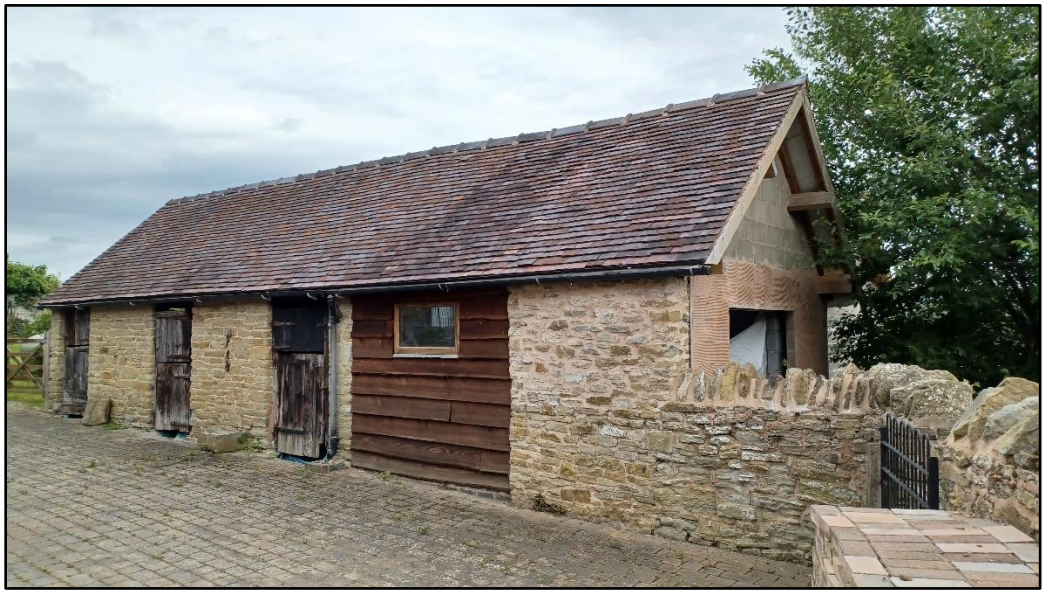
ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE



PHASE 2 BAT ACTIVITY SURVEY

THE CHAINS, MUNSLOW

Lower Betton Farm, Cross Houses, Shrewsbury, Shropshire, SY5 6JD

Project name: The Chains, Munslow

Date: 15/08/2023

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Reviewed by: Phillipa Stirling MSc ACIEEM

Requested by: Simon Brandwood

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning consent will be sought for the conversion of a redundant out-building and a recent garage to residential accommodation.

Preliminary examination of the buildings indicated that they have 'low' potential as a bat roost. Although the structure is very open and exposed to weather and light, a number of crevices exist which could be exploited by bats.

1.2 SCOPE OF SURVEY

Arbor Vitae were commissioned to undertake one bat activity survey to determine if the buildings are in use by roosting bats.

- Bats and their roosting sites are legally protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981.

The survey was also designed to assess the presence of any breeding birds using the building.

- All wild nesting birds, their nests and eggs are legally protected under The Wildlife and Countryside Act 1981.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

The outbuildings lie to the rear of a former farmhouse known as the Chains which is in the centre of the small village of Munslow. A further barn within the former farmstead was converted to residential use a few years ago. This required a Protected Species Mitigation licence due to the presence of roosting bats. A purpose-built bat loft was installed as part of mitigation.

The outbuilding under consideration in this survey lies on the edge of a garden and, beyond this to the south, open farmland. A new garage block has recently been constructed alongside the outbuilding on its southern side.

2.2 BUILDING DESCRIPTION

The outbuilding is a former block of stables. The single storey building is constructed from local limestone rubble. The tiled roof was repaired and restored in 2022 with partially new timber framing and new membrane roof lining. Adjacent to this is a recently completed garage block constructed from concrete breeze blocks.

3 SURVEY METHODOLOGY

3.1 VISUAL INSPECTION

One visit was made to carry out a preliminary visual assessment of the property on 6th July 2023.

The objective of the survey was to find and record any signs of use by bats, for example:

- Droppings, sometimes in concentrations below roost sites,
- Feeding signs such as butterfly and moth wings,
- Staining of timber, brickwork around access points.

The general structure of the buildings was assessed for its potential to provide bats with roosting opportunities.

3.2 ACTIVITY SURVEY

Following the preliminary assessment, one activity survey was carried out to confirm presence or absence of bat activity:

DATE	SURVEY TIME	SUNSET SUNRISE	WEATHER	OBSERVERS	STATIC RECORDERS
10 August 2023	20.35	20.48	Dry 60% cloud 16 C	Will Prestwood Dr Joy Miles	Anabat Express internally x2
Bat activity was registered and recorded externally using Echometer 2 Pro microphone with iPad Air.					

