Haydock House, Wilpshire

Bat Survey Report

July 2015

Control sheet

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Contents

1. Introduction

1.1 Bowland Ecology Ltd was commissioned by Peter Hitchin Design Ltd. to undertake a bat survey of Haydock House, Wilpshire (NGR: SD 68198 30924). The site is subject to proposals for an extension to the eastern elevation of the building

1.2 The site is located between Wilpshire and Blackburn, Lancashire with residential properties located to the east, south and north of the site. To the west the habitat is predominantly rural with scattered farms and fields (Figure 1).

1.3 The aim of the survey was to make an assessment of the value of the site for bats, with particular reference to legal requirements and potential development constraints.

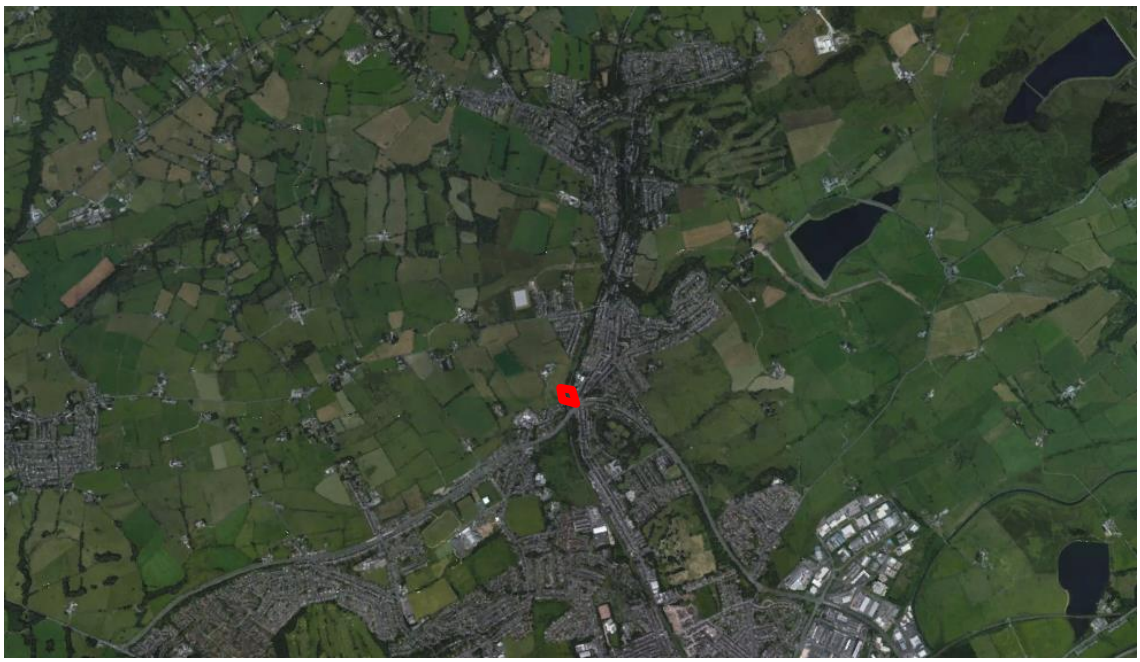


Figure 1. Site location

2. Methodology

Desk Study

2.1 A desk study for bat records was undertaken using online recourses to check for bat records within a 10 km grid square of the site.

Internal and External Building Inspection

2.2 A daytime internal and external inspection of the building was undertaken on the 19th June 2015 by Mark Breaks BSc (Hons). The survey followed the Bat Conservation Trust 'Good Practice Guidelines' (Hundt L 2012). The weather during the inspection was dry and mild with patchy sunshine and a light breeze.

2.3 Building sections surveyed are shown on the site plan in Appendix B.

2.4 The internal inspection involved a detailed search of the loft space checking for bats and field signs of bats including; bat droppings, urine stains, bat feeding remains (moth wings, insect cases), bat staining, a distinctive smell of bats, scratch marks and smoothing of surfaces, which would indicate a roost site.

