Rob Smith

RS Ecology

*mammal specialist * protected species surveys * habitat surveys * conservation projects*

PROTECTED SPECIES REPORT

8 BROOKBURN ROAD
CHORLTON-CUM-HARDY
MANCHESTER
M21 9ES



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COMPILED BY: **ROB SMITH**

Prepared for:	**Paula Butterfield Groves** **Huse Living Ltd** **102 Roseneath Road** **Urmston** **Manchester** **M41 5AZ**
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Rob Smith ***Independent Consultant Ecologist***

72 Severn Road Culcheth Cheshire WA3 5EB
Mobile: 07847072526 ***E mail: robsmith.eco1@gmail.com***

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EXECUTIVE SUMMARY

Background

RS Ecology was commissioned by Paula Butterfield of Butterfield Architecture to undertake a building inspection and bat survey at 8 Brookburn Road, Chorlton-cum-Hardy, Manchester. M21 9ES.
The OS grid reference is SJ8126 9340.

The survey was undertaken on 24th September 2018 as a precursor to the client seeking planning permission for modification of the existing building which would include removal and replacement of roofs on both the main building and side extension and an additional floor level to the extension.
The surrounding area was also assessed for potential impact on any other protected species.

The main building is a three-storey double brick and breeze block construction with a pitched roof covering of Marley tiles and ridges. A small extension and conservatory are located at the front of the property. The single storey extension is of brick and breeze block construction with a prefab concrete tiled sloping roof.

There was no evidence that bats were roosting in any of the accessible loft spaces during the inspection. There was also no evidence of bats emerging from any part of the building during the bat survey.
A single common pipistrelle and briefly a soprano pipistrelle were observed foraging and commuting along the edge of the adjacent woodland and Ivy Green Nature Reserve.

It was assessed that the potential impact on bat species to survive, breed or rear young in or on this building is considered to be negligible. There are multiple and more suited buildings in the locality capable of supporting any casual roosting bats with access to good feeding and commuting routes within 30 metres of the surveyed building.
There was no evidence of any other protected species using the property.

There is no requirement at this time to apply for a European Protected Species Licence from DEFRA / Natural England for the building works to proceed.

Although it is considered unlikely that bats will be found during building works, however if any are discovered then all work must stop and a qualified consultant, licensed for bats be contacted and their advice followed.

Failure to do so may result in an offence under the legislation for protected species (Appendix 4).

1. INTRODUCTION

1.1 SITE DESCRIPTION

Main building - Is a three-storey double brick and breeze block construction with a pitched roof covering of Marley tiles and ridges and end caps which are supported by wood trusses. A combination of UPVC and wood eaves and soffits complete the edge of the roof and gable ends.
The loft space and two side cavities on the upper floor are well sealed from the outside with a combination of insulation board and mineral felt.
Internally the two upper floors are part of the main building whilst the ground floor level is separated to form part of the side extension.

A small lean-to extension with concrete roof tiles and a small conservatory are located at the front of the main building.

A wrap around lean-to porch connects the front of the main building to the single storey extension at the rear of the property.

Extension - The single storey brick extension with rendered walls comprises a sloping roof of concrete roof tiles. The roof of the single level extension is supported by beams and trusses with the loft area partially boarded out and insulated. The extension forms part of the ground floor flat located beneath the main building. This has a well-sealed but inaccessible loft space with metal trusses supporting the concrete floor of the upper level.

The property is located next to Ivy Green Nature Reserve and several occupied apartment blocks to the rear.

1.2 PROPOSED WORKS

The survey was undertaken as a precursor to the client seeking planning permission for modification of the main building which includes extending out to the front and replacement of the roof. Works will also include adding an additional floor level to the side extension.

1.3 AIMS OF STUDY

The survey was conducted to investigate the status of the site in respect to protected species. It was to:

- establish the presence / absence of protected species and bats in particular.
- gather information to make an informed assessment as to the use of the site by these species.
- make an informed assessment of potential impacts on protected species found on site and establish whether there may be a requirement for further survey work to achieve this.
- assess the requirement for a European Protected Species Licence (EPSL) prior to building work.

2. SURVEY METHODOLOGY

2.1 DESK TOP STUDY

An examination and assessment were made of the building, grounds and surrounding area using the OS map (1:25,000 scale) and a recent aerial photograph (Google Earth).

2.2 FIELD STUDY

The inspection and bat emergence survey were undertaken on 24th September 2018. The survey observed the following protocol:

- checking the exterior of the building for signs of bat entry / exit points; such as staining from urine and oils or excessive scratching.
- checking the building exterior for droppings, especially on ledges and under the potential access/egress points.
- noting all potential access points and roosting opportunities for bats and examining them thoroughly. any inaccessible points are noted and recorded as a constraint of the survey.
- checking the building's interior loft area for bats, bat droppings or staining especially on ledges and under the potential roosting points.

