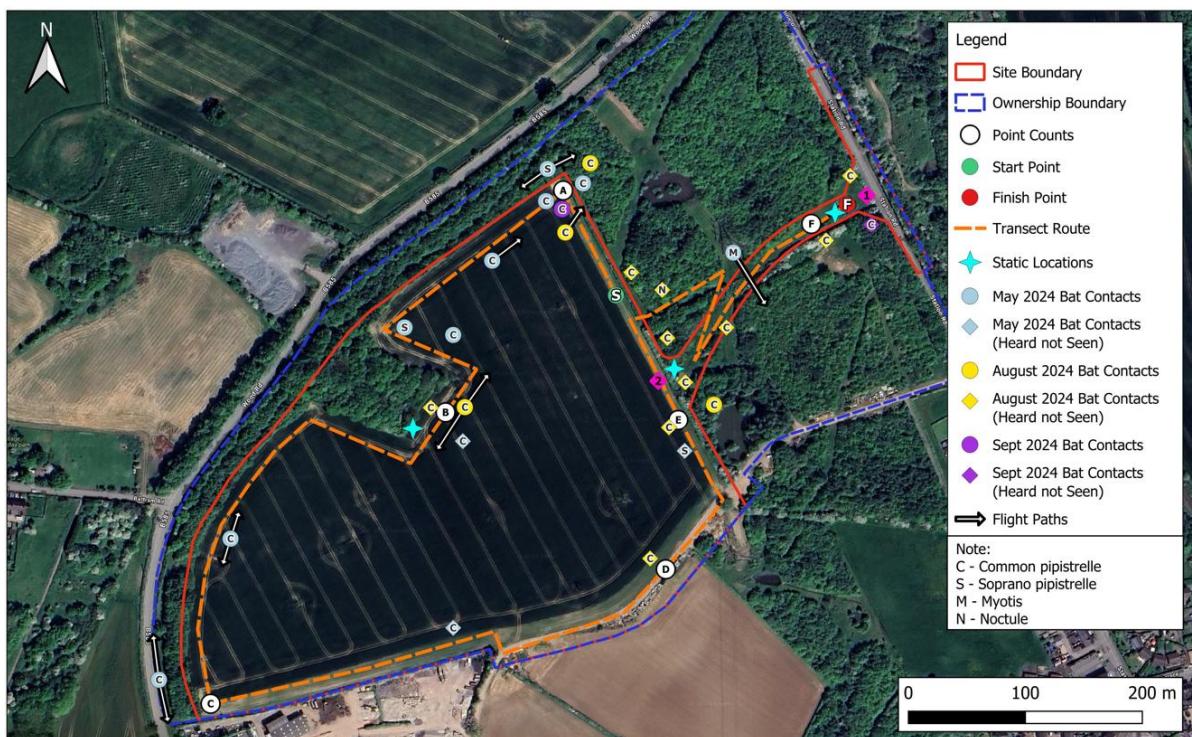
in Appendix 2.

#### 4.3.4 Bats

The arable field was considered to provide minimal foraging opportunities for foraging bats, however, the boundary hedgerows and woodland edges were considered to provide suitable habitat for foraging and commuting. Additionally, the woodland on site and adjacent to site was considered to provide optimal habitat for bats as it featured multiple rides which provides sheltered foraging habitat and additional woodland edge habitat.

##### Transect surveys

Bat activity recorded during the NBW surveys was largely comprised of foraging and commuting common pipistrelles. A low number of soprano pipistrelles were recorded foraging on site and a single pass from a noctule bat and unidentified *Myotis* sp. were also recorded. All bat activity observed was associated with hedgerows or woodland, with increased levels of bat activity recorded in proximity to the eastern block of woodland. No bat activity associated with the open arable habitat was recorded. Minimal bat activity was recorded within September, with only two passes from a common pipistrelle recorded. Results are shown in Figure 7 below.



**Figure 7: NBW survey results. . NTS. Source: [www.google.co.uk](http://www.google.co.uk). Note site boundary at time of survey.**

##### Automatic Bat Static Detector Surveys

The results from the static detector surveys undertaken in 2024 show that a minimum of five species of bats utilise the site. The majority of passes recorded across the static detector deployments were from common pipistrelle bats (63%). The total number of passes recorded from both soprano pipistrelle and *Nyctalus/Serotine* spp., accounted for 21% and 11% of all calls, respectively.

The results show a large range in the total number of bat calls recorded per month and indicate that the site is utilised by bats more in spring with average passes per night peaking in April. Total calls recorded

in April and May account for 75% of the total calls recorded across the full static detector deployment. Very low activity was recorded on site in autumn, with total calls recorded in September and October accounting for just 4% of the total calls recorded. This general pattern was reflected across all species recorded. However, it is noted that the summer NBW survey recorded similar levels of bat activity during both the spring and summer surveys.

There was also a range in the number of passes recorded per detector at different locations during the deployment period. However, no significant pattern indicating that different areas of the site are utilised more by bats throughout the active season.

The results of the automatic bat static detector surveys undertaken between April and October 2024 are detailed within Table 13 and 14.