3.3 BREEDING BIRDS

The buildings were assessed for their potential to provide birds with nest sites, and to record any existing evidence of previous nesting.

3.4 PERSONNEL

The survey was carried out by Will Prestwood BSc, Natural England bat licence number: 2021-52205-CLS-CLS, assisted by Joy Miles PhD, experienced bat surveyor.

3.5 CONSTRAINTS

There were no constraints to the survey according to the Bat Conservation Trust good practice guidance.

4 SURVEY RESULTS

4.1 VISUAL INSPECTION

No droppings were found and there was no evidence of feeding signs. Although the buildings are very open with high light conditions, there are a small number of crevices within the structure including behind barge boards and internally above wall plates and the timber frame. Overall, the structures were assessed as providing 'low' suitability as a bat roost.

4.2 ACTIVITY SURVEY

The first bat recorded was a common pipistrelle at 21.12 and this appeared from the direction of the house. This was followed immediately by a soprano pipistrelle. Several more bats of this species flew from the original barn conversion and house section of the property, emerging from the traditional roost site in crevices in stone work beneath the archway which joins the barn to the house. All bats flew in an easterly direction, presumably to access hedgerows and rough meadows along which they were seen to forage.

Only one other species, noctule bats, were recorded.

No bats were seen to emerge from the buildings under consideration.

4.3 BREEDING BIRDS

One pair of swallows was found to be nesting above the timber frame supporting the roof.

5 EVALUATION OF RESULTS AND IMPACT

5.1 BATS

No evidence of bats having used the buildings was found and no bats were seen to emerge. The light and open conditions are probably not optimal for bats. The known roost of pipistrelles in the stone walls of the house and the presence of a bat loft in the converted barn probably provide sufficient roost sites.

The conversion of the buildings will have no impact upon bat species or their roosting sites. Therefore, a European Protected Species Mitigation Licence will **not** be required for the conversion work to proceed.

5.2 BREEDING BIRDS

The survey showed that the building is in use as a nesting site by swallows. This site will be lost as a result of building conversion.

6 MITIGATION & ENHANCEMENT

6.1 BATS

The buildings are not in use as a roosting site for bat species. No further survey work or mitigation is required.

6.2 BREEDING BIRDS

The proposals will result in the loss of a swallow nest site and appropriate mitigation will be required. This will comprise the installation of artificial nest ledges/ swallow cups inside another structure on the property. The siting will be discussed with the project ecologist.

6.3 ENHANCEMENT

A dedicated bat loft and an external bat box are already present on the property and no further enhancements for bats are considered necessary.

In order to enhance the habitat for birds, it is recommended that the following bird nest boxes are erected:

Two Schwegler 1B boxes on mature trees in the garden.

7 SUMMARY

Planning consent will be sought for the conversion of a former farm building and adjacent garage into residential accommodation. Due to the possible impact on bats and/or breeding birds, a protected species survey was carried out in August 2023.

A preliminary assessment of the buildings was carried out and, although no evidence of bats was found, the building was judged to have 'low' potential to support a bat roost. As a result, one further activity survey was undertaken.

No bats were seen to emerge from the buildings. An internal static detector did not record echolocation calls. Common and soprano pipistrelles were recorded in the vicinity of the buildings but appeared to emerge from a known roost site in the stone walls of the nearby house.

The survey concluded that the building in question is not used as a roost site by bats and therefore no further surveys or Mitigation licence is required.

One pair of swallows is using the former stable building as a nest site and mitigation for the loss of this site will be required in the form of the installation of artificial nest cups in another building.

Habitat enhancement for birds is recommended in the form of nest boxes.