Binoculars were used as an aid in searching for high access points of entry and exit. An EM3+ heterodyne and frequency bat detector was used to monitor and record any bat movement during the emergence survey.

Other protected species

An inspection of the external areas also considered the presence of other protected species.

2.3 PERSONNEL

Rob Smith is a professional consultant with over 35 years' experience in surveying for mammals, birds, amphibians and reptiles and protected species including bats. He is an active member of several local and national conservation organizations and has considerable experience in species conservation and reserve management and has been responsible for management of national and international nature reserves.
He holds Natural England licenses for both bats and great crested newts and is an Associate Tutor for the Field Studies Council.

Bobby Smith is an ecologist with a BSc in Ecology and Conservation Biology. He has over 7 years' experience in surveying UK protected species including bats and newts. He has carried out a variety of field research in tropical ecosystems and marine environments whilst on location in Central America.
He also holds Natural England licenses for both bats and great crested newts.

3. SURVEY RESULTS

3.1 Bat emergence survey

The two observers were positioned around the property which allowed good views of the area to be modified. Activity was monitored from 10 minutes before sunset to 90 minutes after sunset.

Results, timing and conditions are detailed in **Appendix 1** and summarised below.

There was no evidence of bats roosting in the building during the inspection or bats emerging from any part of the building during the bat survey.

A single common pipistrelle and briefly a soprano pipistrelle were observed and recorded foraging and commuting along the edge of Ivy Green Nature Reserve and around the adjacent flats.
Conditions during the survey were good.

Other Protected Species

There was no evidence of any other protected species using the property or its immediate surrounds.

4. ASSESSMENT

4.1 Constraints of survey

Surveying for bats at a specific season of the year does not provide information of use of the site by bats at other times of the year. Whilst consideration may be given to roosting at other times, there may be no evidence for this outside the survey period. The optimum survey period is May to mid-August.

Small roosts and single roosting bats can easily be overlooked. They can be difficult to detect during inspection as they leave few field signs.

4.2 Conclusions

Bats - It is concluded that:

- The potential of the house to support roosting or hibernating bats is assessed as **negligible.** This was based on the lack of evidence of any bat activity in or on the building.
- It was concluded that more suited roosting facilities were noted in adjacent buildings alongside the woodland edge.

Other Protected Species

It was assessed that the potential for supporting other protected species currently on the site was **negligible.**

5. RECOMMENDATIONS AND MITIGATION

5.1 FURTHER SURVEYS

Bats - No further surveys are required currently.

Other protected species - No further surveys are required currently.

5.2 REQUIREMENTS FOR EPS LICENSING

Bats - There is no requirement at this time to apply for a European Protected Species Licence (EPSL) from DEFRA / Natural England for the building works to proceed.

Other protected species
It is considered that there is no requirement for licensing for any other species.

5.3 MITIGATION MEASURES

Bats - Timing of works
Bats are highly mobile and use occasional places to roost in small numbers during all active times of the year. The following advisory measures are designed to reduce or remove any potential impacts identified in respect of bat species presence around the site during and following the development of the site. This will include:

- optimal timing of the works to ensure minimum disturbance to bats on the site (October – March).
- measures during building works to prevent the entrapment, injury or death of individual bats.

Reasonable avoidance measures
Compensatory measures include sensitive timing of the building works in order to minimise disturbance, and include:

- During construction/restoration works the roof cover and any wall cavities are removed by hand using a 'soft protocol' method. Tiles should be removed by hand by lifting and carefully peeling back outer layers. Bats are often found between the upper surfaces of internal divisions and the roof cover and can be crushed if care is not taken.
- Any external work involving the removal and replacement of apertures will be done at a sensitive time to avoid trapping bats. The best time to start such works is October/November and March/April, when bats are inactive and are not usually found on such sites. Between May and September, it may be necessary to employ exclusion measures to prevent bats entering through open apertures and becoming trapped inside buildings under development.
- Any replacements to apertures should be done by completing the removal and replacement in a day to prevent any crevices being left open overnight.
- Further advice on measures to prevent entrapment of bats and methods of preventing entry will be provided as required by a qualified consultant bat specialist.

5.4 CONSERVATION MEASURES

Normally a development provides opportunities to enhance a site for wildlife and is recommended on sites where there is potential for bats to be present. With regard to this property and its location no conservation measures are recommended.

Further information can be found in Bat Mitigation Guidelines (2004) available from Natural England and Habitat management for Bats (JNCC, 2001).

