FEB
2019

Preliminary Roost Assessment (Bats)

38 RAMSDEN TERRACE
CLITHEROE ROAD
WADDINGTON
LANCASHIRE
BB7 3HN

contractecology
Green Space Professionals

THIS REPORT IS NOT VALID FOR STAND ALONE SUBMISSION TO PLANNING AUTHORITIES IN ITS CURRENT FORM.

Reason:

This Preliminary Roost Assessment has identified the need for further survey works in relation to bats of which suitable habitat is present onsite.

Consideration of the findings of this report in isolation of such further survey data cannot be deemed acceptable for appropriately identifying the potential impacts upon protected species at this site.

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SUMMARY

This report presents the results of a Preliminary Roost Assessment commissioned by [redacted] in aid to a planning application for the demolition of an existing outhouse, lean-to and entrance porch at 38 Ramsden Terrace, Clitheroe Road, Waddington.

The survey was conducted on 31st January 2019 when an inspection of the exterior and interior of the outhouse, wooden lean-to and porch was undertaken to assess for signs of bats in accordance with the survey protocol as set out in the Bat Conservation Trust Bat Survey Good Practice Guidelines (2016).

Features considered suitable for bat roosting or ingress for bat roosting were found at this property. The immediate terrestrial habitats surrounding the site are considered to offer suitable bat foraging opportunity and so potentially increase the prospective value of the property to accommodate bats.

The structure was therefore assessed as being of low to moderate suitability to support a bat roost during the bat active season. The property is also considered to offer suitable bat hibernation opportunity.

It is the recommendation of this Preliminary Roost Assessment that further nocturnal bat surveys be undertaken at this site during the bats typical active period. This is acknowledged under current survey best practice guidelines as being between May and September.

The further survey effort is to establish the status of the building in relation to bats, and to assess what if any impact the proposed redevelopment works may have.

Report Author:	*Report Reviewed by:*	*Report Approved by:*
L. Hodgson MCMA	R. Talbot	O. Nelson MCIEEM AssocRICS

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1.0 INTRODUCTION

1.1 This report presents the results of a Preliminary Roost Appraisal commissioned by [redacted] in aid of a planning application for the demolition of an existing outhouse, wooden lean-to and entrance porch at 38 Ramsden Terrace, Clitheroe Road, Waddington, hereby referred to as the 'applicant site', 'property' or 'survey structure(s)'. Grid Ref: SD 72928 43651.

1.2 The objectives of the survey are to:

- Identify and assess the potential and suitability of the structures to be demolished to support roosting bat species
- Inspect the fabric of the structures and examine both the exterior and interior for evidence of or the presence of roosting bat species
- Provide recommendations in light of any species evidence identified within
- Identify any further survey requirements

2.0 LEGISLATIVE CONTEXT

2.1 All British species of bat are protected under Schedule 5 of the *Wildlife and Countryside Act, 1981* (as amended by the *Countryside and Rights of Way Act, 2000*) and the *Conservation of Habitats and Species Regulations 2017.*

2.2 Actions prohibited under the above legislation are detailed in Table 1.

Table No.1: Legislative Guidelines (Bats- all species)

Legal Provision	Actions Prohibited
Wildlife and Countryside Act 1981 (as amended) & Conservation of Habitats and Species Regulations 2017	Intentionally or deliberately kill a bat, Intentionally or deliberately injure a bat, Intentionally or deliberately capture or take a bat, Deliberately or recklessly disturb a bat (whether in a roost or not), Recklessly damage, destroy or obstruct access to any structure used by bats as a roost, Possess/control a bat or any part of a bat (unless acquired legally), Sell, advertise, transport or offer for sale a bat or any part derived from a bat.

2.3 It should be noted that the word 'roost' is not actually used in any of the above legislation; such terminology has been used within this report for simplicity. The actual wording used within *The Wildlife and Countryside Act 1981* (as amended) refers to 'any structure or place which any wild animal uses for shelter or protection'.

3.0 SITE LOCATION

3.1 The applicant site is located at 38 Ramsden Terrace, Clitheroe Road, Waddington, Clitheroe, BB7 3HN. The survey structures comprise of a single storey outhouse (survey structure 1), wooden lean-to (survey structure 2) and entrance porch (survey structure 3).