**Table 13: Number of bat species and total bat passes at each static location per static deployment and average number of bat passes each night**

Date	Location	Minimum no. of species	Total no. of bat passes	Average passes per night
26.04.24-30.04.24 (5 nights)	Eastern access road hedgerow	4	1182	295.5
26.04.24-30.04.24 (5 nights)	Eastern field boundary hedgerow	4	187	46.75
26.04.24-30.04.24 (5 nights)	Northern woodland block edge	4	187	46.75
15.05.24-19.05.24 (5 nights)	Eastern access road hedgerow	4	69	17.25
15.05.24-19.05.24 (5 nights)	Eastern field boundary hedgerow	5	337	67.4
15.05.24-19.05.24 (5 nights)	Northern woodland block edge	4	681	170.25
12.07.24-16.07.24 (5 nights)	Eastern access road hedgerow	4	273	68.25
12.07.24-16.07.24 (5 nights)	Eastern field boundary hedgerow	4	154	38.5
12.07.24-16.07.24 (5 nights)	Northern woodland block edge	4	64	16
22.08.24-26.08.24 (5 nights)	Eastern access road hedgerow	5	130	26
22.08.24-26.08.24 (5 nights)	Eastern field boundary hedgerow	SD card malfunction, no data		
22.08.24-26.08.24 (5 nights)	Northern woodland block edge	5	99	19.8
25.09.24-29.09.24 (5 nights)	Eastern access road hedgerow	1	1	1
25.09.24-29.09.24 (5 nights)	Eastern field boundary hedgerow	5	19	3.8
25.09.24-29.09.24 (5 nights)	Northern woodland block edge	4	11	2.75
09.10.24-13.10.24 (5 nights)	Eastern access road hedgerow	2	8	4
09.10.24-13.10.24 (5 nights)	Eastern field boundary hedgerow	4	21	5.25

Date	Location	Minimum no. of species	Total no. of bat passes	Average passes per night
09.10.24-13.10.24 (5nights)	Northern woodland block edge	3	51	17

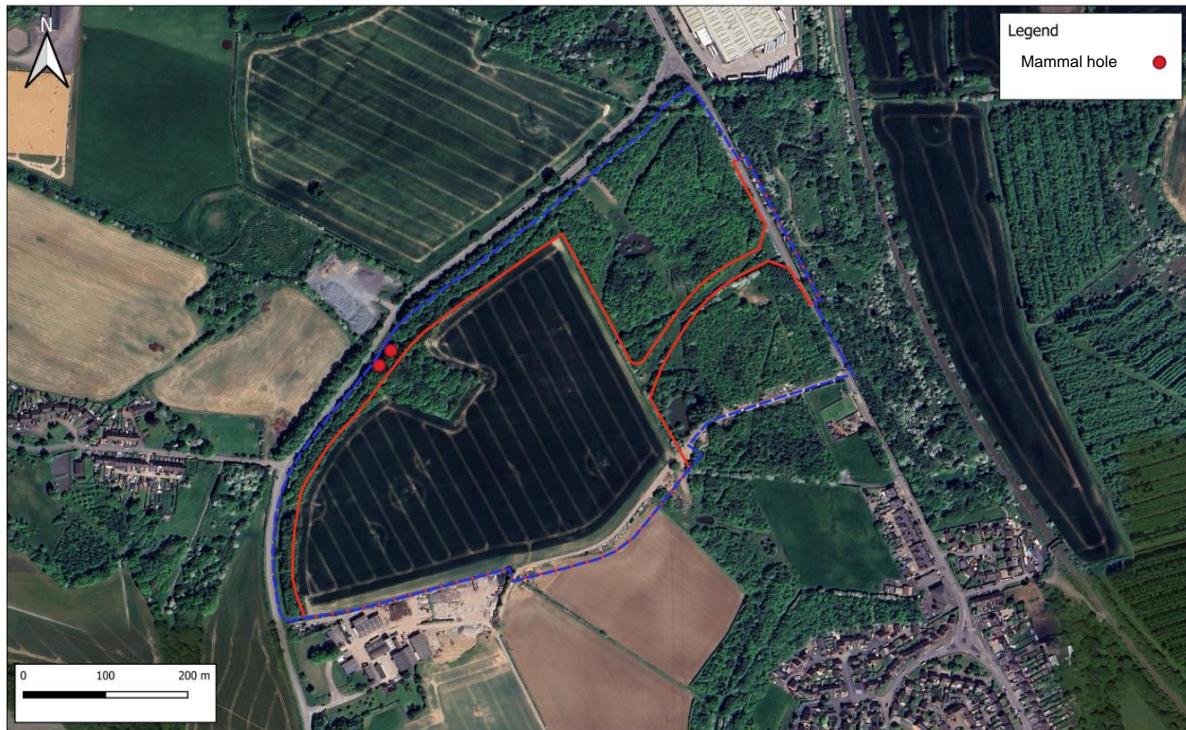
**Table 14: Total number of bat passes per month period per species**

Species	April	May	July	August	September	Total calls	% Overall
Common pipistrelle	1006	691	302	50	11	2060	63.09
Soprano pipistrelle	303	328	44	36	5	716	21.93
NSL- Noctule, Serotine, Leisler's	209	34	127	9	3	382	11.70
Myotis spp	29	26	14	2	9	80	2.45
Pipistrelle sp	9	0	4	0	0	13	0.40
Brown long eared	0	5	0	2	3	10	0.31
Lesser horseshoe	0	0	0	0	0	0	0.00
Barbastelle	0	0	0	0	0	0	0.00
Unknown	0	3	0	1	0	4	0.12
Total	1556	1087	491	100	31	3265	
% Overall	47.66	33.29	15.04	3.06	0.95		

#### 4.3.4 Badger

Areas of the site were suitable to support badger, predominantly associated with the boundary hedgerows and woodland on and adjacent to the site. Mammal runs and snuffle holes were recorded sporadically throughout the woodland on and adjacent to the site. Additionally, two mammal holes were recorded adjacent to the site along the north-western boundary (see Figure 8). Although no definitive evidence was found, the holes were of the correct size and shape to be used by badger. The trail camera placed at the entrance of these holes did not record any badger activity during the monitoring period. Therefore, the mammal holes are currently considered to be inactive and not a badger sett.

