BAT SURVEY REPORT

Dusk Emergence Survey

1 HORSEDALE, BONSALL, MATLOCK, DERBYSHIRE.

PROJECT REFERENCE: **WDEC509**

PREPARED FOR: **A. CLARK**

May 2024 - Version: 1

Report Produced By:	Anthony Bird. BSc PGDip MCIEEM
Direct Telephone Number:	07715 931826
Email Address:	wildlifediscovery@btinternet.com
Client Agreement:	11/01/2024
Site Survey:	24/05/2024
Site Surveyors:	A. Bird, M. Lidster.
Draft Report Produced:	26/05/2024
Report Reviewed:	27/05/2024
Report Checked and Signed Off:	 A. Bird. 27/05/2024

Disclaimer:
This report has been prepared with all reasonable skill and diligence, for the exclusive use of and within the terms agreed with: A. Clark (the client).
No part of this document may be reproduced or relied upon without the written permission of WDEC.
WDEC accepts no responsibility or liability 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.

The contents of this report have been produced with due consideration of current best practice guidance, and in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct and guidelines, as outlined in Collins 2023.

This report should not be submitted as part of a planning application without the appropriate accompanying species-specific reports which may have been recommended herein.

Data within this report is valid for a maximum of eighteen months from the date of the survey. After this period, an updated site visit will be required to determine a new ecological baseline.

Whilst every effort has been taken to ensure the accuracy of this report and its contents, in view of potential ecological constraints to development or the likely presence or absence of species, it must only be viewed as a snapshot in time and, therefore, not be viewed as definitive.
It should be noted that, whilst every effort has been made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Due to external factors, such as seasonality, weather etc, having the potential to affect survey results, no liability can be assumed for omissions or changes that may, or may not occur, after the date this report was produced.

WDEC confirms that the opinions expressed within are true and professional opinions.

EXECUTIVE SUMMARY

WDEC was commissioned by: A. Clark (the client), to undertake a series of bat surveys at the dwelling 1 Horsedale, Bonsall, Matlock, Derbyshire. This included a Bat Roost Appraisal Survey, completed and reported January 2024 within report WDEC494, and the resulting Dusk Emergence Survey, to which this report specifically refers.

The Dusk Emergence Survey covered all aspects of the property, and was performed by two qualified and experienced surveyors and all the necessary bat survey equipment including Night Vision Aids.
The Dusk Emergence Survey was completed on the evening of 24/05/2024.

Summary of the findings of the DES

- 4 (four) species of bat were recorded and observed within the local environment during the DES. However, no bats were observed or recorded within the site or to emerge from the property.
- No evidence of any other protected and/or priority species was observed within the site or surrounding environment during the DES.

CONTENTS

A. INTRODUCTION

- WDEC was commissioned by: A. Clark (the client), to undertake a series of bat surveys at the dwelling 1 Horsedale, Bonsall, Matlock, Derbyshire. This included a Bat Roost Appraisal Survey, completed and reported January 2024 within report WDEC494.

- The findings of the Bat Roost Appraisal Survey were reported in the report WDEC494 (January 2024).
  In summary:
  - No evidence of bats was discovered anywhere on or within the building.
  - No evidence of any other protected species (including barn owls *Tyto alba*) was discovered anywhere within the site.
  - However, because of the age, condition and location of the property, the report concluded that the property did have a Low Potential to harbor bats and thus it was recommended that one Dusk Emergence Survey (DES) be completed at the appropriate time of year to endorse or refute the findings of the Bat Roost Appraisal Survey (BRAS) and ensure no bats were present at the site.

- The DES was completed on the evening of 24/05/2024, covering all aspects of the property. It was completed by two licensed, qualified and experienced surveyors, operating all the necessary and correct bat survey equipment including Night Vision Aids (NVA).

- The property is a stand-alone detached two-storey cottage on the edge of a small village, surrounded by open countryside. All parts of the building were found to be in an overall good condition.
  The property is suspected to date from the mid-19th century.

- The purpose of this report is to convey the findings of the DES, which can only be conducted between early May and late September.
  A DES begins 15 minutes prior to sunset, completing 90 minutes following sunset.

- The findings of the survey directly inform the conclusions and recommendations of this report.
  However, surveys of this type can only ever provide a 'snapshot' of the ecology at the survey site, establishing the evidence as detected at the time of those surveys only.
  Factors such as weather conditions, safety concerns, development restrictions or other impediments could all limit the ability to find relevant evidence.
- Despite the results of the survey, please be aware that circumstances can change.

- The lead ecologist and author of this report: Anthony Bird BSc PGDip MCIEEM, is a qualified, licensed bat ecologist with over 20 years' experience.
- WDEC has prepared this report for the named client's use only.

<u>Please note</u>

- Ecological reports have a limited shelf life. Local Authorities usually expect reports for European Protected Species and/or Priority Species to be no more than 18 months old at the time of their submission.
- Should the project stop or otherwise cease to proceed within 18 months of this report, an updated survey should be undertaken before any works commence at the site, especially to the roofs, in order to check for any changes that may have occurred on site.