3.2 The survey structures are located in a residential street in a small rural settlement. Residential properties and gardens surround the site on all other aspects. Beyond the settlement, the wider habitats open out into rural farmland.

3.3 The applicant site is bounded by a driveway to the north, interconnecting gardens with hedgerows to the south and west, and attached terraced property to the east,

4.0 DESK STUDY

4.1 Current and archive aerial photography, obtained from the Government's online mapping service 'MAGIC', Lancashire County Council's online mapping service 'MARIO' and Google Earth was used to assess suitability of habitats in the immediate surrounding environment and inform of any structural changes historically at the applicant site.

4.2 The surrounding area and its terrestrial habitats comprise of residential housing with mature gardens and tree lined boundaries leading into open farmland, hedgerows and wooded areas. The classifications 'Priority Habitat Inventory – Deciduous Woodland' and 'National Forrest Inventory – Broadleaved' are listed within residential grounds 121m to the north of the applicant site.

4.3 The nearest waterbody is Waddington Brook approximately 26 meters to the East of the applicant site. Waddington Brook is a tributary of the River Ribble approximately 1km east. A cemetery and War Memorial at the Parish of St. Helen church is approximately 115m to the north. The cemetery features mature trees, scrub and open grassland.

4.4 Connectivity for commuting and foraging bats throughout the area is uninterrupted.

5.0 SITE SURVEY METHODOLOGY

5.1 The survey was conducted on 31st January 2019 when an inspection of the exterior and interior of the survey structures were assessed for signs of bats (such as droppings, dead bats, feeding remains, urine staining, grease marks around crevices and noises such as scratching and chitting).

5.2 The surveyors walked the perimeter of the survey structures to look for means of ingress into potential roost sites including but not limited to; slipped or missing slates, gaps in or around barge boards, eaves, vents, masonry and windows.

5.3 The surveyors examined all accessible internal areas within the survey structures looking for signs of ingress, bats, droppings, urine staining on ceilings and walls and potential feeding remains.

5.4 Apparatus used to aid the survey effort included surveyor's ladders, close focusing binoculars, endoscope and an LED Lenser torch.

5.5 Weather at the time of survey was cold, dry and sunny. The assessment was conducted by licenced bat surveyors Ms. Ley Hodgson BA (Hons) MCMA (Natural England Class 2 licence No. 2015-11804-CLS-CLS) and Ms. Oonagh Nelson BSc (Hons) MCIEEM AssocRICS (Natural England class 2 licence No. 2017-29114-CLS-CLS).

5.6 The survey was conducted in accordance with the "Bat Survey, Good Practice Guidelines" (Bat Conservation Trust 2016).

6.0 LIMITATIONS

6.1 It is rare for any site to be surveyed using all the available techniques to full effect, as there are often reasons of seasonality, weather or access which restrict survey intensity.

6.2 Due to the householder using parts of survey structure one for storage, not all rooms could be fully accessed. Surveyors removed stored items where practical to gain further access and surveyed tops of stored materials for signs of bat usage.

6.3 The external western gable of the survey structure abuts the neighbouring properties boundary wall. The resulting void was too narrow for the surveyors to adequately observe the features of the façade in relation to bats.

