

PRELIMINARY BAT ROOST ASSESSMENT

THARBIES FARM, SAWBRIDGEWORTH, HERTFORDSHIRE



Commissioned by: **Ashdown Developments**

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EXECUTIVE SUMMARY

1. A specialist daytime based preliminary bat roost assessment was undertaken by ASW Ecology Ltd, at Tharbies Farm, during Summer 2022.
2. A 2km radius online bat desktop study, using MAGIC and the NBN Gateway resources, was also undertaken by us, for bat species and licence information, so to support this report.
3. There was bat roosting potential present at the Barn associated with the Cricket School but there was no bat roosting potential at the Storage Barn, the Cricket School and at the Barn with Storage/Embroidery Business.
4. Bat evidence was found within the Listed Barn, with small numbers of pipistrelle and brown long-eared bat droppings on a side wall.
5. A follow-up bat emergence survey is therefore required for two of the five buildings eg the Listed Barn and the Barn associated with the Cricket School, in regards to the future planned development works by the client.
6. This survey will need to be undertaken in the Summer and in suitable weather conditions only, so that best practice guidance is followed at all times and all bat related legislation is strictly adhered to.

1. INTRODUCTION

A Preliminary Bat Roost Assessment was undertaken at Tharbies Farm, Sawbridgeworth, Hertfordshire CM21 0LL, during June 2022, for the client: Ashdown Developments.

The grid reference for this site is: TL471161.

This bat assessment was required due to the future demolition and conversion of the various buildings at the application site. A previous bat assessment of several of the buildings had been undertaken in 2012 by Greenwillows Associates Ltd.

The main method used for this bat assessment, as well as the full results and the final recommendations can be found within this report.

Both this bat assessment and the report were undertaken and compiled by Mr Andrew S. Waller, Consultant Ecologist, ASW Ecology Ltd, with the help from an assistant ecologist.

Mr Andrew S. Waller MSc BSc (Hons) MCIEEM, Director of ASW Ecology Ltd - has been a Consultant Ecologist since 1997, and has very extensive experience and knowledge of protected wildlife species/issues including bats, for which he is fully licensed to survey throughout England by Natural England for consultancy purposes (Bat Class 2 Licence Registration Number: 2015-15703-CLS-CLS). He also has Natural England survey licences for great crested newts and barn owls. He has been studying bats for 29 years and wildlife in general for 40 years. He is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and meets the requirements of being a Suitably Qualified Ecologist.

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2. METHODOLOGY

2.1 Preliminary Bat Roost Assessment method

On the 28th June 2022, a daytime based bat assessment was undertaken of the five stated buildings at Tharbies Farm.

A licensed bat consultant and an assistant ecologist, using appropriate equipment, such as torches, an endoscope and binoculars, conducted a comprehensive search of the existing structures both internally and externally for any possible features or evidence which could suggest the presence of a bat roost.

Weather conditions and visibility were very good at the time of the visit, with it being quite cloudy (4/8CC), dry, warm, with a light wind only.

Indications of bats roosting at any site during a bat inspection of a building can include the presence of actual bats, crumbly bat droppings, insect prey remains and the staining of any timbers/wooden beams by natural oils in the bats fur or by urine.

An online 2km radius bat only desktop study was also undertaken by us, to note any previously recorded bat records or bat licence sites, so to support this bat assessment report.

All results from this bat assessment can be found in the next chapter of this report.

2.2 Constraints

Due to the timing of this bat survey, only the early Summer period could be covered. This is a standard constraint for any bat survey which can only investigate part of any year.

The June to August period is important to bats, since this is when maternity roosts are present and young bats will be born. Large roosts are sometimes present within structures, and can be very visible during bat emergence surveys. This survey was commissioned when such roosts will have formed, with bats being very active, so was timed at the key period of the year for bats.

As always though, without taking into account any further active surveying or monitoring, this study can only provide a “snapshot” of the presence of bats at the site during the period of this study.

Please also note that any bat survey report is valid for one year only, as stated in the BCT bat survey guidelines (BCT, 2016).