In the event that bats are found during building works being undertaken then all work must stop, workers withdraw from the site and a licensed bat worker, the Acting Ecologist or Natural England contacted for advice to review the situation. On no account should bat(s) be handled by anyone other than a licensed bat worker.

Failure to stop work and take advice in the event of finding bats may result in a breach of the law under the Wildlife and Countryside Act 1981 (as amended) under Section 9 and under the Conservation (Natural Habitats & c) Regulations [Regulation 39].

The conclusions and recommendations in this report in respect of protected species are based upon results from a survey in September 2018. This data will only be of use until July 2019 after which, in the absence of works being started or completed, further surveys to establish the position and possible changes in status will be necessary to ensure all activities are informed and guided by recent data.

6. REFERENCES

Bat Conservation Trust 2016 - *Bat Survey Guidelines (revised),*

JNCC (2004) - *Bat Workers Manual* Third Edition.

7. APPENDICES

Appendix 1: Results
Appendix 2: Images
Appendix 3: Legislation and Policy Guidance
Appendix 4: Ecology of protected species

APPENDIX 1 - RESULTS

Key:

Pip *spp* = pipistrelle species
Pip 45 = Common pipistrelle (*Pipistrellus pipistrellus*)
Pip 55 = soprano pipistrelle (*Pipstrellus pygmaeus*)
BLE = brown long-eared (*Plecotus auritus*)
Myotid = one of Myotis genera of bats
Noctule = noctule bat (*Nyctalus noctula*)
HNS = heard not seen
NEL = not echo locating
FP = feeding pass
EL = echolocation
CP = commuting pass

TABLE 1 - Emergence survey on 24th September 2018

RS – rear of building		
time	**species**	**activity**
19.30 – 20.20	*Common pipistrelle*	Frequent FPs & CPs around flats with occ. social calls
19.40	*Soprano pipistrelle*	Brief FP around flats opposite

BJS – front of building		
time	**species**	**activity**
	none	*No bat activity recorded during emergence survey*

TABLE 2 – Timing & Conditions, Emergence Survey

	Time	**Temperature**	**Wind**	**Cloud cover**	**Precipitation**
Start	18.50	11c	none	0	none
End	20.00	8c	slight	0	
Sunset	19.02				

APPENDIX 2 – IMAGES OF PROPERTY

Fig 1: location of property



Fig 2: front aspect



Fig 3: rear aspect



Fig 4: loft of pitched roof



Fig 5: side cavity



Fig 6: side extension

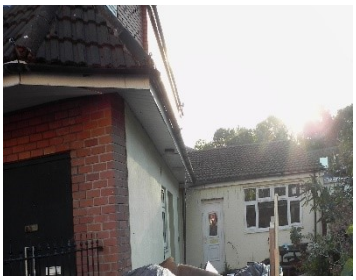

Fig 7: loft space of stand alone extension



Fig 8: loft space of flat beneath main building



APPENDIX 3 - LEGISLATION AND POLICY GUIDANCE

Bats are offered special protection under the following legislation:
The Wildlife and Countryside Act 1981 (as amended) Schedule 5, Section 9. This Act transposes into UK law the **Convention on the Conservation of European Wildlife and Natural Habitats** (commonly referred to as the "Bern Convention". The WCA was recently amended by the **Countryside and Rights of Way [CroW] Act 2000.** This makes it is an offence to:

- Intentionally kill, injure or take any species of bat [Section 9(1)].
- Possess or control any live or dead specimens or anything derived from a bat [Section 9(2)].
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat [Section 9(4)(a)]
- Intentionally or recklessly disturb a bat while it is occupying a place or structure which it uses for that purpose [Section 9(4)(b)]

The Conservation (Natural Habitats &c) Regulations 1994 (The Habitats Directive) transposes into UK law **Council Directive 92/43/EEC** of 21st May 1992 on the **Conservation of Natural Habitats of Wild Fauna and Flora** (referred to as the Habitats [and Species] Directive). Bats are listed on Annex II and Annex IV of the Directive. Inclusion in Annex II serves to underline their conservation significance; inclusion in Annex IV (European Protected Species) means that member states are required to put into place a system of strict protection as outlined in Article 12. This is done through inclusion in Schedule 2 of the Regulations. Regulation 39 makes it an offence to:

- Deliberately capture or kill a bat [Regulation 39 (1)(a)]
- Deliberately disturb a bat [Regulation 39(1)(b)]
- Deliberately damage or destroy a breeding site or resting place of a bat [Regulation 39(1)(d)].