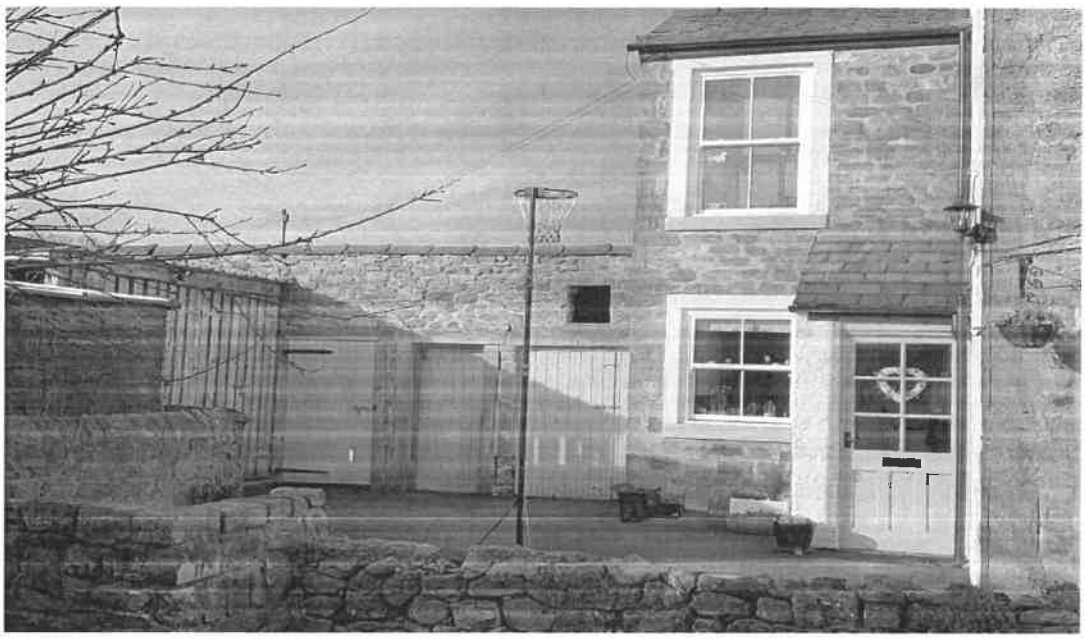
6.4 The eaves on the western end of the southern façade could not be surveyed due to the presence of a wooden lean-to obscuring the surveyors viewpoint.

7.0 SITE SURVEY RESULTS

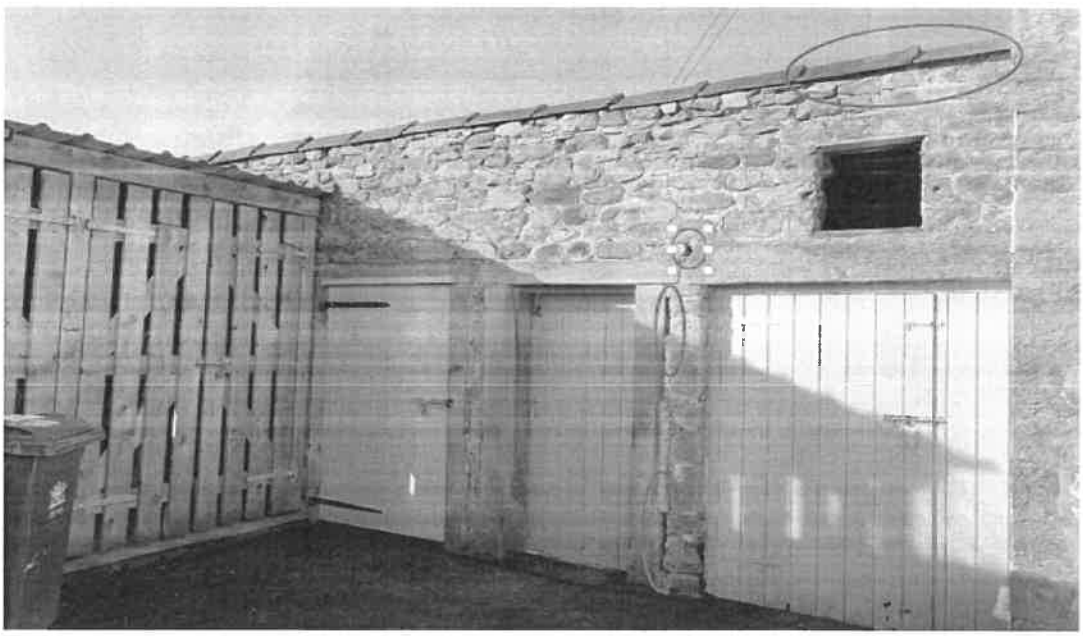
External Assessment Survey Structure 1

7.1 The survey structure is a single storey stone built outhouse with stone lintels and slate pent roof sloping downwards to the north. The southern façade features a row of overhanging ridge

tiles along the wall plate. Four timber doors allow access into the structure and a 'hatch' hole is present above one doorway. The northern façade has a shorter elevation due to an increase in the land level on the north side of the property. Here, the stone wall is approximately 1m high and features a small hatch with timber access panel. There is a wooden barge board and UPVC plastic guttering at the eaves. The pent slate roof is easily visible. The western façade abuts the neighbouring property wall with an 8-10cm gap between the two. The survey structure attaches to the western gable of the the Clients main dwelling house, with flush fitting lead flashing.