8 REFERENCES

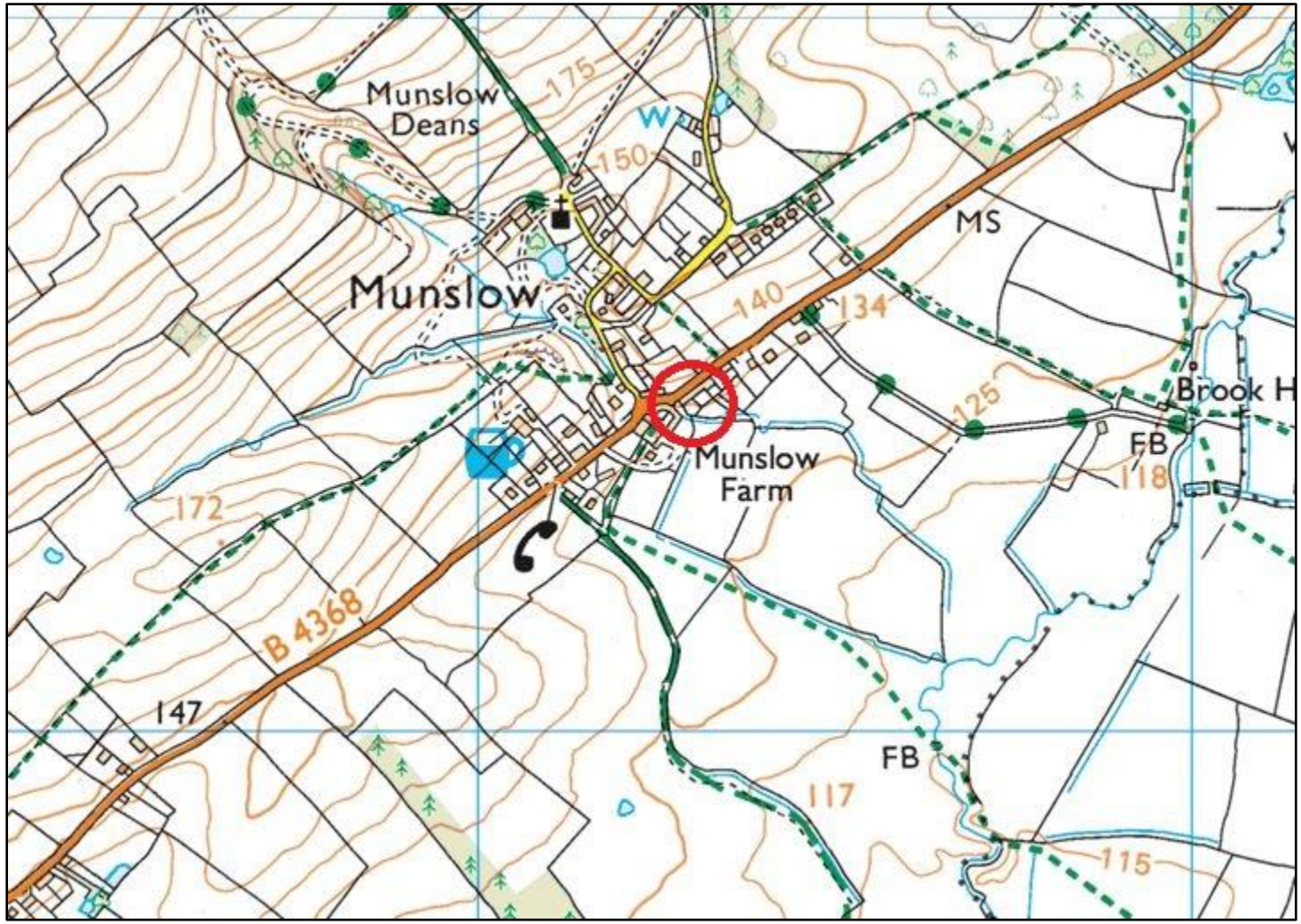
Bat Conservation Trust (2018) Bats and artificial lighting in the UK. *Bats and the Built Environment series*, Guidance Note 08/18. Institution of Lighting Professionals.