A1 Aims of the Study:

The aim of this survey is to:

- Conduct a comprehensive DES to include all areas of the cited building likely to be impacted by the proposed development.
- Establish if bats are using the property for any purpose.
- To identify to species level, the bats that habituate the property (if any) and/or the immediate local environment.
- To determine the population size and nature of the roost (if any) within the property.
- To report any other protected or priority species discovered as a consequence of the bat surveys.
- Set out the legislative and policy protection afforded to bats and/or any other protected species and/or priority species and/or their habitats discovered within the survey site.
- Present an assessment of any potential ecological impacts of the development on any protected species and/or priority species and/or their habitats discovered within the survey site.
- Provide advice in accordance with current wildlife legislation, regarding bats, roosts and birds' nest sites, including recommendations for any further surveys if considered necessary.
- On the result of all surveys, provide recommendations regarding any mitigation, compensation and/or enhancement measures that are likely to be required.

This report sets out the results of the DES conducted at the site, in the context of any known ecological interest identified as a result of the desk study including the Local Biological Records Search as referred to within WDEC494.

This report also sets out the approach necessary to ensure that effects on any identified ecologically-sensitive receptors are avoided or ameliorated.

A2 Description of the Development Project:

According to the client, the proposed planned development is to repair the roof and chimneys and to restore some of the walls to make the building fit for purpose.

A2.1 Survey Preparation:

The survey preparation was enhanced by a comprehensive desk study and ecological data search, centered at: Ordnance Survey Grid Reference: SK18957168, as referenced to within report WDEC494.

B. METHODOLOGIES

All surveys at the site were conducted by professional and suitably qualified, experienced and licensed ecologists.

The surveyors at the site employed the correct tools and techniques, in accordance with the standing advice as stated by Natural England (NE) and the Department for Environment, Food and Rural Affairs (Defra), and the National Good Practice Guidelines cited by the Bat Conservation Trust (BCT), and the Chartered Institute of Ecology and Environmental Management (CIEEM), which is the recognised national standard and in accordance with:

- Natural England and Department for Environment, Food and Rural Affairs. Bats: Surveys and Mitigation for Development Projects. Published 28/03/2015. Updated 28/02/2020.
- Natural England and Department for Environment, Food and Rural Affairs. Bats: Protection and Licences [sic]. Published 08/10/2014. Updated 29/03/2015.
- The Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed): Collins, J (ed), 2023
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- Jonathan Howard et al (2009). Bats in Traditional Buildings. English Heritage, The National Trust & Natural England, London.
- National Planning Policy Framework, 2021. NPPF.
- Barn Owl Trust (2015). Barn Owl and Rural Planning Applications – A Guide. Barn Owl Trust, Ashburton.
- The Chartered Institute of Ecology and Environmental Management. CIEEM, 2016.

B1 Desk Study & Pre-Existing Information

Pre-existing relevant information on the protected species and priority species (specifically bats) related with this site, held by organisations such as DBCG were purchased and analysed as part of the initial BRAS (WDEC494) in January 2024.

A 2km radius of the site was searched, informing the surveyor of the local habitats and the potential protected and priority species likely to be found in and around the site.

This specific information can be found at C2. All other relevant information was gleaned from freely available data within the public domain as stated at A2.

B2 Field Survey Methodology

B2.1 Dusk Emergence Survey Methodology

The DES at the site employed 2 surveyors, strategically positioned, aided by; Echometre Touch full spectrum bat detectors, a Guide TrackiR and a FlirOne thermal imaging cameras, and 2 Nightfox infrared cameras.

The DES commenced 15 minutes prior to sunset and concluded 90 minutes post sunset.

The DES was conducted at an optimal time of year for this type of surveys, in appropriate environmental conditions, using all the correct methodologies and covered all areas of the property.

During the DES, the surveyors watched for any emerging/re-entering bats, recording the time, species and numbers and behaviours. Notes were also made of any other bats using other adjacent buildings or trees.

All evidence gathered including camera footage was analysed and correlated within office conditions.

B2.2 Bats: Protection, Surveys and Mitigation for Development: (NE / Defra)

Table 1: Summary of the relevant Standing Advice for local planning authorities to assess impacts of development on bats. Published 2015. Updated 2020.