Photograph 1: Southern façade of the property



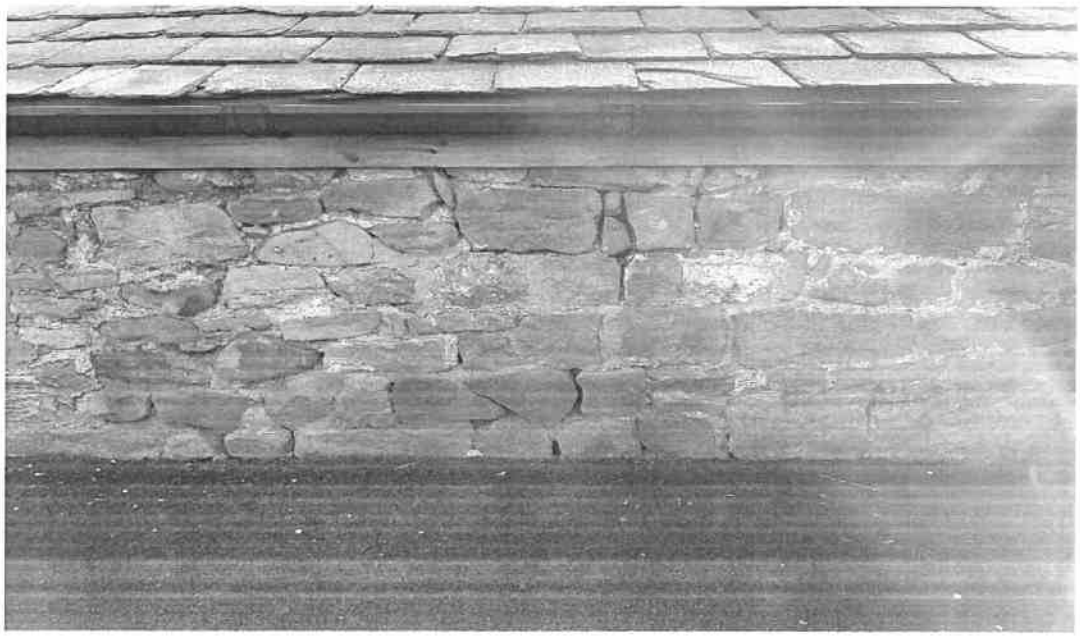
Photograph 2: Example of missing mortar in stone work and raised ridge tiles on southern facade

7.2 Mortar is missing in multiple areas around the exterior stone work, creating gaps that are considered suitable for bat ingress. These gaps lead into cavities within the stone infill of the walls.

7.3 Gaps are present between the uneven stonework of the wall plate and the overhanging ridge tiles. All gaps are considered suitable for bat ingress.

Photograph 3: Northern façade showing the attachment to the western gable of the main dwelling and the 8-10cm gap between the western façade of the survey structure and neighbouring property (to the right of image).

7.4 There are significant gaps and cracks in the stonework on the northern façade leading to crevices within the stone infill of the wall.



Photograph 4: Example of the gaps and cracks in the stone work on the northern facade

7.5 The ridge tiles at the western end of the northern façade have raised. Historically they have been filled with expandable foam but gaps considered suitable for bat ingress are still present.

Photograph 5: Raised ridge tiles at western end of northern façade – showing gaps with expandable foam.