Although no active badger setts were identified on site, the site is considered to form part of a wider foraging resource for badger in the local area.



**Figure 8: Indicative locations of mammal holes**

#### 4.3.5 Hedgehog

The hedgerow and woodland habitats on site were considered to provide foraging opportunities for hedgehog.

#### 4.4 Invasive Species

A small stand of Japanese knotweed was recorded on site within the eastern block of woodland (SK 43829 09651).

## APPENDIX 1: HSI RESULTS AND EDNA

	Pond 1	Pond 2	Pond 3	Pond 4	Pond 5	Pond 6	Pond 7	Pond 8	Pond 9	Pond 10	Pond 11	Pond 12
SI <sub>1</sub> Location	Zone A	Zone A	Zone A	Zone A	Zone A	No access	No access	No access	Zone A	Zone A	Dry	Zone A
SI <sub>2</sub> Pond Area	1100m <sup>2</sup>	1700m <sup>2</sup>	275m <sup>2</sup>	125m <sup>2</sup>	175m <sup>2</sup>				250m <sup>2</sup>	100m <sup>2</sup>		900m <sup>2</sup>
SI <sub>3</sub> Pond Drying	Never	Never	Never	Dries	Rarely				Never	Never		Sometimes
SI <sub>4</sub> Water Quality	Moderate	Poor	Moderate	Moderate	Moderate				Moderate	Moderate		Poor
SI <sub>5</sub> Shade	0-60%	0-60%	0-60%	0-60%	96-100%				86-90%	86-90%		0-60%
SI <sub>6</sub> Fowl	Minor	Minor	Minor	Absent	Absent				Absent	Absent		Absent
SI <sub>7</sub> Fish	Possible	Major	Absent	Absent	Absent				Absent	Absent		Absent
SI <sub>8</sub> Ponds	>12	>12	>12	>12	>12				>12	>12		>12
SI <sub>9</sub> Terrestrial Habitat	Good	Good	Good	Good	Moderate				Moderate	Moderate		Good
SI <sub>10</sub> Macrophytes	21-25%	6-10%	1-5%	81-85%	<1%				1-5%	1-5%		<1%
HSI	0.82	0.48	0.77	0.66	0.63				0.70	0.64		0.74
Suitability	Excellent	Poor	Good	Average	Average				Good	Average		Good

## GCN eDNA Analysis

### Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

### Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN2269	Wiggs Farm, Pond 1	SK4377109709	Pass	Pass	Positive	5/12
GCN2270	Wiggs Farm, Pond 10		Pass	Pass	Negative	0/12
GCN2272	Wiggs Farm, Pond 4	SK4391109354	Pass	Pass	Negative	0/12
GCN2274	Wiggs Farm, Pond 3	SK4381808384	Pass	Pass	Negative	0/12
GCN2275	Wiggs Farm, Pond 12	SK4397309730	Pass	Pass	Negative	0/12
GCN2277	Wiggs Farm, Pond 9	SK4396010040	Pass	Pass	Negative	0/12
GCN2278	Wiggs Farm, Pond 5	SK4298209377	Pass	Pass	Negative	0/12
GCN2279	Wiggs Farm, Pond 2		Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Daisy Chambers

Approved by: Christopher Troth



## Methodology

The samples detailed above have been analyzed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample tube which then undergoes DNA extraction. The extracted sample is then analyzed using real-time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded. Analysis of eDNA requires attention to detail to prevent the risk of contamination. True positive controls, negative controls, and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added analytical security.

SureScreen Scientifics Ltd is ISO9001 accredited and participates in Natural England's proficiency testing scheme for GCN eDNA testing.

## Interpretation of Results

**Sample Integrity Check:** When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results. Any samples which fail this test are rejected and eliminated before analysis.

**Degradation Check:** **Pass/Fail.** Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.

**Inhibition Check:** **Pass/Fail.** The presence of inhibitors within a sample is assessed using a DNA marker. If inhibition is detected, samples are purified and re-analyzed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.

**Result:**

- Presence of GCN eDNA (Positive/Negative/Inconclusive)**  
**Positive:** GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.
- Positive Replicates:** Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with the WC1067 Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.
- Negative:** GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.
- Inconclusive:** Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for GCN presence or absence.