Decide if you need to survey	
1. Bats can be affected by construction work including:	• Demolishing buildings • Extensions that block roof access • Wind turbines • Barn conversions • Removal of trees or hedgerows • Building or maintenance of roads
2. Survey for bats if:	• Records show that there are bat roosts in the development site or roosts in the area • The area includes buildings or other structures that bats tend to use • There are underground structures like abandoned mines, tunnels, or cellars nearby • There are trees with features that bats tend to use nearby • Distribution and historical records suggest they may be present
3. Buildings that bats use.	Bats are more likely to be found using a building because of certain features including that it: • Is not affected by artificial light levels • Is close to woodland or water • Was built a long time ago (particularly early 20th century or before), but bats use modern houses too • Has cracks or crevices • Has a roof warmed by the sun • Has an uneven roof covering with gaps (but is not too draughty) • Has entrances bats can fly into • Has a large roof area with clear flying spaces • Has large roof timbers with cracks, joints and holes • Has hanging tiles or wood cladding, especially on south-facing walls
4. Survey Methods.	• Visually inspect buildings or other structures • Inspect trees • Use bat detectors • Use nets and/or harp traps (only if suitably qualified to do so)
5. Visually inspect buildings or other structures.	The surveyor should: • Ask owners and neighbours if there is a history of bats using the building • Inspect in the daytime using high-quality binoculars • Check for access points into the building • Inspect outside the building for bat droppings, such as on the ground or stuck to walls • Inspect the inside of the building thoroughly - use endoscopes to inspect cavities if possible • Record all signs of bats on a plan and compare them with a reference collection • Explain in the report if it was not possible to get to certain areas • Search roof areas • Search a large building for 1 day, or narrow down the search area using bat detectors at night • Use bat detector (bat activity) surveys to confirm whether a bat roost is present if you cannot access the whole building or your building inspection shows evidence of bats.
6. Survey effort needed.	Surveyors should assess how likely it is that concentrations of bats will be present at the site and how they will use it. Your survey should include checking whether bats: • Fly into or out of features likely to contain roosts, including swarming around underground structures like caves or mines • Travel through or near features likely to be used as commuting routes, like hedgerows, tree lines or water courses and are active in habitats where they are likely to forage or feed

Table 1: Standing advice for local planning authorities to assess impacts of development on bats. Published 2015. Updated 2020 (cont.)

7. Survey effort needed.	The number of visits a surveyor may need to make will depend on the local conditions and how much risk the proposed work and the location will be for bats. • The local planning authority will need to see the survey reports and mitigation plans to check they meet the standards required. You may be asked for more surveys if: • Habitats or other information (such as local records) show that it is very likely that bats are present • The bats' use of the habitat varies between seasons • The survey was done outside of the bats' active season (May to September) • Your survey was done in unusual weather conditions like a particularly bad storm • Your planning or licence applications are based on poor data, unless you can show the area is not very important to bats • You should assess how likely it is that concentrations of bats will be present at the site and how they will use it.
8. Influences on survey results.	• Weather • An event that disturbed the bats, for example adverse weather event or extreme noise • Signs of bats were removed, such as someone swept the floors to remove droppings
9. Assess the impacts.	Provide an impact assessment showing what effect this development would have on bats if no mitigation were to take place. Include this with your planning or licence application. Consider the following potential impacts. <u>Short-term impacts</u>: During development, bats can be disturbed by: • Increased human presence at the site • Increased noise • Changes to the area's layout, temperature or humidity (these can affect commuting routes) <u>Long-term impacts</u>: Changes to bat roosts can have long-term effects, for example: • Reduced roosting space or loss of roosts altogether • Changed entrance positions and sizes • New entrances • Changed ventilation • Increased human activity • External lighting near flight paths and commuting route
10. Mitigation and compensation methods.	<u>Mitigation and compensation methods</u> Address the potential impacts on bats by creating mitigation plans. Use the following approach. • Aim to avoid negative effects, for example by redesigning the scheme. • If this is not possible, use mitigation measures to reduce the impacts. • Use compensation measures if there are still negative impacts for bats. Mitigation and compensation methods can include: • Changing the location of the work and/or changing work methods or timing to avoid bats • Creating, restoring or improving roosts (and replacing any that will be damaged or removed) • Creating, restoring or improving habitats including foraging areas and managing and maintaining habitats in the long term • Monitoring the roost status after the development <u>Bat boxes</u>: Do not use bat boxes as a like-for-like replacement for existing roosts. Incorporate existing roosts into refurbished buildings. For this method: • Make sure the roost is kept at the appropriate size and type for the species of bat • Put roost entrances back in their original positions • Do not use breathable roofing membranes (also called non-woven textiles) in a roof used by bats - use type 1F roofing felt with a hessian matrix instead.

Table 1: Standing advice for local planning authorities to assess impacts of development on bats. Published 2015. Updated 2020 (cont)

10. Mitigation and compensation methods (continued).	Create new roosts in buildings For this method: • Make sure the new roosts are appropriate for the species of bat, for example provide crevices for species that typically roost in them • Avoid trussed rafters, unless it creates a large roof void • Make sure the new roost will have an appropriate temperature • Avoid plastic roof linings (or use rough timber planks along the ridge beam) • You can use large bat boxes in roofs. Roost entrances • For horseshoe bats, create roost entrances they can fly through. For other species you can use smaller holes or slits for the bats to crawl through. Bat houses or barns: Only use this method if it's not possible to keep existing roosts.

Table 2: Bats: Protection and Licences. (NE / Defra) Published 2014. Updated 2015.

