

United Environmental Services Ltd

1 Booths Park,
Chelford Road,
Knutsford,
Cheshire
WA16 8QZ

www.ues.org.uk

enquiries@ues.org.uk

01565 757788



BAT SCOPING SURVEY

At

The Boat Inn

Erbistock
Wrexham
LL13 0DL

NGR: (SJ) 335505 341321

Prepared for:	Mr Peter Miller
Written by:	Suzie Whitnall, UES Assistant Ecologist
Approved by:	Toby Hart, UES Managing Director

A handwritten signature in black ink, appearing to read 'Toby Hart', is positioned below the 'Approved by:' line.

Date:	5 th March 2019
UES reference:	UES02603/02



CONTENTS

EXECUTIVE SUMMARY	3
1 INTRODUCTION	4
1.1 Author, surveyors and qualifications	4
1.2 Survey objectives.....	4
1.3 Proposed development	4
1.4 Structure of the report	4
2 METHODOLOGY	5
2.1 General.....	5
2.2 Building survey	5
2.3 Survey limitations.....	6
3 RESULTS.....	7
3.1 Habitat assessment	7
3.2 Building survey	7
4 EVALUATION AND RECOMMENDATIONS	9
4.1 Evaluation of results.....	9
4.2 Mitigation and compensation measures	9
5 CONCLUSION.....	10
6 REFERENCES	11
APPENDICES.....	12
Appendix 1 – Site plan.....	Error! Bookmark not defined.
Appendix 2 – Aerial photographs.....	12
Appendix 3 – Photographs	13
Appendix 4 – Statutory and planning context.....	14



EXECUTIVE SUMMARY

This report is written by Suzie Whitnall BSc MSc, UES Assistant Ecologist at United Environmental Services Ltd (UES). It provides an assessment of the potential impacts on bats as a result of the proposed development at The Boat Inn, Erbistock. The development proposals are for the renovations of the Boat Inn buildings and reinstatement of the former ferry dock.

A bat scoping survey was undertaken on 4th February 2019. The objective of the survey was to establish the suitability of the buildings on site to support roosting bats, based on a site-specific survey and habitat assessment. The buildings were searched externally and internally (where accessible) for bat presence and features associated with bat activity, as detailed in Bat Conservation Trust (BCT) guidance (2016).

The Boat Inn is situated in an area which provides high quality habitat for bats. The network of hedgerow and tree-lined fields, riparian vegetation along the River Dee and woodland copses will all provide good foraging opportunities, whilst the mature trees, agricultural buildings and villages will provide an abundance of suitable roosting opportunities. Furthermore, the connectivity between habitats in the local area is good due to the presence of hedgerows and tree lines and riparian vegetation.

The quality of roosting habitats within the buildings is moderate, with a number of external potential roosting features (PRFs) such as gaps under raised roof tiles, gaps under ridge tiles, gaps under lead flashing, a single gap under the eaves and gaps in the stonework.

Given the number of external PRFs primarily on the roof and proposed re-roofing works, further presence / absence surveys are required in order to determine whether bats are using the buildings on site and to ascertain the number and species of bats. These surveys should be undertaken by an appropriately licensed ecologist during the bat survey season, May to September inclusive.

The report should be read in conjunction with appendices 1 to 3, which give visual representations of the survey results.



1 INTRODUCTION

1.1 Author, surveyors and qualifications

This report is compiled and written by Suzie Whitnall BSc MSc, UES Assistant Ecologist. Suzie is licensed by Natural Resources Wales to disturb, take and handle all species of bats under licence number 75161:OTH:CSAB:2017.

All surveyors have the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Bats" (2013), or were under the supervision of a surveyor with the required competencies.

1.2 Survey objectives

UES was commissioned in January 2019 to conduct site surveys which include the following activities:

- Conduct internal and external building inspections to look for field signs of bats
- Assess the suitability of the buildings for use by roosting bats
- Recommend further surveys, mitigation and compensation, where appropriate

1.3 Proposed development

The development proposals includes the renovation of the Boat Inn including demolition of the modern single storey extensions, construction of a single storey kitchen extension and re-roofing. A line of mature Leyland cypress *Cupressus × leylandii* will also be removed as part of the development.

1.4 Structure of the report

This report sets out the methodology, results, and recommendations in relation to a specific bat survey. Recommendations are in line with statutory legislation and planning policy objectives.

The report should be read in conjunction with appendices 1 to 3, which give visual representations of the survey results.



2 METHODOLOGY

2.1 General

All surveys were carried out to recognised guidelines, timings and weather conditions, with particular reference to Natural Resources Wales and BCT publications (see references for further information).

The habitats on site and in the surrounding area were assessed during a walkover survey and by studying aerial photographs, in order to gauge their suitability to support roosting, foraging and commuting bats.

