

**BAT SURVEY AT -
MORANS FARM
PENDLETON**

DATE AND TIME OF VISIT

12th Aug 2020 11.00 am

24th Aug 2020 8.30 pm

WEATHER CONDITIONS

12th Aug - Sunny, light breeze, 25 C

24th Aug - Clear sky light breeze 15 C

REFERENCE. Mr SAGAR



SURVEY CARRIED OUT BY: LYNNE RUSHWORTH AssocRICS

LYNNE RUSHWORTH
6 PENDLE VIEW
BARLEY
BURNLEY
LANCS
BB129LA

UK BAT ECOLOGY

- It is thought that there are 18 native species of bats in the UK, most of which have seen declines in numbers over the last century.
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- As insect feeding species the preferred habitats include woodland, grassland, agricultural land, wetland and rivers which provide good foraging potential.
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- Bats typically roost close to foraging sites and use linear features such as hedgerows, tree lines and rivers to navigate. It is important to maintain these features, as removal is thought to contribute to the decline in numbers.
- Bats will roost in a wide variety of sites and built structures, including underground structures (caves , bridges) and trees . Types of roost and times of year used.

Hibernacula - November to March

Temporary roosts - March to April and August to October

Maternity roosts – May to August

Summer roosts – Used by Males and immature females

Mating roosts – September and October

- Disturbance to a Hibernacula or Maternity roost is the most damaging for any local bat population. The same Maternity roosts are typically used year after year commencing between May to early June and are colonised with mature females and their young, any disturbance can lead to abandonment of the young and loss of the roost will have a significant impact on the bat population. Hibernacula roosts typically consist of underground sites caves, cellars etc or buildings which maintain cool and fairly constant temperatures. Bats hibernate (deep sleep , torpor) to survive the winter months when insects are in short supply so they hibernate to conserve energy and survive on their fat stores. Any disturbance which wakes the bats can result in unnecessary use of the energy reserves and thus reduces the chance of survival over the winter months.

THIS SURVEY HAS BEEN CARRIED OUT BY: LYNNE RUSHWORTH WHO HAS COMPLETED THE BAT CONSERVATION TRUST'S 'BATS AND BAT SURVEYS' FOUNDATION COURSE FOR CONSULTANTS, AND 'PLANNING AND PREPARATION OF BAT SURVEYS' COURSE

EMERGENCE SURVEYS ARE CARRIED OUT WITH A SECOND SURVEYOR WITH ELEVEN YEARS EXPERIENCE OF ASSISTING ON EMERGENCE SURVEYS

THE BRIEF

In conjunction with the submission of an application for planning approval, this survey was commissioned to identify if bats are currently present in the building, to assess if it has been used in the past or if there is any potential for future use of the building.

All British bats and their roosts are legally protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010, the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006

BAT LEGISLATION - Summary of offences under the law:

Bats and the Law Wildlife and Countryside Act 1981.

Principally those relating to powers and penalties, have been amended by the Countryside and Rights of Way Act 2000 (CRoW Act). The CRoW Act only applies to England and Wales.

Section 9(1) It is an offence for any person to intentionally kill, injure or take any wild bat.

Section 9(4)(a) It is an offence to intentionally or recklessly* damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. (*Added by the CRoW Act in England and Wales only) This is taken to mean all bat roosts whether bats are present or not.

Section 9(4)(b) It is an offence to intentionally or recklessly* disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection. (*Added by the CRoW Act in England and Wales only)

The Conservation (Natural Habitats, &c.) Regulations 1994

Section 39(1)

It is an offence to

(a) Deliberately to capture or kill any bat

(b) Deliberately to disturb any bat

(c) Damage or destroy a breeding site or resting place of any bat. The difference between this legislation and the Wildlife and Countryside Act 1981 is the use of the word 'deliberately' rather than 'intentionally'. Also disturbance of bats can be anywhere, not just at a roost. Damage or destruction of a bat roost does not require the offence to be intentional or deliberate.

Countryside and Rights of Way (CRoW) Act (2000) Part III Nature conservation and wildlife protection 74 Conservation of biological diversity

(1) It is the duty of (a) any Minister of the Crown (within the meaning of the Ministers of the [1975 c. 26.] Crown Act 1975), (b) any Government department, and (c) the National Assembly for Wales, in carrying out his or its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biological diversity in accordance with the Convention.

The Natural Environment and Rural Communities Act (2006) PART 3, (40): Duty to conserve biodiversity

(1) 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 conserving biodiversity.

