

Bat Survey: Preliminary Roost Assessment

Low Meadow

Pendleton, Lancashire

March 2021

Prepared for: Mr and Mrs Newton

Report prepared by: Verity Webster BSc (Hons) MSc CEcol CMIEEM



EXECUTIVE SUMMARY

- On 9th March 2021, a Preliminary Roost Assessment was undertaken at Low Meadow, Pendleton.
- The house was assessed to determine the suitability for bats. The structure is considered to have very low suitability for bats.
- Further survey work is not considered necessary because the risk of the presence of bats is very low.
 However, precautionary methods of work have been proposed to minimise the risk of harm to itinerant bats during the works.
- Recommendations have been made to enhance the site for roosting bats.



Ecology and Protected Species Consultancy

Chorley, Lancashire; www.ecologyconsultant.co.uk; tel: 07917 852 401; Email: info@ecologyconsultant.co.uk



1. Introduction

1.1 Application Site

- 1.1.1. This report details bat survey work at Low Meadow, Pendleton, BB7 1PT. National grid reference SD 7598 3960.
- 1.1.2. Mr and Mrs Newton commissioned Verity Webster Ltd to undertake the bat survey work to inform the planning application.

1.2 Objectives

- 1.2.1 The objectives of the Preliminary Roost Assessment are to determine:
 - The suitability of the building on site to support a bat roost.
 - Whether bats are currently using the building or have done in the past.
 - The potential status of any roost present.
 - How bats might be using the site and the potential species present.
 - The potential impacts of the proposals on any potential roost present or on bats using the site.
 - The requirement for further survey work and/or mitigation.
 - How any impacts might be avoided, mitigated and/or ameliorated, including advice on European Protected Species Mitigation (EPSM) application if required.
- 1.2.2 The format and content of this report follow that required by the European Protected Species Mitigation (EPSM) licence application where appropriate.

1.3 Proposals

1.3.1 The proposals comprise the demolition of the house and construction of a new dwelling.

1.4 Ecologist

- 1.4.1 The Preliminary Roost Assessment was undertaken by Verity Webster. Verity is a licensed bat surveyor (Bat Survey Class Licence WML CL18 (Class 2) Registration number: 2015-13858-CLS-CLS).
- 1.4.2 Verity has worked as an ecological consultant since 2007. She has undertaken preliminary bat assessments and further bat emergence/activity surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes/method statements when necessary.



2. Site Location

- 2.0.1 The survey site is located in a rural location in Pendleton, Lancashire, approximately 1.6km southeast of the outskirts of Clitheroe.
- 2.0.2 The small village of Pendleton extends to the east of the site. The surrounding landscape comprises open countryside, encompassing arable and grazed pasture divided by tree lines and hedgerows. Pendleton Moor and Pendle Moor rise to the southeast and northeast. There are numerous streams and becks throughout the wider area, including Pendleton Brook which runs northwest to southeast through the village, approximately 175m southwest of the site at the closest point. See Figure 1.



Figure 1: Ordnance survey map showing the location of the proposed development site.

Ordnance survey 1:25000

Кеу

Survey site



Figure 2: Aerial image showing the proposed development site and immediate surroundings

From BING Maps







3. The Survey Site

- 3.0.1 The survey site comprises a two-storey cut stone house, mostly rendered. The building is oriented north to south, with an extension to the east. The roof is pitched, supporting corrugated tiles. There are wooden soffit boxes around the eaves. There is wooden weatherboard on the north and south gables of the main body of the house.
- 3.0.2 There is a single-storey porch extension to the west and there is a single-storey garage extension on the north elevation. Both the garage and the porch have flat roofs.
- 3.0.3 Internally there is a loft space approximately 1.2m high extending the length of the main body of the house. The tiles are lined beneath the roof is insulated with polystyrene.
- 3.0.4 The gardens of the house are mature, but well maintained, with trees, shrubs and grassland. Sheep and cattle-grazed grassland is present to the east, whilst to the northwest there is a road, and to the southwest, houses with gardens.



The north elevation of the house



The west elevation of the house



The loft void

(V a)

4. Legislation

Full details of relevant legislation and planning policy can be found in Appendix A.

4.1 UK and EU Legislation

- 4.1.1 Key legislation regarding the protection of bats:
 - Wildlife and Countryside Act 1981 (as amended)
 - The Countryside and Rights of Way Act (CROW), 2000
 - The Natural Environment and Rural Communities Act (NERC, 2006)
 - Conservation of Habitats and Species Regulations (2017)
- 4.1.2 Under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017, it is a criminal offence to:
 - Deliberately capture, injure or kill a bat
 - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
 - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
 - Intentionally or recklessly obstruct access to a bat roost.