## APPENDIX 2: Breeding Bird Report



## **Appendix 2 - Breeding Bird Survey Report**

**Wiggs Farm  
Ibstock  
Harris Lamb Property Consultancy**

**FE-019-200-039-400-R-01-V1**

**October 2024**



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## DOCUMENT CONTROL

### Confidentiality: **Not Confidential**

Site Name: Wiggs Farm  
 Report Name: Appendix 5 - Breeding Bird Survey Report  
 Client: Harris Lamb Property Consultancy  
 Reference No: FE-019-200-039-400-R-01-V1

### Document Checking

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## 1 Executive Summary

- FALCO Ecology Ltd. was commissioned by Harris Lamb Property Consultancy (HLPC) to undertake a suite of breeding bird surveys on an area at Wiggs Farm near Ibstock (hereon referred to as the "Site").
- The habitats within the indicative site boundary included arable farmland and deciduous woodland.
- It is proposed to develop the Site into a warehouse and associated hardstanding (car park with access through the eastern woodland
- A four-visit breeding bird survey (hereon referred to as the "survey") was undertaken within the indicative site boundary and along the existing track eastern woodland (hereon when combined are referred to as the "survey area"). Species heard and seen within the buffer were recorded as accurately as possible.
- The most recent access road location, through the eastern woodland, was not fully surveyed; however, species of conservation concern heard and seen in this area were mapped in this area.
- The Site did not lie within a statutory designated site and no statutory designated sites were present within 2km of the indicative site boundary.
- A total of 32 species were recorded during the survey, of which 11 were species of conservation concern. Seven species of conservation concern were considered to be holding territory and potentially breeding within the Site.
- Overall, the Site had a very low variety of lowland farmland/woodland species including those which are considered as UK Red Listed on the BOCC and are therefore of high conservation concern. UK Red List Species included Skylark, Linnet and Yellowhammer.
- Twenty-one green listed bird species (not of conservation concern) were recorded and were considered likely to be breeding or holding territory within wider survey area, but none were recorded in particularly notable numbers or densities.
- The breeding assemblage of species of conservation concern are relatively common and widespread throughout England and none of the species were present in significantly high numbers, indicating that the existing habitats are like other arable farms.
- The Site is of **low** value to breeding birds at a local scale.
- The proposed development will result in the permanent loss of ~12.2Ha of arable farmland and ~1.5Ha of deciduous woodland which all support breeding birds.
- This permanent loss of these habitats will result in the reduction of suitable nesting and/or foraging habitat for variety of species of conservation concern including Skylark (2 pairs) and single pairs of Yellowhammer, Linnet Wren, Dunnock, Stock Dove and Woodpigeon. Additional woodland species, such as Song Thrush maybe displaced by the access road.
- It is unlikely that the proposed development will displace open nesting species such as Skylark within the buffer area. The woodland surrounding the north, east and west aspect will provide a visual barrier to the fields to the north of the Site. The arable fields to the south that supports a single territory of Skylark is considered large enough to accommodate a 50m displacement zone without impacting Skylark.
- The direct impact from the loss of farmland habitats and in-direct impact of visual displacement on the breeding bird population will be **minor negative** at a local scale.
- Mitigation Measures include:
  - Off-site Skylark mitigation measures will be required to compensate for the permanent loss of farmland habitats and potential visual displacement. These compensation measures will include a minimum of 4no. skylark plots, thus two per pair or creation of suitable grassland habitats within the local area.



- A precautionary approach is recommended that clearance of ground vegetation, including grassland, hedgerow and tree removal is undertaken outside the breeding season, thus September to February, inclusive. Any vegetation clearance works undertaken during the breeding season (1<sup>st</sup> March to 31<sup>st</sup> August) will require a nesting bird check to be undertaken by a suitably experienced ornithologist no more than 48 hours prior to the vegetation clearance works.
- Nesting bird boxes to be installed around the Site.
- Recommendations
  - Habitat suitability and nesting bird check for Barn Owl within the eastern woodland and 125m buffer of the access road.
- The residual impact of the proposed development on breeding birds will be **minor positive** at a local scale.



## 2 Introduction

### 2.1 Background

- 2.1.1 FALCO Ecology Ltd. was commissioned by Harris Lamb Property Consultancy (HLPC) to undertake a suite of breeding bird surveys on an area at Wiggs Farm near Ibstock (hereon referred to as the "Site").
- 2.1.2 The purpose of the surveys was to determine the number of territories within the Site and how birds use the Site. Details of the breeding bird survey (BBS) and subsequent assessment are included within this report.
- 2.1.3 This report was written by and reviewed by Adrian George, Director of FALCO Ecology Ltd. Adrian is a full member of the Chartered Institute of Ecology and Environmental Management, and both have over 15 years' experience in the ecology sector.
- 2.1.4 All bird species detailed within this report follow the sequence and taxonomy recommended by the British Ornithologists' Union (BOU) (2022). Bird names used differ from those recommended by the BOU in that they follow the British (English) vernacular names in common usage by birders and ornithologists in the UK. These vernacular names are detailed in BOU (2022) and their conservation status are shown in Annex 2.

### 2.2 Site Description and Locality

- 2.2.1 The address of the Site is Wiggs Farm, Wood Road, Ellistown, Bagworth, Coalville, LE67 1GE. The central Ordnance Survey grid reference for the Site was SK 4360209483 and the Site was ~170m above sea level.
- 2.2.2 The habitats within the indicative site boundary included arable farmland and deciduous woodland. The indicative site boundary and habitats within the Site, from May 2023, are shown in Plate 1 (page 4).
- 2.2.3 The surrounding area of the Site was predominantly mixed farmland, woodland and commercial units. The wider surrounding area and habitats are shown in Plate 2 (page 4).

### 2.3 Development Proposals

- 2.3.1 It is proposed to develop the Site into a warehouse and associated hardstanding (car park with a revised access road through the eastern woodland (4092 – 10R – Proposed Site Plan).
- 2.3.2 The unmitigated proposed development has the potential to destroy active nests and permanently remove breeding and foraging habitat for birds.

