Preliminary bat roost assessment

&

Emergence Surveys

Client Name	Simon Whiteley
Site Location	Heaton Low Farmhouse, Heaton, SK11 0RE
Document reference	CE1170-01
Date of Survey	PRA: 12TH September 2018 Emergence: 22nd September 2018
Surveyed by	Garry Smith [Class 2 registration 2017-28032-CLS-CLS]

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Validity of data

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

Executive Summary

Chase Ecology Ltd. undertook a Preliminary Roost Assessment (PRA) at the named site on the 12TH September 2018 followed by an emergence survey on the 22nd September 2018. The aim of the assessment was to consider the value and suitability of the structures for roosting bats & nesting birds as detailed below;

Site Location	Heaton Low Farmhouse, Heaton, SK11 0RE
Survey Methodology	An internal & external survey was carried out by Garry Smith for the potential roosting and usage of the structure for bats & nesting birds. See section 3 (Methodology). Additional to the visit further research has been carried out on the Magic.gov database and National Biodiversity Network
Results of Preliminary Bat Roost Inspection	Following the preliminary bat roost assessment carried out on the 12TH September 2018 it has been identified that the structures to be disturbed as part of development offer suitable features of value to bats both externally & internally A roof void above one section of structure to be disturbed as part of development was enclosed with no opportunity for internal inspection where gaps to the roof coverings have been identified and noted within this report. Two EPS Mitigation Licences for Common Pipistrelle, Brown Long-eared, Soprano Pipistrelle have been identified during a desktop survey of a 2km radius search.
Evidence of Nesting Birds	No evidence of nesting birds identified
Requirements for Additional Survey	A single emergence survey has been carried out on the 22nd September 2018 where Common Pipistrelle, Soprano Pipistrelle & Noctule were recorded to have been commuting and foraging close to the building. A further emergence survey has been booked in for the 15th May 2018 to assess the building further, subject to optimal weather conditions.
Predicted Impacts of Development on Bats and Nesting Birds	Further assessment required As bats have been recorded to be using the environments close to the building a level of protection will be required to limit any disturbance caused.

Mitigation and Compensation of Proposed Impacts	Further assessment required
Licensing Requirements for Bats	Not at this stage
Required Actions	See section 6.0

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1.0 Introduction

Brief

1.1 This report will present the findings of a preliminary bat roost assessment and nesting bird survey of the named site and further research of the area online.

1.2 A single emergence survey has been carried out on the 22nd September 2018

Site description

1.3 A two-storey dwelling with adjoining single storey sections which form part of a development plan for the demolition of the single storey sections.

The property is located within an area hosting value to bats which includes open fields, woodlands, hedgerows and various waterbodies including the River Dane situated 550m to the North which all support both feeding & commuting value.

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2.0 Legislation

2.1.1 All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2010 (as amended), making it an offence to:

- Deliberately kill, injure or capture a bat;
- Deliberately disturb bats;
- Damage or destroy a breeding site or resting place

2.1.2 In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly Obstruct access to any structure or place which any bat uses for shelter or protection; or Disturb any bat while occupying a structure or place which it uses

2.1.3 If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.

2.1.4 In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2010 (as amended). All wild birds, their nests and eggs are protected it an offence to: • kill, injure, or take any wild bird; • take, damage or destroy the nest of any such bird whilst it is in use or being built; or • take or destroying an egg of any such wild bird.

2.1.5 Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

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3.0 METHODOLOGY

3.1 All survey and reporting undertaken by Mr Garry Smith who is an experienced licensed bat ecologist in England [Class 2 registration 2017-28032-CLS-CLS] with over 8 years' experience practical of professional ecological surveys.

3.2 Preliminary roost assessments can be undertaken throughout the year and can provide conclusive results, which can save expense and time for Planning Applicants. The optimum time to investigate for the presence of bats is during their active season when signs of presence can be more easily located.

3.3 A thorough interior and exterior inspection of the building for bat roosting and potential roosting features was undertaken. Signs surveyed for included droppings, dead bats, feeding remains (beetle, moth and butterfly remains), urine staining and grease marks around crevices and down walls, and any noises such as scratching and audible bat calls.

