# Preliminary Ecological Appraisal of Harleston Hall Barn



Tel. 07812925622

Email: Mary@aspenecology.co.uk

Survey Commissioned by:	Brown & Scarlett Ltd.
Project Number:	AE21039
Date of survey:	4 <sup>th</sup> June 2021
Surveyor:	Mary Power BSc (Hons) MSc MCIEEM
Reviewed:	n/a

Project number	Report Title	Report Ref.	Revision	Issued
AE21039	Preliminary Ecological Appraisal of a Barn at Harleston Hall	AE21039-1	Draft	30 <sup>th</sup> June 2021

### Disclaimer

The findings detailed in this report are based on evidence from thorough survey, where every effort has been taken to provide an accurate assessment of the site at the time of the survey. No liability can be assumed for omissions or changes after the survey has taken place. This report can be relied upon for twelve months from the date of issue, after this date an updated site visit should be undertaken to assess any material changes to the site.

This report was instructed by Brown & Scarlett Ltd., and following the brief agreed. Aspen Ecology has made every effort to meet the client's brief.

Neither Aspen Ecology, nor any associated company, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use of the report. We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above. This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

Information supplied by the Client or any other parties and used in this report is assumed to be correct and Aspen Ecology accepts no responsibility for inaccuracies in the data supplied.

© **Aspen Ecology 2021** (Copyright of this report remains with Aspen Ecology: Content must not be reproduced, in whole or part, without written consent)

# 1 Executive Summary

Aspen Ecology was instructed by Brown & Scarlett Ltd. to carry out a Preliminary Ecological Appraisal (PEA) of a Barn at Harleston Hall, Harleston, Stowmarket hereafter referred to as 'the Site'. The central grid reference for the Site is TM 01550 60374. The site survey was undertaken on the 4<sup>th</sup> June 2021.

The site is an existing barn currently in used for storage, adjacent habitats include hedgerows and semi-improved grassland.

No statutory sites are present within 2km and no European Sites are located within 13km of the site, with six non-statutory County Wildlife Sites within 2km, however no impacts to these sites are predicted due to the location and scale of the proposals.

The development proposes conversion of the barn to residential use.

The site is generally of low ecological value, however the barn may be used by birds during the nesting season. It is recommended that the conversion works start outside the nesting season or following a nesting bird survey. Precautionary working methods are included in this report to minimise the risk of creating habitat that could be used by protected species that may be present in the wider are and enhancement suggestions are also provided, that if included may improve the site for wildlife post development.

# **Contents**

1	Ex	ecutiv	e Summary	3
2	Int	roduc	tion	6
	2.1	Bac	kground	6
	2.2	Aim	s and Scope of Report	6
	2.3	Site	Description	6
	2.4	Plar	nning Policy and Legislation	7
	2.4	4.1	Planning Policy	7
3	Мє	ethodo	ology	9
	3.1	Site	Survey	9
	3.2	Des	k Study and Biodiversity Information Consultation	10
4	Re	esults	and Discussion	10
	4.1	Des	k Study	10
	4.2	Biod	diversity Information Consultation	11
	4.3	Pote	ential for Protected Species and Habitats	13
	4.3	3.1	Habitats and Flora	13
	4.3	3.2	Bats	13
	4.3	3.3	Reptiles	14
	4.3	3.4	Amphibians	14
	4.3	3.5	Birds	15
	4.3	3.6	Other Mammals	15
	4.3	3.7	Invertebrates	16
	4.3	3.8	Impact on Local Wildlife Sites & European Protected Sites	16
	4.4	Lim	itations and Assumptions	16
5	Re	ecomn	nendations	17
	5.1	Furt	ther Surveys	17
	5.2	Pre	cautionary Methods	17
	5.2	2.1	Nesting birds	17
	5.2	2.2	Amphibians	17
	5.2	2.3	Nocturnal Animals	17
	5.2	2.4	Sensitive Lighting	17
	5.3	Enh	ancement Recommendations	18
	5.3	3.1	Bird Boxes	18
	5.3	3.2	Bat Boxes	18

# A Barn at Harleston Hall

6	Cor	clusion	.18
7	App	endix A – Legislation	.19
	7.1	Habitat Regulations	.19
	7.2	Wildlife & Countryside Act	.19
	7.3	Natural Environment & Rural Communities Act	.19
	7.4	Biodiversity Action Plans	.19
8	App	endix B - Phase 1 Habitat Survey Plan	.20

# 2 Introduction

# 2.1 Background

Aspen Ecology was commissioned by Brown & Scarlett Ltd. on behalf of their client to undertake a Preliminary Ecological Appraisal of a Barn at Harleston Hall, Harleston, Stowmarket, Suffolk. The National Grid co-ordinates for the centre of the site are TM 01550 60374.