3. PRELIMINARY BAT ROOST ASSESSMENT RESULTS

3.1 Buildings 1-5 – Please see Map A in Appendix 2 for the locations of the buildings described below

<p>Building description:</p>	<p>Building 1 (B1) – Storage Barn – This a metal framed barn with a breeze block base and corrugated metal/asbestos roof. Has external wooden cladding</p> <p>Building 2 (B2) – Barn associated with Embroidery Business - This a metal framed barn with a breeze block base and corrugated metal/asbestos roof. Has external wooden cladding</p> <p>Building 3 (B3) – Cricket School – Enclosed school and training building with corrugated metal roof</p> <p>Building 4 (B4) – Barn associated with Cricket School – Brick structure with wooden cladding and an asbestos roof. Has a roof void</p> <p>Building 5 (B5) – Listed Barn – This is an historical timber thresher barn, built in 1600’s, with a brick base and internal timber frame. Has a corrugated metal roof and door</p>
<p>External bat survey</p>	<p>Building 1 (B1) – Shallow crevices only at external wooden cladding</p> <p>Building 2 (B2) – Shallow crevices only at external wooden cladding</p> <p>Building 3 (B3) – Shallow crevice above door, with web</p> <p>Building 4 (B4) – Crevice under ridge tile high up on building and shallow crevices on exterior, some with webs</p> <p>Building 5 (B5) – Lots of crevices and holes at the barn exterior including where damage is present</p>
<p>Internal bat survey</p>	<p>Building 1 (B1) – Storage items inside. Very spacious</p> <p>Building 2 (B2) – Used for storage items</p> <p>Building 3 (B3) – No access for bats and too illuminated by lighting</p>

	<p>Building 4 (B4) – A low roof void is present, with insulation material, many spider webs and dusty. Has timbers. Daylight can be seen above ridge beam so bat access is possible</p> <p>Building 5 (B5) – Substantial timber frame present, with various mortise joint slots and possible crevices where timbers have been fixed together. Has very high potential for roosting bats inside</p>
Bat evidence present	<p>Building 1 (B1) – None</p> <p>Building 2 (B2) – None</p> <p>Building 3 (B3) - None</p> <p>Building 4 (B4) – None</p> <p>Building 5 (B5) – Very small number of pipistrelle and brown long-eared bat droppings found on rear wall of this barn, where bats have roosted above</p>
Other wildlife evidence present	<p>Building 1 (B1) – None</p> <p>Building 2 (B2) – An old bird nest is present and some rat droppings noted</p> <p>Building 3 (B3) - None</p> <p>Building 4 (B4) – None</p> <p>Building 5 (B5) – An old wren nest is present, as is an old dove nest present too, corvid pellets on floor, bird droppings on timbers and barn owl pellet present</p>
Overall bat roost grading for the buildings	<p>Building 1 (B1) – NIL</p> <p>Building 2 (B2) – NIL</p> <p>Building 3 (B3) - NIL</p> <p>Building 4 (B4) – LOW</p> <p>Building 5 (B5) – CONFIRMED BAT ROOST</p>

3.2 Desk study

A 2km radius online bat only data search was undertaken for the application site. This does not replace a full biological records search, which was not selected by the client, but does contain some of the same information and helps support this report. The NBN Gateway (with strict permission) and the MAGIC website were all used.

The key summary findings, in no particular order, are listed below:

Magic – 3x Protected Species Licences present for Bats:

Bat Licence: Common Pipistrelle and Brown Long-eared Bat – Allen’s Green – 2016.

Bat Licence: Common Pipistrelle, Soprano Pipistrelle and Brown Long-eared Bat – Allen’s Green area – 2016.

Bat Licence: Common Pipistrelle – Sawbridgeworth – 2009 to 2011.

NBN Atlas:

2x records present for common pipistrelle (*Pipistrellus pipistrellus*)

4. CONCLUSIONS

4.1 Significance of the Preliminary Bat Roost Assessment results

In summary, there was bat roosting potential present at the Barn associated with the Cricket School but there was no bat roosting potential at the Storage Barn, the Cricket School and at the Barn with Storage/Embroidery Business.

There was bat evidence found within the Listed Barn, with a small number of both pipistrelle and brown long-eared bat droppings on a side wall.

It is likely that the Listed Barn is being used as a day roost by both of these species, especially since internal features such as mortise joint slots and crevices between timbers are present still.