7.6 There are a number of naturally created gaps, raised slates creating gaps and slipped slates on the roof.

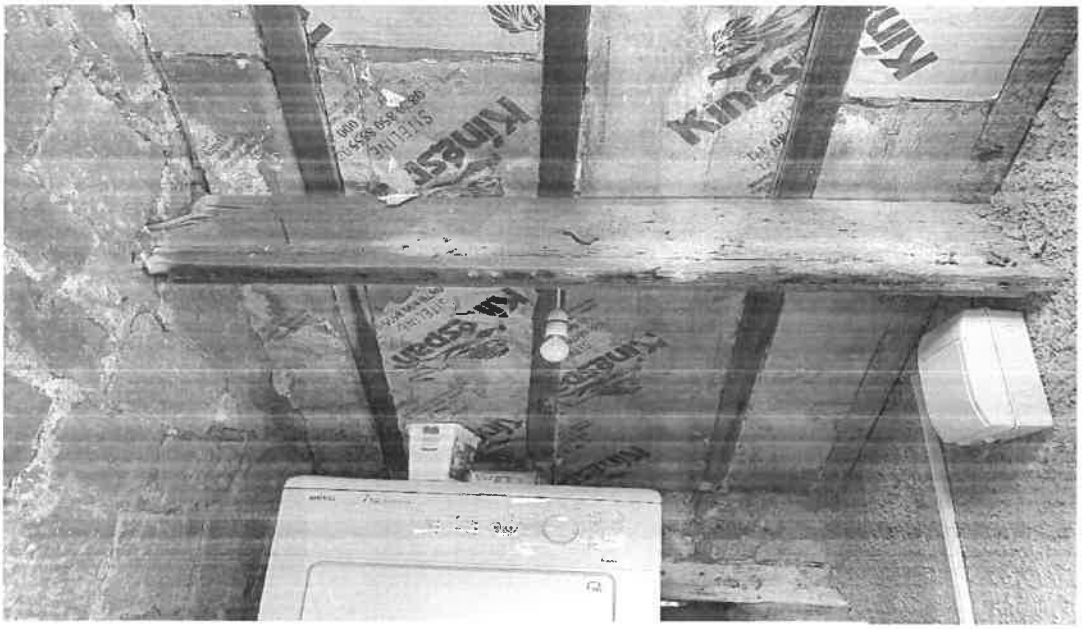
Photograph 6: Example of the slipped and naturally created gaps in the slates.

7.7 A wooden bargeboard runs the length of the northern facade. Behind the bargeboard are gaps leading to the wall plate and eaves. These gaps are considered suitable for bat ingress.

Photograph 7: An example of gap behind the bargeboard.

