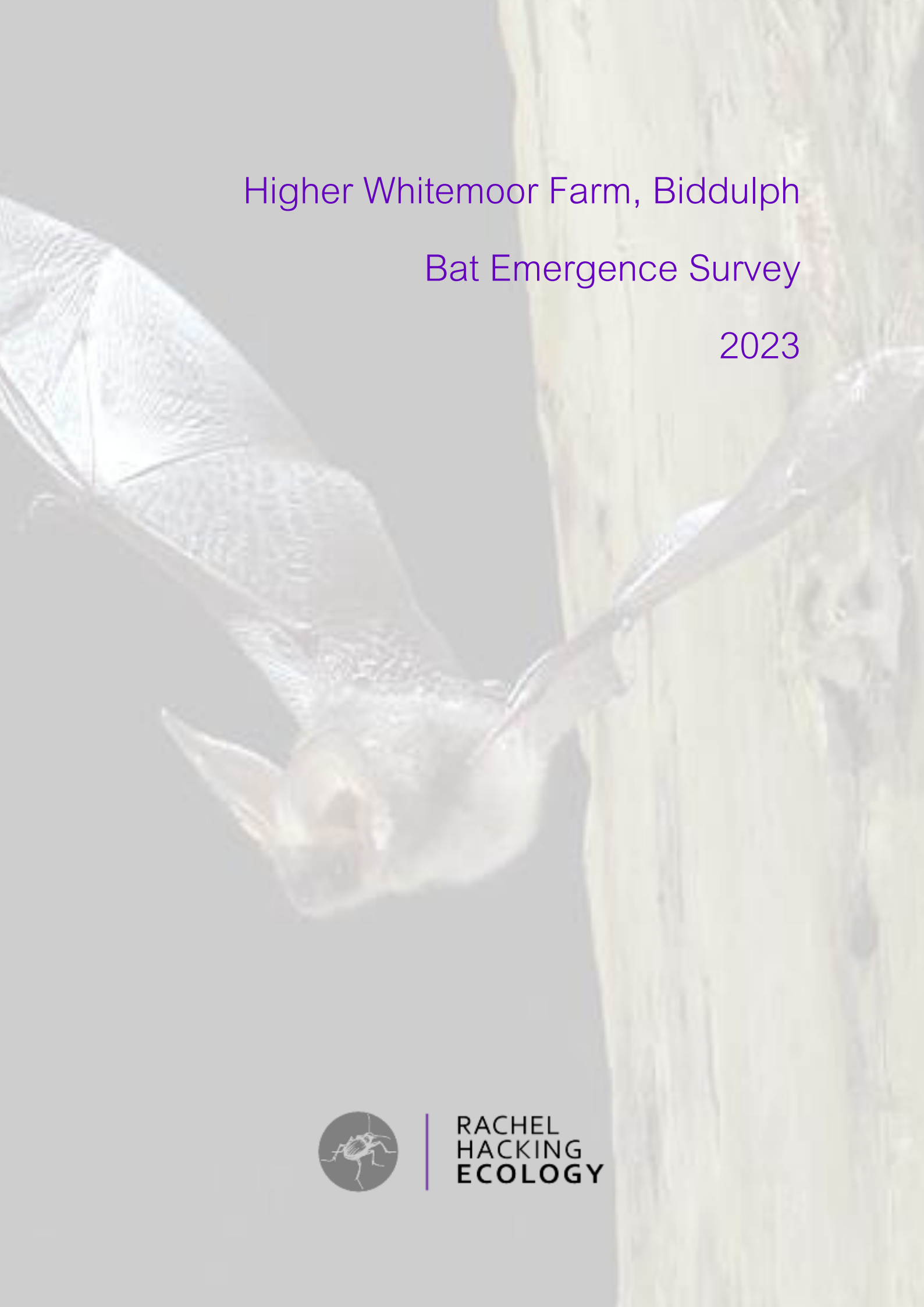


Higher Whitemoor Farm, Biddulph

Bat Emergence Survey

2023

RACHEL
HACKING
ECOLOGY

Client	Brenda Proudlove
Project Title	Higher Whitemoor Farm, Biddulph, Congleton
Project Reference	RHE.3415
Project Leader	Joe Cooper
Contact Details	joecooper@rachelhackingecology.co.uk

	Name	Position	Date
Author	Jasmin West	Assistant Ecologist	8/06/23
Reviewer	Joe Cooper	Senior Ecologist	18/06/23
Revision			

RACHEL HACKING ECOLOGY

The Stables
Paradise Wharf
Ducie Street
Manchester
M1 2JN

0161 465 8971

www.rachelhackingecology.co.uk

mail@rachelhackingecology.co.uk

Report Contents

Executive Summary 3

1. Introduction 4

2. Methods 6

3. Results 8

4. Assessment 9

5. Recommendations 10

Appendix 1: Planning Policy & Legislation 11

Appendix 2: Survey Data 13

Executive Summary

Development Details

The client is proposing the conversion and extension of the existing building at Higher Whitemoor Farm into a dwelling, hereafter referred to as the 'site'.