### 2.4 Survey and Reporting Objectives

- 2.4.1 A series of breeding bird surveys were carried out between late April and late June 2024 to provide the basis on which to assess the potential for effects of the proposed development to breeding bird species during the construction and operation of the proposed development.



**Plate 1:** Indicative site boundary.

© Google Earth. Imagery Date: 27/05/2023.



**Plate 2:** Surrounding habitats.

© Google Earth. Imagery Date: 27/05/2023.



## 2.5 Legislation

2.5.1 Active bird nests are fully protected from deliberate and reckless destruction under the Wildlife & Countryside Act 1981 (as amended) (hereon referred to as 'WCA'). This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times. In short, the WCA makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird; and
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

2.5.2 If convicted of an offense under the WCA then a penalty maybe imposed with an unlimited fine and/or up to six months imprisonment per offence.

2.5.3 Further legislation related to birds are shown in Annex 3.



### 3 Methodology

#### 3.1 Desktop Study

##### Data Search

3.1.1 A data search from following web resources was used:

- The Government's Multi-Agency Geographic Information for the Countryside or 'MAGIC' website, which provides details of statutory sites designated for their ecological interest; and
- Google Earth Pro was utilised to assess the habitats surrounding the Site for their suitability to support foraging and nesting birds.

#### 3.2 Field Surveys

3.2.1 A four-visit breeding bird survey (hereon referred to as the "survey") was undertaken within the indicative site boundary and along the existing track eastern woodland (hereon when combined are referred to as the "survey area"). Species heard and seen within the buffer were recorded as accurately as possible.

3.2.2 The territory mapping methodology followed that outlined by the Bird Survey Guidelines (2023) which is based on a reduced survey effort of the Common Bird Census (CBC) as described in both Gilbert *et al.* (1998) and Bibby *et al.* (2000). The surveys were carried out between late March and late June 2023, which was within the core breeding bird season. Accurate territory counts outside the Site were not obtained; however, the data collected provides a useful indication of what key species are in the vicinity of the Site.

3.2.3 Species of conservation concern were those species that were listed as Red or Amber status on the Birds of Conservation Concern 5 (Stanbury *et al.* 2021) and those listed as Schedule 1, Annex 1 (Birds Directive) or Section 41 priority species of the NERC Act 2006.

3.2.4 The direction of travel of the BBS route was reversed on each visit to prevent temporal bias. The survey route followed the site boundary and along hedgerows within the Site. The survey route is shown in Plate 3 (page 7). The eastern woodland was not entered as this was outside the indicative redline boundary as provided on commission of the survey.

3.2.5 Equipment used during the surveys included Monarch binoculars.

3.2.6 The dates, survey times, weather conditions and surveyor details of each survey visit are detailed in Table 1 (page 7). Wind speed is recorded as per the standard Beaufort scale and cloud cover in aviation oktas scale. Sunrise times are also included within Table 1. The field surveys were undertaken by experienced ornithologist Steve Haynes.



**Plate 3:** Survey route.

© Google Earth. Imagery Date: 27/05/2023.

**Table 1:** Breeding bird survey dates, times and weather details.

Visit	Date	Time (hours)	Sunrise time	Visibility	Wind direction/Speed	Rain	Cloud (?/8)	Temp. (°C)
A	22.04.24	06:00-06:45	05:51	Very good	E 1	Drizzle	8	11
B	15.05.24	05:30-06:30	05:08	Very good	SE 1	Slight mist	8	12
C	01.06.24	05:10-06:15	04:47	Very good	N 1	Nil	5	12 > 13
D	22.06.24	05:05-06:00	04:41	Very good	SW 0-1	Light rain at 04:45	8	13

### 3.3 Surveyor's Experience

Steve Haynes

3.3.1 Steve is a professional ornithologist undertaking bird surveys for a variety of ecological consultancies and in the past has been the Warwickshire Bird Recorder. He is heavily involved in the monitoring of barn owls within the Midlands.

### 3.4 Limitations

3.4.1 Due to the time of commissioning, the late March and early April visit could not be undertaken. Therefore, a four-visit breeding bird survey was undertaken. The results



from these four visits were sufficient to conclude territory presence within the survey area.

- 3.4.2 As the habitats within the indicative site boundary was predominantly arable farmland, it is considered that early breeders such as Mistle Thrush were not missed from the surveys. Those species that breed within arable farmland, such as Skylark, were recorded throughout the survey period.
- 3.4.3 The access route to the proposed development altered during the design phase and now traverses through the eastern buffer woodland. During the survey birds seen or heard were recorded within the woodland; however, the accuracy of species presence and abundance will be lower than that within the indicative redline boundary. Given the species recorded during the survey, it is not expected that any regionally rare avian receptors would be breeding within the eastern woodland. Additionally, the eastern woodland was predominantly young Silver Birch *Betula pendula* and scrub. Google Earth Pro (2024) shows the previously arable (north field) and grassland (south field) in 2000 being planted with trees by September 2011, thus the woodland is only ~13 years old.
- 3.4.4 It is considered that the assessment within this report is sufficient to establish the impact of the proposed development on breeding birds.
- 3.4.5 The details within this report will remain valid for 12 months. Beyond this period, it is recommended that updated breeding bird surveys will be carried out to form a robust assessment.