4.2 Planning Policy and Legislation

- 4.2.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.
- 4.2.2 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.
- 4.2.3 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.
- 4.2.4 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.

Chapter 15, Para 170 of NPPF states: "The planning system 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....
- 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".

Para 171 states: "Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."

Para 174 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

a) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and



- b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."
- 4.2.5 Para 175 states that "when determining planning applications, local authorities should apply the following principles:
 - a) if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"
- 4.2.6 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.

5. Survey Methodology

5.0.1 The Preliminary Roost Assessment was undertaken in accordance with currently accepted guidance: Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London.

5.1 Desk Study

- 5.1.1 Data sources used to establish background information about bats and their likely presence in the locality:
 - Magic Map, Natural England (2016)
 - Bing Maps (2017)
- 5.1.2 Satellite mapping, Ordnance survey, road map, habitat and designated site data from Magic Map (Natural England, 2014) was used to assess the value of the surrounding habitat for bats in the area at a landscape scale (5km), including any potentially important habitat corridors (linear habitat features), feeding grounds or potential roost opportunities, such as large expanses of woodland. The features and habitats immediately surrounding the site (local area) were also assessed at a finer scale as these influence the likely presence of bats within the survey site.

5.2 Preliminary Roost Assessment

- 5.2.1 An internal and external inspection of the building was undertaken during daylight to determine the suitability for bats and establish, if possible, whether bats are using the structures or have been using the structures in the past.
- 5.2.2 All accessible parts of the building were inspected to look for bats and signs of the presence of bats, including:
 - Droppings.
 - Feeding remains including moth and butterfly wings.
 - Staining from urine or oils near crevices or holes or on timber (such as roof beams), walls, chimney breasts etc.
 - Scratch marks on walls and timber.
 - Squeaking or chattering calls.
- 5.2.3 The systematic search inside the building included inspection of beams, floors, surfaces of stored materials, loose roof insulation or felt covering, junctions between roof timbers and timbers and the



walls, and crevices within brickwork. Potential access into the building was also inspected by searching for holes in insulation and any light penetration into the interior from the outside.

- 5.2.4 The assessment outside the structure included inspection of all walls, windows, window sills, fascias, soffits, eaves and tiles, including a search for any crevices under tiles, under lifted lead flashing or lifted roofing felt, missing mortar, gaps in the ridge or gable end of the roofs, crevices in brickwork or under flaking paintwork or render, gaps in cladding or hanging tiles and any other potential bat roost opportunities.
- 5.2.5 Equipment: During the survey, a strong torch with directional beam was used to inspect the buildings.
- 5.2.6 As a result of the preliminary roost assessment, the structure on site was characterised as having 'negligible', 'low', 'medium' or 'high' suitability for bats. It may also be possible to confirm the presence of a roost.
- 5.2.7 Buildings or structures typically characterised as having:
 - Negligible suitability for bats will lack features with any potential to support roosting bats. Modern or newly-built well-sealed structures may fall into this category. Structures that are metal clad with metal internal beams might have negligible potential if there are no favourable roosting spaces. Structures may also be unfavourable due to the level of disrepair, being subject to poor weather conditions.
 - Low suitability for bats will have sub-optimal roost features with limited potential for roosting bats. Features may be used by single bats opportunistically, but do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats.
 - Medium suitability for bats may have few features with potential for bats, that provide enough space, shelter, protection and other suitable conditions, or several features with limited potential for bats. It may also be that a potentially suitable structure is situated in an area with habitat that has an only low potential for foraging and commuting bats.
 - High suitability for bats will support at least one or more features that provide opportunities for roosting bats such that they might be used regularly, for longer periods by larger numbers of bats. These may be external features, such as lifted weatherboard or crevices in brick or stonework, or internal, such as large loft spaces with potential access. Barns, with open doorways and windows with wooden rafters and beams, may fall into this category. If a structure is close to good habitats, such as a waterway, marshland or woodland, this also increases the potential for roosting bats.
 - Confirmed roost presence when it is evident as a result of signs from inspection, such as droppings, or sight of bats, that a roost exists within the building. It is not always possible to ascertain the presence or absence of a roost even if some signs, such as droppings or feeding remains are found.

6. Survey Limitations

6.0.1 The survey work was undertaken in March 2021. At this time of year bats will be in a transitional period between winter hibernation roost sites and summer roost sites. Evidence of use of a structure by bats is unlikely to be evident externally, likely having been washed away by the weather, but is likely to be present internally.



6.0.2 The biological records data was not obtained to inform this assessment. In this case the site visit is considered sufficient to inform the assessment and requirement for mitigation or further survey work.