Bats: Protection and Licences	
What you must do to avoid harming bats and when you will need a licence. All bat species, their breeding sites and resting places are fully protected by law – they are European Protected Species. You may be able to get a licence from Natural England if you cannot avoid disturbing them or damaging their habitats, or if you want to survey or conserve them.	
1. Bat Protection and the law.	<u>Summary of legislation and National Planning Policy that protects bats in England</u>: 1) Conservation of Habitats and Species Regulations 2017 (as amended). 2) Wildlife and Countryside Act 1981 (as amended). 3) Countryside and Rights of Way Act 2000. 4) Natural Environment and Rural Communities Act 2006.
2. What you must not do.	<u>You are breaking the law if you do certain things including:</u> • Deliberately capture, injure or kill bats • Damage or destroy a breeding or resting place • Obstruct access to their resting or sheltering places • Possess, sell, control or transport live or dead bats, or parts of them • Intentionally or recklessly disturb a bat while it is in a structure or place of shelter or protection Either or both of the following could happen if you are found guilty of any offences: • You could be sent to prison for up to 6 months • You could get an unlimited fine
3. Activities that can harm bats.	<u>Activities that can affect bats include</u>: • Renovating, converting or demolishing a building • Cutting down or removing branches from a mature tree • Repairing or replacing a roof • Repointing brickwork • Insulating or converting a loft • Installing lighting in a roost, or outside if it lights up the entrance to the roost • Removing 'commuting habitats' like hedgerows, watercourses or woodland • Changing or removing bats' foraging areas • Using insecticides or treating timber In many cases you should be able to avoid harming the bats or damaging or blocking access to their habitats. • You will need an expert to do a bat survey. • The survey will show what type, how many and how the bats are using the building or area so you can plan to avoid harming them.

B2.3 Equipment Used

The ecologists used various equipment to aid the surveys which included:

Table 3: Equipment

FlirOne thermal imaging camera	2 X Echo Meter Touch 2 Pro, Full Spectrum bat detectors.
Guide TrackiR Pro thermal imaging scope/camera	All the correct safety equipment and PPE
2 X NightFox Whisker IR night-vision cameras	Canon EOS 70D camera with appropriate lenses

B2.4 Timings

All field surveys at the site were conducted on the dates below and took place in optimal weather conditions.

Table 4: Survey Times and Environmental Conditions

1 Horsedale, Bonsall.			
Bat Dusk Emergence Survey – 24/05/2024			
START TIME	21:00	WEATHER: TEMPERATURE	14°C – 11°C
FINISH TIME	22:45	WEATHER: CLOUD COVER	50% - 0%
SUNSET	21:15	WEATHER: PRECIPITATION	0
SUNRISE	N/A	WEATHER: WIND	1 SW

B2.5 Survey Limitations

There were no limiting factors to the survey.

If a deviation from the Standing Advice, as cited by NE / Defra, the National Standard Best Practice Guidelines as cited by the BCT has been made during the survey, the reason and justification will be explained within the report.

B2.6 Personnel

The survey was led by ecologist Anthony Bird (Natural England bat licence number: 2020-48300-CLS-CLS) and assisted by M. Lidster, (Natural England bat licence number: 2021-53310-CLS-CLS).

The visiting surveyors' conduct on site conformed at all times with industry best practice guidelines as cited by CIEEM and the BCT.

C. SURVEY RESULTS

C1 Maps, Plans and Aerial Photographs of the Site

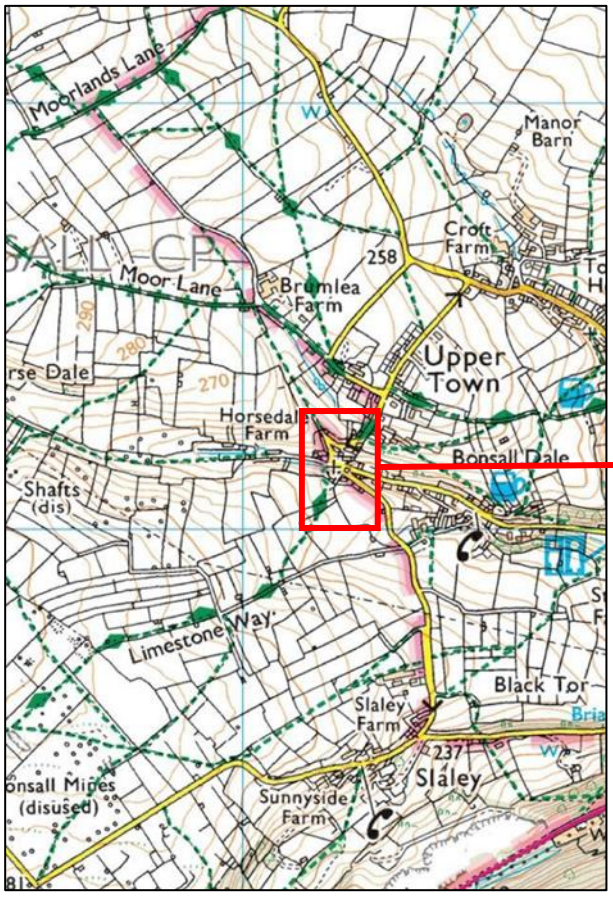


Fig 1: 1:25,000 Ordnance Survey 2023

Fig 2: The surveyed property circled. OS: 2023

Fig 3: Google Earth 2023: The surveyed property (circled in red) within the wider landscape.

