

Nocturnal Bat Survey Report

Site: Outbuildings at New Platt Farm, Littleborough, Rochdale

Ref: 21513

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SUMMARY

At New Platt Farm, Littleborough, Rochdale, planning permission is being sought to convert a barn and adjoining stable block.

In August 2021 Indigo Surveys Ltd was instructed to carry out preliminary bat roost assessment survey of the property.

As the proposals could impact on features typically used by bats as roosting places, a diurnal inspection of the building was undertaken on 5th August 2021 to assess for signs of, and/or suitability for bat occupation.

All the external structures, especially those associated with the roofs and walls of the buildings were examined.

The inspection revealed no signs of recent or historical bat activity or occupation, however a number of features (gaps and potential entry points) were present and the buildings were classified as medium suitability for roosting and/or hibernating bats.

It is understood the barn building roof will not be altered/affected by the proposed works. On this basis, no further surveys on the barn building were required.

The stable block will be affected by the proposals and as such, it was recommended a minimum of two nocturnal bat surveys are undertaken in the period May to September (inclusive). One of the surveys should comprised a dawn re-entry survey. Two surveyors are required to cover the elevations simultaneously.

Subsequently, nocturnal emergence and dawn re-entry surveys were undertaken on the buildings on the evening of 24th May 2022 and morning of 10th June 2022.

During the 1st nocturnal emergence survey, no bats emerged from the buildings. A total of three Common Pipistrelle Bats *Pipistrellus pipistrellus* were recorded flying along Carriage Road, commuting south to forage over a nearby tree lined Brook.

On the dawn re-entry survey, no bats returned to roost within the application buildings. Two Common Pipistrelles were detected and observed along Carriage Road to the northwest of the site close to sunrise.

From the evidence of the nocturnal and the diurnal inspection surveys, the status of bats at the New Platt Farm is considered thus;

- Common Pipistrelle Bat – non roosting but foraging in the wider area for a small number of bats.

Given these findings, no further surveys or mitigation measures are required.

1. INTRODUCTION

At New Platt Farm, Littleborough, Rochdale, planning permission is being sought to convert a barn and adjoining stable block.

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The results of the surveys are contained in this report.

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CROW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats*
- ❑ *Deliberately disturb bats (whether in a roost or not)*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts*
- ❑ *Damage or destroy roosts*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations). As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

2. METHODOLOGY

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2016) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal surveys.

The diurnal walkover provides an opportunity to check for signs of occupancy, such as droppings, scratch marks, feeding remains, carcasses, or even animals in residence, whilst nocturnal surveys (if required) allow numbers and species of bats to be confirmed. The latter are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but likelihood of roosting is considered to be medium to high.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats *Plecotus auritus*, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus*/*M. brandtii*), and Lesser Horseshoes *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where these butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Diurnal walkovers can be carried out at any time of the year, but nocturnal surveys should only be undertaken when bats are out of hibernation and in their summer roosts. The recommended period is from May to September inclusive, with May to August optimum and September sub-optimum. The season can be extended into October, although particularly cold weather will render this inadvisable. Indeed, the air temperature at the start of each survey must be at least 10°C or above.

Visits will be a minimum of two weeks apart, and the number of surveys is dependent on the evidence found or the suitability of the site to bats.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, the number and timing of visits will be decided by the ecologist, and will be appropriate for the type of roost. In general at least two nocturnal surveys will be carried out, both of which can be emergence surveys, or one emergence and one dawn re-entry.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

For a site with no evidence but low suitability, just one nocturnal emergence survey is required, this to be in the optimum period.

For medium suitability a minimum of two visits are needed, of which one must be in the optimum period, and one must be a dawn re-entry survey. With high suitability, three visits will be necessary, of which two must be in the optimum period. At least one of these must be a dawn re-entry survey, with the third visit either an emergence or a dawn re-entry.

For sites < 5 ha in size, and/or regularly shaped structures, at least two surveyors must be present, with more surveyors at larger sites and more complex buildings, e.g. those with multiple elevations and/or roof structures.

10x42 Nikon binoculars, a Fenix TK75 torch were used for the inaccessible/unreachable areas. On this occasion an endoscope was not used, as there were no crevices and cavities that could not be inspected with a torch or by use of binoculars.

Nocturnal emergence and dawn re-entry surveys were undertaken on the buildings on the evening of 24th May and morning of 10th June 2022.

The surveys were undertaken by Matt Liston and assistant (both working under Natural England bat licence No. 2015-16489-CLS-CLS). The surveyors were aided by the use of electronic Echo Meter Touch Pro bat detectors. This facilitates the detection of bats and aids in the identification of individual species, in particular those which might be utilising different frequencies simultaneously.

The results of the surveys are detailed in Section 3, with the positions of the surveyors shown in Plan 1.

3. RESULTS

3.1 Emergence Survey

The emergence survey was conducted on 24th May 2022, commencing at 19:30 and finishing at 21:30. The weather conditions during the time of the survey were recorded and are presented in Table 1.