2.5 The external inspection involved checking for field signs of bats on the external features of the building with particular attention being paid to windowsills, windowpanes and ledges, walls, doors and the ground around the building. An assessment of the potential of the building to support roosting bats was also made during the survey i.e. searching for suitable roosting crevices. High power torches (Cluson Clu-lite 500,000 candlepower), and close focus binoculars were used to aid the survey.

2.6 Natural England's Bat Mitigation Guidelines (2004) state that a significant bat roost can normally be determined on a single visit at any time of the year, provided that the entire structure is accessible and that signs of bats have not been removed by others.

2.7 Using the information collected during the internal and external assessment, a 'roost potential' score was given to building according to the criteria shown in Appendix D (Hundt L 2012).

2.8 An assessment of the suitability of the site for bats was undertaken, including the identification of potential foraging and roosting areas, potential flight lines and important commuting corridors.

Dusk Emergence Survey

2.9 The dusk emergence survey was undertaken by Mark Breaks BSc (Hons) and Laura Bennett MSc, MA (Hons), ACIEEM on the 30th June 2015 with the aid of heterodyne detectors (Bat Box Duet and Petterssen D230).

2.10 The survey commenced at 21:30 and ended at 23:15. Sunset was at 21.44. The weather during the survey was dry with 0% cloud cover and no breeze. The minimum temperature was 25 ˚C.

2.11 The surveyors positioned themselves to get the best coverage of the site at locations A and B (Appendix C), and used the results of the daytime building inspection to focus in on the areas of the site with most potential as roosting habitat.

3. Results

Desk Study

3.1 Online resources[1] displayed a number of records for the 10 km grid square (SD63) as well as neighbouring 10 km squares (SD62, SD72 and SD73) between 1990 and 2015, therefore these species could potentially be present if suitable habitats are found on site;

- Soprano Pipistrelle *(Pipistrellus pygmaeus)* – three recorded in SD63, seven in SD62,one in SD72 and 1 in SD73,
- Noctule (*Nyctalus noctula*) – two recorded in SD63, six in SD62 and one in SD72,
- Brown Long-eared Bat *(Plecotus auritus)* – one recorded in SD63 and 14 in SD62,
- Myotis species – three recorded in SD63 and 29 in SD62,
- Daubenton's bat (*Myotis daubentonii*) – 17 recorded in SD62,
- Natterer's bat (*Myotis nattereri*) – 11 recorded in SD62,
- Common Pipistrelle *(Pipistrellus pipistrellus)* – over 70 recorded in SD62 and 28 records in SD72.

External Inspection

3.2 A two storey stone building with a pitched tiled roof. The building is a residential property and all rooms within the building are heated. The roof was observed to be in good condition with no loose roofing tiles and no gaps along the ridge tiles. Wooden, well-sealed soffits are present on all elevations of the building, with a narrow air vent present on the outer edge of the soffits. The PVC windows were found to be well sealed.

Figure 2: Eastern Gable

Figure 3: Upper storey windows and overhanging roof

[1] Data courtesy of the NBN Gateway with thanks to all the data contributors. The NBN and its data contributors bear no responsibility for the further analysis or interpretation of this material, data and/or information.

Figure 4: Eastern Gable

Figure 5: Air vent on edge of soffit

Internal Inspection

3.3 A large, well-insulated, sealed loft void is present within the building. The roof was observed to be well lined with timber beams. The internal area was well ventilated allowing air and small amounts of light into the roof void. No bats or field signs of bats were recorded during the internal inspection, however, brown rat (*Rattus norvegicus*) and house mice (*Mus domesticus*) droppings were noted in the loft space. No obvious bat roosting habitat or crevices that could be utilised by bats were recorded during the survey.

