

34 Erw Deg, Acrefair,
Wrexham, LL14 3YA
Daytime Bat Survey
2024



RACHEL
HACKING
ECOLOGY

Client ████████████████████
Project Title 34 Erw Deg, Acrefair, Wrexham
Project Reference RHE.4058
Project Leader Kate Reed
Contact Details kate@rachelhackingecology.co.uk

	Name	Position	Date
Author	Mark Ashton	Junior ecologist	17.01.2024
Reviewer	Kate Reed	Senior Ecologist	11/02/2024
Revision			



**RACHEL
HACKING
ECOLOGY**

The Stables
Paradise Wharf
Ducie Street
Manchester
M1 2JN

0161 465 8971

www.rachelhackingecology.co.uk

mail@rachelhackingecology.co.uk



**RACHEL
HACKING
ECOLOGY**

Report Contents

Executive Summary	3
1. Introduction	4
2. Methods	6
3. Results	8
4. Assessment	12
5. Recommendations	12
Appendix 1: Planning Policy & Legislation	13



Executive Summary

Development Details

The client is proposing residential development at 34 Erw Deg, Acrefair, Wrexham, LL14 3YA, 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 negligible level of ecological interest. Ecological features of interest include small areas where light is visible from within the roof void and, several small openings through damaged and rotten wood in the soffit.

Outcomes

No further survey work is required.



1. Introduction

1.1 Project Brief

- 1.1.1 Rachel Hacking Ecology Limited was commissioned in 2023 by Wesley Richards to carry out an Extended Phase 1 Habitat Survey of land at 34 Erw Deg, Acrefair, Wrexham, LL14 3YA hereafter referred to as the 'site'. The site is located at O.S. grid reference: SJ 28193 43442 (see Figure 1).



Figure 1. Map showing the location of the site courtesy of the site

The site is a semi-detached residential property build c. 1980. The property has a small rear garden consisting of a small area of amenity grassland and bare ground. At the front of the property is a hardstanding driveway. The site is located in a small housing estate at the edge of Acrefair village, surrounded by residential housing and agricultural land with scattered, semi-mature trees.

Description of Development

The site will be the subject of a planning application for a two-storey extension to the rear of the property.

1.2 Scope of Work

1.2.1 The Client commissioned Rachel Hacking Ecology to carry out the following works:

- Undertake an external and internal assessment of any buildings on the site affected by the development proposals;

1.3 Aims of the Survey

1.3.1 The aims of the survey were to:

- Assess the potential of the site to support roosting bats;
- Identify the requirement for any further detailed surveys.



2. Methods

2.1 Daytime Bat Survey

- 2.1.1 The exterior of the site was surveyed from the ground using binoculars and a high-powered torch. Features offering potential access to roosting bats were recorded. Such features may include suitable gaps in roof coverings, gaps behind external cladding/facia and gaps in masonry.
- 2.1.2 Evidence indicating the presence of roosting bats was also searched for. This may include staining from fur oil around roost entry points.
- 2.1.3 The interior of the site, including the roof void, was surveyed to identify any evidence indicating use by roosting bats. Such evidence may include bat droppings, feeding remains, urine splashes, live or dead bats and staining from fur oil on timbers.

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^{1,2}.

2.3 Site Visit Information

- 2.3.1 The survey was undertaken by Kate Reed (Senior ecologist) and Mark Ashton (junior ecologist) on the 14th January 2024. Both surveyors are fully training in carryout out protected species surveys. Kate has over 7 years' experience and holds a level 2 class survey licence (Reference 2022-10920-CL18-BAT).
- 2.3.2 The weather at the time of the survey was cold, clear and still, with an average temperature of 3°C. The site conditions were appropriate for a full assessment to be undertaken.

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

¹ Collins, J. (Ed.) (2023) *Bat Surveys for Professional Ecologists-good practice guidelines*. 4th edn. The Bat Conservation Trust, London.

² Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield..

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 Constraints

- 3.1.1 Field survey results are valid for a limited duration and no investigation can provide a complete description and characterisation of a site. The composition of habitats and species can change depending on environmental variables and the mobility of species, so the results of a study become less reliable over time. In some cases, surveys that are 3 years old may be acceptable for a project assuming that habitats have not significantly changed in the intervening period, but for protected species it is likely that survey data will need to be no more than 18 months old.

3.2 Habitat Appraisal

- 3.2.1 The site is located within a housing estate on the semi-rural outskirts of Acrefair, the properties have small garden spaces and lie adjacent to agricultural pastoral land with boundary hedgerows and tree-belts. The habitats adjacent to the site offer suitable foraging habitats for bats.



3.3 External Survey

- 3.3.1 The site is a semi-detached, two-storey house, built c.1980 (see Photograph 1). The walls are brick, and the front facing and rear facing elevations have been rendered and painted. A single-storey porch exists on the front and rear of the property, these are constructed from brick and breeze-block. uPVC windows and doors are present and well-sealed within the buildings structure. The masonry features are generally in a good conditional, a few minor cavities were located where the mortar has recessed but the resulting gaps are considered too shallow to offer shelter for bats (see Photograph 2).