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

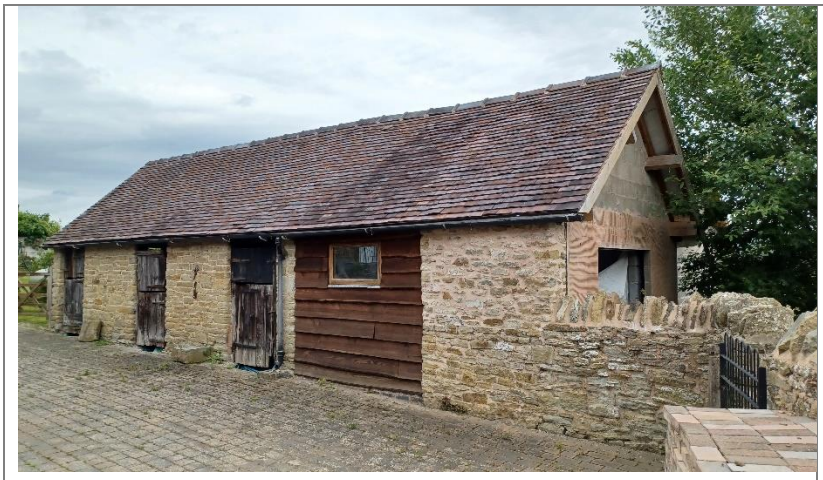
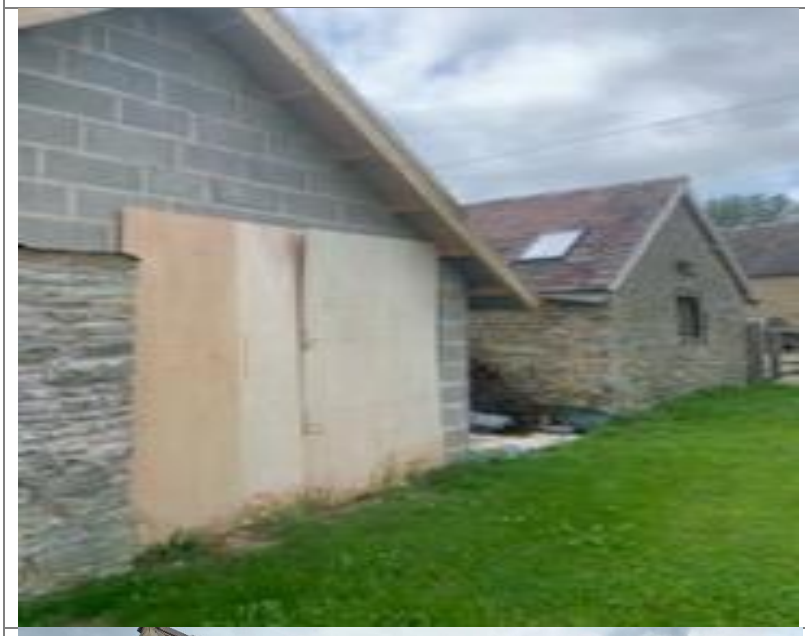
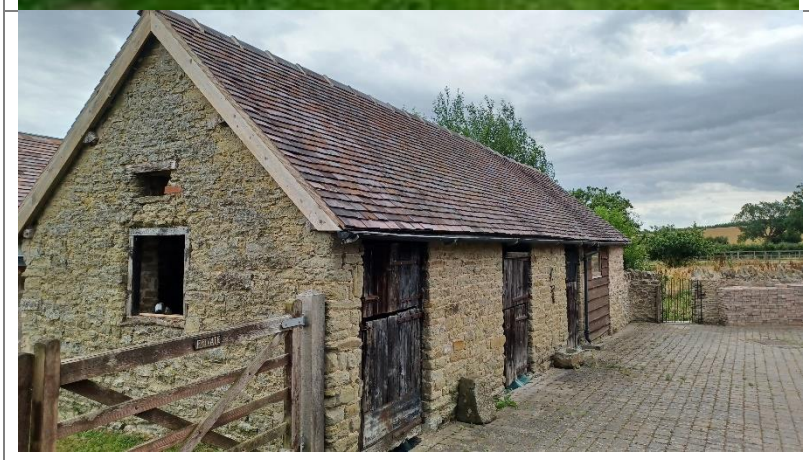
Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.

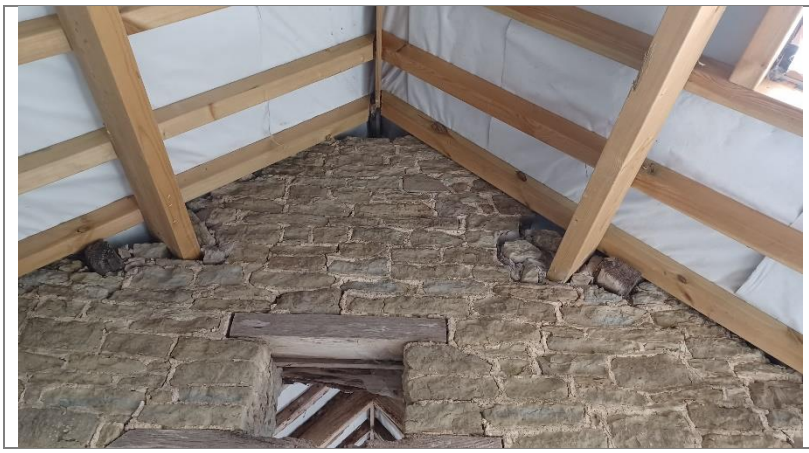
Mitchell-Jones, A.J. (2004) Bat mitigation guidelines. English Nature.

FIGURE 1 LOCATION. 1:50,000



APPENDIX 1 PHOTOGRAPHS

	FORMER STABLE BLOCK
	GABLE END OF RECENT GARAGE AND STABLE BLOCK BEYOND
	STABLE BLOCK

	INTERNAL OF STABLE BLOCK SHOWING REPAIRED ROOF STRUCTURE