Emergence Survey Report – Bats

Site Location	84 Copse Wood Way, Northwood, HA6 2UB
Document reference	CE2075-01 *This document should be read in conjunction with the Preliminary Roost Assessment for bats completed on the 22nd March 2022, document reference: CE2075*
Date of survey	Emergence Survey – 20th June 2022 Emergence Survey – 4th July 2022 Emergence Survey – 22nd July 2022
Report by	Garry Smith – Senior Ecologist Signature:  Tel: 07792064673 Email: info@chaseecology.co.uk

DISCLAIMER
This report/document has been prepared by Chase Ecology for the named client as a Protected Species Survey - Bats. Chase Ecology accepts no liability or responsibility for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared. We confirm that the opinions expressed are our true and professional opinions.

Limitations and Copyright
Chase Ecology has prepared this Report for the sole use of the named Client or their Agents in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This Report may not be relied upon by any other party without the prior and express written agreement of Chase Ecology. The assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Chase Ecology. Chase Ecology standard Limitations of Service apply to this report and all associated work relating to this site. A copy has been supplied with our original quotation and further copies are available on request.

CONTENTS

1.0 Introduction

Brief
This report will present the findings of an emergence survey of the named site on the below dates;

Emergence Survey – 20th June 2022
Emergence Survey – 4th July 2022
Emergence Survey – 22nd July 2022

2.0 Executive Summary

Chase Ecology undertook an emergence survey at the named site to assess the building for bats following a preliminary roost assessment which deemed the structure to offer value for roosting.

Survey Methodology	All emergence surveys were conducted during the optimal recommended survey times following best practice guidelines. All surveys were carried out during optimal weather conditions. Each elevation of the structure which offers value to bats was viewed during the survey visit with no limitations.
Results of emergence surveys	Following the emergence survey of the structure, it has been identified that bats are using the building for daytime roosting and the following roosts were identified; • Roost 1 – Brown Long-eared daytime roost (Max count 1 x bat) In addition to the above recorded bat roosts, several other bats were observed to be using the site for both feeding and commuting. See Section 5: Results of Phase 2 Activity Surveys
Requirements for Additional Survey	No further survey requirements have been identified during the emergence surveys conducted to date. See Appendix 1: Mitigation, Protection & Enhancement.
Predicted Impacts of Development on Bats	Low impacts will be offered to bats if all guidance & recommendations within appendix one for mitigation, protection and enhancement are implemented during all stages of development. See Appendix 1: Mitigation, Protection & Enhancement.
Licensing Requirements for Bats	A Protected species mitigation licence for bats will be required and sort prior to any disturbance to both bats and their roosts which have been identified and recorded within this report.

	The following bat roosts recorded will need to be mitigated under licence from Natural England; • Roost 1 – Brown Long-eared daytime roost (Max count 1 x bat)
Biodiversity Net Gain	See Appendix 1: Mitigation, Protection & Enhancement.

3.0 Legislation

1.1.1 All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017, making it an offence to:

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

1.1.2 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

1.1.3 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.

1.1.4 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.

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

4.0 METHODOLOGY

4.1 All reporting undertaken by Mr Garry Smith who is an experienced licensed bat ecologist in England [Class 2 registration 2017-28032-CLS-CLS] with over 9 years' experience practical of professional ecological surveys.

4.2 It is recommended that emergence surveys should be carried out within the optimal survey season from May to August, April & September are also useful times if weather conditions remain optimal, in line with the Good Practice Guidelines, 3rd edition, Bat Conservation Trust

4.3 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.

4.4 All elevations of the structure were visible throughout the survey to capture any bats emerging from within or into the structure throughout the duration of the survey.

5.0 Results of Phase 2 Activity Surveys

Date	20th June 2022					
Sunset/ Sunrise	Start Time	Finish Time	Temperature Start	End	Wind Beaufort Scale	Cloud Cover
21:23	21:05	23:00	16	13	1	10%

	Name	Position	Detector
Lead Surveyor	GARRY SMITH	FRONT LEFT	WALKABOUT
Assistant Surveyor	ANNIKA SMITH	REAR RIGHT	EMT PRO
Assistant Surveyor	NAOMI TURNER	REAR CENTRE	EMT PRO

Emergence/Re-Entry Data
No bats observed to have emerged from the building during the survey times recorded.

Activity from Bats during survey

Species	Activity
Common Pipistrelle	2 x brief intervals of foraging across rear garden spaces during mid stages of survey. 1 x commuting pass front to rear during mid stages of survey. 1 x commuting pass through rear garden spaces during mid stages of the survey. 1 x brief foraging through rear garden spaces during late stages of survey.
Brown long eared	1 x commuting pass during late stages of survey, no visual.
Soprano Pipistrelle	1 x commuting pass across front areas of building during late stages of survey.