Figure 6: Internal loft space

Figure 7: Internal timber supporting beams

Figure 8: Brown rat droppings

Evening Emergence and Activity Survey

3.4 The evening emergence survey of the building was carried out on the 30th June 2015. The results of the emergence survey are described below and the foraging/commuting flight lines are shown in the bat emergence survey plan in Appendix C.

3.5 During the survey the surveyor at location A (NGR: SD 68218 30894) recorded the first bat activity at 22:23. It was a single common pipistrelle commuting in a north east to south west direction. At 22:36 a common pipistrelle was recorded commuting in a southerly direction. No bats were observed emerging from building throughout the survey.

3.6 The surveyor at location B (NGR: SD 68212 30928) recorded the first bat activity at 22:19, a single commuting common pipistrelle, however, it was not seen. At 22:23 a common pipistrelle was observed commuting in a southerly direction. A single common pipistrelle was recorded foraging in the area between 22:31 and 22:56. No bats were observed emerging from the building throughout the survey.

4. Conclusions and Recommendations

Bats

4.1 No evidence of use by roosting bats was recorded during the internal and external building inspection, and the building has no suitable structural features that could be utilised by roosting bats.

4.2 Due to the lack of evidence of bats emerging from the building and lack of suitable roosting habitat, it is considered that the building is not suitable for use by roosting bats.

4.3 Bat activity within the surrounding area was minimal with only small numbers of common pipistrelle recorded commuting along the eastern elevation of the building.

4.4 The risk of impacts to bats within the site is considered to be low/negligible on completion of the emergence survey. However, as bats are mobile species and may utilise the building occasionally at any time, as a precautionary measure, Reasonable Avoidance Measures are recommended. Reasonable Avoidance Measures are considered appropriate to mitigate the risk of encountering a low number of bats within the building and reduce any encounters to an incidental level.

4.5 If bats are found or suspected, as a legal requirement, works in that area should cease immediately until further advice has been sought from Natural England or the scheme ecologist. The following recommendations should also be adhered to throughout the duration of the project;

- Before any work proceeds, all contractors should be made aware of the possible presence of bats and the signs to look for (Appendix E);
- All soffits, barge boards, and roofing material removal work is to be undertaken by hand;
- During the works to remove soffits, barge boards and roofing material, a suitably licensed ecologist must be on call, so that if a bat is encountered or suspected all works must cease and the ecologist contacted immediately so they can attend site, check the health of the bat and then place it in a suitable bat box.

Further survey

4.6 If the development is delayed for any reason it is recommended that if more than one year elapses before work commences, a re-survey of the site should take place.

5. References

A.J. Mitchell-Jones. (2004) *Bat Mitigation Guidelines*, Natural England

JNCC. (2004) *The Bat Workers Manual*. 3rd Edition, Joint Nature Conservation Committee