3.4 During the survey, the surrounding area was assessed in relation to suitable habitat that may be of value to bats.

3.5 Surveys were conducted following "The Bat Workers Manual "(JNCC 2004), "The Bat Mitigation Guidelines" (EN 2004) and the Bat Conservation Trust 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (2016) recommendations.

3.6 All areas of the building internally were inspected with the aid of a 2 million c/p lamp and inspection camera. External features were also inspected where possible and observations were aided with binoculars where needed.

3.7 A desk top survey was also completed to establish the biodiversity of the area along with its habitat structures including statutory and non-statutory designations

3.8 Biological records were not obtained for this survey

3.9 Emergence surveys to be carried out between May – September during optimal weather/survey conditions.

4.0 Results

Desk Study
Environmental record search

4.1 A data search from freely available resources was undertaken to assess the names species for distribution/record within a 2km study area which demonstrated records for;

- Daubenton's
- Whiskered
- Natterer's
- Noctule
- Brown Long-eared
- Common Pipistrelle

4.2 Designated sites;
Statutory (5km)

Site	Designation	Distance (km)	Direction
LEEK MOORS	SSSI	2.60	NE

Non-Statutory (2km)

Site	Designation	Distance (km)	Direction
NON-IDENTIFIED			

Priority Habitat Inventory within 2km

HABITAT	Distance (km)	DIRECTION
DECIDUOUS WOODLAND	0.25	NE
DECIDUOUS WOODLAND	0.51	N
DECIDUOUS WOODLAND	0.68	W
DECIDUOUS WOODLAND	0.75	E
TRADITIONAL ORCHARDS	1.16	E
DECIDUOUS WOODLAND	1.30	NW
DECIDUOUS WOODLAND	1.35	S
DECIDUOUS WOODLAND	1.70	NE

None of the above names sites/locations would be effected in any way from the proposed development plan for this site, including both habitats and species.

4.3 Aerial photographs of the site were consulted to determine if there are important landscape features surrounding and within vicinity of the site.

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4.4 A search of previous Granted European Protected Species Applications revealed TWO granted European Protected Species applications

- 1.50km – South/West – Common Pipistrelle
- 1.53km – South/West – Common Pipistrelle, Brown Long-eared, Soprano Pipistrelle

Field study

4.5 A site visit was completed on the 12TH September 2018 by Garry Smith [Class 2 registration 2017-28032-CLS-CLS] where the dwelling and surrounding areas were assessed for the possible usages of bats & birds.

4.6 A full external assessment was carried out visually around the property including checks to the stonework's & roof structures where accessible.

The areas to be effected from development are split into two sections.

A single storey stone section (Image 1) with a tiles roof covering has demonstrated no suitable roosting value to bats across the external stonework's which looked to be well sealed. However, there were a number of gaps within the hip coverings (Image 2) which looked to offer suitable roosting values for crevice dwelling bats within.

Below the roof coverings to this section is an enclosed void where no access is offered where we were unable to assess the internal features for any evidence of bats.

The single storey garage section (Image 1, 4, 5, 6) has demonstrated a number of suitable roosting features and access points for bats which has included holes within the stonework's, gaps between the timbers and crevices between joints.

A fabricated roof system is in place which demonstrated a fairly well sealed covering with no suitable roosting features available.

Internally the garage section has demonstrated no void below the fabricated sheets coverings (Image 7) along with sections which offer natural daylight which reduces the likelihood of void dwelling bats roosting below.

The internal stonework's however does offer suitable roosting availability to crevice dwelling bats (Image 8, 9, 10) from areas of deterioration and open crevices which may lead to larger voids which may offer further value to void dwelling bats.

We have made use of an inspection camera to assess the crevices further where no evidence of bats was noted, however due to the depth and shape of a number of the features we were unable to fully rule bats and or roosts out.