C2 Desk Study Results

The survey preparation was enhanced using a desk study utilising data from: MAGIC, NBNatlas, DBCG plus other freely available information.

All designations are sourced within 2km of the site, centred at: SK18957168.

Table 5: MAGIC: National and Local Land Based Designations, Habitats and Species Designations.

MAGIC – Authoritative Geographic Information – Defra – www.magic.gov.uk			
Land Based Designations			
Statutory	Eastern Peak District Moors (SSSI) South Pennine Moors (SAC) Peak District Moors & South Pennine Moors (Phase 1) (SPA)		• 750m NE • 750m NE • 750m NE
	Local Nature Reserve (LNR)	Dunsley Meadows Matlock Parks	• 1.4km SE • 2km W
	Site of Special Scientific Interest (SSSI)	Bonsall Leys Via Gellia Woodlands Matlock Woods Rose End Meadows	• 630m SW • 920m SE • 1.5km E • 2km SE
	Special Areas of Conservation (SAC)	Peak District Dales	• 900m SE
Habitat Designations			
Grassland			
Priority Habitats Inventory	Lowland Meadows		• Adjacent • 460m SW • 880m S • 1.2km SE
	Lowland Calcareous Grassland		• 750m SW • 810m N • 830m SE • 880m E
	Good Quality Semi-Improved Grassland		• 370m SW • 750m W • 940 S • 1.2km NE
	Calaminarian Grassland		• 950m S • 1.4km SE • 1.5km W
Woodland			
Priority Habitat Inventory	Deciduous Woodland & National Forest Inventory: Broadleaved Woodland		• 625m E • 820m SE • 1km S • 1km NE • 2km SW • 2km W
	Ancient Woodland		• 1km S • 1.1km SE • 1.6km SW • 1.6km E
	Traditional Orchards		• 1.2km SE
Species Designations			
The area is designated for Upland Breeding Birds and Farmland Birds, specifically: curlew (*Numenius arquata*) and lapwing (*Vanellus vanellus*). There are no records of barn owl within the immediate area.			

Table 6: DBCG Local Bat Records.

Summary of Local Records Data: DBCG		
Bats (European Protected Species) recorded within 2km of the site: 2013 – 2023		
Species	Dates	Records
• Unidentified: bat spp		3
• Unspecified Pipistrelle spp		4
• Unspecified Myotis spp		1
• Common pipistrelle (Pipistrellus pipistrellus)	2014 – 2023	402
• Soprano pipistrelle (Pipistrellus pygmaeus)		218
• Brown long-eared bat (*Plecotus auritus*)		168
• Whiskered bat (*Myotis mystacinus*)		136
• Brandt's bat (*Myotis brandti*)		120
• Natterer's bat (*Myotis nattereri*)		109
• Daubenton's bat (*myotis daubentonii*)		89
• Noctule bat (*Nyctalus noctula*)		28