Hundt L (2012) *Bat Surveys: Good Practice Guidelines,* Bat Conservation Trust

https://data.nbn.org.uk/Reports/Sites/SD62/Groups

https://data.nbn.org.uk/Reports/Sites/SD63/Groups

https://data.nbn.org.uk/Reports/Sites/SD72/Groups

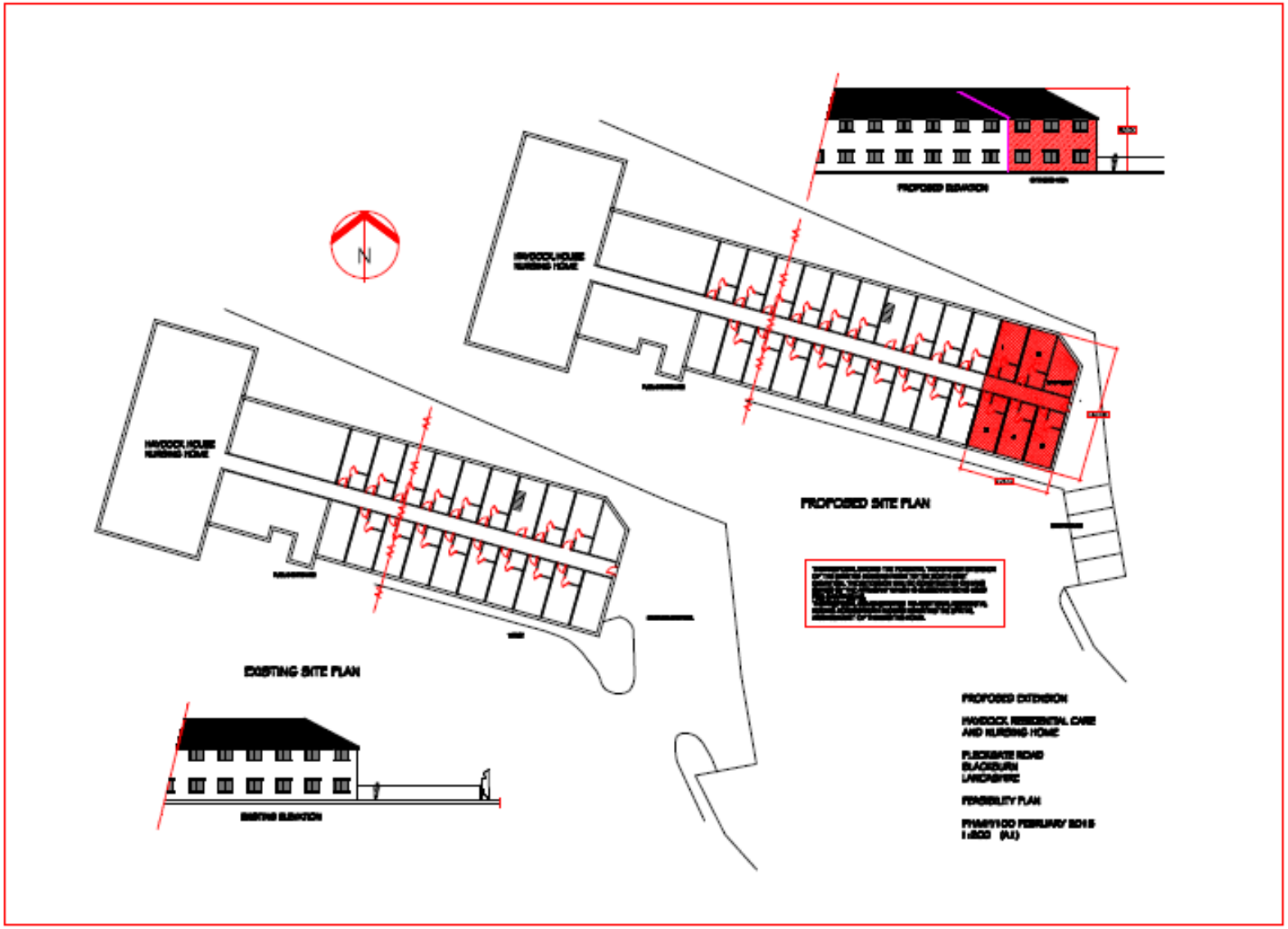
https://data.nbn.org.uk/Reports/Sites/SD73/Groups

Appendix A - Legal Information [2]

