

Bat Surveys
of
**Stable at Lower Farm, Barrow Rd,
Great Saxham**



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Survey Commissioned by:	Phil Cobbold Planning Ltd on behalf of their client Mr W Phizacklea
Project Number:	AE21035
Date of survey:	8 th & 28 th June 2021
Surveyor:	Mary Power BSc (Hons) MSc MCIEEM
Reviewed:	n/a

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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 was instructed by Phil Cobbold on behalf of their client Mr W Phizacklea, and following the brief agreed. Aspen Ecology has made every effort to meet the client's brief.

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1 Executive Summary

Aspen Ecology was instructed by the Phil Cobbold on behalf of their client Mr W Phizacklea to carry out Bat Surveys a stable building at Lower Far, Great Saxham, Suffolk. The central grid reference for the Site is TL 78054 63141.

The site is an existing barn currently in use as stables and surrounding small area of grassland and hedgerow.

A Preliminary Ecological Appraisal undertaken by Aspen Ecology in May 2021 identified the barn as having low to moderate bat roost potential. A single dusk emergence and a separate dawn re-entry survey was carried out by three suitably experienced ecologists on the 8th and 28th June 2021.

The findings are summarised in the table below:

Considerations	Description	Potential impacts and mitigation.
Survey results	<p>No bats were recorded emerging from the stables. Low numbers of common and soprano pipistrelles were recorded foraging around the site and commuting along site off-site tree lines.</p> <p>Occasional passes form noctules commuting across the site were recorded.</p> <p>Up to three common pipistrelle bats were recorded roosting within an adjacent building.</p>	No impacts to roosting bats are predicted.
Mitigation (proportional to status of roosts to be impacted).	No mitigation is necessary	A sensitive lighting strategy should be adopted during the construction and operational phases of the development to minimise impacts to roosting, foraging and commuting bats.

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2 Introduction

2.1 Background

Aspen Ecology was commissioned by Phil Cobbold Planning Ltd. on behalf of their client Mr W Phizacklea, to undertake Bat Surveys of Stables at Lower Farm, Great Saxham, Suffolk. The National Grid co-ordinates for the centre of the site are TL 78054 63141.

The assessment was required to inform a Planning Application to convert the building to holiday lets. A previous Preliminary Ecological Appraisal identified the Barn as being of low to moderate bat roost potential.

Further surveys were recommended to:

- Assess the presence or likely absence of roosting bats within the building.

Bats are strictly protected under UK legislation (The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)¹, and the Wildlife and Countryside Act, 1981²). Four UK species are also listed under Annex II of the Habitats Directive (including the barbastelle).

Seven species; barbastelle, noctule, brown long-eared, soprano pipistrelle, greater horseshoe, lesser horseshoe and Bechstein's bat are Species of Principal Importance in England (SPIE) - formerly UK Biodiversity Action Plan Priority (BAP).

2.2 Site Description and Local Habitats

The site is located to within the main farmyard of Lower Farm with residential dwellings to the south and west and agricultural building to the north, the Suffolk Pet Crematorium is located to the east. The site itself is a block of stables within a brick and flint barn.

The surrounding area is dominated arable farmland with boundary hedgerows and areas of mature woodland. A large lake surrounded by trees provide excellent bat foraging habitat approximately 120m south east.

3 Survey Methodology

Surveys comprised single dusk emergence survey and a separate dawn re-entry survey undertaken on the 8th and 28th June 2021.

The survey methodology followed standard techniques and guidance, as recommended by Natural England and the Bat Conservation Trust³.

¹ HMSO (2019) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations. HMSO, London.

² HMSO (1981) Wildlife and Countryside Act. HMSO, London.

³ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Best Practice Guidelines (3rd edn). The Bat Conservation trust, London.

All nocturnal surveys were conducted by three experienced surveyors, in optimal weather conditions (mild, dry, little wind). Emergence surveys started approximately 15 minutes before sunset and continued for approximately 1.5 hours after sunset.