7. Findings: Preliminary Roost Assessment

7.1 Suitability for bats

- 7.1.1 At a landscape level, the area surrounding the survey site is very good for bats. Refer to Figure 2.
- 7.1.2 Open landscape surrounds the survey site. The good mix of habitat, including grassland, tree lines, hedgerows and waterways will support a variety of bat species including widespread species such as common and soprano pipistrelle bat (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively) and brown long-eared bat (*Plecotus auritus*). Species that favour open habitats such as Leisler's (*Nyctalus leisleri*) and noctule bat (*Nyctalus noctula*) would also be expected. Given that there are no substantial areas of woodland in the landscape, species that favour wooded habitat, such as Natterer's bat (*Myotis* natterri), whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*) are less likely to be present in abundance.

The Conservation Status of Bats in the Area

7.1.3 The conservation status of bats in the area is shown in Table 1.

Species	Local	County	Regional
Common pipistrelle	Likely to be common in the area. There are records of this species in the area (10km).	Common and widespread Frequently recorded.	Common and widespread Frequently recorded across the Northwest
Soprano pipistrelle	Likely to be present due to the presence of riparian habitat.	Widespread. Frequently recorded.	Common and widespread Frequently recorded across the Northwest
Nathusius's pipistrelle	Likely to be rare in the area.	Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.	Rare across the northwest. A migratory species.
Brown long-eared bat	Likely to be in the area. There is a recent record of this species within 10km of the site.	Common and widespread Frequently recorded.	Common and widespread Frequently recorded across the Northwest.
Natterer's bat	Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.	Scattered distribution in Lancashire	Widespread and scattered across the Northwest.

Table 1: The Conservation Status of Bats in the area at a Local, County and Regional Level



Noctule	Present	Widespread and frequently recorded.	Common and widespread. Frequently recorded in the Northwest.
Whiskered bat	Present but likely rare	Present	Widespread.
Brandt's bat	Rare / absent	Present	Widespread.
Alcathoe's bat	Unknown	Unknown	Widespread. Likely under-recorded.
Daubenton's	Presence is likely due to the riparian habitat present.	Widespread, frequently recorded near water.	Widespread
Serotine	Rare / absent	Unknown	Restricted to south and southwest Britain, rarely recorded in the northwest.
Leislers	Rare	Unknown	Rare, but widespread in Britain. Present in the northwest.
Barbastelle	Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.	Unknown	Present south of a line from North Wales to the Wash.

7.2 Preliminary Roost Assessment

7.2.1 The building inspection and bat roost assessment was undertaken in daylight on 9th March 2021.

The House

- 7.2.2 The house is considered to have very low suitability for bats.
- 7.2.3 Externally the walls of the extension are well-sealed with no crevices or gaps. There are a couple of gaps in the wooden soffit, but otherwise it is well-sealed.
- 7.2.4 The roof, supporting corrugated tiles does not show any visible crevices that might be utilised by roosting bats.
- 7.2.5 Externally, no evidence of bats was found.
- 7.2.6 Internally, the loft void appears to be well-sealed and no evidence of bats was found. There were rat droppings, however, suggesting there is access into the void from the exterior.



Showing the tight-fitting tiles on the roof of the house



Showing one of a couple of gaps in the soffit

8. Appraisal

- 8.0.1 The Preliminary Roost Assessment at Low Meadow, Pendleton was undertaken to determine the suitability of the house for roosting bats and to determine the likely impact of the proposed works on bats.
- 8.0.2 No bats were found during the external and internal inspection of the structures.
- 8.0.3 There are only a couple of locations (cracks in the soffit) that might have suitability for roosting bats. The majority of the roof is well sealed. No evidence of bats was found internally and overall, the building is considered to have very low suitability.
- 8.0.4 It is considered that employment of precautionary methods of work would reduce the risk of harm to bats to negligible.
- 8.0.5 The proposals provide the opportunity to significantly enhance the site for bats. Recommendations for this have been made.



9. Recommendations

- 9.0.1 Recommendations are proposed to minimise the risk of harm to bats during works to the roof of the structure. It is recommended that:
 - The site workers are provided a Toolbox Talk on bats prior to the start of works. The Toolbox Talk will detail the risk to bats, the signs of the presence of bats, how to proceed with the works with care, and what to do if bats or signs of bats are discovered.
 - Works to remove the roof structure, including tiles and soffits is undertaken by hand, with care.
 - Tiles and other roof materials must be checked for the presence of bats prior to being discarded.
 - If bats are found during works, works must stop and an ecologist must be contacted for advice.
- 9.0.2 Overall, if the recommendations are followed, the proposed development is considered very unlikely to be of significance to bats in the locality and no further survey is necessary.
- 9.0.3 In order to enhance the site for roosting bats, the following is recommended:
 - At least three Kent Bat Boxes are installed on trees in the garden. See Appendix B.