2.2 Building survey

The buildings on site were searched both externally and internally for bat presence and features associated with bat activity, as detailed in BCT guidance (Collins, 2016). This was conducted on 4th February 2019 by Suzie Whitnall.

2.2.1 External inspection

The external inspection of the buildings on site were carried out from ground level using binoculars, and also using ladders and an endoscope to investigate suitable gaps. The objective of the survey was to find and record any signs of bat use, for example:

- Bat droppings
- Feeding remains
- Grease staining / urine marks
- Corpses or skeletons

The bat signs listed above are visible from the outside of a building. The following areas were searched, where present:

- | | |
|---------------------------|---|
| • Roof and ridge tiles | • Gaps under felt |
| • Lead flashing | • Cracks / holes in woodwork or behind cladding |
| • Eaves | • Gaps in brickwork and mortar |
| • Boxed soffits | • Air bricks |
| • Fascia and barge boards | • Grills |
| • Window sills and panes | • Vents |
| • Walls | |

2.2.2 Internal inspection

The internal inspection covered all of the accessible rooms and roof spaces within the buildings.

Bats regularly utilise specific areas within roof spaces, which were searched for any field signs of bats using high-powered torches and an endoscope, where considered necessary by the licenced ecologist. The following features were searched, where present:

- Roof beams and junctions



- Gaps under felt
- Dividing walls
- Chimney breasts
- Gaps in brickwork and mortar
- Cracks / holes in woodwork
- Floor or other surfaces on which droppings could accumulate

2.3 Survey limitations

The survey was carried out in early February at a time when bats are spending large amounts of time in torpor within hibernation sites. For this reason, exposed droppings from summer roosts may not be evident as they are likely to have decomposed or have been washed away.

Internal field signs should still be evident at this time of year, as should droppings in sheltered locations.



3 RESULTS

3.1 Habitat assessment

The Boat Inn is located in the rural Erbistock village, Wrexham. Habitats within the curtilage of the proposed development site include the former public house buildings surrounded by areas of hardstanding including a back yard, driveway and car park, amenity grassland, scrub and scattered mature trees. The southern boundary lies on the Afon Dyfrdwy / River Dee SSSI¹.

The immediate surrounding area comprises the Grade II listed St Hillary's Church directly east, the River Dee and associated riparian vegetation, woodland including Llan-y-Cefan wood and farmland with associated farm buildings, hedgerow and tree-lined fields. These habitats provide highly suitable foraging, commuting and roosting habitats.

The wider surrounding area (2km) is similar in composition with a rural landscape comprising a network of hedgerow and tree-lined fields, woodland, and the River Dee. These habitats provide excellent foraging, commuting and roosting opportunities.

In summary, the local area surrounding The Boat Inn is of high quality for foraging, commuting and roosting bats.

3.2 Building survey

3.2.1 External inspection

The Boat Inn is a Grade II listed building formerly two 17th Century buildings remodelled in 19th and late 20th Century. At present, the former public house comprises two two-storey buildings (**A** and **B**), a single storey modern extension (**C**) and single storey connecting section (**D**). See Appendix 1 - Aerials for locations.

A. The former cottage has a sandstone wall and pitched, slate roof construction (See Appendix 2 – Photo 1). The roof contains two dormers with hipped roofs and three chimneys. The roof tiles are in relatively good condition, however there are a couple of PRFs under raised lead flashing and gaps in the ridge tiles (Photo 2). The roof overhangs at the eaves with a small gap present at the eastern corner leading into a small cavity under the tiles (Photo 3).

There are two gable ends (west and east) which contain no suitable features due to well-sealed end tiles and well-pointed stonework.

To the rear (north) there are a couple of 19th and 20th Century extensions (Photo 4), including a two-storey brick built section and single storey sections with breezeblock and concrete walls and flat roof. No PRFs were identified in these sections.

The stone work on the southern elevation contains several gaps between the stones which lead into small cavities (Photo 5). A number of the cavities, where accessible, were inspected. Evidence of bird nests and mice were found, however there are no current field signs of bats.

B. The two-storey 17th Century building has a sandstone wall and pitched, slate roof construction (Photos 6 and 7). The roof and slate tiles are generally in good condition with no raised, slipped or missing tiles.

¹ Sites of Scientific Interest



There are two gable ends (north and south) which contain no suitable features due to well-sealed end tiles and well-pointed stonework.

The stonework is well-pointed and window frames well-sealed with no gaps.

C. The single storey modern extension is connected to the western wall of Building B (Photos 6 and 8). It has a brick wall with pitched roof construction. The roof is clad with slate tiles which is in poor condition with a number of raised and slipped tiles and gaps at the ridge, particularly on the northern aspect (Photo 9).

There are a couple of bay windows with flat roofs on the front (south) elevation and a single storey extension to the rear (north). The extension has a felted flat roof with timber barge board which is slightly raised on the northern aspect. No evidence of bats was found under the gap.