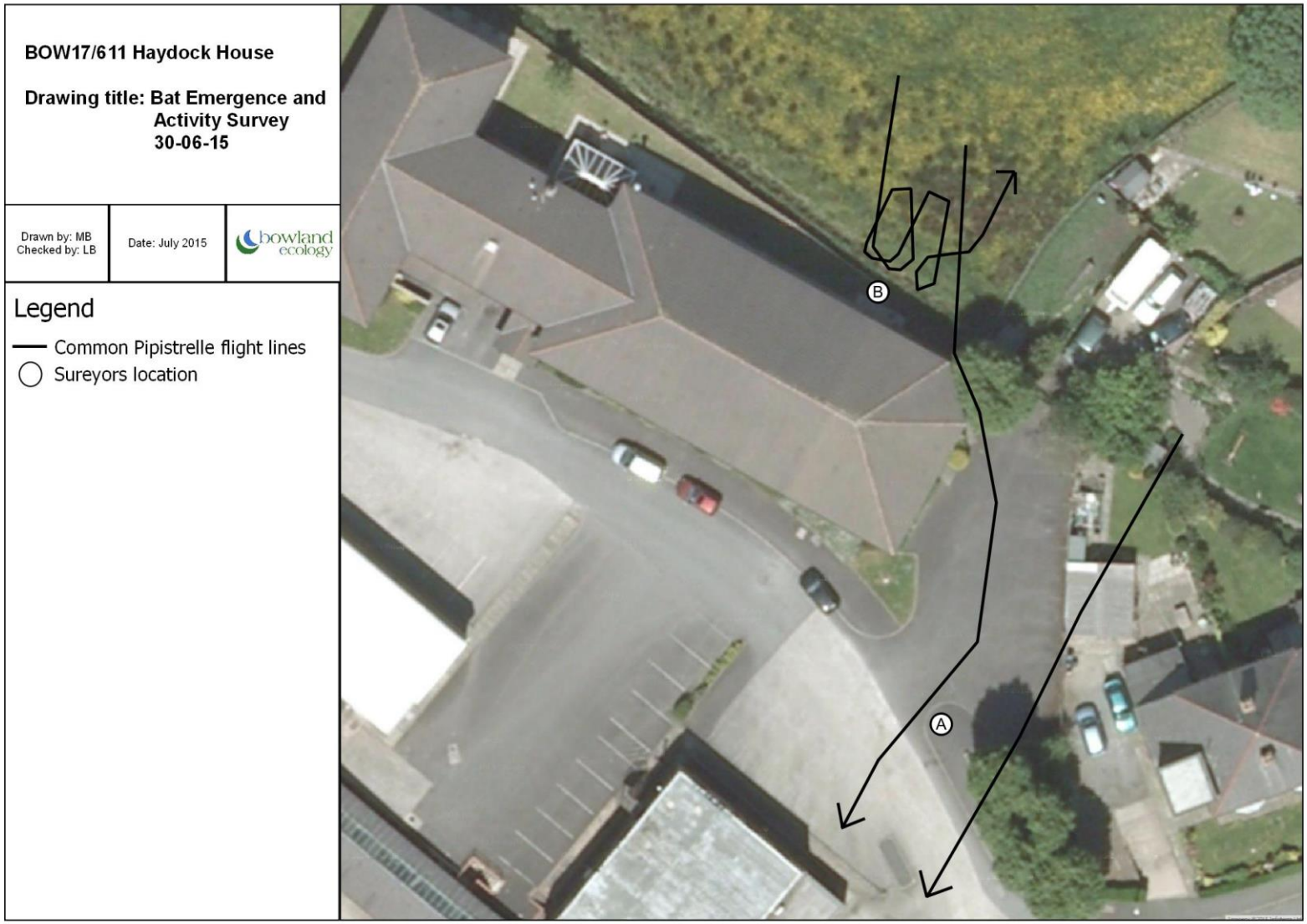
Species	Legislation	Offences	Notes on licensing procedures and further advice
Species that are protected by European and national legislation			
Bats *European protected species*	Conservation of Habitats and Species Regulations 2010 Reg 41	Deliberately[1] capture, injure or kill a bat; Deliberate disturbance[2] of bats; Damage or destroy a breeding site or resting place used by a bat. The protection of bat roosts is considered to apply regardless of whether bats are present.	An NE licence in respect of development is required in England. *European Protected Species: Mitigation Licensing- How to get a licence* (NE 2010) *Bat Mitigation Guidelines* (English Nature 2004) *Bat Workers Manual* (JNCC 2004)
	Wildlife and Countryside Act 1981 (as amended)[4] S.9	Intentionally or recklessly[3] obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.