This report describes the ecological features of the site and its surroundings and assesses the potential impacts of the development on the ecological interest. Recommendations are provided so that the development is compliant with biodiversity policy and legislation.

Ecological Interest

The site has a moderate level of ecological interest. The site is situated in a rural area, with mature trees, hedgerows and linear landscape features suitable for bats. The site looks out onto open countryside and greenspace, providing good foraging habitat.

Outcomes

Four Common Pipistrelle bats and a single Soprano Pipistrelle bat were observed emerging from the building over both of the surveys undertaken. Therefore, the building is considered to support a day roost for a small number of Pipistrelle bats. The findings of this survey are consistent with the previous surveys of the buildings at this site.

A bat mitigation licence will be required to avoid the risk of an offence.

1. Introduction

1.1 Project Brief

Rachel Hacking Ecology Limited was commissioned in 2023 by Philip Kelsall Associates to carry out two dusk emergence surveys of the existing building at Higher Whitemoor Farm, Biddulph (O.S. grid reference: SJ 88383 60307 – see Figure 1).



Figure 1. Map showing the location of the site courtesy of Map Data © Google 2023

1.1.1 The proposed development site is a barn building situated within a farm courtyard. The building is situated in a rural location, with pastural and agricultural land with some scattered woodland and residential and farm buildings. The area around the site offers suitable bat foraging and commuting habitat.

Description of Development

1.1.2 The site will be the subject of a planning application for the conversion and extension of the current 'L-shaped' barn building.

Relevant Planning History

1.1.3 Previous report by Rachel Hacking Ecology[1] highlighted the need for emergence surveys to determine if/how bats are using the barn building and the possible presence/absence of a roost.

[1] Daytime Bat Survey & Barn Owl Survey of Barns at Higher Whitemoor Farm, Biddulph 2022

1.1.4 The daytime bat survey report concluded that there was moderate potential for roosting bats. This was due to evidence of bat activity identified at the site, including: Areas of concentrated bat droppings, evidence of feeding as well as the presence of multiple potential access points. It was recommended that a minimum of two dusk emergence surveys be carried out to assess the presence of an active roost.

1.2 Scope of Work

1.2.1 The Client commissioned Rachel Hacking Ecology to carry out the following works: (omit as required)

- Two bat emergence (dusk) surveys and one dawn re-entry survey of the garage building in line with Bat Conservation Trust Survey Guidelines.

1.3 Aims of the Survey

1.3.1 The aims of the survey were to:

- Establish the status of roosting bats at the site.
- Identify the requirement for any further surveys or mitigation.

2. Methods

2.1 Emergence Surveys

2.1.1 Two dusk emergence surveys were undertaken in accordance with the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016). For both surveys, two surveyors and an infra-red camera monitored the building, 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 Ananbat Scout, Echometer Touch 2 Pro and Bat Scanner bat detectors to record the echolocations of emerging bats.

2.2 Assessment Criteria

2.2.1 Interpretation of survey findings and assessment of roosting potential was undertaken using professional judgement and criteria described in published guidance[2,3].

2.3 Site Visit Information

Surveyor Details

2.3.1 The survey was undertaken by Simon Holden (Associate ecologist), Joe Cooper (Senior Ecologist) and Matthew Bottomley & Robert Tisscoff (Junior Ecologist). All surveyors are experienced and trained in nocturnal bat surveys. Joe also have their level 2 protected species licences for bats (licence number: 2022-10780-CL18-BAT).

Site Conditions

2.3.2 The weather at the time of the first survey was mild and overcast with an average temperature of 12°C. The weather at the time of the second survey was dry, overcast and calm with an average temperature of 15°C.

Surveyor Positions

2.3.3 Figure 2 shows the locations of the surveyors (yellow stars) and Thermal camera (red star) during the surveys.

---

[2] Collins, J. (Ed.) (2016) *Bat Surveys for Professional Ecologists-good practice guidelines. 3rd edn.* The Bat Conservation Trust, London.