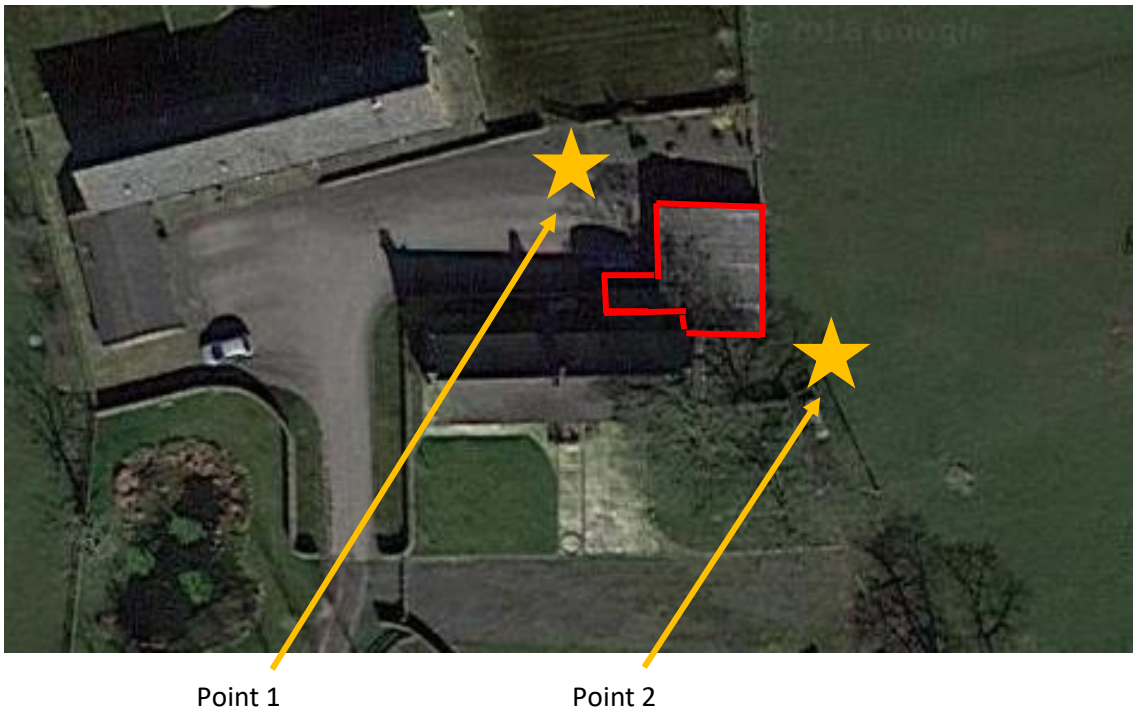
Internally no other evidence of bats was identified.

No evidence of nesting birds has been evidenced or detailed within this report.

The property is located within an area hosting value to bats which includes open fields, woodlands, hedgerows and various waterbodies including the River Dane situated 550m to the North which all support both feeding & commuting value.

Results of Phase 2 Activity Surveys

Below plan of survey positions for all emergence survey



Date: 22nd September 2018

Sunrise	Start Time	Finish Time	Temperature	Wind Beaufort Scale	Cloud Cover
06:54	05:10	07:10	7 Start, 7 End	2	80%

Point 1 – Garry Smith

Equipment – Anabat Walkabout

Time	Species	Activity	Audio/Visual
05:41	C Pip	Single pass	Audio
05:53	C Pip	Single pass	Audio
06:09	S Pip	Brief foraging	Audio
06:34	C Pip	Foraging around courtyard area close to the neighbouring property North/West of the building	Audio & Visual
06:40	C Pip	Continuation from 06:34	Audio & Visual
06:41	Noctule	Single pass	Audio

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Point 2 – Scott Latham

Equipment – Anabat Walkabout

Time	Species	Activity	Audio/Visual
05:29	Noctule	Single pass	Audio
05:53	C Pip	Single pass	Audio
06:33	C Pip	Single pass	Audio
06:41	Noctule	Single pass	Audio
06:43	Noctule	Single pass	Audio

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5.0 Plans & Photographs

Image 1 – West facing elevation showing the single storey garage section and adjoining single storey stone section with tiled roof which connects to the main dwelling



Image 2 – Gaps within the roof coverings which offer value to crevice dwelling bats



Image 3 – Gap of 20mm+ noted between the two sections of the buildings which offer access into further suitable roosting environments for bats



Image 4 – North facing elevation of the garage section which offers further roosting availability for crevice dwelling bats with along with access through into the internal features of the building



Image 5 – East facing elevation demonstrating a fabricated roof covering with no enclosed void below.