During the 2012 survey by Greenwillows Associates Ltd, they showed that both common pipistrelle and brown long-eared bats were roosting in the Listed Barn. Brown long-eared bats were shown to enter a mortise joint slot, with video evidence provided.

The desk study undertaken by us, demonstrated that bats such as common pipistrelle are indeed still known to be present within the local area. This bat species is both building roosting and tree roosting.

Nesting bird evidence was noted in two of the buildings including old nests belonging to wren and doves. There was also an old barn owl pellet, derived when this species had roosted in the Listed Barn previously. There was no fresh barn owl evidence and no indication that barn owl had nested here.

Follow-up investigations are therefore required for two of the buildings, in regards to the future planned development works by the client, so it can be fully ascertained if bats are present or not at these structures currently.

Please see the next chapter of this report for the recommendations and key actions now put forward for the client for this site.

4.2 Impact assessment

In the absence of any mitigation measures or precautions, the following direct or indirect impacts from the proposed demolition and building related works on bats at Tharbies Farm, would be currently predicted as:

DIRECT: Since there is bat roosting evidence at the Listed Barn, there is a risk that without mitigation, bats could be disturbed by the proposed works, injured or killed and bat roosts damaged or lost. **Impact magnitude predicted: High**

INDIRECT: No high quality natural bat habitat is to be removed from the site, with no damage to take place on linear corridors such as tree lines or on wetland features for bats. **Impact magnitude predicted: NIL**

4.3 Legal protection of bats in the UK (Simplified current summary only of the legislation – please see other texts for full details)

THE LEGAL PROTECTION OF BATS IN ENGLAND AND WALES

Introduction

All species of bats in England and Wales are protected by law. Their legal protection derives from two sources:

the strict species protection provisions of the EU Habitats Directive as implemented in England and Wales by Part 3 of the Conservation of Habitats and Species Regulations 2017 (the “**2017 Regulations, amended by the 2019 Regulations due to Britain leaving the EU**”); and

Part 1 of the Wildlife and Countryside Act 1981 (as amended).

Conservation of Habitats and Species Regulations 2017 (“2017 Regulations, as amended by the 2019 Regulations”)

The 2017 Regulations came into force on 30th November 2017. They replace the previously applicable regulations (Conservation (Natural Habitats, &c) Regulations 1994 and the 2010 Regulations) in relation to England and Wales. The 2017 Regulations are the principal means by which the EU Habitats Directive is transposed in England and Wales.

The Regulations contain a number of Parts which set out the protection to be afforded to “European Protected Species” (“EPS”), which includes all species of British bats. The list also includes other species which are rare on a European scale, such as great crested newts, otters and dormice.

Under the 2017 Regulations both bats themselves and their “breeding sites and resting places” (most commonly their roosts) are protected.

It is a criminal offence to do the following (note that this is not an exhaustive list of all offences but rather a list of offences which will be of most relevance to developers):

- a. to damage or destroy a breeding site or resting place of a bat (even if bats are not present at the time);
- b. to deliberately capture, injure or kill a wild bat;
- c. to intentionally or recklessly disturb a bat in its roost or to deliberately disturb a group of bats, in particular:
 - i. any disturbance of bats which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or
 - ii. any disturbance of bats which is likely to impair their ability to hibernate or migrate; or

- iii. any disturbance of bats which is likely to affect significantly the local distribution or abundance of the species to which they belong;
- d. to have in one's possession or to control or to transport or to sell or exchange or offer to sell or exchange any live or dead bat or part of a bat which has been taken from the wild; or any part of, or anything derived from, a bat or any part of a bat; and
- e. to intentionally or recklessly obstruct access to a bat roost.

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of the company may also be prosecuted if the offence has been committed with their consent or connivance, or is attributable to their neglect.

Wildlife and Countryside Act 1981 (“WCA 1981”)

The WCA 1981 protects a wide range of animals, plants and habitats in the UK. All British bat species are afforded protection under Part 1 of the WCA 1981, in addition to the protection they have under the 2017 Regulations (as amended by the 2019 Regulations).