The assessment was required to inform an application to convert the barn to residential use. This report presents the findings of the Preliminary Ecological Appraisal carried out by Aspen Ecology in June 2021.

# 2.2 Aims and Scope of Report

This report is a Preliminary Ecological Appraisal. According to CIEEM guidelines<sup>1</sup>, a Preliminary Ecological Appraisal "can be used as a scoping report (for non-Environmental Impact Assessment (EIA) projects), but should not be submitted as part of a planning application unless it can be determined that the project would have no significant ecological effects, no mitigation is required and no further surveys are necessary."

This report is based on an extended Phase 1 habitat survey and desktop study aimed at assessing the suitability of the site to support protected species and notable habitats. This information allows an initial assessment of the biodiversity value of the site to be made, potential constraints to the proposed development to be identified and mitigation, compensation and enhancement measures to be developed.

The report addresses any potential impacts on legally protected species and habitats present at the stie or within impact distance. Where potential for notable or protected species is identified, further surveys may be required to determine presence or likely absence and assess the conservation status of populations or assemblages present. The results of such work are required to fully assess the potential ecological impacts of the scheme.

# 2.3 Site Description

The site is located to the north west of Harleston Hall to the south of Haughley Road, in Harleston, Stowmarket. Residential properties are present to the east and the village of Harleston to the south west.

The surrounding area is dominated by farmland: arable and pasture with area of woodland approximately 100m south and 500m west.

\_

<sup>&</sup>lt;sup>1</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

# 2.4 Planning Policy and Legislation

For the purposes of this report, protected species are taken to be those which are protected under UK legislation (The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019<sup>2</sup>, Wildlife and Countryside Act 1981<sup>3</sup>; Protection of Badgers Act 1992<sup>4</sup>).

Protected species, and Species of Principle Importance for conservation of biodiversity in England (SPIE species – formally Biodiversity Action Plan species), are a material consideration for individual planning consents under the National Planning Policy Framework<sup>5</sup> (NPPF), which places responsibility on LPAs to aim to conserve and enhance biodiversity in and around developments, promote the enhancement of natural and local environments through planning, and achieve net gains for biodiversity where possible.

# 2.4.1 Planning Policy

### 2.4.1.1 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF "So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development". However, Paragraph 177 goes on to state that "The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site".

The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that the planning system should contribute to and enhance the natural environment by "...minimising impacts on and providing net gains for biodiversity..."

Paragraph 175 states that "development whose primary objective is to conserve or enhance biodiversity should be supported". A number of principles are set out in Paragraphs 175 and 176 including the principle that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Protection of irreplaceable habitats, such as ancient woodlands and those sites proposed as SPAs, SACs and Ramsar sites or acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as Habitats Sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states "the

\_

<sup>&</sup>lt;sup>2</sup> HMSO (2019) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations. HMSO, London.

<sup>&</sup>lt;sup>3</sup> HMSO (1981) Wildlife and Countryside Act (as amended). HMSO, London.

<sup>&</sup>lt;sup>4</sup> HMSO (1992) Protection of Badgers Act, HMSO London.

<sup>&</sup>lt;sup>5</sup> National Planning Policy Framework (Feb 2019)

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. Whilst paragraph 99 states "it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted".

### 2.4.1.2 Local Policy

The site is covered by Mid Suffolk District Council who are in the process of preparing a New Joint Local Plan Document with Babergh District Council. The New Local Plan will include all major planning policy for the District in a single document and will need to meet the requirements of the National Planning Policy Framework (NPPF). Once complete it will replace both the Core Strategy (2008) and the Local Plan Alteration No.2 (1998). A new Local Development Scheme (LDS) which sets out the revised timetable for the production of the Joint Local Plan was approved by Babergh District Council on 21st July 2020 and Mid Suffolk District Council on 23rd July 2020.

