
DAYTIME BAT SURVEY & BAT EMERGENCE SURVEY

BARN AT MEADOWCROFT FARM, WALSHAW, BURY



2021



**RACHEL
HACKING
ECOLOGY**

Bowden Hall,
Bowden Lane,
Marple, Stockport
SK6 6ND
0161 465 8971

www.rachelhackingecology.co.uk
mail@rachelhackingecology.co.uk



CONTENTS

1.0 INTRODUCTION	2
2.0 METHODOLOGY	4
3.0 RESULTS – DAYTIME BAT SURVEY	5
4.0 RESULTS - BAT EMERGENCE SURVEY	9
5.0 SUMMARY AND RECOMMENDATIONS	11
6.0 REFERENCES	12

1.0 INTRODUCTION

Site Information

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2021 by Thomas England Limited to undertake a daytime bat survey and a dusk emergence survey of a small barn at Meadowcroft Farm, Lowercroft Road, Walshaw, Bury (O.S. grid reference: SD 76856 11357). The survey site is a single-storey stone barn, which is dilapidated and used by cattle for shelter. The barn is surrounded by agricultural land, with reservoirs to the south, offering suitable bat foraging and commuting opportunities.

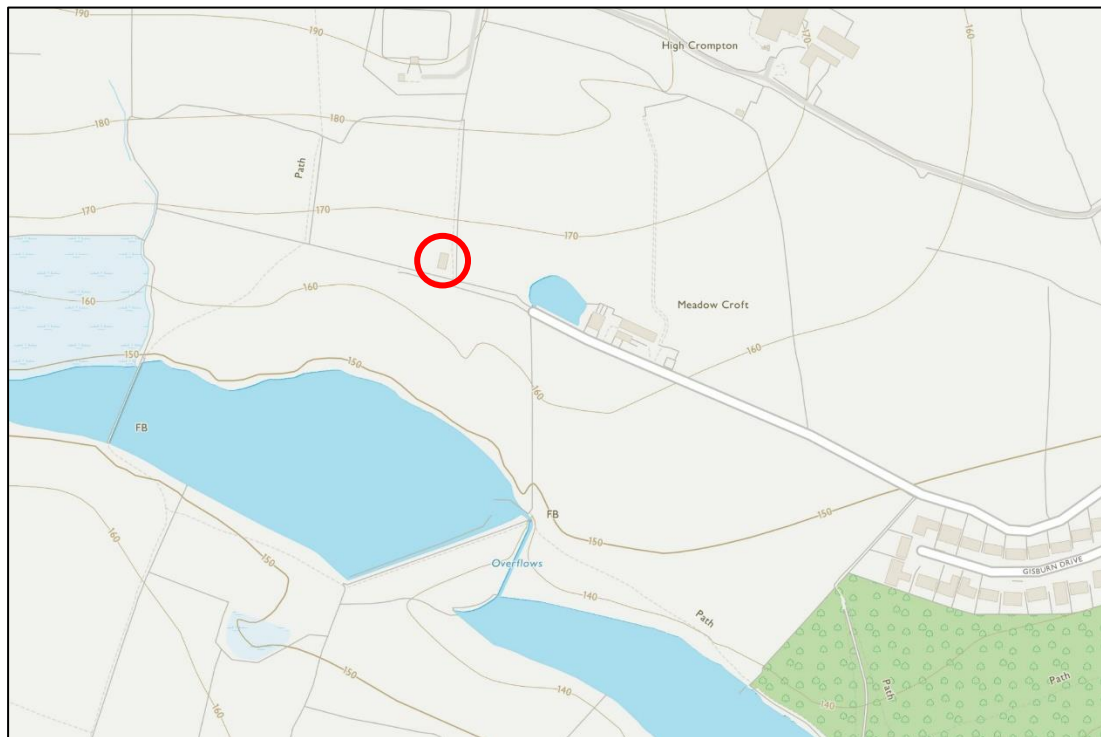


Figure 1 showing the location of the property circled in red

Description of Development

- 1.2 The site will be the subject of a planning application for the conversion of the barn to residential accommodation, to include a small extension. The barn benefits from a planning consent for conversion to residential under a previous Permitted Development application.