Wild Birds: Wildlife legislation through the Wildlife & Countryside Act 1981 states it is an offence to

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built
- Intentionally take or destroy an egg of any wild bird

The Wildlife & Countryside Act 1981 has several subsequent amendments the most important being the Countryside and Rights of Way Act 2000 (CROW) which under Schedule 12 of the Act strengthens the legal protection for threatened species. It also makes certain offences 'arrestable' and importantly and significantly creates a new offence of reckless disturbance. It also confers greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and also enables heavier penalties on conviction of wildlife offences. Schedule 12 amendment states:
1. In section 1(5) of the 1981 Act (offence of intentional disturbance of wild birds) after "intentionally" there is inserted "or recklessly".

Exceptions and Licencing

There are several exceptions to the provisions listed above. Licenses permit unlawful activities and are granted for certain purposes by Natural England for scientific, education or conservation purposes (including survey). The Department for Environment, Food and Rural Affairs (DEFRA) issue licenses for the purposes of "preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment" [Regulation 44(2)(e)].

APPENDIX 4 – ECOLOGY OF PROTECTED SPECIES

Bats in buildings

Buildings such as houses, barns and outbuildings provide a number of safe dry places for bats to roost. Some bats may remain in one area, others may move around as conditions change. Outbuildings and barns are often used as night roosts and shelters. Potential roost sites in houses and outbuildings are:

walls:

- behind cladding, external tiles or weatherboarding
- inside the cavity wall spaces
- at the top of solid walls

roofs:

- tunnel under the ridge tiles
- between under-felt or boards and tiles or slates
- inside roof space at ridge ends or roof junctions
- inside roof space in gaps between timber and brickwork of chimneys
- under junctions of rafters and hip beams
- at gable end wall
- lower corners of the eaves
- between loft insulation and ceiling
- space between joist and ceiling

eaves:

- between soffit and bargeboard
- behind bargeboards or fascias

There are 6 different types of roost identified (A.M. Hutson 1993). These are:

- spring gatherings (transitional)
- maternity (summer) roosts
- mating roosts
- night and feeding roosts
- pre-hibernal roosts (transitional)
- hibernation roosts

Summer roosts, found between May and August, are the most obvious. These consist almost exclusively of females, most of which give birth and raise a single young over this period. These colonies usually disperse by the autumn. Some species remain in one roost all year. Some roosts may be transitional, when small numbers are present for a limited period, usually during the spring and autumn. Night roosts are often indicated by large accumulations of insect remains and some droppings.

Most species conceal themselves in crevices and are not easy to find. The presence of droppings is a key sign to their presence. Hibernating bats however leave little or no trace of their presence. Other possible signs are a characteristic odour. Also, a clean or polished area at a place through which light can enter may suggest an entrance/exit hole.

The commonest bats, *Pipistrellus* sp and *Plecotus auritus* (brown long-eared), are the most commonly occurring in buildings. The former uses crevices, cavity walls and behind tiles and boarding as their roost spots. The latter prefer open roof areas, and their droppings are often concentrated below ridge beams, where they roost, and scattered about the loft area.

Other species found in the area are *Nyctalus noctula (*Noctule), *Myotis brandtii* (Brandt's), *Myotis mystacinus* (whiskered), *Myotis nattereri* (Natterer's) and *Myotis daubentonii* (Daubenton's). Of these species whiskered and Natterer's are the most likely to use buildings but are not commonly found on such sites. It is however likely these species are all under recorded throughout Britain.

Bats in linear landscapes

All UK bats feed on insects that are associated with trees. Their importance varies with species, season and foraging behaviour. Bats use trees, tree lines and hedgerows and other linear features to navigate at night. Loss or damage to these features affects their ability to commute safely and efficiently between roosts and

feeding sites. A gap of as little as 10 metres may force bats to take different routes and even change roosting sites. Linear habitats and features such as tree lines, banks, ditches, watercourses and edges, and hedgerows are important areas for foraging and for shelter against wind or from predators. Loss of connectivity and fragmentation of these features may cause bats to abandon roost sites.
Trees, houses, barns and outbuildings provide a number of safe dry places for bats to roost.
Some bats may remain in one area, others may move around as conditions change. Trees, outbuildings and barns are often used as night roosts and shelters. There are 6 different types of roost identified (A.M. Hutson 1993). These are:

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Most species conceal themselves in crevices and are not easy to find. The presence of droppings is a key sign to their presence. Hibernating bats however leave little or no trace of their presence. Other possible signs are a characteristic odour. Also, a clean or polished area at a place through which light can enter may suggest an entrance/exit hole.
Bats are a European Protected Species (**Refer to Appendix 3 - Legislation and Policy Guidance).**