Mid Suffolk's Core Strategy was adopted in September 2008. As the key Development Plan Document it sets out the vision, objectives, spatial strategy and core policies that will guide development across the district until 2025, and beyond. A Core Strategy Focussed Review was undertaken and adopted by the Council on 20<sup>th</sup> December 2012.

Current adopted Local planning policy within Mid Suffolk is provided by the Core Strategy 2008. A single overarching policy within the Core Strategy makes specific reference to ecology and biodiversity:

• Policy CS5: Mid Suffolk's Environment

All development will maintain and enhance the environment, including the historic environment, and retain the local distinctiveness of the area.

To protect, manage and enhance Mid Suffolk's biodiversity and geodiversity based on a network of:

- Designated Sites (international, national, regional and local)
- Biodiversity Action Plan Species and Habitats, geodiversity interests within the wider environment
- Wildlife Corridors and Ecological Networks

and where appropriate increase opportunities for access and appreciation of biodiversity and geodiversity conservation for all sections of the community.

Emphasis will be given to the creation new habitats particularly along the Gipping, Upper Waveney and Deben river valley's in connection with flood management schemes and to contribute towards green tourism opportunities.

# 3 Methodology

# 3.1 Site Survey

The site survey was undertaken by Mary Power BSc (Hons) MSc MCIEEM, a full member of the Chartered Institute of Ecology & Environmental Management, subject to the CIEEM Professional Code of Conduct and licensed by Natural England to survey for great crested newts (WML-CL08; Level 1) and bats (WML-CL18; Level 2).

During the survey on 4<sup>th</sup> June 2021 the temperature was 17°C; the wind was Beaufort scale 0-1, 100% cloud cover and good visibility.

The survey was undertaken in accordance with Guidelines for Preliminary Ecology Appraisal<sup>6</sup> and the broad methodology and principles of the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Survey<sup>7</sup>, which included mapping habitat types and identifying plant species observed on the site, including Wildlife and Countryside Act Schedule 9 invasive plant species.

The Phase 1 Habitat Map in Appendix B shows main habitat types, and features of interest identified as target notes.

The potential for presence of protected, Species of Principal Importance in England (SPIE) and rare species was assessed as follows:

**Amphibians** - Known ponds within the site were addressed for potential to support breeding amphibians where accessible. Habitat on the site, was surveyed for potential to support amphibians during their terrestrial or aquatic phase. 250m is a standardised search radius to assist in the assessment of the potential of a site and its surrounding habitat to support great crested newt, based on current Natural England guidance<sup>8</sup>.

**Bats** – Habitat within, and adjacent to, the site boundary was assessed for potential to support roosting, foraging and commuting bats, aided by aerial photographs of the surrounding landscape. The survey conformed to current Bat Conservation Trust guidelines<sup>9</sup>.

**Dormice** – the site was assessed for potential to support dormice: Wooded/scrub areas or hedges with good under-storey/shrub layer and a diversity of foraging opportunities covering the active dormouse season.

**Reptiles** – Habitats were assessed for potential to support foraging or breeding reptiles and hibernation or refuge opportunities<sup>1011</sup>.

\_

<sup>&</sup>lt;sup>6</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

<sup>&</sup>lt;sup>7</sup> JNCC (2010) Handbook for Phase 1 habitat survey: a technique for environmental audit (revised reprint) JNCC: Peterborough.

<sup>&</sup>lt;sup>8</sup> English Nature (2001) Great Crested Newt Mitigation Guidelines. Peterborough

<sup>&</sup>lt;sup>9</sup> Collins, J. (Ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (Third Edition). The Bat Conservation Trust, London.

<sup>&</sup>lt;sup>10</sup> Froglife (1999) Reptile Survey. An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation.

<sup>&</sup>lt;sup>11</sup> Gent, A.H. and Gibson, S.D., eds. (1998) Herpetofauna Workers' Manual. Peterborough, Joint Nature Conservation Committee.

**Invertebrates** - The site was surveyed for high quality aquatic, deadwood or other habitats which could be used by significant assemblages of invertebrates, or by invertebrates identified in the data search. During the Phase 1 survey there was no attempt made to identify species present and where a site supports features that may be of importance to invertebrates then further Phase 2 surveys may be required to assess the importance of the site.

**Flora and habitats** - A walkover survey identified broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. Any invasive species<sup>12</sup> encountered as an incidental result of the survey are noted.

**Water voles and otters** – Water bodies within impact distance of the site were assessed for potential to support water voles and otters.