## 4 Results

### 4.1 Desktop Study

#### Data Search

##### Statutory Designated Sites

4.1.1 The Site did not lie within a statutory designated site and no statutory designated sites were present within 2km of the indicative site boundary. However, the Site did lie within the outer most Site of Special Scientific Interest (SSSI) Impact Zone, although it is considered that the proposed development will not have a detrimental impact the associated SSSI features.

### 4.2 Field Survey

4.2.1 A total of 32 species were recorded during the survey, of which 11 were species of conservation concern. Seven species of conservation concern were considered to be holding territory and potentially breeding within the Site. Territory holding species of conservation concern are summarised in Table 2, below. There were no species of conservation concern that were considered not be holding territory within the survey area.

4.2.2 Figure 1 (Annex 1) shows the approximate central location of the territories for Red & Amber list species.

4.2.3 Overall, the Site had a very low variety of lowland farmland/woodland species including those which are considered as UK Red Listed on the BOCC and are therefore of high conservation concern. These included Skylark, Linnet and Yellowhammer.

**Table 2:** Species of conservation concern breeding or holding territory within the Site and wider survey area.

Species	Number of territories recorded within Site (number within buffer area)	Notes
Mallard	0 (1)	One territory on the pond within the eastern buffer. Breeding probable.
Stock Dove	1 (1)	Two territories within the woodland habitat. Breeding was not confirmed but probable.
Woodpigeon	1 (3+)	A minimum of four territories within the woodland habitat. Breeding not confirmed but probable within the buffer and likely to have been under-recorded during the survey. Peak foraging flock of 6 individuals on Visit B.
Skylark	2 (1)	Recorded the indicative site boundary and surrounding fields. Breeding probable within the open field habitat of the survey area.
Willow Warbler	0 (1)	A single territory within the buffer woodland habitat. Breeding was not confirmed but probable.



Species	Number of territories recorded within Site (number within buffer area)	Notes
Wren	1 (5+)	6+ territories were spread throughout the woodland habitat of the Site and into the buffer. Breeding was not confirmed but probable.
Song Thrush	0 (3+)	A total of three territories spread throughout the survey area. Breeding probable.
Dunnock	1 (2+)	Recorded throughout the woodland habitats with the indicative site boundary and buffer. Breeding probable within the survey area.
Greenfinch	0 (1)	One territory around Wiggs Farm. Breeding probable within the survey area.
Linnet	1 (0)	Recorded along the southern indicative site boundary. Breeding not confirmed but probable within the field boundary.
Yellowhammer	1 (0)	Recorded along the southern indicative site boundary. Breeding not confirmed but probable within the field boundary.

4.2.4 A further 21 green listed bird species (not of conservation concern) were recorded and were considered likely to be breeding or holding territory within wider survey area, but none were recorded in particularly notable numbers or densities and included Canada Goose, Pheasant, Cormorant, Heron, Buzzard, Great Spotted Woodpecker, Jay, Magpie, Jackdaw, Carrion Crow, Blue Tit, Great Tit, Swallow, Long-tailed Tit, Chiffchaff, Blackcap, Blackbird, Robin, Pied Wagtail, Chaffinch and Goldfinch.



## 5 Assessment

### 5.1 Evaluation

#### Breeding Birds

- 5.1.1 The Site held a very low diversity and abundance of lowland farmland and woodland breeding birds. This was primarily due to the Site consisting of spring wheat with a small area, ~0.5Ha of deciduous woodland. A total of 3no. UK Red List species and 4no. UK Amber List species were considered to be holding territory within the indicative site boundary. Additionally, the Site offered a variety of foraging or nesting habitat for breeding birds, including open habitats, woodland and hedgerows.
- 5.1.2 The breeding assemblage of species of conservation concern are relatively common and widespread throughout England and none of the species were present in significantly high numbers, indicating that the existing habitats are similar to other arable farms.
- 5.1.3 The Site is of **low** value to breeding birds at a local scale.
- 5.1.4 The surrounding farmland and woodland habitats provided similar habitats to those recorded on Site and are considered to be of moderate value to breeding birds.

### 5.2 Impact

#### Breeding Birds

- 5.2.1 The proposed development will result in the permanent loss of ~12.2Ha of arable farmland and ~1.5Ha of deciduous woodland which all support breeding birds.
- 5.2.2 This permanent loss of these habitats will result in the significant reduction of suitable nesting and/or foraging habitat for variety of species of conservation concern including Skylark (2 pairs) and single pairs of Yellowhammer and Linnet. With the inclusion of the new access track through the eastern woodland, it is predicted that low numbers (<3/4 pairs) of Wren, Dunnock, Stock Dove and Woodpigeon will also be lost.
- 5.2.3 It is unlikely that the proposed development will displace open nesting species such as Skylark within the buffer area. The woodland surrounding the north, east and west aspect will provide a visual barrier to the fields to the north of the Site. The arable fields to the south that supports a single territory of Skylark is considered large enough to accommodate a 50m displacement zone without impacting Skylark.
- 5.2.4 The direct impact from the loss of farmland habitats and in-direct impact of visual displacement on the breeding bird population will be **minor negative** at a local scale.
- 5.2.5 The loss of a small proportion of the local breeding population of those species recorded within the Site could be considered reversible if sufficient biodiversity net gain features are provided locally and maintained for a duration of a minimum of 30 years.
- 5.2.6 There is the potential for disturbance to nesting birds during the construction phase. Given the scale of the development, it is likely that some construction works will occur within the breeding season (March to August, inclusive) and may cause a temporary disturbance to nesting birds, or destruction of active nests.