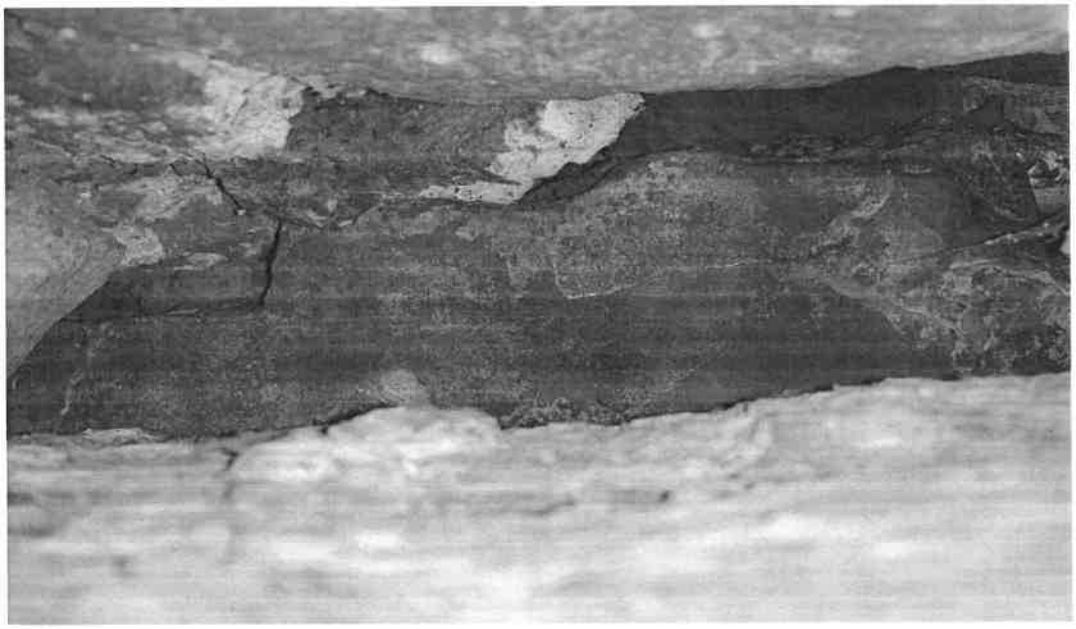
Internal Assessment Survey Structure 1

7.8 Internally the structure is split into 4 rooms (A, B, C, D). The rooms are used for a mixture of storage and utility purposes. Room A attaches to the western gable of the main dwelling and features one rendered wall. It is used as a laundry room. Kingspan insulation boards are present between the rafters under the roof slates. There is a small wooden hatch/door in the northern façade with wooden lintels. Am open window is present on the southern façade with a wooden lintel which leads to a void between the slates and insulation. There is a large wooden beam above the entrance door on the southern façade. Rooms B, C, D all have no sarking or insultation under the slates, although some horse hair mortar is visible. Walls are rough non-rendered stone, with a red brick partition between room C and D. Room D is accessed through survey structure 3.



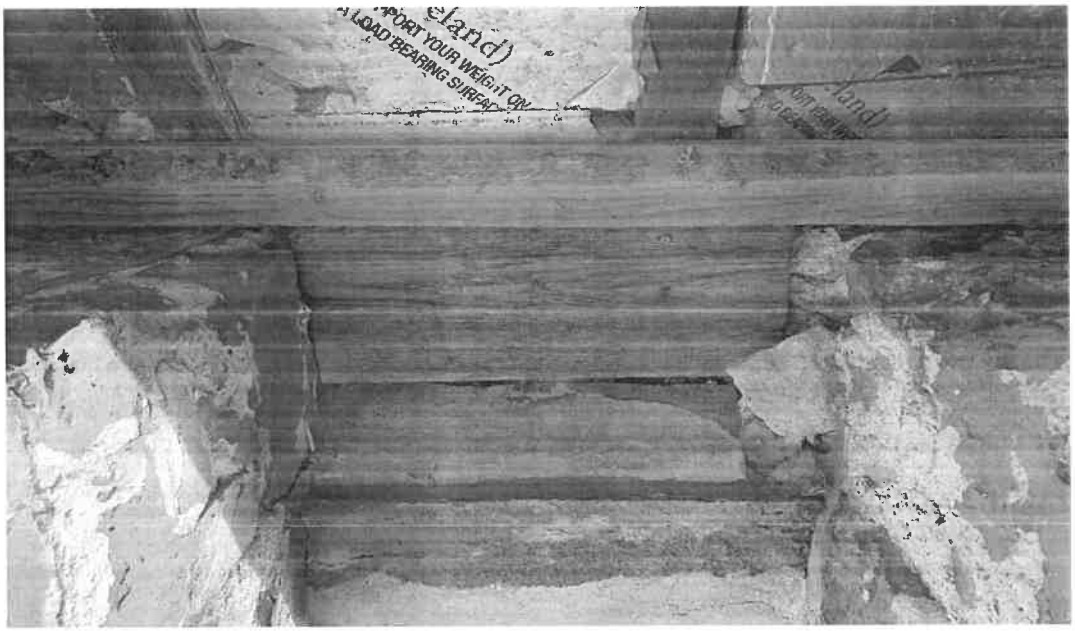
Photograph 8: Kingspan insulation blocks in room A.

7.9 In room A there are several large cracks and missing mortar in the stone work, gaps around wooden lintels, and gaps around the wooden joists and stone work that lead to crevices within the wall structures.