**Badgers** - A visual assessment for setts, hair, latrines, prints, foraging disturbance or other signs of badgers was undertaken within, and directly adjacent to, the site boundary.

**Birds** - The assessment of breeding birds and wintering birds on the site was based on the suitability of habitat present, evidence of nesting such as old or currently active nests and the presence of bird species that may potentially nest within the available habitat.

**Adjacent habitat** - Aerial photographs, available maps and survey of the area outside the site boundary (where access was available) was used to identify any habitat in the wider landscape which could be impacted by proposed works.

# 3.2 Desk Study and Biodiversity Information Consultation

A 2km radius search for statutory designated sites was conducted using "MAGIC", the Multi-Agency Geographic Information system for the Countryside<sup>13</sup>. The search radius was extended to 13km for sites previously designated under European Legislation: Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites, where the potential risk of impact to the qualifying features (species or habitats) of these sites may extend over a wider area.

Suffolk Biodiversity Information Service (SBIS) was consulted for records of protected and locally rare species within a 2km radius of the site (data provided on 24<sup>th</sup> May 2021). The site is covered by the Local BAP for Suffolk.

# 4 Results and Discussion

# 4.1 Desk Study

MAGIC<sup>14</sup>, was accessed (25<sup>th</sup> June 2021), to identify the presence of statutory designated sites and habitats.

The site does not lie within an Impact Risk Zone (IRZ), therefore there are unlikely to be any impacts on SSSIs/ SACs/ SPAs & Ramsar sites in the local area.

\_

<sup>&</sup>lt;sup>12</sup> Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

<sup>13</sup> http://defra.magic.gov.uk

<sup>14</sup> http://defra.magic.gov.uk

No Statutory site are located within 2km and no European sites within 13km of the site. Six non-statutory County Wildlife Sites were located within 2km of the site (Table 4.1).

No sites have been granted European Protected Species Licences (as recorded on MAGIC – accessed 25<sup>th</sup> June 2021) within 2km of the site boundary.

Table 4.1: Non-statutory County Wildlife Sites within 2km.

Site Name	Designation	Approx. distance from Site	Description
Broad Border	cws	1.1km NE	The entire wood, which has been cleared of native trees and shrubs, has been densely planted with conifers to the detriment of the wildlife value of the wood.
Buxhall Fen	CWS	1.8km SE	The site consists of an extensive mosaic of wetland habitats. Blackcap, whitethroat, marsh tit, and nightingale are among the many birds which have been recorded on this site. Buxhall Fen is of particular importance for wildlife as it is one of only a few wetland sites in this part of Suffolk.
RNR 219	cws	1.8km NE	Bee Orchid, Pyramidal Orchid. This site is also a Roadside Nature Reserve.
Northfield Wood	CWS	500m E	A large proportion of the wood was felled by the previous owner. It was subsequently replanted with conifers. The long term management plan for the wood is to thin the conifer crop to favour broadleaves and to restore parts of the wood to deciduous woodland. Approximately 4ha have already been clear-felled and replanted with a mixture of oak and cherry, woodland indicator plants can be seen including pale sedge, nettle-leaved bellflower and herb-Paris. Furthermore a pond in the north-eastern corner is known to provide a valuable habitat for breeding amphibians.
Shelland & Woolpit Woods	CWS	750m NW	The majority of Shelland Wood is composed of ash, field maple and hazel coppice with oak standards. Some areas are dominated by hornbeam coppice. Herb-Paris, wood-melick, wood sorrel, abundant wood anemone and yellow pimpernel. Oxlip has also been recorded in Shelland Wood. At the time of the survey, Shelland Wood had not been managed for some time. In contrast, Woolpit Wood which lies adjacent to Shelland Wood, has been altered considerably by the extensive planting of conifers.
Haughley Arable field margin/ RNR160	CWS	1.8km NE	This arable field margin is the only known site in Suffolk for a long-established and self-sustaining population of Cornflower - a traditional Archaeophyte cornfield plant.

# 4.2 Biodiversity Information Consultation

A full list of SPIE (formally UK BAP) protected mammals, amphibians, invertebrates and plants is shown below in Table 4.3. A reduced list of UK BAP and protected birds and plants is shown; these have been selected based on their likelihood of being recorded at the site, given the habitat types present.

Table 4.2: Protected, SPIE and locally scare species records (SBIS, 24th May 2021).