(2) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

If it is discovered that development may impact upon bat roosts (thus leading to an offence being committed) a mitigation plan should be devised and a Bat Mitigation Licence applied for from the relevant government department (i.e. Natural England). Gaining a licence will depend on many variables, such as the bat species present, roost type, roost size and its local/regional/national importance

LIMITATIONS OF REPORT

NOTE: The absence of bats is near impossible to prove. The bats' high mobility means it is virtually impossible to rule out bats using any type of structure for roosting or habitat for foraging or on a flight path.

- External walls and internal rooms inspected from ground level.
- Roof spaces, attics and lofts will only be inspected if safe access is possible.
- Winter surveys will provide limited results. However internal inspection should determine if bats have used the building in the previous year.
- Any building whose structure is considered dangerous can only be inspected from a safe distance. Crevice-roosting bats ie. Pipistrelles, some Myotis species and Brown long eared bats can remain unseen even after close inspection in small spaces ie. cavity walls, roof structures soffits or cladding.
- Bat roosting evidence ie. Droppings or insect remains can be removed by weather conditions or sweeping/ cleaning internally so this lack of evidence cannot always prove undoubtedly that bats are absent.

EQUIPMENT USED ON SURVEY

- 'MAGENTA 5' BAT DETECTOR
- BINOCULARS
- HIGH POWERED TORCH
- LADDERS FOR HIGH LEVEL INSPECTION
- CAMERA
- ENDOSCOPE

PROPOSED DEVELOPMENT

Demolition of redundant farm buildings (B1, 2, 3) prior to the construction of 4no Holiday lodges.
Impact of development in relation to potential bat habitat:-
Removal of buildings, survey to assess if roost habitat will be removed.

TYPE OF BUILDING

The proposed site consists of a large farm building (B1) on the left of the site and a further group of ad hoc farm buildings consisting of a main Shed (B2) with further smaller timber shed and roofed sections to form a courtyard (B3) on the right nearer to the road and adjacent house to which the buildings were ancillary.



S.W elevation of B1

courtyard section



Courtyard elevations

(B3)



N.W elevation of (B1) and (B2)

S.E elevation (B2)



N.E elevation (B2)

METHODOLOGY

The survey methodology follows the guidelines published in the Bat Conservation Trust (BCT- Bat surveys, good practice guidelines 2nd Edition)

Scoping survey ; (Non invasive) carried out by one surveyor to assess if the site has any potential value for protected species and determine if bats are currently or have historically used the building.

Emergence survey ; are conducted 20 minutes before sunset and up to two hours after. Emergence surveys are conducted between the months of April through to end of September (weather dependant).

October to April (winter months) bats are inactive during the hibernation period.

All surveyors used have many years experience in conducting bat emergence surveys

CONSTRAINTS

Vegetation is present, concealing parts of all the buildings on site.

Not all parts of the interior of B 3 could be thoroughly inspected.

AIMS OF THE SURVEY

To ensure the proposed development will not affect any protected species

The survey will ; Identify past ,current or potential use of the site by protected species.

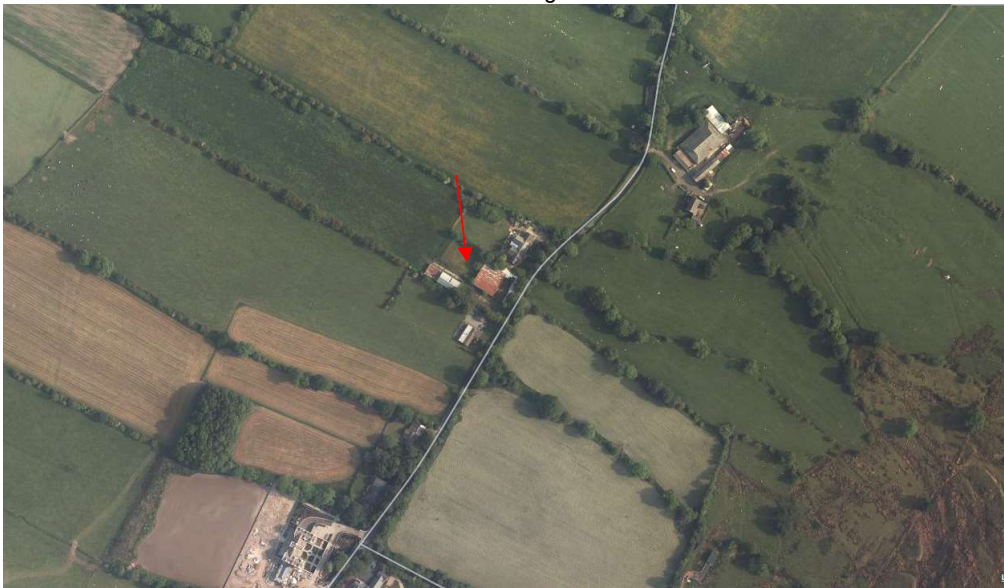
Assess any impact of the proposed development on these species

Outline a mitigation scheme for any species affected by the development (if required)

LOCATION SD752383 142 m elevation

The site is located immediately on the north west side of Pendleton road, with a dwelling adjacent to north east and the south west boundary.