Equipment used included full-spectrum Echo Meter Touch bat detectors/recorders and an infra-red night-vision camera. Direct observation was also used to record bat activity on the site.

Table 3.1: Weather conditions and timings of activity surveys

Date	Survey Type	Sunset or Sunrise	Temp.	Wind	Cloud cover
8 th June 2021	Dawn 03:05 – 04:55	Sunrise: 04:38	15-11°C	Beaufort 0-1	75%
28 th June 2021	Dusk 21:05 – 23:00	Sunset: 21:23	17-15°C	Beaufort 0	100%

3.1 Proposed Development

The existing stables/barn will be converted to holiday lets.

3.2 Surveyor Details

Surveys were undertaken by Mary Power BSc (Hons) MSc MCIEEM, a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM), subject to the CIEEM Professional Code of Conduct and licensed by Natural England (Licence ref: CL18: 2015 12111-CLS-CLS) to survey for bats (Level 2) with assistance by Juliette Banwell. Both ecologists are experienced bat surveyors.

4 Survey Results

4.1 Building Inspections

The barn is single storey, of brick and flint construction with a pitched slate roof, which was generally in a state of good repair with occasional lifted spates and gaps under ridge tiles. A single storey lean-to is present to the west, of block and timber construction with an unlined corrugated tin roof. Timber weatherboarding was present to the gable ends which was unlined internally.

Internally the barn is open to the roof, which is supported on moderate sized timbers; the roof is lined with traditional sarking felt with some gaps in the felt. The ridge beam was well cobwebbed with no evidence of roosting bats found internally, however the stables are cleaned regularly. The internal walls are rendered with concrete to 1.5m.

Brick and flint work was generally well sealed internally and externally, with some shallow holes around the brickwork, which were considered unsuitable for hibernating bats.

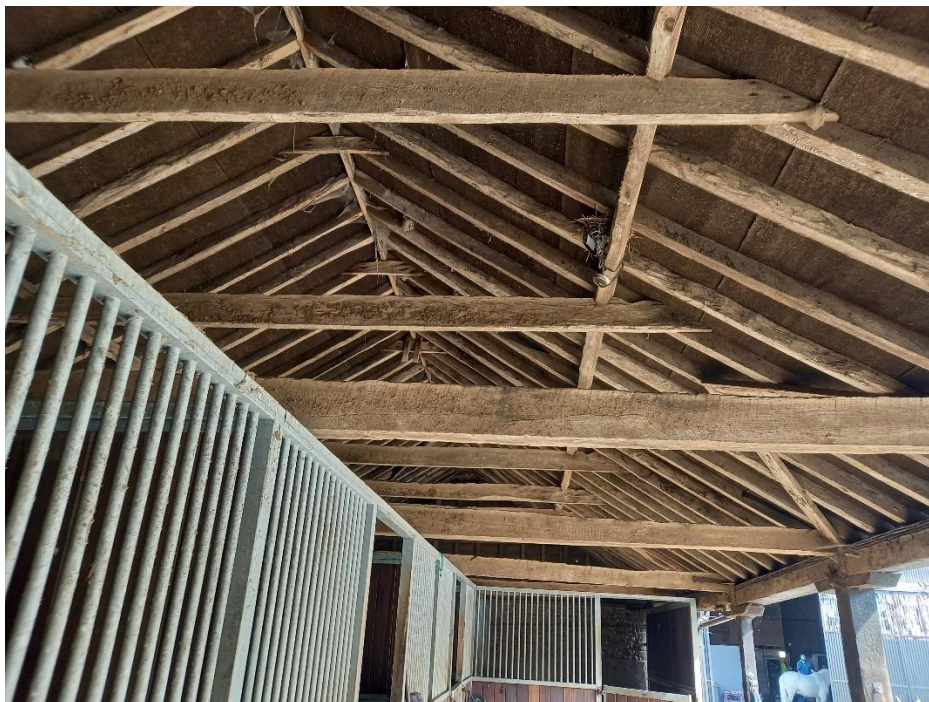
Plate 4.1.1: Southern and eastern elevations



Plate 4.1.2: Northern and western elevations



Plate 4.1.3: Internal view



4.2 Desk Study Results

4.2.1 Biological Record Centre Records

Suffolk Biodiversity Information Service (SBIS) were consulted for records of protected and locally rare species within a 2km radius of the site (data provided on 23rd April 2021).