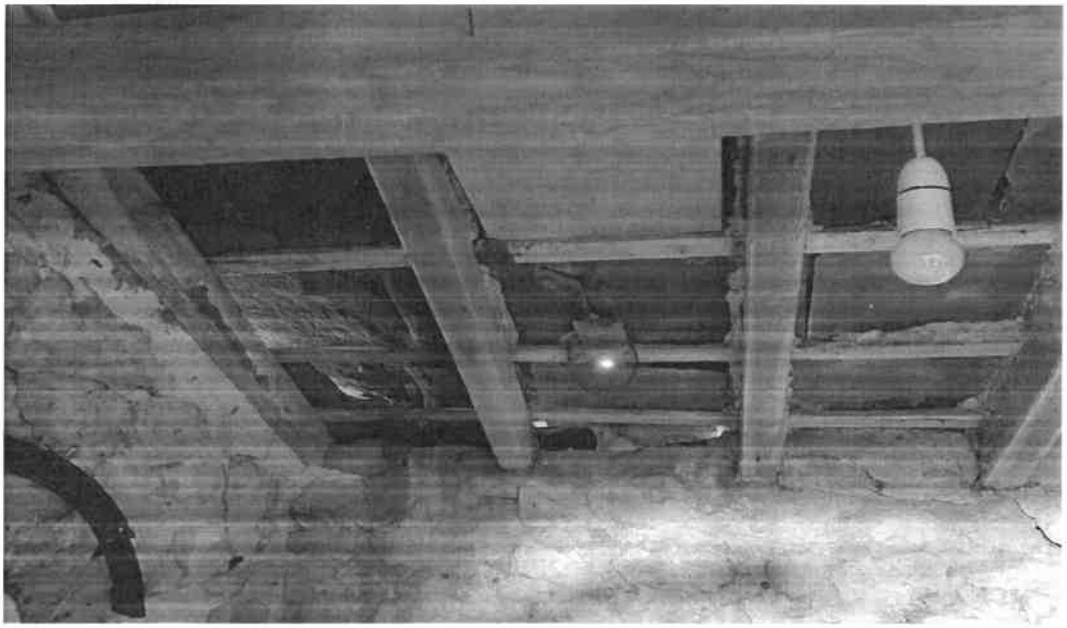
Photograph 9: Example of gaps around lintels, stonework and joists from room A.

7.10 There are gaps around the wooden lintel of the open window on the southern façade which leads into a void between the insulation board and the roof slates. This is considered suitable for bat ingress.



Photograph 10: Gaps around wooden lintel in the window.

7.11 Daylight can be seen in between the slates of rooms C and D, considered suitable for bat ingress.



Photograph 11: Unlined roof slates within remaining compartments, showing daylight through missing slates.

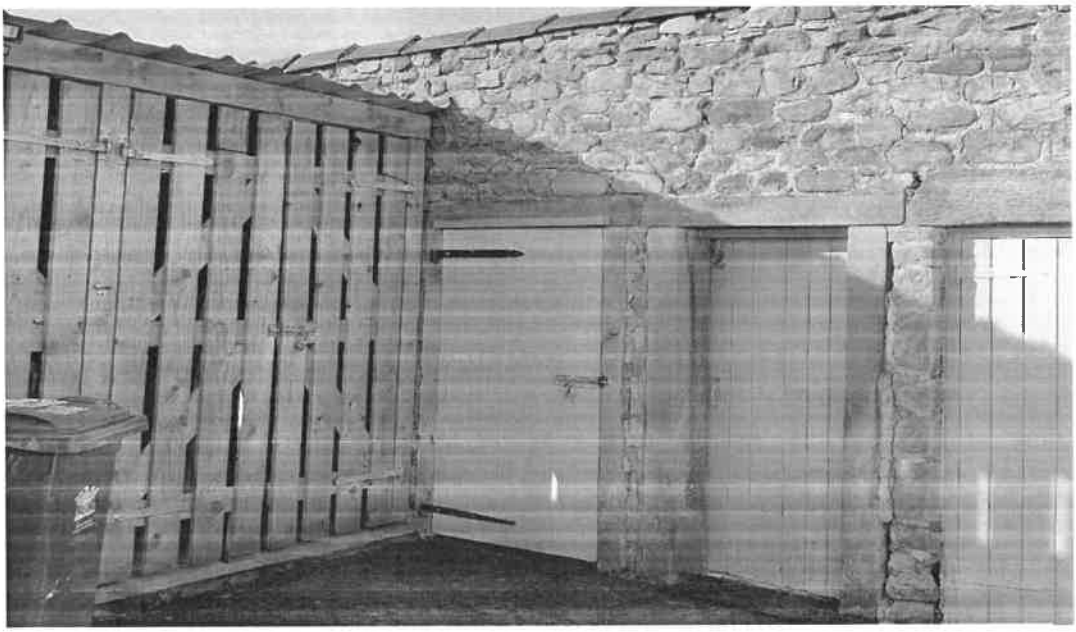
7.12 Rooms B, C, D have cracks and gaps in mortar and around door frames that are considered suitable for bat ingress into crevices deeper in the wall structure.

Photograph 12: Example of cracks and gaps in the stonework of rooms B, C, and D.