Species	Protection	Records: Date and distance to the site			
Bats					
Common pipistrelle Pipistrellus pipistrellus	CHS(EU Exit)R 2019; WCA; SBAP	Four records (2014-2018). Closest record 260m SE.			
Noctule Nyctalus noctula	CHS(EU Exit)R 2019; WCA; SBAP	Single record (2015) 1.9km NE.			
Brown long eared bat Plecotus auritus	CHS(EU Exit)R 2019; WCA; SBAP	Three records (2013-2014). Closest record 260m SE.			
	Other Mammals				
Hedgehog Erinaceus europaeus	SPIE, SBAP	Fifty-six records (2004-2019). Closest record 115m W.			
Otter Lutra lutra	CHS(EU Exit)R 2019; WCA; SBAP	Five records (2003-2013). Closest record 1.5km S.			
Water vole Arvicola amphibius	WCA; SBAP	Two records (2009). Closest record 1.7km SW.			
Badger Meles meles	Protection of Badgers Act	Eighteen records (2001-2019). Closest record 460m SW.			
Polecat Mustela putorius	SPIE; SBAP	Five records (2017-2019). Closest record 1.2km S.			
Brown hare Lepus europaeus	SPIE; SBAP	Three records (2012-2020). Closest record 1.1km W.			
Harvest mouse Micromys minutus	SPIE; SBAP	Two records (2009). Closest record 1.3km SW.			
Amphibians					
Great crested newt  Triturus cristatus	CHS(EU Exit)R 2019; WCA; SBAP	Twelve records (2016-2020). Closest record 1.8km SE & 1.8km NW.			
Reptiles					
Grass snake Natrix helvetica	WCA; SBAP	Single record (2012) 770m NW.			
Nesting and protected, WCA, SPIE birds					

A number of birds were identified in the desk study, many of which would not use habitats at the site. The following SPIE/EBAP species have been recorded within 2km, and could use habitats within/adjacent to the site for nesting or foraging:

SPIE/BAP and Red-listed Birds of Conservation Concern (BoCC): Song thrush, linnet, yellowhammer, spotted flycatcher, house sparrow, tree sparrow, starling.

SPIE/BAP and Amber-listed Birds of Conservation Concern (BoCC): dunnock, bullfinch.

WCA Schedule 1 birds: Barn owl.

Species	Protection	Records: Date and distance to the site		
Protected and SPIE plants				
The following plants listed as vulnerable on the Red list of Great Britain & England have been recorded within 2km of the site:				
Dwarf spurge <i>Euphorbia exigua</i> , lesser spearwort <i>Ranunculus flammula</i> , corn spurrey <i>Spergula arvensis</i> . Also SPIE cornflower <i>Centaurea cyanus</i> & WCA Sch8 bluebell <i>Hyacinthoides non-scripta</i> .				
Protected and SPIE invertebrates				
Invertebrates	SPIE	Lepidoptera species include white admiral, small heath, white-letter hairstreak butterflies and four moths.		

SBAP = Suffolk Biodiversity Action Plan; SPIE = Species of Principal Importance in England; CHS(EU Exit)R = Conservation of Habitats and Species (Amendment) (EU Exit) Regulations; WCA = Wildlife and Countryside Act.

# 4.3 Potential for Protected Species and Habitats

The site was assessed to identify whether the proposals could potentially impact on protected or locally rare species or habitats, either during the construction, or operational phase.

### 4.3.1 Habitats and Flora

The survey was undertaken in June, which is within the optimum botanical survey season. No rare or priority plant species were recorded during the survey.

The site comprised a block and corrugated metal curved roof Dutch barn, outside the development boundary were areas of hard standing, hedgerows and semi-improved grassland.

# 4.3.1.1 Semi-improved grassland

Semi-improved grassland outside the site boundary to the south and west had a sward height of approximately 70cm at the time of survey. Species were dominated by grasses with frequent forbs including cow parsley *Anthriscus sylvestris* and creeping buttercup *Ranunculus repens*.

# 4.3.1.2 Hedgerows

Hedgerows were present outside the site boundary to the north and south. H1 to the north along Haughley Road is approximately 2m tall with species including privet Ligustrum vulgare, hawthorn *Crataegus monogyna*, elder *Sambucus nigra*, blackthorn *Prunus spinosa* and holly *Ilex aquifolium*. H2 to the south is an immature/semi-mature planted hedgerow with species including hawthorn and field maple *Acer campestre*.