Table 4.1: Bat records (SBIS 23rd April 2021).

Species	Protection	Records: Date and distance to the site
Bats		
Common pipistrelle <i>Pipistrellus pipistrellus</i>	CHS(EU Exit)R 2019; WCA; SBAP	Single record (2017) 1km SE.
Serotine <i>Eptesicus serotinus</i>	CHS(EU Exit)R 2019; WCA; SBAP	Single record (2004). Closest record 830m NE.
Brown long eared bat <i>Plecotus auritus</i>	CHS(EU Exit)R 2019; WCA; SBAP	Five records (2001-2017). Closest records 800m SE.

4.2.2 Status of bats in Suffolk and the UK

The following data are taken from the Suffolk Bat Group website (<https://www.suffolkwildlifetrust.org/suffolkbatgroup>) and Bat Conservation Trust (BCT) web-based information of population trends⁴.

Of the 18 species of bat in Britain (17 of which are known to have bred), ten are regularly recorded in the Suffolk.

Two bat species were recorded regularly during the survey: Common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*.

Common and soprano pipistrelle are the most common species in Suffolk, which reflects national trends. Over 350 common pipistrelle roosts have been located in the county, the size of the colonies ranging from 50 - 400+ animals.

Populations of pipistrelles have declined dramatically in the last few decades. This is at least partly as a result of modern agricultural practices, although common pipistrelle populations have started showing signs of recovery in recent years. Their reliance on buildings for roosting makes them vulnerable to building renovations, exclusion and toxic remedial timber treatment chemicals.

Noctule bats have a widespread distribution in England and Wales, and is widespread throughout the Suffolk. The Noctule is usually the first bat to appear in the evening, sometimes even before sunset. It can travel up to 10km from roost to feeding areas, flying well above tree level in the open.

4.3 Bat activity survey

The level of foraging and commuting activity at the site was low and generally associated with off-site vegetation to the south.

Two species of bats were recorded during the surveys: Common pipistrelle (low numbers roosting within an adjacent building) and noctule (occasional commuting/ foraging high above the site).

No bats were recorded emerging from any roosts within the barn, although up to three common pipistrelles were recorded roosting within an adjacent building. An overview of the survey is given below, with full results in Appendix B:

4.3.1 Dawn Survey 8th June 2021

Up to three common pipistrelles were recorded foraging around the stables infrequently and foraging around trees to the south, they returned to roost within an adjacent building to the south east.

Individual noctule passes were recorded with bats seen flying high above the site to the south.

4.3.2 Dusk Survey 28th June 2021

The first bat recorded was a noctule commuting high above the site to the south west.

⁴ www.bats.org.uk

Three common pipistrelles emerged from a roost within an adjacent building and foraged around trees and garden planting to the south and briefly around the stables.

4.4 Limitations and Assumptions

The weather conditions during the survey were optimal and any bats present would have been active during these surveys. Surveys covered the active survey season, and covered the maternity season. All areas of the site were accessible during the surveys.

5 Recommendations

5.1 Precautionary Measures

To minimise risk of disturbance to bats that are roosting adjacent to the site and foraging and commuting bats using off-site vegetation (both during and post development), external lighting should be minimised as follows:

- Any task lighting (during conversion works) should not be directed at the adjacent buildings or vegetation.
- 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 adjacent buildings.
- 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 only⁵⁶.

5.2 Enhancement Recommendations

5.2.1 Bat Boxes

A bat box could be installed on suitable mature trees adjacent to the site or 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

⁵ BCT (2014) Artificial lighting and wildlife: Interim Guidance: Recommendations to help minimise the impact artificial lighting.