Photograph 1 showing the front facing elevation of the property



Photograph 2 showing a minor gap in the brickwork

- 3.3.2 The roof of the property is pitched and covered with concrete tiles, these are all in position and lie flush to each other with no potential gaps that would provide roosting opportunities for access points for bats (see Photograph 3). The tiles on the rear extension mean small gaps exist at the roof edge here, there was no evidence to suggest that bats were using these spaces (see Photograph 4).



Photograph 3 showing the roof of the property



Photograph 4 showing the gaps under the extension tiles

- 3.3.3 The roof edges are finished with wooden soffit and bargeboards, these support areas of significant water damage/rot on the gable end (see Photographs 5 and 6). Attempts have been made to temporarily repair the damage, patching the hole with roofing insulation. This does provide a potential access point to the internal roof void. Other small gaps exist where the wooden soffit boards meet the brickwork, where the wooden soffit boards have warped due to water damage and a small hole in the bargeboards at the rear of the property.



Photograph 5 showing an area of water damage



Photograph 6 showing minor areas of water damage

- 3.3.4 The single-storey porches are connected to the main property with lead flashing this is all in position and lies flush to the brickwork. A small cavity does exist between the main property and the extension an old bird's nest exists within this gap, reducing the likelihood that bats would use this cavity (see Photographs 7 and 8).



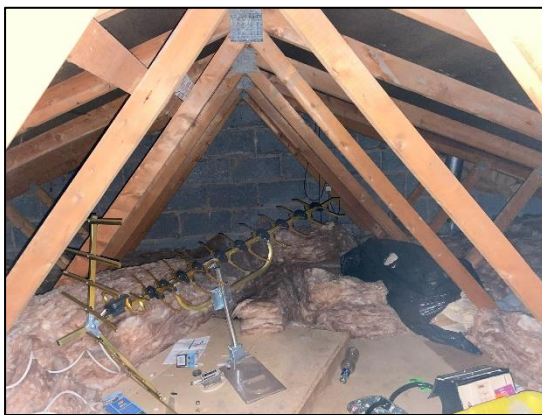
Photograph 7 showing the gap between the extension and the main house



Photograph 8 showing the lead flashing

3.4 Internal Survey

- 3.4.1 A single roof void exists within the property, this is used for occasional storage. The roof is supported by a wooden frame which is all complete and intact. The roof is lined with bitumen which is all complete and flush to the tiles above, a small section has been removed for the installation of the ventilation pipe, however this appears to be well-sealed externally and therefore is not considered to be a roosting/access feature for bats. The survey revealed two areas in which light was visible, these corresponded with the areas on water damage on the northern elevation. The roof void is cold and damp which has resulted in a layer of mould to form on the lining material. No signs of bat activity, such as droppings were found within the roof void during the survey (see photographs 9 and 10).



Photograph 9 showing the roof void



Photograph 10 showing the mould growth on the lining

3.5 Other Buildings

- 3.5.1 A large shed exists to the rear of the property. This is a well-maintained single-storey structure with a flat, felt covered, roof. Numerous windows are present, and the wooded bargeboards are present along the roof edging. The internal space does not support a roof void, is well-lit and un-insulated (see photographs 11 and 12).



Photograph 11 showing the shed looking west



Photograph 12 showing the front elevation of the shed

4. Assessment

4.1 Interpretation of Results

- 4.1.1 The site was fully accessible at the time of the survey. The building is generally in a good condition with only the rotten soffit and bargeboards offering some access points, these are considered to be of limited value to bats due to the damp, rotten and mouldy nature of the resultant cavities/ internal roof void. The building on site is assessed as offering negligible potential to support roosting bats. No evidence of feeding, roosting or hibernating bats was found internally or externally.
- 4.1.2 The shed onsite is also considered to offer negligible potential to support a bat roost as it constructed from materials of poor-thermal capacity, supports no roof void and is well-lit internally.

5. Recommendations

5.1 Further Surveys

- 5.1.1 No further surveys are required.

5.2 Mitigation Measures

Suitable bat roosting features should be incorporated within the new building to retain roosting opportunities on the site. Alternatively, a bat boxes can be installed within the site.

5.3 General Precautions

- 5.3.1 Briefly It is not always possible to prove absence of roosting bats. Bats can roost in suitable features opportunistically and are not always identified during surveys. It is recommended that roof coverings are removed with due caution. Should a bat/bats be identified at any time, work should stop in that area and a suitably qualified ecologist contacted to attend site and advise how to proceed.
- 5.3.2 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 2023) 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 180 and 180, shown below:

- 180. 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;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 186. 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.

Legislation

All bat species are protected under the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit), which make it 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.