### 4.3.1.3 Invasive Flora and WCA Schedule 9 Species

No invasive species or species listed on Schedule 9 of the Wildlife and Countryside Act (1981 as amended) were recorded at the site.

### 4.3.2 Bats

All UK species of bats are protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Common pipistrelles, noctule and brown long-eared bats have been recorded in the local area.

# 4.3.2.1 Roosting Bats - structures

The barn is of block construction to 2m with corrugated steel above. Internally the curved corrugated steel roof is supported on a steel frame. Windows on the northern and southern elevations let a lot of light internally, creating very light conditions during the day. Blockwork is well sealed internally and externally, with no roosting opportunities noted. Small gaps are present where steel sheets overlap the blockwork externally, however these are well cobwebbed and no signs indicting the presence of bats were recorded.

The Barn is considered to provide negligible roosting potential for bats. No further surveys are considered necessary.

# 4.3.2.2 Roosting Bats – trees

No trees are present within the site boundary, or surrounding the site that may be impacted by the proposals.

# 4.3.2.3 Foraging and Commuting Bats

The site itself provides poor quality foraging habitat with no vegetation cover, however mature trees and ponds associated with Haughley Hall to the south east provide good quality habitat and are linked via a hedgerow to Northfield Wood CWS to the east. No impacts to any good quality forging habitat are predicted.

### 4.3.3 Reptiles

All UK reptile species are protected under the Wildlife and Countryside Act 1981, with two species afforded higher levels of protection under the European Habitat Regulations.

The site provides poor quality habitat for reptiles, with no vegetation cover and no opportunities for shelter or hibernation.

Grass snakes have been recorded in the local area, and may be present in surrounding, however as the proposed works are confined to areas of building and existing hard standing no significant impacts are predicted. No further surveys are necessary.

# 4.3.4 Amphibians

There are no waterbodies within the site, however three ponds are present within 250m, to the east, west and south east, the closest pond is approximately 75m south east.

Habitats within the site are of poor quality for amphibians including great crested newts, with no vegetation cover and no opportunities for shelter or hibernation.

The site is approximately 0.02ha, using Natural England's Rapid Risk Assessment the proposed development is 'likely' to cause an offence.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.3
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.3
Rapid risk assessment result:	AMBER: OFFENCE LIKELY	

However 'the risk assessment tool has been developed as a general guide only, and it is inevitably rather simplistic. The following factors are not taken into consideration for sake of simplicity, though they will often have an important role in determining whether an offence would occur: terrestrial habitat quality, timing and duration of works, detailed layout of development in relation to newt resting and dispersal. The following factors could decrease the risk: poor terrestrial habitat, small development footprint, short construction period'.

The proposed development involves the conversion of an existing barn with no removal of any suitable terrestrial habitat or fragmentation of dispersal routes.. The existing barn and immediate hard standing surroundings provide poor quality habitat for amphibians including great crested newts. The footings of the buildings appear to be in a good state of repair and no potential access into wall structures was recorded at ground level.

It is considered unlikely that the site supports great crested newts or that the species would be significantly impacted by the proposals in the long term. Given the poor quality of the site it is considered unlikely that great crested newts would be harmed or disturbed by the proposals, however, given the presence of ponds within 100m, it is recommended that any demolition works are undertaken in a sensitive and precautionary way to minimise the risk of causing harm to any great crested newts that may be present in the surrounding area (see Section 5.2.for more detail).

### 4.3.5 Birds

### 4.3.5.1 BAP/SPIE/Red-list Birds

A number of local BAP, national SPIE, and Schedule 1 bird records were provided by SBIS from the local area. The site provided poor quality foraging habitat, with no vegetation cover.

# 4.3.5.2 Nesting Birds

All nesting birds and their eggs are protected under the Wildlife & Countryside Act 1981. The barn provides potential nesting opportunities for species such as wood pigeon and swallow, and old nests (likely wood pigeon) were recorded internally.

The start of conversion works should be undertaken outside of the bird nesting season (March-August), if this is not possible a nesting bird survey should be undertaken prior to the start of works.

### 4.3.6 Other Mammals

### 4.3.6.1 Badger

Badgers and active setts are protected under the Protection of Badgers Act 1992.