⁶ Institution of Lighting Professionals (2011) Guidance Notes for the Reduction of Obtrusive Light GN01:2011.

should ideally be erected at least 3m above the ground in a southerly direction (south-east to south-west).

5.2.2 Night scented planting

Including some night-scented flowering into the landscape proposals will help attract night-flying insects which provide a foraging resource for bats. Species include: Evening primrose *Oenothera biennis*, Honeysuckle *Lonicera periclymenum*, Night-scented catchfly *Silene noctiflora*, White jasmine *Jasminum officinale* and Soapwort *Saponaria officinalis*.

6 Conclusions

No roosting bats were recorded using the barn/stables and the site itself provides very limited foraging habitat, although a roost used by low numbers of common pipistrelle bats was recorded within an adjacent building this will not be impacted by the proposals if lighting minimisation recommendations are implemented. It is considered unlikely that the proposals will have any negative impact on the local bat population.

Including the enhancement recommendations into the proposals will provide additional roosting and foraging opportunities for bats in the local area.

7 Appendix A – Legislation

7.1 Habitat Regulations

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English 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 1981⁷, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006⁸, 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)⁹ 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

⁷ HMSO (2000) Countryside and Rights of Way (CRoW) Act. HMSO, London.

⁸ HMSO (2006) Natural Environment and Rural Communities Act (NERC Act) HMSO, London.

⁹ UK BAP from URL <http://jncc.defra.gov.uk/page-5717>

Biodiversity 2020: A strategy for England's wildlife and ecosystem services¹⁰. As a result, the BAP process has been devolved to local level with each county deciding its own way forward.

¹⁰ Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services.

8 Appendix B – Bat Activity Survey Results

Dawn Survey 8th June 2021 (Sunset 21:15)

Time	Surveyor 1: NW of Stables	Surveyor 2: SE of Stables
03:05	No Activity	No Activity
03:10		
03:15		
03:20		
03:25	03:26 Common pipistrelle foraging heard not seen.	No Activity
03:30	No Activity	
03:35		
03:40		03:43 Common pipistrelle foraging along S side of stables.
03:45	03:45 Noctule, commuting heard not seen.	03:45 Noctule commuting over trees to the S. 03:46 Common pipistrelle foraging to the S.
03:50	03:52 Common pipistrelle brief foraging pass, heard not seen	03:52 3 x Common pipistrelle foraging along S side of stables until 04:06 04:00 Noctule, heard not seen 04:09 3 x Common pipistrelle circling NE corner of adjacent building.
03:55	03:59 Common pipistrelle foraging over yard until 04:05	
04:00	04:00 Noctule commuting high over site to S.	
04:05		
04:10	No Activity	04:11 3 x common pipistrelle returned to roost within adjacent building.
04:15		No Activity
04:20		
04:25		
04:30		
04:35	No Activity	No Activity
04:40	No Activity	No Activity
04:45		
04:50		
04:55		

Dusk Survey 28th June 2021 (Sunset 21:23)