It is located 1.2km to the south west of Pendleton village settlement area.



FORAGING POTENTIAL IN THE LOCATION

The site is situated between dwellings located to the north east and south west boundary, Pendleton road forms the south east border. The greater locality consists of pastureland surrounding the site, the fields are mainly bound with hedgerow as is the site together with mature trees. The road is also lined on both sides with mature trees and hedgerow.

The nearest significant area of standing water is a small reservoir 550m to the north east with a further lake 900m to the west.

The area provides optimal bat forage potential.



WALL CONSTRUCTION

All the walls are block work with sections of Yorkshire boarding. Most of the walls are exposed concrete block but the side walls on (B1) have a grey render finish.



BAT ACCESS POINTS IN WALLS

All the buildings are freely accessed via numerous openings in walls and gaps in boarding, part of the courtyard is formed by roof only.

ROOF CONSTRUCTION

The roofs of (B1) is a mono pitch corrugated steel sheet with clear panels over timber beams.



B2 has a pitched roof with a lean too section adjacent to the north west gable both sections have a steel corrugated sheet finish over timber or steel frame/purlins.



B3 has a mono pitch roof with a steel sheet finish over timber purlins / beams.



BAT ACCESS POINTS IN ROOF

All the roofs have some sections missing allowing free access ,however most of the sheet laps are tight fitting and did not provide any bat roost potential. In B3 some of the roof timbers are rotten however it was possible to examine them to ensure bats have not found any crevice roost potential.

ROOF SPACE

None of the buildings had enclosed roof voids all the structures were visible and could be closely examined for roost potential with the exception of the south west end of B3 which was not accessible.



		Yes	No
<u>BAT SIGNS, EXTERNAL</u>	SEEN	X	
	DROPPINGS		X
	MAGENTA BAT5 DETECTOR RESULT	X	

All the buildings were examined externally as far as possible for dropping , grease mark, or staining evidence with the aid of binoculars where necessary , paying particular attention around the openings into the buildings. The buildings although in poor condition due to the The result was negative.

The evening emergence survey was carried out during excellent weather conditions for forage activity. It commenced ½ hour before dusk and continued until approx 10.00 pm.

8.40 pm the detector picked up an echolocation prior to the emergence of the first Pipistrelle bat from the direction of the house adjacent to the north east boundary, the activity increased during the survey with approx 4no bats foraging on the routes indicated, passing through B1. The main forage route was over the courtyard in a north east to south west direction .The north west section of the site and B2 did not record any forage activity or emergence.



		Yes	No
<u>BAT SIGNS, INTERNAL</u>	SIGHTED	X	
	DROPPINGS		X
	DETECTOR RESULTS		X
	STAINING/GREASE MARKS		X
	SUSPECT SUMMER ROOST		X
	SUSPECT WINTER HIBERNACULA		X
	INSECT OR MOTH FEEDING EVIDENCE		X

The floors and any surfaces in the buildings were examined for any of the above listed evidence the result was negative , however during the emergence survey a couple of the foraging bats entered through the door opening in B1 south east elevation and exited through the south east opening as indicated above.

CONCLUSION

The buildings are located in an optimal forage potential area, whilst the adjacent properties could provide good roost opportunities the farm building construction being open, draughty and damp and does not provide cracks or crevices suitable for bat ingress. The emergence survey confirmed that bats are not using the buildings as a summer roost and they do not provide any potential for winter hibernation.

The removal of these buildings will not remove any high value summer, Maternity or Hibernacula roost habitat. Although B1 was accessed for some forage activity its removal will not result in a detrimental reduction in forage habitat in the location.

A forage / commute route existed over the site, over the courtyard area, however the proposed Lodges will be single storey construction and will not form any break or obstruction to the route.

The demolition of the Buildings will not impact on the local bat population and will not remove any high value roost / hibernation potential there is no evidence of past or present use.

The development will not disturb roosting/ hibernating bats or impact on / destruct, any bat roost or foraging/commute routes.

No mitigation or further survey effort required however due to the location it is suggested that roost potential should be enhanced by attaching 1no Kent bat box to each lodge. See details below.