D. A single storey section connects Building A and B (Photo 10). It has a stone wall with pitched glass roof. The roof overhangs at the eaves with a large timber boxed soffit over the entrance. No suitable gaps were present at the eaves.

The stonework is in good condition and well-pointed.

In summary, the Boat Inn contains a number of external PRFs, including:

- Gaps in stonework of Building A
- Gaps under lead flashing and roof tiles of Building A
- Gap in the eastern corner under the eaves of Building A
- Gaps under roof and ridge tiles of Building C

No bat droppings or other field signs of bats were found during the external building inspection.

3.2.2 Internal inspection

A. The attic of the former cottage has been converted into office and storage space for the public house (Photo 11). As such, the ceiling is vaulted and no loft space is present.

B, C and D. There are no loft spaces present (Photos 12 and 13).

No bat droppings or other field signs of bats were found during the internal building inspection.



4 EVALUATION AND RECOMMENDATIONS

4.1 Evaluation of results

4.1.1 Qualitative assessment of foraging habitats

In summary, the Boat Inn is situated in an area which provides good quality foraging habitat for bats. The surrounding network of hedgerow and tree-lined fields and River Dee with minimal lighting provide good foraging and commuting opportunities, whilst the farm building and residential properties within the villages provide numerous roosting opportunities.

4.1.2 Qualitative assessment of roosting habitats

Externally, the Boat Inn Buildings A and C provide a number of roosting opportunities for crevice-dwelling bat species, including gaps under roof and ridge tiles, gaps under lead flashing, a gap at the eaves and gaps in the stonework. Buildings B and D have limited external roosting opportunities.

Internally, the buildings provide limited roosting opportunities for loft- or void-dwelling bat species due to the lack of loft spaces present.

In summary, it is considered that building A and C provide moderate suitability for roosting bats with a small number of external PRFs. Buildings B and D have negligible suitability for roosting bats.

4.2 Mitigation and compensation measures

Due to the external PRFs and proposed re-roofing works, further presence / absence surveys are required in order to determine the species and numbers of bats using the buildings. These surveys should be undertaken by an appropriately licensed ecologist during the bat survey season, May to September inclusive.

If bats are found to be roosting within the buildings, further mitigation measures will need to be designed and implemented, which may include the requirement for a European protected species (EPS) mitigation licence from Natural Resources Wales.



5 CONCLUSION

The Boat Inn provides good quality foraging and commuting habitats for bats in the local area, with several potential roosting features. It is also situated in a surrounding area which provides good quality habitat for bats, due to the abundance of potential roosting habitats and foraging opportunities.

A number of external PRFs were identified within the buildings. Therefore, further bat presence / absence surveys are required in order to determine the species and numbers of bats using the buildings. These surveys should be undertaken by an appropriately licenced ecologist during the bat survey season, May to September inclusive.



6 REFERENCES

Chartered Institute of Ecology and Environmental Management (2013). *Competencies for Species Survey: Bats*.

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

Mitchell-Jones, A.J. & McLeish, A.P. (2004). *The Bat Workers Manual*. (3rd ed.) JNCC



APPENDICES

Appendix 1 – Aerial photographs



The Boat Inn, Wrexham

Close aerial photograph

— Development boundary

A - D Buildings





The Boat Inn, Wrexham

Wide aerial photograph



Site location



Appendix 2 – Photographs



Photo 1. The Boat Inn – Building A southern elevation facing the River Dee.



Photo 2. Gaps under ridge tiles of Building A.



Photo 3. Gap at the eastern corner eaves - Building A.



Photo 4. Gaps in the stonework on the southern elevation of Building A.



Photo 5. Rear (north) of Building A.



Photo 6. Front (south) elevation of Building B and Building C.



Photo 7. Rear (north) gable end of Building B.



Photo 8. Rear (north) of Building C with small extension.



Photo 9. Raised and slipped roof tiles - Building C.



Photo 10. Front (south) elevation of Building D connecting A and B.



Photo 11. Upper floor of Building A.



Photo 12. Interior of Building C.



Photo 13. Interior of Building D.



Appendix 3 – Statutory and planning context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Habitats

Section 7 of the Environment Act (Wales) places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists, and encourage others to take such steps.

Bats

In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (known as the “Habitats Regulations”). The Wildlife and Countryside Act is the domestic implementation of the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] ... uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by NRW.

The Environment (Wales) Act 2016 also lists the following bat species as species of principle importance under Section 7:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared bat *Plecotus auritus*
- Greater horseshoe *Rhinolophus ferrumequinum*
- Lesser horseshoe *Rhinolophus hipposideros*

Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The Environment (Wales) Act 2016 offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2016). The most relevant sections are included in Chapter 5: Conserving and Improving Natural Heritage and the Coast. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online.