Image 6 – South facing elevation demonstrating gaps between the timbers and block walling which offers access for bats internally

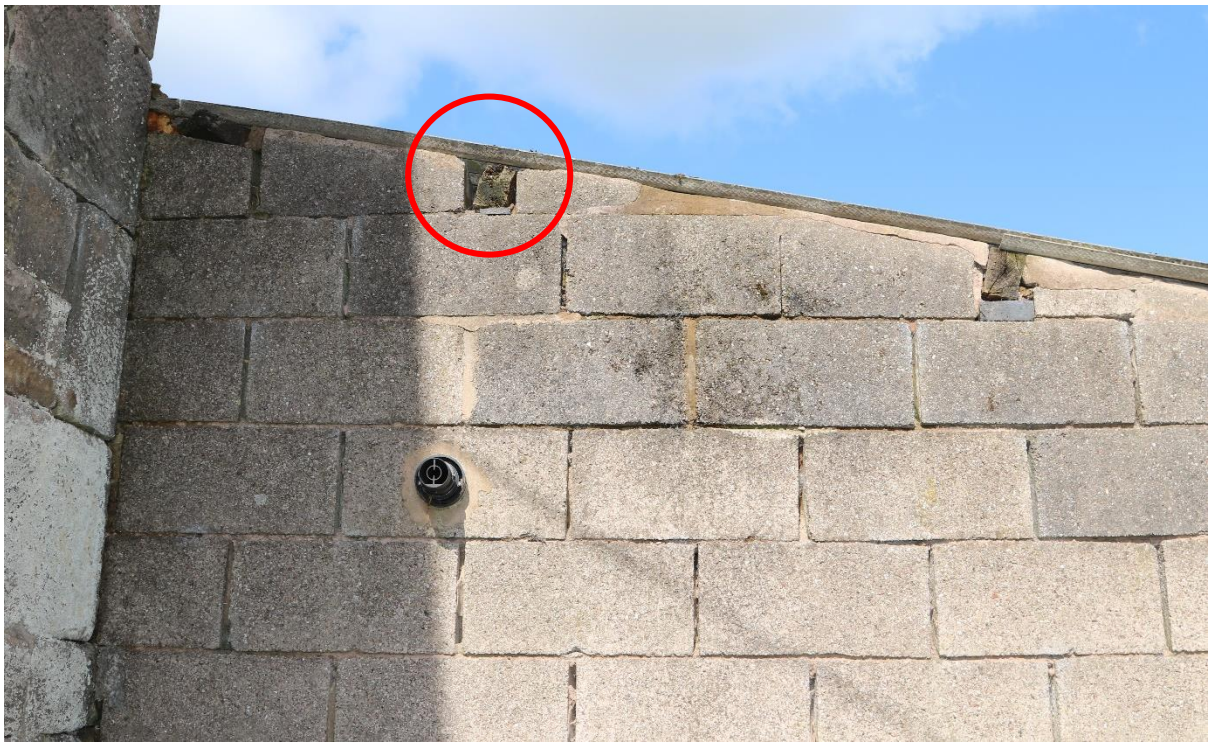


Image 7 – Internal view from within the garage section which has demonstrated no void areas below the fabricated roof coverings



Image 8 – Internal area of deteriorated stonework's which offers roosting value to crevice dwelling bats within



Image 9 – Further roosting availability within the stonework's where additional crevices have been noted