No signs indicating the presence of badgers were recorded within the site. It is unlikely that badgers would be impacted by the proposals, however, precautions are detailed to protect nocturnal animals, including badgers, during the initial construction/conversion phase. No further surveys are considered necessary.

### 4.3.6.2 Hedgehogs

Numerous records of hedgehogs were provided by SBIS, habitats at the site were of limited quality for hedgehogs due to the lack vegetative cover and lack of shelter and hibernation opportunities.

No further surveys are necessary, however precautionary methods (Section 5), should be followed during the construction/conversion phase to minimise the risk of causing harm to this (and other nocturnal) species that may use suitable habitat adjacent to the site.

### 4.3.6.3 Hares

Brown hares (SBAP and SPIE species) generally use arable land and long grassland, and are unlikely to use habitats at the site. No further survey is necessary.

### 4.3.6.4 Dormice

There are no records of dormice within the local area and habitats within the site were not suitable to support dormice.

The site is not connected to any other suitable habitat in the local area, therefore no further surveys or precautions are considered necessary.

### 4.3.6.5 Otter/Water Vole

The site does not contain any suitable habitat for otter or water vole. There are no significant watercourses in the local area.

Otter and water vole will not be impacted by the proposals and no further survey or precautions are necessary.

### 4.3.7 Invertebrates

The site provided poor quality habitat for invertebrates with no vegetation cover or areas of suitable bare ground. It is considered unlikely that any protected or rare invertebrates are present or would be significantly impacted by the proposals. No further surveys are necessary.

# 4.3.8 Impact on Local Wildlife Sites & European Protected Sites

The proposed development will not directly impact on any local wildlife sites due to the location and scale of the proposals. There are no European sites within impact distance.

# 4.4 Limitations and Assumptions

The baseline conditions reported and assessed in this document represent those identified during a single site survey, on the 4<sup>th</sup> June 2021. A reasonable assessment of habitats can be made during a single survey; however, seasonal variations cannot be observed. The survey provides an overview of the likelihood of protected species occurring on the site: Where no evidence is found, this does not mean that species are not present, or using the site. Further surveys are only recommended if there is a significant likelihood that protected species may be present and impacted by the proposed development, based on the suitability of the habitat and any direct evidence.

The desk study used records and historical data provided by SBIS, which depend on the availability of recorders and survey effort in the area, and do not list all species likely to be present. Data supplement the site visit, but absence of records does not confirm absence of species.

All areas of the site were accessible on the day of survey.

# 5 Recommendations

# 5.1 Further Surveys

No further surveys are considered necessary.

# 5.2 Precautionary Methods

# 5.2.1 Nesting birds

The start of conversion works at barn should be undertaken outside the nesting bird season (March-August). If this is not feasible, a precautionary survey of the site prior to start of works, should be carried out, to check for active bird nests, and avoid infringing legislation which protects all nesting birds (WCA 1981). If an active nest is recorded, works will be postponed until all young birds have fledged and left the area.

### 5.2.2 Amphibians

All stored materials at the site should be stored on hard standing and off the ground (on pallets) to prevent creating new shelter and hibernation opportunities.

Any loose rubble/debris should be taken off site or stored securely in skips to prevent creating new shelter or hibernation opportunities.

### 5.2.3 Nocturnal Animals

Any deep holes or foundations left uncovered overnight should have an escape ramp (secured scaffold board), to enable any nocturnal animals that become trapped to escape.

# 5.2.4 Sensitive Lighting

To minimise risk of disturbance to foraging and commuting bats that may use adjacent habitats (both during and post development), external lighting should be minimised as follows:

- Any task lighting (during construction) should not be directed at the existing hedgerows.
- Any necessary security lighting should be set on short timers and be sensitive to large moving objects only.
- Lighting should be low-level, bollard-type, or directed downward and shielded to minimise light spillage.
- Hoods, cowls or directional lighting should be used to avoid light directed at the sky or towards mature trees.
- Lighting times should be limited, to provide dark periods.
- If the new access or parking areas will be lit, low-level, bollard-style lighting should be considered.
- Low pressure sodium security lights with glass glazing are recommended, as these produce the least amount of UV light. Avoid white and blue wavelengths of the light spectrum. The brightness of the lamps should be kept as low as feasibly possible for security and safety only<sup>1516</sup>.

<sup>&</sup>lt;sup>15</sup> BCT (2014) Artificial lighting and wildlife: Interim Guidance: Recommendations to help minimise the impact artificial lighting.