7.13 There is a large gap at the top of the wall plate between C and D on the southern façade of the survey structure. An old Virginia Creeper stem is visible.

External Assessment Survey Structure 2

7.14 Survey structure 2 is a wooden slat lean-to with a corrugated tin roof. It is attached to the western end of the southern façade of survey structure 1 with the neighbouring property's boundary wall forming the western façade of the structure. It is open sided on the southern façade and has wooden slats along the eastern façade. A security sensor light is fitted to the eastern façade of the structure, which if working would illuminate survey structures 1 and 3.



Photograph 13: Survey structure 2 eastern façade with slatted wood.

Internal Assessment Survey Structure 2

7.15 Mortar is missing around the door lintel to survey structure 1 which is accessed through and forms the northern façade of the lean-to. The structure is used for storage, is very bright and airy.

External Assessment Survey Structure 3

7.16 Survey structure 3 is a single storey entrance porch attached to the southern façade of the main dwelling house. It has a slate pent roof, rendered walls, uPVC plastic eave caps, uPVC plastic guttering, wooden bargeboard and lead flashing where it joins the main dwelling. The main dwelling is part rendered, part stone and mortar. The mortar is in good condition.

7.17 There is some natural lifting of the slates.

Photograph 14: Example of natural lifting of the roof slates above the entrance porch.

Internal Assessment Survey Structure 3

7.18 Internally the porch is plastered with no access to any roof void if one is present.

Endoscope Assessment of Survey Structure 1

7.19 Surveyors used an endoscope to survey any gaps and cracks that could be accessed both internally and externally in survey structure 1. The assessment concluded that crevices extend throughout the wall structures and are considered suitable for bat ingress and roosting opportunities.

7.20 Many of the crevices were noted to extend beyond the reach of the endoscope. The stone infill creates cavities of interminable reach.

7.21 The endoscope was also used by surveyors to gain insight into the void above the Kingspan insulation in room A and identified the positive potential for bat ingress and suitability for the void to offer roosting opportunities.

8.0 DISCUSSION OF RESULTS AND RECOMENDATIONS

8.1 In accordance with the "Bat Survey, Good Practice Guidelines" (Bat Conservation Trust 2016), the Preliminary Roost Assessment was conducted at a time deemed optimal for assessing structures for suitability of features for bats.

8.2 Features considered suitable for bat roosting or ingress for bat roosting were found at this property. The immediate terrestrial habitats surrounding the site are considered to offer suitable bat foraging opportunity and so potentially increase the prospective value of the property to accommodate bats.

8.3 The property is considered to have hibernation potential. It is evident through the use of an endoscope during the Preliminary Roost Assessment that the recommended hibernation survey methodology outlined with the BCT survey guidelines 2016 would likely be of limited success at this site, given the depth of the cavities present. The PRA was conducted at a time when bats would traditionally be hibernating. The extent of the crevices available are considered to be a limitation in the effectiveness of endoscope assessment. For this reason we are not recommending any further survey effort to establish hibernation. It is considered reasonable in this instance that the proposed demolition works be timed to avoid hibernating bats and that compensatory hibernation habitat be integrated into the fabric of the new structure.

8.4 In addition to the hibernation roost potential, the structure was assessed as being of low to moderate suitability to support bat roosts in the bat active season.

8.5 It is the recommendation of this assessment that further nocturnal bat activity surveys be undertaken at this site between May and September, to establish the status of the building in relation to bats, and to assess what if any impact the proposed works may have.

9.0 REFERENCES AND FURTHER READING

Bat Conservation Trust (2016) *'Bat Surveys, Good Practice Guidelines'*. Bat Conservation Trust, London.

English Nature (2004) '*Bat Mitigation Guidelines'*. English Nature, Peterborough.

Hutson, A. M. (1993) '*Action Plan for conservation of Bats in the United Kingdom'*. The Bat Conservation Trust, London.

Joint Nature Conservation Committee (2004) '*Bat Workers Manual'*. JNCC, Peterborough

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Contract Ecology and Landscapes
Preston technology Centre
Marsh Lane
Preston
Lancashire
PR1 8UQ

Tel: 01772 731 404
Email: enquiries@contractecology.co.uk
Web: www.contractecology.co.uk

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