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



Figure 2 showing Surveyor positions (yellow stars) and camera positions (red stars) during the survey.

2.4 Mitigation Hierarchy

2.4.1 Mitigation measures should be embedded within the masterplan design and planning application process. Measures during the construction phases should be included in a Construction Environmental Management Plan: Biodiversity (CEMP). This process from proposal to implementation needs to consider the 'mitigation hierarchy' of avoid, reduce, compensate, and enhance:

- Aim to avoid negative effects through the design process.
- Mitigate if negative effects cannot be avoided.
- Use compensation measures to offset residual impacts.
- Identify and implement opportunities to enhance biodiversity.

3. Results

3.1 Survey Results

3.1.1 There was a total of 4 Pipistrelle bats emerging from the building over both surveys. It was also noted that site was used as foraging and commuting habitat by a small number of bats.

3.1.2 Over the course of the two surveys, three Pipistrelle bats were observed emerging from the roof edge and from the raised tiles at the gable end to the south of the site. One single Pipistrelle was observed emerging from under the ridge tiles in the approximate centre of the roof (see Figure 2 for indicative locations).



Figure 2 – A photograph illustrating the points of emergence from the front of the building.

4. Assessment

4.1 Interpretation of Results

4.1.1 Evidence of roosting bats was recorded during the surveys. Low levels of bat activity were recorded in the locality during both surveys. The surveys were undertaken during optimum weather conditions and seasonal timing.

4.1.2 Given the evidence gathered during the daytime survey and the multiple recorded emergences, it is concluded that the site is used as a day roost by a small number of Pipistrelle bats.

5. Recommendations

5.1.1 The site is due to be renovated with both internal and external changes meaning the destruction of a day roost for Pipistrelle bats.

5.1.2 **A licence will be required to avoid the risk of an offence**. An application will be made to register the site under the Bat Mitigation Class Licence. The licence will authorise the destruction of the roost. Renovation and alterations to the roof will be undertaken in accordance with the terms of the licence. This will include a briefing to contractors and a pre-works check for bats by a licensed ecologist. A suitable bat box will be installed on a nearby tree or building to compensate for the loss of the roost.

5.1.3 It is recommended that an integral bat box such as the Habibat Bat Box is included within the fabric of the building or an external bat box such as the Beaumaris Woodstone Bat Box is positioned at the apex of the gable end. These should be installed at eaves height on a southeast to southwest facing elevation, but not directly above windows or doorways.

5.1.4 This report is considered to be valid for two years. After this, a suitably qualified ecologist should be consulted to assess its validity. An assessment update may be required.

Appendix 1: Planning Policy & Legislation

National Policy

The National Planning Policy Framework (NPPF 2021) describes the Government's planning policy for England and how it should be applied. Within this framework, the requirements in relation to biodiversity are included within several policies. The two most relevant to individual planning decisions are Paragraphs 174 and 180, shown below:

- 174. Planning policies and decisions should contribute to and enhance the natural and local environment by:
    a. protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
    b. recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
    c. maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
    d. minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; etc…

- 180. When determining planning applications, local planning authorities should apply the following principles:
    a. if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
    b. development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c. development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
d. development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on every public authority to have regard to conserving biodiversity. Section 41 of the same Act requires that the Secretary of State must publish a list of the living organisms and types of habitats that are of 'Principal Importance' for the purpose of conserving biodiversity. The Secretary of State must take steps, as appear reasonably practicable, to further the conservation of those living organisms and habitats in any list published under this section. The list of species and habitats of principal importance currently includes 943 species and 56 habitats.

Legislation

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.

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.

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.

Appendix 2: Survey Data

Table 1. Results from the dusk emergence survey 1				
Survey Type	Date	Average Temp (°C)	Sunset/ Sunrise	Weather
Dusk Emergence	10/05/23	11	20:50	Dry, Overcast
Results				
Common Pipistrelle emergence from the roof edge at 21:02				
Common Pipistrelle emergence from under a ridge tile in the centre of the barn at 21:23				
Soprano Pipistrelle emergence from under the raised tiles at the gable end at 21:48				
Intermittent foraging activity and social calling from a small number of Pipistrelle bats between 21:25 - 22:00				

Table 2. Results from the dusk emergence survey 2				
Survey Type	Date	Average Temp (°C)	Sunset/ Sunrise	Weather
Dusk Emergence	23/05/23	13	21:15	Dry, 10% cloud cover.
Results				
Common Pipistrelle emergence from the corner of the roof at 21:42				
Intermittent foraging of a small number of Pipistrelle was observed between 21:45- 22:00				