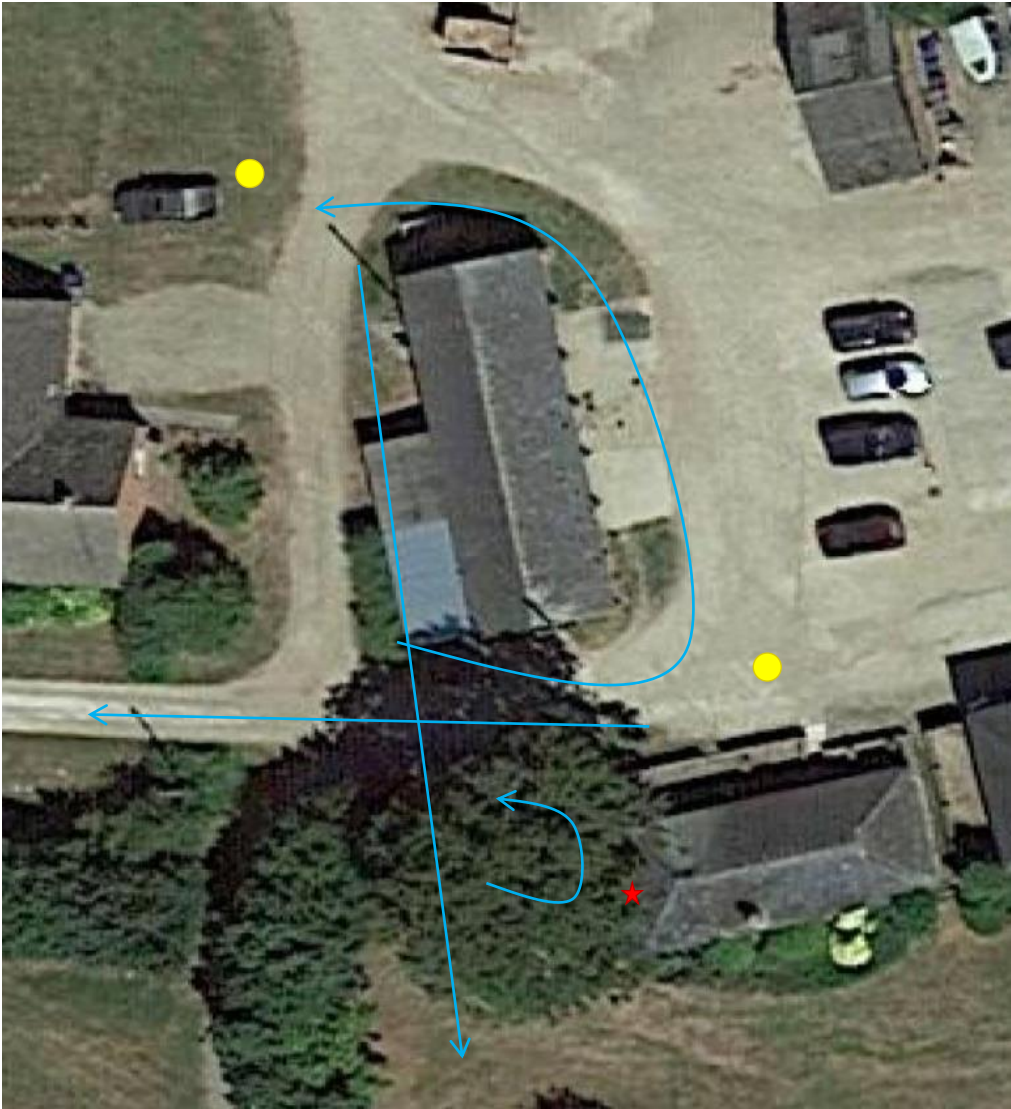
Time	Surveyor 1: NW of Stables	Surveyor 2: SE of Stables
21:05	No Activity	No Activity
21:10		
21:15		
21:20	No Activity	No Activity
21:25	21:27 Noctule commuting high above the site to SW.	21:25 Noctule foraging off site to W
21:30	No Activity	No Activity
21:35	21:39 Common pipistrelle foraging around yard and adjacent trees.	21:35 2 x Common pipistrelle emerged from roost within adjacent building and foraged around adjacent trees and driveway until 22:24. 22:19 Noctule foraging over yard to N.
21:40	No Activity	
21:45	21:49 Common pipistrelle foraging around yard.	
21:50	No Activity	
21:55	21:56 Common pipistrelle commuting S.	
22:00	No Activity	
22:05		
22:10	22:11 Common pipistrelle foraging occasionally around yard until 22.34.	
22:15		

Bat Surveys:




Stables at Lower Farm, Great Saxham

22:20		
22:25		
22:30		
22:35	22:39 Common pipistrelle brief commuting pass, heard not seen.	
22:40		No Activity
22:45		
22:50	No Activity	
22:55		
23:00		

9 Appendix C – Bat Activity Survey Results Plan



Key

	Surveyor location
	Direction of bat flight path
	Roost location