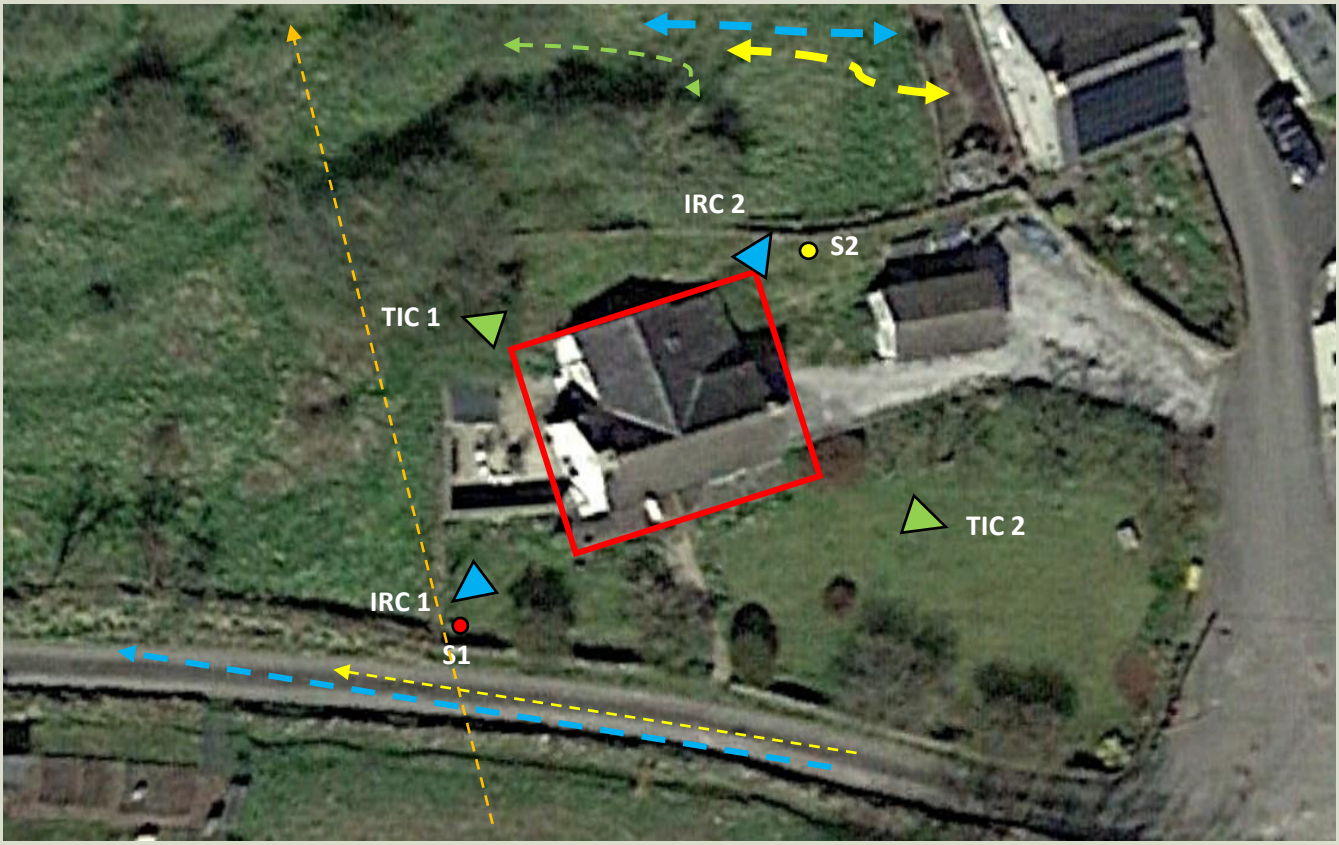
C3 Field Survey Findings

C3.1 Dusk Emergence Survey

Table 7: Summary of the Survey Findings 24/05/2024. Start: 21:00 - Finish: 22:45.

Summary of the survey findings

Fig 4: Bat Activity observed and recorded during the first dusk emergence survey. The surveyed building highlighted in red.



Bats of four species were observed and/or recorded within the local environment during the DES. Several common pipistrelles (*Pipistrellus pipistrellus*), several soprano pipistrelles (*Pipistrellus pygmaeus*), three Nathusius pipistrelle (*Pipistrellus nauthusi*) and a noctule bat (*Nyctalus noctula*) were observed or recorded. Several common pipistrelle and soprano pipistrelle were observed foraging and socialising within the field to the north of the site, later joined by a Nathusius pipistrelle.

Three common pipistrelles and a soprano pipistrelle were observed and/or recorded commuting east to west along the lane to the south of the site. The noctule bat was recorded flying high over the site from south to north.

The majority of the bat activity was recorded to the north within the grass field.

No evidence of any bats emerging from the property was observed or recorded during the survey.

No evidence of any other protected species was discovered anywhere within the surveyed site or the local environment.

Key

Bats observed:

Noctule bat Activity

Common pipistrelle Activity

Soprano pipistrelle Activity

Nathusius pipistrelle Activity

The Surveyed Building

Individual surveyor positions S1

Thermal Camera positions TIC 1

Infrared Camera positions IRC 1

Table 8: Survey Observations and Recordings.

Bat Dusk Emergence Survey			
Site Address	Horsedale, Bonsall, Matlock, Derbshire.	Grid Reference	SK18957168
Date	24/05/2024		
Time: start	21:00:00		
Time: finish	22:45:00		
Sunset	21:15:00		
Sunrise	N/A		
Surveyors	A Bird & M Lidster		
Equipment used	2 x Echometre Touch Full Spectrum Bat Detectors. 2 x Nightfox Infrared Cameras. FlirOne Thermal Imaging Camera. Guide Thermal Imaging Scope / Camera.		

Weather		General Comments
Temperature (^{O}C)	14 to 11	A very clear and still evening with an occasional light breeze. The first bats were observed and recorded at 21:48. The last bat was recorded at 22:24.
Precipitation	None	
Cloud cover (%)	50 to 0	
Wind - direction	South Westerly	
Wind - strength (Beaufort Scale)	1 - Light Air	
Visibilty	Excellent	