## 6 Mitigation and Compensation Measures

### 6.1 Habitat Loss

- 6.1.1 The permanent loss of ~13Ha of farmland habitat cannot be avoided to construct the proposed development. Therefore, mitigation and compensation measures are required to off-set this loss.
- 6.1.2 Off-site Skylark mitigation measures will be required to compensate for the permanent loss of farmland habitats and potential visual displacement. These compensation measures will include a minimum of 4no. skylark plots, thus two per pair or creation of suitable grassland habitats within the local area.
- 6.1.3 Skylark plots are undrilled patches in winter cereals to boost nesting success. A minimum of 2no. Skylark plots per hectare (~20m<sup>2</sup> per plot) in fields larger than five hectares (RSPB 2024).
- 6.1.4 It is plausible that suitable agreements with local farmers could be arranged to provide the required Skylark plots. Alternatively, it is plausible that the Leicestershire and Rutland Wildlife Trust may be able to provide Skylark plots to developers.
- 6.1.5 The Skylark plots would need to be provided for a minimum of 10 years.
- 6.1.6 The biodiversity net gain habitats proposed will provide suitable nesting and foraging habitat for the majority of the breeding bird assemblage with some important features to be included. These features are discussed further within Section 6 of this report.

### 6.2 Nesting birds

- 6.2.1 Open habitat, ground-nesting birds (i.e. Skylark) were recorded holding territory or breeding within the Site during the survey. Open nesting species (i.e. Dunnock, Linnet and Yellowhammer) were also recorded throughout the Site within the field boundary (hedgerow) and woodland habitats. Both open habitat and open nesting birds will be impacted as part of the construction phase of the proposed development. A precautionary approach is recommended that clearance of ground vegetation, including grassland, hedgerow and tree removal is undertaken outside the breeding season, thus September to February, inclusive. Any vegetation clearance works undertaken during the breeding season (1<sup>st</sup> March to 31<sup>st</sup> August) will require a nesting bird check to be undertaken by a suitably experienced ornithologist no more than 48 hours prior to the vegetation clearance works.



## 7 Recommendations

### 7.1 Barn Owl

- 7.1.1 The eastern woodland is unlikely to support breeding Barn Owl; however, there are established trees within the woodland area - southern existing pond and central field boundary in 1999 (Google Earth Pro 2024). However, the surrounding farmland habitats appear to be intensively farmed with little to no field margins and thus of low suitability for foraging Barn Owl (Google Earth Pro 2024).
- 7.1.2 It is recommended that a pre-felling survey of the access route is undertaken by a barn owl licenced ornithologist to assess if any of the trees within the revised redline boundary or 125m buffer have the potential to support breeding barn owl.
- 7.1.3 Birds will often have multiple nesting locations within their territory. Therefore, it is recommended that an assessment of the trees to support breeding Barn Owl and a check of any potential trees is completed as near to the vegetation clearance as possible rather than as part of the planning process.
- 7.1.4 The results of the assessment will be provided to the Local planning Authority as a Technical Note prior to any vegetation clearance works.



## 8 Biodiversity Net Gain

8.1.1 The proposed biodiversity net gain should include a minimum of 20 free-hanging bird boxes are installed on poles or the building of the proposed development. These will include:

- A minimum of 5no. Starling nest boxes, e.g. 3S Schwegler Starling nest box (Plate 4, below) and 10no. House Sparrow boxes, e.g. Vivara Pro WoodStone House Sparrow nest box (Plate 5, page 16) are to be included within the proposed development. These are to be positioned above 3m above ground, and on east or north aspect walls. It is advised these boxes are located near to vegetation such as roadside edges.

8.1.2 A detailed plan of the proposed make, model and positions of the nest boxes will be produced and agreed with the County Ecologist either at the planning application stage or as part of a Decision Notice Condition.



**Plate 4:** Example of a free hanging Starling nest box.



**Plate 5:** Example of a free hanging house sparrow box.



## 9 Residual Impact

9.1.1 If the proposed biodiversity net gain habitats are maintained, the required Skylark plots are implemented within the local area and installation of free-hanging nest boxes on the structures within the redline boundary are erected, then it is considered that the residual impact of the proposed development on breeding birds will be **minor positive** at a local scale.



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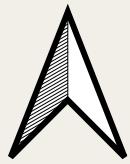
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## **Annex 1 – Figures**



## LEGEND

- UK Amber List Species
- UK Red List Species
- Indicative site boundary

## OpenStreetMap

### LABEL KEY:

- D.= Dunnock
- GR = Greenfinch
- LI = Linnet
- S.= Skylark
- SD = Stock Dove
- ST = Song Thrush
- WP = Woodpigeon
- WR = Wren
- WW = Willow Warbler
- Y.= Yellowhammer

0 75 150 m

REV.	Details	DRA	CHD	APP	DATE
RO	Final	AJG	AJG	AJG	14.10.24
R1					

Client Harris Lamb Property Consultancy  
Project Wiggs Farm  
Title Central territory locations of UK Red & Amber list species  
Figure Number 5.1  
Scale 1:2,500 @A3  
Document Reference FE-019-200-039-500-D-01



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**Figure 5. 1: Central territory locations for UK Red & Amber list species.**