Legal Context

- 1.3 All bat species are protected under the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit), which make is an offence to:
- Deliberately kill, injure or capture a bat;
 - Deliberately disturb bats;
 - Damage or destroy a breeding site or resting place of a bat.

- 1.4 The Wildlife & Countryside Act 1981 (as amended) 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 for that purpose.
- 1.5 Proposed development works that are likely to disturb or destroy bats or their roosts will need to obtain a licence from the relevant Statutory Nature Conservation Organisation (e.g., Natural England) prior to work commencing.

2.0 METHODOLOGY

Daytime Bat Survey

- 2.1 A daytime bat survey of the barn was undertaken to search for, and to assess the potential for, a bat roost within the building.
- 2.2 An external survey was carried out, which included, for example, looking for gaps between any soffit boards and walls, gaps between window frames and the walls, and looking for bat droppings on the walls and window ledges. An internal survey was also carried out, with particular focus on gaps in walls, cracks in roof beams, and any evidence of bat activity, such as bat droppings, in the internal spaces.
- 2.3 A pair of close-focussing binoculars, an endoscope and a high-powered torch were used to search for evidence of bats.

Bat Emergence Survey

- 2.4 In addition to the daytime bat survey inspection, one dusk bat emergence survey were undertaken in accordance with the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (2016). For the survey, two surveyors monitored the property, to ensure complete coverage for any emerging bats. The emergence surveys began 15 minutes before dusk and continued for 90 minutes after dusk. The surveyors used Anabat Scout and Echometer Touch Pro 2 bat detectors to record the echolocations of emerging bats.

Personnel and Seasonal Timing

- 2.5 Ben Crossthwaite (Senior Ecologist) carried out the daytime bat survey on the 22nd June 2021. Sam Harmer and James Nolan undertook the dusk emergence survey on 13th July 2021. All surveyors are experienced and fully trained in protected species surveys. Ben and Sam both hold a Natural England Class 2 Survey Licence for bats (Respective References: 2020-48541-CLS-CLS & 2020-49406-CLS-CLS). The weather at the time of the daytime survey was overcast and dry. The weather at the time of the dusk emergence survey is detailed below.

Survey Constraints

- 2.6 Daytime bat surveys can be conducted at any time of the year. July is an optimum time of year to undertake nocturnal bat surveys. The property was fully accessible. There were no constraints to the surveys.



3.0 RESULTS - DAYTIME BAT SURVEY

External Assessment

- 3.1 The barn is a single-storey single-skin stone-built structure, which has been partially rebuilt with breezeblock at the front (see Photographs 1 and 2). The stonework is complete and all mortar is in place, but is weathered in places. The windows and doors are missing, with only remnant dilapidated wooden window frames in-situ within the front elevation.



Photograph 1 showing the front elevation of the building



Photograph 2 showing the rear elevation of the building

- 3.2 A large crack exists on one of the side elevations (see Photograph 3). This is covered in cobwebs. It was surveyed with the use of an endoscopic camera and no evidence of bat usage was found. The crack does not lead to the interior.



Photograph 3 showing the crack within the stone wall

- 3.3 The roof is pitched, with a mixture of stone and slate tiles (see Photograph 4). Many tiles have slipped, leaving small gaps. The ridge stone tiles are intact but the mortar is missing. Large gaps exist where the roof meets the walls. The ends of the roof timbers are exposed.



Photograph 4 showing the roof tiles on one elevation

Internal Assessment

- 3.4 Internally, the barn is divided into two. Cattle take shelter inside the barn. The interior stone walls are in good condition, with minimal missing mortar (see Photograph 5). Where gaps do exist in the mortar, these were surveyed with an endoscopic camera and no evidence of bat usage was found. The walls are covered with cobwebs. In one half of the barn, a ceiling has been created (see Photograph 6). This is intact and the timbers offer no suitable bat roosting cavities.