Bat Species		Number Detected	Number of bats seen:						Total Number of Obserations / Recordings
Common Name	Scientific Name		Emerging	Returning	Commuting	Foraging	Socialising	Swarming	
Common Pipistrelle	*Pipistrellus pipistrellus*	8			4	5	4		13
Soprano Pipistrelle	*Pipistrellus pygmaeus*	4			1	3	3		7
Nathusius' Pipistrelle	*Pipistrellus nathusii*	3				3	1		4
Brown Long-eared	*Plecotus auritus*								
Grey Long-eared	*Plecotus austriacus*								
Natterers' Bat	*Myotis nattereri*								
Daubentons' Bat	*Myotis daubentonii*								
Brandts' Bat	*Myotis brandts'*								
Whiskered Bat	*Myotis mystacinus*								
Bechsteins' Bat	*Myotis bechstenii*								
Alcathoe Bat	*Myotis alcathoe*								
Noctule	*Nyctalus noctula*	1			1				1
Leislers' Bat	*Nyctalus leisleri*								
Serotine	*Eptescius serotinus*								
Barbastelle	*Barbastella barbastellus*								
Greater Horseshoe Bat	*Rhinolophus ferrumequinum*								
Lesser Horseshoe Bat	*Rhinolophus hipposideros*								

Total Number of Species		Total Number of Bats							
Recorded	Observed	Recorded	Emerging	Returning	Commuting	Foraging	Socialising	Swarming	Total Number of Observations / Recordings
4	4	16	0	0	6	11	8	0	25

Table 9: Summary of the Bats Recorded by the Thermal and Infrared Cameras.

Equipment	Position	Bat Activity Recorded	Time
Thermal Camera (TIC1)	Northwest corner of the site	No bat activity relating to the surveyed building was recorded on TIC1.	-
Thermal Camera 2 (TIC2)	Southeast corner of the site.	No bat activity relating to the surveyed building was recorded on TIC2.	-
Infrared Camera 1 (IRC1)	Southwest corner of the site.	No bat activity relating to the surveyed building was recorded on IRC1.	-
Infrared Camera 2 (IRC2)	Northeast corner of the site.	No bat activity relating to the surveyed building was recorded on IRC2.	-

D. CONCLUSIONS

No evidence of bats was discovered on the on the initial BRAS completed in January 2024. However, in line with the BCT's guidance, because of the property's location, age and condition, the property was deemed to have a Low Potential to accommodate roosting bats. Therefore, the survey report WDEC494, recommended that the property be subject to one DES.

The DES was completed on the evening of 24/05/2024.
The findings of the survey conclude that there was no evidence of bats roosting within the property. No bats were observed or recorded to emerge from or enter the building for the duration of the survey.

Four species of bats were both observed and recorded within the vicinity of the property.
Common, soprano and Nathusius pipistrelle were all observed and recorded socialising and foraging within the grass field to the immediate north of the property.
Common and soprano pipistrelle were observed and recorded commuting east to west along the lane at the south of the property.
A noctule bat was recorded by both surveyors, flying high over the site, slightly west of the property.

It is suspected by the site ecologists that the bats observed and recorded are roosting somewhere within the buildings to the east and northeast of the property, using the scrubland and grassland to the west and north to forage within.

No breeding bird activity or active birds' nests were recorded within any part of the site.

No other protected or priority species, including barn owls were observed or recorded throughout the survey.

It is therefore concluded that no protected or priority species are present at the property.

E. RECOMMENDATIONS

It is recommended that the proposed plans for the property can be completed without any impact upon protected wildlife.

However, it is also recommended that suitable ecological enhancement or compensatory measure for the loss of any potential roost features, be incorporated into any works at the site, such as the introduction of 2 (two) raised roof tiles, to allow bats to roost/shelter within the roof or the placement of an appropriate bat box on the apex of the west gable end.

The placement of an appropriate bird nest box could also be placed upon the east gable end, for species such as house sparrow (*Passer domesticus*) or swift (*Apus apus*) could also be considered.

E.1 General Recommendations

- WDEC always recommends that the workforce engaged with the proposed development, should practice a precautionary method of working regarding all wildlife in the immediate area of the site.

- The workforce should be made aware of their individual responsibilities regarding protected species and priority species legislation, a summary of which can be found within Section B2.2 Tables 1 and 2, and within the Appendix.

- In the unlikely event of bats (or any other protected or priority species) being discovered anywhere within the site as part of any proposed development works, by any of the workforce, **all works must cease immediately** within that area, and a suitably qualified and licensed ecologist must inspect the site as soon as possible to advise accordingly.

- If the works are delayed more than 18 months from the date of this report, it is highly recommended that the survey site is reassessed by a suitably qualified and experienced ecologist.

F. REFERENCES & ACKNOWLEDGEMENTS

Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, (4th edition).
The Bat Conservation Trust, London.
Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
Mitchell-Jones, A.J & McLeish, AP (2004). Bat Worker's Manual, 3rd Edition. Joint Nature Conservation Committee, Peterborough.
Jonathan Howard et al (2009). Bats in Traditional Buildings. English Heritage: The National Trust & Natural England, London.
Barn Owl Trust (2015). Barn Owl and Rural Planning Applications – A Guide. Barn Owl Trust, Ashburton.
Natural England and Department for Environment, Food and Rural Affairs. Bats: Surveys and Mitigation for Development Projects. Published 28/03/2015. Updated 28/02/2020. http://www.gov.uk/guidance/bat-survey-and-mitgation-for-development-projects
Natural England and Department for Environment, Food and Rural Affairs. Bats: Protection and Licences [sic]. Published 08/10/2014. Updated 29/03/2015. http://www.gov.uk/guidance/bat-survey-and-mitgation-for-development-projects
National Planning Policy Framework, 2021. http://www.communities.gov.uk/publications/planningandbuilding/nppf
Derbyshire Bat Conservation Group.
Ordnance Survey.
MAGIC, NBNatlas and other freely available information e.g., Natural England's nature on the map website, etc.
Google Maps & Google Earth.