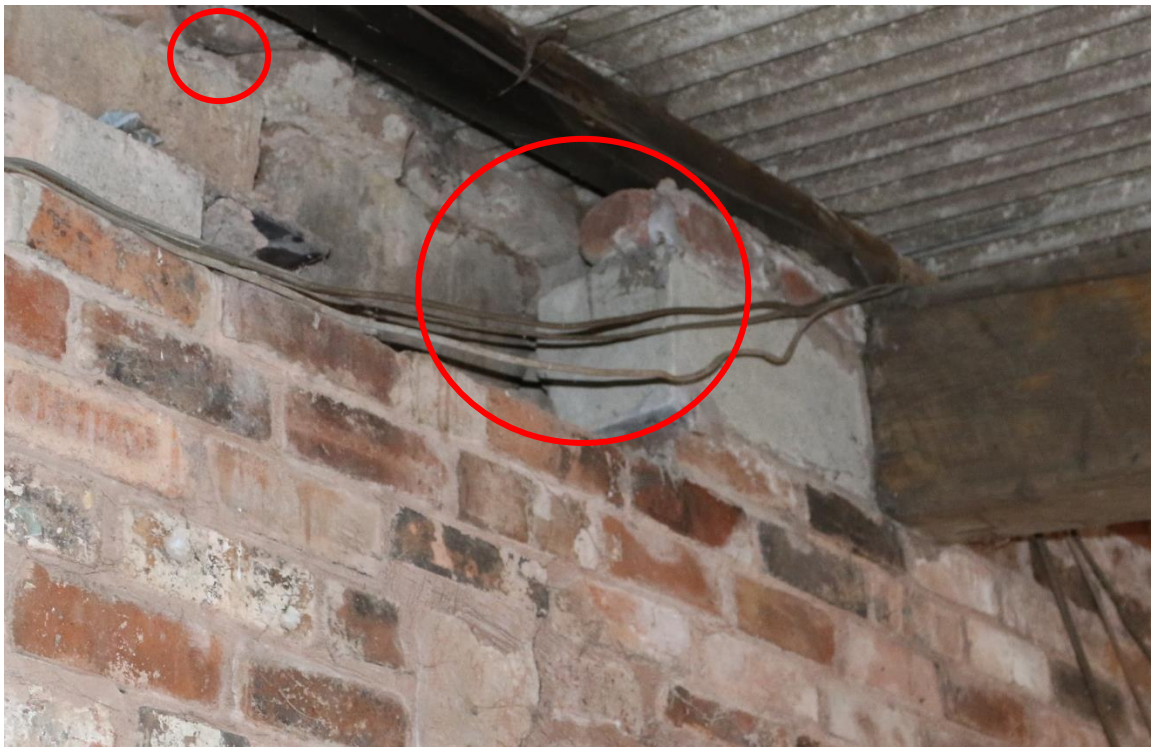


Image 10 – Further roosting availability within the stonework's where additional crevices have been noted



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Image 11 – Surrounding habitats around the building



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6.0 Conclusion and recommendations

All recommendations provided in this section shall be on Chase Ecology Ltd's current understanding of the site proposals and current planning application, correct at the time the report was compiled. Should any aspect of the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate

6.1 Following the preliminary bat roost assessment carried out on the 12TH September 2018 it was identified that the structures to be disturbed as part of development offered suitable features of value to bats both externally & internally

6.2 A roof void above one section of structure to be disturbed as part of development was enclosed with no opportunity for internal inspection where gaps to the roof coverings have been identified and noted within this report.

6.3 Two EPS Mitigation Licences for Common Pipistrelle, Brown Long-eared, Soprano Pipistrelle have been identified during a desktop survey of a 2km radius search.

6.4 A single emergence survey has been carried out on the 22nd September 2018 where Common Pipistrelle, Soprano Pipistrelle & Noctule were recorded to have been commuting and foraging close to the building.

6.5 A further emergence survey has been booked in for the 15th May 2018 to assess the building further, subject to optimal weather conditions.

6.6 It is advised that no further development take place to the areas identified within this report as this may cause disturbance to bats and their roosts.

6.7 As bats have been recorded to be using the environments close to the building a level of protection will be required to limit any disturbance caused.

7.0 References

- Mitchell-Jones, A.J, & McLeish, A.P. Ed., (2004) 3rd Edition Bat Workers' Manual. Joint Nature Conservation Committee, Peterborough.
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.Mitchell-Jones, A.J. (2004) Bat Mitigation Guidelines. Natural England, Peterborough.
- British Trust for Ornithology (2016) www.bto.org/
- Magic database (2017) http://www.magic.gov.uk/MagicMap.aspx accessed on 08/03/2017.
- Google Earth (2017)

Appendix 1: Location plan