As regards England and Wales the following offences apply to protect bats under the W&CA 1981:

- a. to intentionally or recklessly disturb any bat while it is occupying a structure or place which it uses for shelter or protection (s9(4)(b) WCA 1981);
- b. to intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection (s9(4)© WCA 1981);
- c. attempting either of the above (s18(1) WCA 1981).

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of that company may also be prosecuted if the offence has been committed with their consent or connivance or is attributable to their neglect (s69(1) WCA 1981).

5. RECOMMENDATIONS

5.1 Requirement for a follow-up bat emergence survey

Due to the presence of bat evidence in the Listed Barn and some bat roosting potential at the Barn associated with the Cricket School, it is recommended that a standard follow-up bat emergence survey is undertaken at the application site, in suitable weather conditions.

Such a follow-up survey would adhere to current best practice for surveying bats by the Bat Conservation Trust (BCT, 2016) where buildings with low bat roosting potential, warrant a specialist bat survey of 1 bat dusk survey visit, whilst a confirmed bat roost building needs 3 bat dusk survey visits, all by experienced bat surveyors with bat detectors, between late April to August.

The Listed Barn will therefore require 3x bat dusk survey visits in total. The Barn associated with the Cricket School will require just 1x bat dusk survey visit.

Such a survey would focus on the type of bat roosts present, the bat species present, the location of the access points and the number of bats. The survey would also focus on any key bat commuting routes at the site as well as any key foraging areas.

This bat survey should use a sufficient number of experienced bat surveyors to cover the two stated buildings with bat detectors and begin before sunset and last for approximately 2 hours.

5.2 Best practice guidance – nesting birds and development

As per any development related site, the general advice is that no vegetation eg trees, bushes, shrubs, hedges, bramble scrub or dense ivy cover should be removed during the bird nesting season as all bird nests are fully protected by law, and this includes whilst a nest is being built by the adult birds.

This also includes buildings and bird boxes that have been proved to have active bird nests present.

If any nests are present within the proposed development footprint during the works phase, then these must be left alone until the young birds have fully fledged from the nest and no further breeding attempts are to take place.

The bird nesting season in the UK, currently runs mainly from mid-January to September, but sometimes birds can start breeding before or after this period e.g. some resident birds can start building nests during the first half of January or earlier, including crows, magpies, feral pigeons and woodpigeons.

Therefore, September to late December can be the best months for such works, although with a bird watching brief for any early or late nesters as stated above.

An experienced ecologist can be present though on a site during the nesting bird season, if applicable and practical, to search vegetation and buildings for active bird nests.

6. REFERENCES

- (1) Altringham, J.D. (2003) *British Bats*. HarperCollins *Publishers*, London.
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- (6) Gunnell, K. (2012) *Landscape and Urban Design for Bats and Biodiversity*. BCT, London.
- (7) Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature.
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APPENDIX 1:
Photographs A-M
(All photos are dated 28/6/2022)



Photograph A
B1 – There was no bat roost potential in the Storage Barn



Photograph B

B2 – There was no bat roost potential in the Barn associated with the Embroidery Business



Photograph C

B3 – The Cricket School was too lighted and had no access for bats, hence with no value for bats at all



Photograph D

B4 – The Barn associated with the Cricket School had limited bat roost potential, with a low loft present above the roof shown, with possible access for bats



Photograph E

B1 – There were no high quality external features for bats to use for roosting purposes



Photograph F

B3 – There were also no external features here for bats to use for roosting



Photograph G

B4 – There is a crevice below the ridge, especially since daylight was seen above the ridge beam in the loft space



Photograph H

B5 – There are various access points present around this barn, leading into the interior



Photograph I

B5 – This large thresher barn was found to be spacious, with various niches for roosting bats including mortise joint slots



Photograph J

B5 – This barn also had crevices present where timbers have been fixed together



Photograph K

B5 – A barn owl pellet was present in the barn, although this was an old pellet



Photograph L

B5 – A small number of pipistrelle bats droppings were found adhered to the rear wall, showing that common pipistrelle most likely is still roosting here



Photograph M

B5 – A very small number of brown long-eared bat droppings were also present on the rear wall showing that this species is still here roosting

APPENDIX 2:

Map A – Bat related target notes for Buildings 1-5 at Tharbies Farm