Limitations:

Anthony Bird (WDEC) conducted the survey/s and authored the resulting report for the client and/or his agent/s in accordance with WDEC General Terms and Conditions. It is deliberately stated that the results of the survey/s of which the above report concludes were correct at the time of writing. This report may not be relied upon by any other persons without the prior and express written agreement of Anthony Bird (WDEC). The conclusions and recommendations contained within this report are also based upon information provided by third parties (as cited above). Information obtained from third parties has not been independently verified by Anthony Bird (WDEC) and was taken as read.

APPENDIX

Summary of Legislation and Legal Status for Referenced Species:

Table 1: Summary of Relevant Legislation and Legal Status.

Conservation of Habitats and Species Regulations 2017 (as amended)	Part 3, regulation 41, paragraph (1) of the *Conservation of Habitats and Species Regulations 2017* states that *A person who—* *(a) deliberately captures, injures or kills any wild animal of a European protected species,* *(b) deliberately disturbs wild animals of any such species,* *(c) deliberately takes or destroys the eggs of such an animal, or* *(d) damages or destroys a breeding site or resting place of such an animal, is guilty of an offence.* Part 3, regulation 41, paragraph (2) states that disturbance of animals includes in particular any disturbance which is likely: *(a) to impair their ability—* *(i) to survive, to breed or reproduce, or to rear or nurture their young, or* *(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or* *(b) to affect significantly the local distribution or abundance of the species to which they belong.* The offence in the paragraph above applies regardless of the stage of the life of the animal in question. Under the terms of the *Habitats Directive*, developments that would result in a breach of the protection afforded to European Protected Species (EPS) may nevertheless be allowed by derogation under *Article 16* which is transposed by *Regulation 44* of the *Conservation of Habitats and Species Regulations 2010 (& as amended)*. By derogation, licences may be issued for certain prescribed purposes listed in *Regulation 44(2)(a)-(g)* where the licensing authority is satisfied that two tests are met, which are set out in *Regulation 44(3)*: A licence must not be issued unless there is no satisfactory alternative; and It must not be issued unless the action authorised by the licence would not be detrimental to maintaining the population of the species concerned at a favourable conservation status in its natural range.
Wildlife & Countryside Act 1981 (as amended)	*Subject to the provisions of this Part, a person is guilty of an offence if he/she intentionally or recklessly—* *(a) disturbs any such animal while it is occupying a structure or place which it uses for shelter or protection; or* *(b) obstructs access to any structure or place which any such animal uses for shelter or protection.* *Schedule 1. Part 1* *A person is guilty of an offence if he/she intentionally or recklessly disturb a barn owl at, on or near an active nest with eggs, or young, or before eggs or laid, or to disturb the dependent young.*
Natural Environment and Rural Communities (NERC) Act 2006	Under the *Natural Environment and Rural Communities (NERC) Act 2006* a Planning Authority has a duty to conserve biodiversity. This duty is set out at Section 40, which states: *Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.* *In complying with subsection (1), a Minister of the Crown, government department or the National Assembly for Wales must in particular have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.* *Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat…"*
Environment Act 2021	Relevant schedules within the Act: Part 6: Nature and biodiversity Biodiversity gain in planning: 98. Biodiversity gain as part of planning permission. Biodiversity Objectives and reporting: 102. General duty to conserve and enhance biodiversity. Local nature recovery strategies: 104. Local nature recovery strategies in England. Schedule 14: Biodiversity gain as a condition of planning permission: Part 1. Section 1.

National Planning Policy Framework (NPPF*)* as amended 2021	In the most basic terms, Paragraph 109 of the NPPF states that: "*The planning system should contribute to and enhance the natural and local environment by... minimising impacts on biodiversity and providing net gains in biodiversity where possible...*" In addition, Paragraph 117 identifies the need for planning policies to identify and map components of local ecological networks (both designated sites and stepping stones in between), and promote the preservation, restoration and enhancement of UK BAP Priority Habitats and ecological networks, whilst also promoting the protection and recovery of Priority Species.
Office of the Deputy Prime Minister (ODPM) Circular 06/2005	Biodiversity and geological conservation - Statutory obligations and their impact within the planning system. (DCLG, 2005) ODPM Circular 06/2005 states: *"The 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."* Therefore: *"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."* However: *"Bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development."*
The code of Practice for Planning and Development.	
British Standard for Biodiversity – BS.8683:2021.	

END