Date	4th July 2022					
Sunset/ Sunrise	Start Time	Finish Time	Temperature Start	End	Wind Beaufort Scale	Cloud Cover
21:22	21:05	23:00	17	24	2	0%

	Name	Position	Detector
Lead Surveyor	GARRY SMITH	FRONT LEFT	WALKABOUT
Assistant Surveyor	Elena Vasileva	REAR CENTRE	EMT PRO
Assistant Surveyor	Carla Maria Ferreira de Sousa	FRONT RIGHT	EMT PRO

Emergence/Re-Entry Data

Point	Time	Species	Activity
One	21:39	Brown long eared	Emerged from left elevation, hole in facia

Activity from Bats during survey

Species	Activity
Soprano Pipistrelle	1 x bat foraging around rear garden spaces for up to 30 minutes during early/mid stages of the survey. 2 x commuting passes front to rear during mid stages of the survey.
Common Pipistrelle	3 x commuting passes during mid stages of the survey through the rear areas of the site. 1 x brief foraging across rear areas of the site during mid stages of the survey.
Noctule	1 x commuting pass during late stages of the survey, no visual.

Any other information including photographs of emergence points	Point one

Date	22nd July 2022

Sunset/ Sunrise	Start Time	Finish Time	Temperature Start	Temperature End	Wind Beaufort Scale	Cloud Cover
05:09	03:40	05:25	13	13	0	50%

	Name	Position	Detector
Lead Surveyor	GARRY SMITH	FRONT LEFT	WALKABOUT
Assistant Surveyor	ANNIKA SMITH	REAR RIGHT	EMT PRO
Assistant Surveyor	CRAIG DAVIES	REAR CENTRE	EMT PRO

Emergence/Re-Entry Data

No bats observed to have emerged from or into the building during the survey times recorded.

Activity from Bats during survey

Species	Activity
Common Pipistrelle	1 x commuting pass early into the survey, no visual. 1 x commuting pass front to rear during mid stages of the survey.

6.0 Ecological Experience

Garry Smith - England [Class 2 registration 2017-28032-CLS-CLS]
On joining the ecological sector in 2008 he has developed practical experience of UK protected species from phase-1 habitat assessments through to phase-2 assessments and mitigation works.

Garry has a working knowledge of mammals, reptiles, amphibians and birds.
Garry has worked on both private and commercial projects both residential and industrial.

Garry has experience and knowledge for developing and implementing Ecological Impact Assessments, Construction Ecological Management plans, Habitat Regulations Assessments, Biodiversity Net Gain assessments, Biodiversity Enhancement Schemes.

Craig Davies – Craig has worked within the ecology sector since 2016 and offers a firm knowledge for UK Bats and best practice guidelines.

Craig has been involved with both large commercial and residential surveys from Preliminary Bat Roost Assessments, Emergence Surveys and Mitigation Works for bats.

Craig has supported Chase Ecology since 2018 as a component survey team leader and competently delivers supervision to survey assistance at all levels on site.

Annika Smith – Annika has worked as an assistant ecologist with Chase Ecology since 2017 and has in this time gained a suitable level of knowledge for delivering both phase-1 & phase-2 bat surveys.
She has supported works on mitigation and habitat creation and has a good understanding of maintaining best practice guidelines and survey protocols.

Carla Maria Ferreira de Sousa - Carla has worked as a seasonal survey assistant since 2017 and holds Class Licence level 2 for Bats registration number: 2020-46427-CLS-CLS.

She has worked on both residential and large commercial sites and has the ability to lead and manage others during the surveys on site.

She holds a clear understanding of UK protected species and legislation & guidance for both survey and mitigation.

Elena Vasileva - Elena joined the Chase Ecology team in 2022 as a seasonal survey assistant.

She has demonstrated a clear understanding of survey methodology and offers a good knowledge of best practice survey guidelines.

She has been supporting on both residential and commercial sites including emergence surveys for bats.

7.0 References

Bat Conservation Trust. 2012. Bats and Buildings. Bats and the Built Environment Series. London. Bat Conservation Trust. 2018.
http://www.bats.org.uk/pages/bat_boxes.html (Accessed July 2021).
Bat Conservation Trust. 2018.
Bats and Artificial Lighting in the UK.
Bats and the Built Environment Series. London. Collins, J. (ed). 2016.
Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition.
Bat Conservation Trust. Multi-Agency Geographical Information for the Countryside web http://magic.defra.gov.uk Mitchell-Jones, A.J. 2004 Bat mitigation guidelines. English Nature, Peterborough. Mitchell-Jones, A.J. and McLeish, A.P. 1999 (revised 2004).
The Bat Workers Manual. Joint Nature Conservation Committee, Peterborough.
Stone, E.L. 2013. Bats and Lighting: Overview of Current Evidence and Mitigation Guidance.

Appendix 1: Mitigation, Enhancement & Protection

This document must be available to all involved in the planned development. All contractors must aware of the potential of protected & priority species being found on site and care should be taken during works to avoid harm (including during any tree works), if protected species are found then all work should cease and an ecologist should be consulted immediately.