10. References

- BING maps (2016) <u>http://www.bing.com/mapspreview</u>
- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
- Google maps (Accessed 2019) https://www.google.co.uk/maps
- MAGIC Map (Accessed 2019) http://www.magic.gov.uk/MagicMap.aspx. DEFRA.

• APPENDIX A: Wildlife Legislation and Planning Policy

UK AND EU LEGISLATION

10.1. KEY LEGISLATION

- 10.1.1. Key legislation regarding the protection of bats:
 - o Wildlife and Countryside Act 1981 (as amended)
 - The Countryside and Rights of Way Act (CROW), 2000
 - The Natural Environment and Rural Communities Act (NERC, 2006)
 - Conservation of Habitats and Species Regulations (2017)

10.2. WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

- 10.2.1. The Wildlife and Countryside Act 1981 is UK legislation.
- 10.2.2. Bats are listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981. Under Section 9 of this legislation it is an offence to:
 - Kill, injure or take a bat.
 - Possess, a live or dead bat.
 - Intentionally or recklessly damage or destroy any structure of place which any bat uses as shelter or protection.
 - Intentionally or recklessly disturb a bat whilst it is occupying a structure or place which it uses for shelter or protection.
 - Internationally or recklessly obstruct access to any structure or place which a bat uses as shelter or protection.
 - Sell, offer or expose for sale any live or dead bat.

10.3. COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

10.3.1. Schedule 12 of the Countryside and Rights of Way (CROW) Act 2000, amended by the Wildlife and Countryside Act 1981 by removing the need to prove intent to damage a roost / harm (etc) a bat or other species listed on Schedule 1 by adding the words 'or recklessly' after 'intentionally' into the wording in Section 9 of the WCA 1981. The CROW act also strengthened the penalties for offences to bats and other species listed on Schedule 5.

10.4. CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010

- 10.4.1. The Conservation of Habitats and Species Regulations 2017 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales.
- 10.4.2. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The regulations came into force on 30 October 1994.
- 10.4.3. The Regulations provide for the designation and protection of European Sites and European Protected Species, including bats.
- 10.4.4. Under the Regulations, competent authorities (ie any government department or public body) have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats

Directive.

10.4.5. With regard to European Protected Species (including bats), the Regulations make it an office to:

- Deliberately capture;
- Kill;
- Disturb or;
- Trade in animals listed in Schedule 2, which include all UK bat species.

10.5. European Protected Species (EPS) Licenses and the Three Tests

- 10.5.1. These actions can me made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserve public health and safety). For such a licence to be granted the appropriate authority would have to be satisfied that an application has met the three tests, which are:
 - 1)- The licence may be granted 'to preserve public health or public safety or for reasons of overriding public interest, including those of a social or economic nature and beneficial consequences or primary importance for the environment''
 - 2)- There must be "no satisfactory alternative"
 - **3)** The proposal ''will not be detrimental to the maintenance of the species at a favourable conservation status in its natural range''

10.6. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006 (PLANNING SYSTEM)

Planning Authorities: A Duty to Conserve Biodiversity

- 10.6.1. Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.
- 10.6.2. Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity"

Species of Principal Importance

- 10.6.3. Part 3, Section 41 requires the Secretary of State to '*publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principle importance* for the *purpose of conserving biodiversity*''.
- 10.6.4. This requirement lead to production of a list of species and habitats of Principal Importance. This lists includes all UK bats.

PLANNING POLICY

10.7. NATIONAL PLANNING POLICY FRAMEWORK

10.7.1. In March 2012 the Government introduced the National Planning Policy Framework (NPPF). This was revised in 2018.



Chapter 15, Para 170 of NPPF states: "The planning system should contribute to and enhance the natural and local environment by:

- b) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils....
- e) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".

Para 171 states: "Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."

Para 174 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- c) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- d) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."

Para 175 states that "when determining planning applications, local authorities should apply the following principles:

- b) if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"
- c) 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;
- d) **Development result in the loss of deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused,** unless there are wholly exceptional reasons and a suitable compensatory strategy exists; and
- e) Development whos primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Para 177 states "the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined."

10.8. ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

10.8.1. This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.

APPENDIX B: Kent Bat Box

The Kent bat box

Simple to construct, self-cleaning and low maintenance.

The only critical measurement is the width of the crevices—these should be no larger than suggested. Other measurements are approximate.

Materials and construction

Box to be made from untreated rough-sawn timbers Timber should be c,20mm thick The box should be rainproof and draught-free Crevices can be between 15 and 25 mm wide Fixing may be by use of brackets, durable bands or wires

Location

Boxes are best fixed as high as possible in a sheltered wind-free position, exposed to the sun for part of the day.

They can be fitted to walls, other flat surfaces or trees

A clear flight line to the entrance is important