Photograph 5 showing the interior walls and roof structure of one half



Photograph 6 showing the interior walls and roof structure of the other half



- 3.5 Across the barn, the roof is mostly open with no concealed roof voids (see Photograph 7). The roof timbers are intact and no cavities suitable for roosting bats were found within the timbers. The roof tiles are unlined, with small amounts of roof mortar still visible in places. Multiple gaps exist within the roof, making the interior damp. Cobwebs exist across the roof. A small void exists above where a room has been created (see Photograph 8). This could be inspected and was found to be extremely dusty and well-lit from multiple gaps at the roof edges. No evidence of bat activity was found within the barn. No evidence of Barn Owl was found. Disused bird nests were noted.



Photograph 7 showing the roof structure



Photograph 8 showing the small void

4.0 RESULTS - BAT EMERGENCE SURVEY

Rationale

- 4.1 Whilst no evidence of bat activity was found within the barn, access for bats into the barn exists in multiple places and the barn is located within a rural area with suitable bat foraging and commuting habitat nearby. The barn itself is damp internally and offers no suitable bat roosting cavities. The barn is considered to offer **low** bat roost suitability and one precautionary bat emergence survey was undertaken.

Surveyor Positions

- 4.2 Figure 2 shows the locations of the bat surveyors during the survey (purple stars),



Figure 2 showing the locations of the surveyors (purple stars)

Survey Results

- 4.3 No bats were recorded emerging from the barn during the survey. Low levels of bat activity were recorded throughout the survey. Common Pipistrelle *Pipistrellus pipistrellus* and Soprano Pipistrelle *Pipistrellus pygmaeus* bats were recorded foraging around the adjacent hedgerows.
- 4.4 Bat activity from the emergence survey is recorded in Table 1 below.

<i>Table 1. Results from the emergence survey</i>				
Survey Type	Date	Average Temp (°C)	Sunset	Weather
Emergence	13/07/2021	17°C	21:33	Dry, warm, scattered cloud, slight breeze
Results				
Single Common Pipistrelle bats recorded foraging intermittently (approximately every 20 minutes) around the hedgerows nearby between 21:48 and 22:56				
Single Soprano Pipistrelle bat recorded foraging nearby but not close to barn at 21:54, 22:16 and 22: 19				

5.0 SUMMARY AND RECOMMENDATIONS

Summary of Findings

- 5.1 No evidence of bat activity was found within the barn during the daytime survey. The barn is open, well-lit and draughty. No suitable roosting cavities exist and the gaps within the roof allow rainwater in. No bats were recorded emerging from the barn during the dusk emergence survey.
- 5.2 Both the surveys were undertaken during optimum weather conditions with no impediment to any of the visits. The temperatures were optimum prior to and during the dusk survey. The whole barn could be surveyed and observed during the surveys.

Recommendations

- 5.3 It is the opinion of the author of this report that development work can proceed without further bat survey effort or licensed mitigation works. However, if the work is delayed by longer than two years from the date of this survey, a further bat survey will be required to update the findings.
- 5.4 It should be noted that bat absence is very difficult to prove definitively due to their mobility and size, and single or small numbers of bats are able to roost in extremely small spaces, such as in gaps between tiles. The development work should be undertaken with care, for example with roof tiles lifted rather than dragged.
- 5.5 If during development works a bat (or an accumulation of bat droppings) is discovered at any time, work is to temporarily cease whilst an experienced bat ecologist is contacted for guidance and assistance. This can be Rachel Hacking Ecology (0161 465 8971) who undertook the initial survey, any licensed bat worker, or the Bat Conservation Trust (BCT) helpline (0845 1300 228).
- 5.6 No evidence of Barn Owl was found within the barn. Two disused bird nests were found. All bird species are protected whilst at the nest under The Wildlife & Countryside Act 1981 (as amended). It is recommended that if the development work takes place within the bird nesting season (which is generally March-August) then a nesting bird survey should be undertaken prior to work commencing.
- 5.7 It is recommended that the development enhances the ecological value of the site. Two bird boxes and one bat box should be erected either onto the completed building or on nearby trees, at a height of 3 metres or more.

6.0 REFERENCES

Collins, J. (ed.). (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition*. Bat Conservation Trust. London.

Mitchell-Jones, A.J, & McLeish, A.P. Ed., (2004) *3rd Edition Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

MAGIC mapping: www.magic.gov.uk. Defra, London

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough

National Planning Policy Framework (February 2019). Ministry of Housing, Communities & Local Government