**Annex 2 – Vernacular English Bird Names, Scientific Bird Names & Conservation Status.**



British (English) vernacular name 2022	Scientific name 2022	Conservation Status
Canada Goose	<i>Branta canadensis</i>	Green
Mallard	<i>Anas platyrhynchos</i>	Amber
Pheasant	<i>Phasianus colchicus</i>	Nott accessed
Stock Dove	<i>Columba oenas</i>	Amber
Woodpigeon	<i>Columba palumbus</i>	Amber
Moorhen	<i>Gallinula chloropus</i>	Amber
Cormorant	<i>Phalacrocorax carbo</i>	Green
Grey Heron	<i>Ardea cinerea</i>	Green
Buzzard	<i>Buteo buteo</i>	Green
Barn Owl	<i>Tyto alba</i>	Green; Sch1
Great Spotted Woodpecker	<i>Dendrocopos major</i>	Green
Jay	<i>Garrulus glandarius</i>	Green
Magpie	<i>Pica pica</i>	Green
Jackdaw	<i>Coloeus monedula</i>	Green
Carrion Crow	<i>Corvus corone</i>	Green
Blue Tit	<i>Cyanistes caeruleus</i>	Green
Great Tit	<i>Parus major</i>	Green
Skylark	<i>Alauda arvensis</i>	Red; Sec41
Swallow	<i>Hiundo rustica</i>	Green
Long-tailed Tit	<i>Aegithalos caudatus</i>	Green
Willow Warbler	<i>Phylloscopus trochilus</i>	Amber
Chiffchaff	<i>Phylloscopus collybita</i>	Green
Blackcap	<i>Sylvia atricapilla</i>	Green
Wren	<i>Troglodytes troglodytes</i>	Amber
Starling	<i>Sturnus vulgaris</i>	Red; Sec41
Song Thrush	<i>Turdus philomelos</i>	Amber; Sec41
Blackbird	<i>Turdus merula</i>	Green
Robin	<i>Erythacus rubecula</i>	Green
House Sparrow	<i>Passer domesticus</i>	Red; Sec41
Dunnock	<i>Prunella modularis</i>	Amber; Sec41
Pied Wagtail	<i>Motacilla alba</i>	Green
Chaffinch	<i>Fringilla coelebs</i>	Green, Ann1
Greenfinch	<i>Chloris chloris</i>	Red
Linnet	<i>Linaria cannabina</i>	Red; Sec41



<b>British (English) vernacular name 2022</b>	<b>Scientific name 2022</b>	<b>Conservation Status</b>
Goldfinch	<i>Carduelis carduelis</i>	Green
Yellowhammer	<i>Emberiza citrinella</i>	Red; Sec41



### **Annex 3 – Environmental Legislation & Convention Relating to Birds**



## Introduction

The UK has ratified several Conventions and implemented legislation pertaining to the protection of bats, either independently or as member state of the European Union. These are defined and summarised below.

Lists of threatened, endangered and extinct species are also provided, together with a summary explanation of each.

### Bern Convention (1982)

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the EC Birds Directive (1979) and the EC Habitats Directive (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

### Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985, Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CROW)

The UK has currently ratified four legally binding Agreements under the Convention, one of which is the African-Eurasian Migratory Waterbird Agreement (AEWA) and Agreement on the Conservation of Albatrosses and Petrels (ACAP).

The UK has ratified the Conservation of Migratory Birds of Prey in Africa and Eurasia and the Memorandum of Understanding on the Aquatic Warbler.

### National Planning Policy Framework (2021)

Following the publication of the first revision of the National Planning Policy Framework (NPPF) in March 2012, Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (2005) has been withdrawn. However, ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System (the guidance document that accompanied PPS9) has not been withdrawn and, where more detailed guidance is required than is given within the NPPF, local planning authorities will continue to rely on ODPM 06/2005. The NPPF has been revised and was published in July 2021.

The natural environment is covered within the NPPF 2021 in Chapter 15, paragraphs 174-188.

The purpose of the NPPF is to conserve and enhance the natural environment including:



- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*

To protect and enhance biodiversity and geodiversity, plans should:

- *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

This guidance requires local planning authorities (planning policies and planning decisions) to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Furthermore, the NPPF 2021 still includes the requirement for developments to *improve biodiversity* including *ecological net gain*. In the case of birds, planning policy emphasises that strict statutory provisions apply (including the Conservation of Habitats and Species (Amendment) Regulations 2012), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species it is necessary that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005 which states that:

*'The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'*

Potential Special Protected Areas, possible Special Areas of Conservation, listed or proposed Ramsar site should be given the same protection as fully designated sites.

### Species of Principal Importance in England

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions.

The S41 list includes 49 bird species which are primarily designated as UKBAP species.

### The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019

The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019 came into force on 1<sup>st</sup> February 2020 and ensures that the species and habitat protection and standards derived from EU law will continue to apply during the Brexit transitional period. No alterations have been made within the amendment from the Conservation of Habitats and Species Regulations 2017 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the



conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales.

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. The 2012 amendments include that public bodies help preserve, maintain and re-establish habitats for wild birds.

Schedule 2 of the 2019 Regulations do not include any avian species.

### Wildlife & Countryside Act 1981 (as amended)

Active bird nests are fully protected from deliberate and reckless destruction under the Wildlife & Countryside Act 1981 (as amended) (WCA). This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times. In short, the WCA makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird; and
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

If convicted of an offense under the WCA then a penalty maybe imposed with an unlimited fine and/or up to six months imprisonment per offense.