Mitigation

During the three emergence surveys a total of one individual daytime bat roosts were identified which will suffer total loss during the proposed development works;

Roost 1 – Brown Long-eared daytime roost (Max count 1 x bats)

Prior to any development works which would offer disturbance to the roost location within the main roof coverings a Protected Species Mitigation Licence will need to be obtained from Natural England as below;

- Mitigation License to be applied and granted prior to any disturbance works to both bat roosts which have been identified within this report.

- Mitigation methods agreed with contractors prior to any development works on site.

- During mitigation, a licenced and experienced bat worker will be on site to co-ordinate the mitigation works and to supervise a hand strip of all roost locations. During this time, any roosting bats located will be moved to a suitable bat box within the site.

- One bat box will be installed within the site and remain as a permanent fixture. This will be a large chamber bat box which will also offer additional enhancement to void dwelling species of bats.

- On completion of all mitigation works the licenced ecologist will complete all relevant return documentation to Natural England and conduct any post development checks where appropriate.

- In addition to the agreed mitigation requirements, a suitable level of biodiversity net gain has been agreed and will be implemented during the development works.

Bat box location within the site

<u>Protection measures to be implemented during development</u>

<u>Lighting</u>

It is recommended that during the development process the levels of lighting such as security floodlighting and lighting around working platforms if any should be limited to reduce the level of disturbance caused to bats which have been recorded locally.

Disturbance caused by high power lighting can cause disturbance to common commuting and foraging areas currently used by bats.

It is advised that all works should be carried out during the hours of daylight to further reduce the levels of disturbance caused to bats and other nocturnal wildlife in the surrounding environment.

Nesting Birds

Although no nesting activities were demonstrated within the building where development will take place consideration and protection must be implemented during March to September to prevent disturbance.

If nesting birds are identified within the building during this time which may face disturbance from any planned works the client should seek advice from an experienced ecologist.

Protection of Wildlife During the development

All excavations if any should be closed where possible during the hours of darkness to prevent entrapment of wildlife such as mammals which may use the site during the hours of darkness for commuting & foraging.

For excavations which require to be left open a shallow slope should be in place to aid escape.

All external pipe's & services must be capped during development/overnight to prevent animals entering/entrapment.

The site should remain is a tidy fashion with waste materials removed daily to prevent any use from wildlife as an au natural refugia.

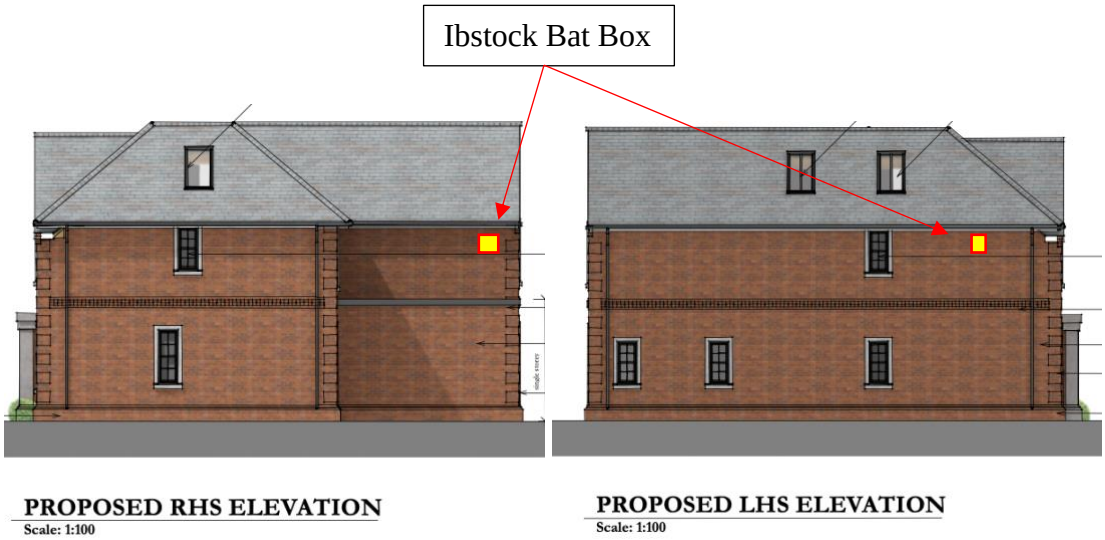
Appendix 2: Biodiversity Net Gain

The below biodiversity net gain features have been agreed and will be incorporated within the build/site during the development process and will be maintained by the land owner for no less than ten years.

It is the land owners responsibility to contact an ecologist if any of the features below for protected species suffer damage/disturbance during this time.

As bats are a UK protected species the land owner must be aware that they are not permitted to disturb both the recorded features of bats themselves. This must be conducted by a licenced bat worker only.

<u>Bats</u>
To offer a suitable level of net gain features for bats, a total of two integrated bat boxes such as the Ibstock bat box B or C will be installed within the East & West facing elevations as below



The Enclosed Bat Box is ideal for new builds as it can be integrated directly into the brickwork to produce a discrete but attractive home for bats.

The inside of the box is designed to create several roosting zones which are ideal for crevice dwelling bats such as the pipistrelle. The bottom entrance means that no maintenance is required as droppings will simply fall out the bottom.