<sup>&</sup>lt;sup>16</sup> Institution of Lighting Professionals (2011) Guidance Notes for the Reduction of Obtrusive Light GN01:2011.

### 5.3 Enhancement Recommendations

These additional recommendations are not legal requirements but would enhance the value of the site for wildlife, as encouraged through the NPPF, and to help achieve Suffolk BAP targets.

### 5.3.1 Bird Boxes

Bird boxes could be installed on the converted barn. These should be installed at least 3m above the ground and should avoid direct sunlight (not directly south-facing), prevailing wind and be out of reach of cats and other predators:

- Smaller, open-fronted box, made to BTO dimensions (for spotted flycatcher and song thrush – Suffolk BAP species).
- Nest boxes with 32mm holes for house sparrow (SPIE species) could be added to the
  outbuildings. These should be located close together for this colonial nesting species,
  in a sheltered, minimally disturbed area (on the western aspect).

### 5.3.2 Bat Boxes

A bat box could be installed on the exterior wall of the converted barn. Woodcrete boxes such as the Vivara pro Woodstone box are suitable for crevice roosting species and would be suitable for installing on trees at the site. Bat boxes should ideally be erected at least 3m above the ground in a southerly direction (south-east to south-west).

# 6 Conclusion

The site is generally of low ecological value, however the building may be used by nesting birds; careful timing of works or a pre-works nesting bird survey will prevent an offence to nesting birds. If the precautionary working methods are followed it is considered unlikely that any protected or rare wildlife would be significantly impacted by the proposals and the site could be enhanced for local wildlife through inclusion of some or all of the enhancement suggestions.

# 7 Appendix A – Legislation

# 7.1 Habitat Regulations

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 transpose EU Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) and the Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) into domestic law, making it an offence to deliberately capture, kill or disturb wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

# 7.2 Wildlife & Countryside Act

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act.

Sites of Special Scientific Interest (SSSI) are designated under this Act.

Special Protection Areas (SPA) are strictly protected sites, designated under the Birds Directive, for rare and vulnerable birds and for regularly occurring migratory species.

### 7.3 Natural Environment & Rural Communities Act

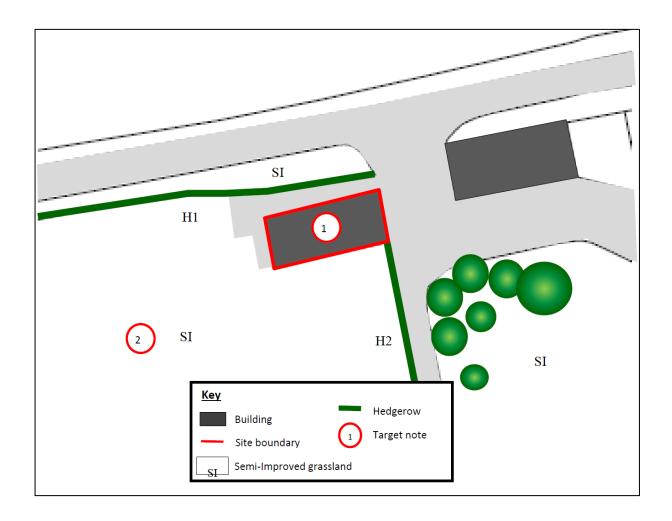
The NERC 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.

# 7.4 Biodiversity Action Plans

The UK Biodiversity Action Plan (UKBAP) was organised to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory.

There is no longer a UK Biodiversity Action Plan; this has been replaced by the UK Post-2010 Biodiversity Framework (2012). The England Biodiversity Strategy has been replaced by Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011). As a result, the BAP process has been devolved to local level with each county deciding its own way forward.

# 8 Appendix B - Phase 1 Habitat Survey Plan



# **Target Notes**

Target note	Habitat Description	Photo
1	Block and sheet metal Dutch barn.	
1a	Internally the roof is unlined and support on a steel structure. Very light internal conditions. No suitable bat roosting opportunities, evidence of old birds nests.	
2	Adjacent semi-improved grassland.	

H1	Hedgerow along Haughley Road, managed at 2m tall. Species including privet, blackthorn, hawthorn, elder and holly.	
H2	Recently planted hedgerow (<10yrs old) managed to 2m high, species include hawthorn and field maple.	