[2] This report provides guidance of potential offences as part of the impact assessment. This report does not provide detailed legal advice and for full details of potential offences against protected species the relevant acts should be consulted in their original forms i.e. The Wildlife and Countryside Act, 1981, as amended, The Countryside and Rights of Way Act 2000, The Natural Environment and Rural Communities Act, 2006 and The Conservation of Habitats and Species Regulations 2010.

Appendix B - Pre-application Site Drawing



Appendix C - Bat Emergence Survey Plan



Appendix D - Bat Potential Category Descriptions for Buildings

Category (Potential to support roosting bats)	Description (Categories for Buildings)
Negligible potential	Buildings with no features capable of supporting roosting bats. Often these buildings are of a 'sound' well-sealed nature, or have a single skin and no roof void. They tend to have high interior light-levels, and little or no insulation. Buildings without any roofs may also fall into this category.
Low potential	Buildings with limited features for roosting bats (e.g. shallow crevices where mortar is missing between building blocks/bricks). They may have open locations which may be subject to large temperature fluctuations and bat-access points may be constrained. No evidence of bats found (e.g. droppings / staining). Buildings may be surrounded by poor or sub-optimal bat foraging habitat. No evidence of bats found.
Moderate potential	Buildings with some features suitable for roosting bats. Buildings usually of brick or stone construction with a small number of features of potential value to roosting bats e.g. loose roof / ridge tiles, gaps in brickwork, gaps under fascia boards, and/or warm sealed roof-spaces with under-felt. These buildings may be used as occasional or transient roosts in the summer, but are unsuitable for large colonies. No evidence of bats found.
High potential	Buildings with a large number of features or extensive areas of obvious potential for roosting bats. Generally they have sheltered locations, with a stable temperature regime and suitable bat-access points. Could be suitable for a maternity roost. No evidence of bats found.
Confirmed roost	Bats discovered roosting within the building, or recorded emerging / entering the building at dusk / dawn. Building found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.

Appendix E - Information Sheet for Contractors on Bats

Legislation Covering UK Bat Species

All UK Bat species are protected by European and UK law, in practical terms this means it is an 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

Penalties on conviction: the maximum fine is £5,000 per incident or per bat (some roosts contain several hundred bats), up to six months in prison, and forfeiture of items used to commit the offence, e.g. vehicles, plant, machinery.

Defenses include:

1. Tending/caring for a bat solely for the purpose of restoring it to health and subsequent release
2. Mercy killing where there is no reasonable hope of recovery (provided that person did not cause the injury in the first place – in which case the illegal act has already taken place).

Where bats can be found:

- Free hanging from ceilings/pipes,
- Under barge boards,
- In cavity walls,
- Under roof coverings,
- Between beams,
- In cracks in stone or concrete,
- Behind peeling paint/wall coverings,
- In holes in walls or pipes,
- Gaps behind window frames, door frames, lintels,
- Behind ivy-cladding,
- In trees (cracks, holes, ivy cladding).



Signs to Look for:

Live or Dead Bats – these can be found in various places in buildings or within trees.

Bat Droppings – the presence of droppings indicate a bat roost and can be found in all the places mentioned above and on the ground beneath these features. Bat droppings look like mouse droppings but will crumble between your fingers (they are dry and made entirely of insects).

Procedure if bats are found:

If you find a bat or suspect bats to be present you must **stop works immediately** and contact **the project manager**. Contractors should avoid handling bats as a very small number of bats in the UK have been identified as carrying a rabies virus called European Bat Lyssavirus (EBLV). If handling is absolutely essential to move bats away from harm, gloves must be worn.

If bat is in imminent danger
Stop works **- - - - - >** Gloves on - - - - - - - - > place bat in a box/safe place - - - - - - -> Call Bowland Ecology (Tel. 01200 446777)

Bat is not in immediate danger
Stop works - - - - - > Call Bowland Ecology (Tel. 01200 446777)