Parameter	Value
Temperature (°C)	15.0
Cloud cover (%)	40
Precipitation	None
Wind speed (Beaufort scale)	F1
Sunset	21:17

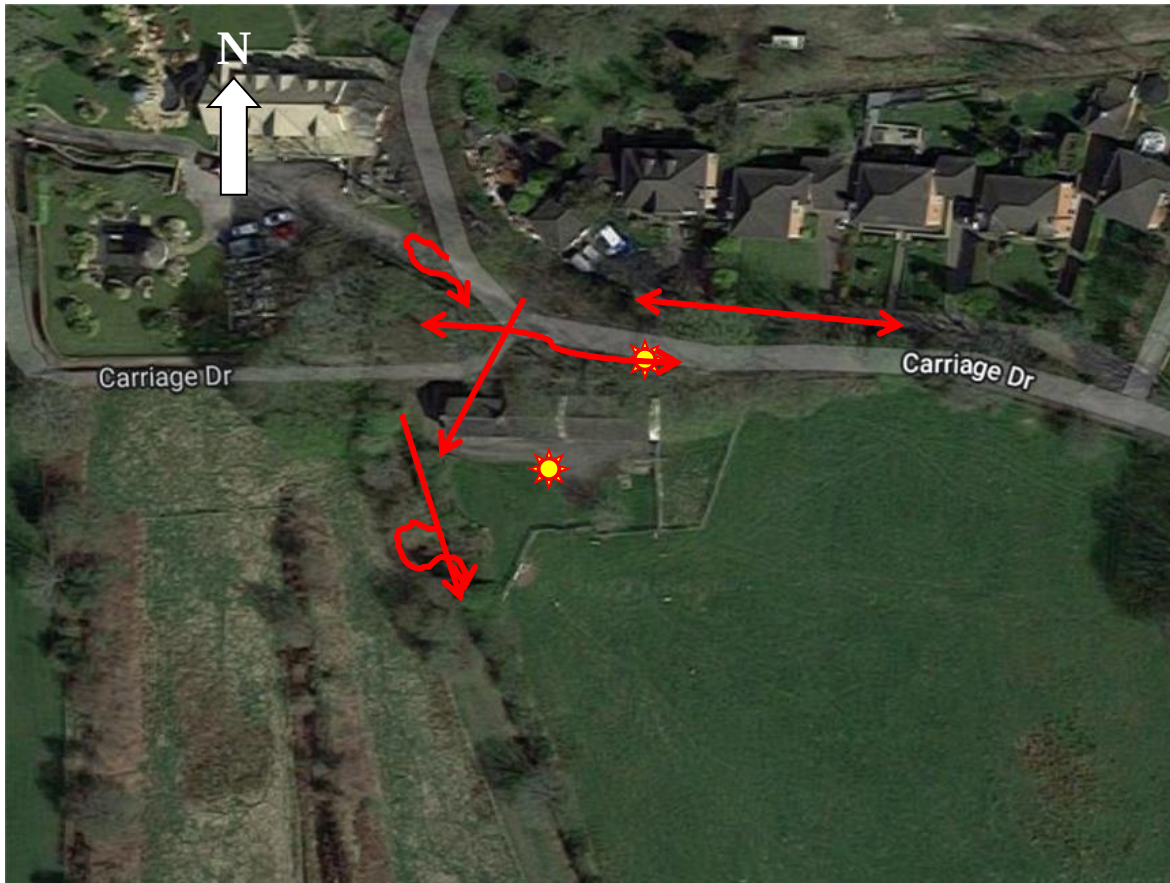
Table 1 Weather conditions during the 1st emergence survey

During the 1st nocturnal emergence survey, no bats emerged from the buildings. A total of three Common Pipistrelle Bats were recorded flying along Carriage Road, commuting south to forage over a nearby tree lined Brook. The times of bat detections and observations are shown in the table below.

Time	Observation
21:00	Survey starts
21:39	Common Pipistrelle (CP) detected to north of Carriage Road.
21:43-21:47	2 CP's detected and observed flying around trees/hawking along Carriage Road.
21:48	3 rd CP' detected, hawking and social calls along Carriage Road.
22:03	CP flies along site margins, commuting south and foraging over Brook.
22:12	2 nd CP commutes over application site flying south before feeding sweeps around trees lining Brook.
22:03	No bats emerge or detected across the application site and survey ends.

The bat flight paths at emergence are shown on Plan 1 (overleaf).

Plan 1 Bat flight paths at emergence on 24th May 2022



Common Pipistrelle Bat(s) →

Positions of surveyors ★

3.2 Dawn Re-entry Survey

The dawn re-entry survey was conducted on 10th June 2022, commencing at 03:00 and finishing at 04:52. The weather conditions during the time of the survey were recorded and are presented in Table 1.

Parameter	Value
Temperature (°C)	12.0
Cloud cover (%)	30
Precipitation	None
Wind speed (Beaufort scale)	F0
Sunrise	04:40

Table 1 Weather conditions during the dawn re-entry survey

On the dawn re-entry survey, no bats returned to roost within the application buildings. Two Common Pipistrelles were detected and observed along Carriage Road to the northwest of the site close to sunrise.

The times of bat detections and observations are shown in the table below.

Time	Observation
03:00	Survey starts.
03:24	Common Pipistrelle (CP) detected in far distance to west (possibly foraging along Carriage Road)
04:05	CP again detected in distance (west/northwest).
04:11	CP detected briefly (feeding sweep) in close proximity to application site.
04:33	2 CP's observed circling and detected along Carriage Road adjacent residential garden to northwest (possibly roosting in one of the houses).
04:52	No bats return to roost in buildings on application site and survey ends.

The bat flight paths at dawn re-entry are shown on Plan 2 (overleaf).

Plan 2 Bat flight paths at dawn on 10th June 2022



Common Pipistrelle Bat(s) →

Positions of surveyors ★

4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October.

Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls.

As such they can be difficult to find, so the suitability for roosting was assessed.

The inspection revealed no signs of recent or historical bat activity or occupation, however a number of features (gaps and potential entry points) were present and the buildings were classified as medium suitability for roosting and/or hibernating bats.

It is understood the barn building roof will not be altered/affected by the proposed works. On this basis, no further surveys on the barn building were required.

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5. REFERENCES

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