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

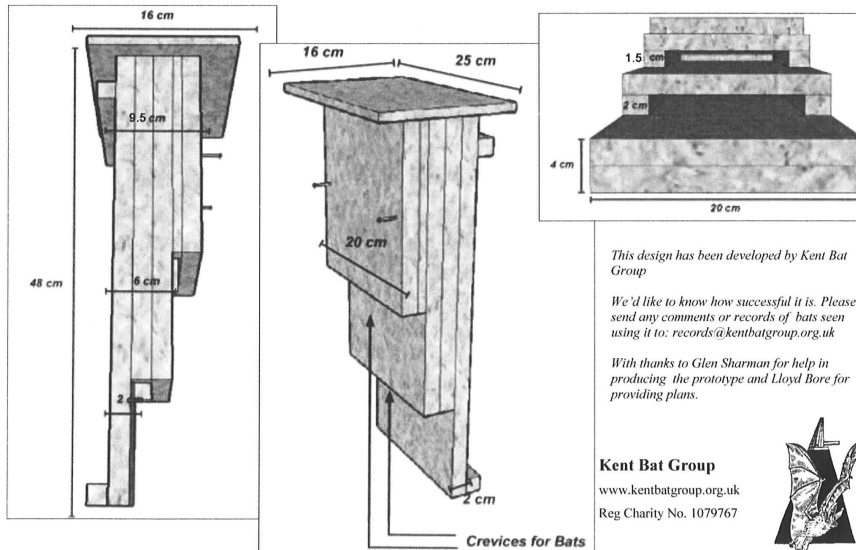
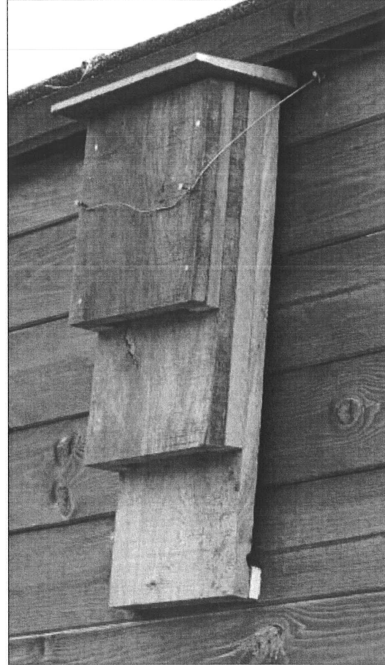
Box to be made from untreated rough-sawn timbers
Timber should be c,20mm thick
The box should be rainproof and draught-free
Crevices can be between 15 and 25 mm wide
Fixing may be by use of brackets, durable bands or wires

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



This design has been developed by Kent Bat Group

We'd like to know how successful it is. Please send any comments or records of bats seen using it to: records@kentbatgroup.org.uk

With thanks to Glen Sharman for help in producing the prototype and Lloyd Bore for providing plans.

Kent Bat Group
www.kentbatgroup.org.uk
Reg Charity No. 1079767



All contractors should be made aware of their responsibilities to protected species and work should proceed with due diligence and in the unlikely event that any bats are discovered work must be stopped immediately and a licensed bat worker must be contacted for advice on how to proceed

RISK ASSESSMENT

(The level of probability that bats are using the property is calculated on the evidence found.)

LOW

NOTES:

The precautions below should be incorporated in the unlikely event that any bats are found to be present in the intervening time between surveys and work commencing on site.

When bats are found to be present in a building:

- A NATURAL ENGLAND licence will be required before any building work is undertaken.
- Pointing work should not be undertaken during winter months as hibernating bats might be entombed.
- Work to roof structure should not be undertaken between late May, June, July and August.
- Small areas of wall could be left un-pointed to encourage potential roosting sites.
- Care must be taken when removing existing roof timbers, and any new timbers or treatment of existing timbers must be carried out using chemicals listed as safe for bat roosts.
- NOTE: The onus lies with the applicant to satisfy themselves that no offence will be committed if the development goes ahead.

If bats are ever found during building work, stop work immediately and contact the Bat Conservation Trust or Natural England.

The Bat Conservation Trust
15 Cloisters House
8 Battersea Park Road
London SW8 4BG
0845 1300 228

Natural England Cheshire-Lancashire Team
Cheshire-Lancashire Team
Pier House
Wallgate
Wigan WN3 4AL

LIVING WITH BATS

- **Bats are not rodents**, and will not nibble or gnaw at wood, wires or insulation.
- **Bats do not build nests** and therefore do not bring bedding material into the roost; neither do they bring their insect prey into the roost.
- **All bats in the UK eat insects**, so they are a great form of natural pest control!
- **Bat droppings** in the UK are dry and crumble away to dust. As a result, there are no known health risks associated with them.
- **Female bats usually have only one baby a year**, so properties do not become 'infested'.
- **Most bats are seasonal visitors** to buildings - they are unlikely to live in the same building all year round, although they are loyal to their roosts and so usually return to the same roosts year after year.
- **Bats are clean and sociable animals** and spend many hours grooming themselves.