Michael Gavaghan Wildlife Consultancy

370 King Street
Fenton
Stoke-on-Trent
Staffordshire
ST4 3DB
Tel: 01782 313544

Internal and External Inspection Survey for Bats & Birds

Hurst Farm, Derbyshire Level.

December 2011

Notice to readers

This report has been prepared by Michael Gavaghan Wildlife Consultancy with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Institute of Ecology and Environmental Management (www.ieem.org.uk).

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Capability

Matthew Haydock – HND, ND, MIEEM, Natural England Bat Licence Number 20101027. Matthew is an ecologist with five years' experience of environmental consultancy work. He holds a HND in Environmental Management with distinction. Matthew is an experienced bat surveyor with competency in activity surveys, dawn and dusk bat roost assessments, daytime surveys for bat field signs, assessments of buildings and trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required. Matthew holds a Natural England and Countryside Council for Wales licence, since 1997, to disturb bats for the purposes of science and education or conservation and has held Development Licences to permit development works affecting bats. Matthew has been an active bat group worker with the Staffordshire and Derbyshire Bat Group since 1997, conducting various surveys throughout Staffordshire and Derbyshire. He also works alongside the Bat Conservation Trust with various projects such as the National Bat Monitoring Project, and is now a corporate member of the Bat Conservation Trust.

Non-technical summary

An internal and external inspection survey for bat roost, owl and bird potential was carried out on 13th December 2011 of an existing Coach House on a site known as Hurst Farm, Derbyshire Level, Glossop, High Peak SK13 7PT.

The site contains redundant agricultural buildings which are surrounded by residential housing, gardens, hedgerows and areas of hardstanding. The building will be redeveloped into dwellings.

The survey found that the existing coach house on site showed no sign of bat activity. The building is largely unsuitable for bats with only a few features suitable for roosting bats. These features where checked using an endoscope during the daytime survey although this method alone cannot be relied upon for accurate results though two mitigation strategies have been provided for this site (Please see 6.0 Impacts & Recommendations) for further guidance. The survey did not find any evidence that the buildings are used by Owls and the potential for Owls to do so is regarded as negligible. During the inspection, no active birds' nests were identified. Therefore it has been concluded that there will be no impact with respect to Owls or nesting birds.

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1.0 Introduction

Background

1.1 Michael Gavaghan Wildlife Consultancy was commissioned to undertake an internal and external inspection survey for the bat roost potential of existing coach house on a site known as Hurst Farm, Derbyshire Level, Glossop, High Peak SK13 7PT.

1.2 The site comprises areas of hardstanding, grassed lawn and hedgerow at the front and back of the buildings. It is proposed that the buildings are to be redeveloped into a dwelling.

1.3 As defined in Planning Policy Statement 9 (ODPM, 2005) Biodiversity and Geological Conservation, sites of biodiversity conservation value and protected species are material considerations in the planning process.

1.4 The aim of the survey was to undertake an appraisal of the buildings to establish the following:

- Presence/absence of bat roosts
- Status of roosts, if present
- Whether additional surveys are required
- Whether a European Protected Species (EPS) licence is required to ensure legal compliance
- Which type of mitigation measures would need to be employed.

Site Characteristics

1.5 The site consists of hardstanding, amenity grassland, shrubbery and semi-mature trees.

1.6 The site is bordered by residential buildings, agricultural fields, woodland and hedgerows.

2.0 Legislation and Status

2.1 All species of bat are listed in Schedule 5 of The Wildlife and Countryside Act (1981) and as such receive protection under Section 9 of this Act. This has been amended several times, most recently by the Countryside and Rights of Way Act 2000, which added 'or recklessly' to Section 9(4) (a) and (b). In summary, it is a criminal offence to:

- intentionally kill, injure or take a wild bat
- be in possession of, or control, any live or dead wild bat or part of, or anything derived from a wild bat
- intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection
- intentionally or recklessly disturb any wild bat whilst it is occupying a structure or place that it uses for shelter or protection
- transport for sale or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

2.2 All species of bat are also listed in Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations (known as the Habitats Regulations) and as such receive protection under Regulation 39 of these Regulations, making it an offence to:

- deliberately capture or kill a bat
- deliberately disturb a bat
- damage or destroy a breeding site or resting place of a bat
- keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

2.3 The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is an offence to possess, sell or offer, or transport for sale any European species of bat or any part derived from such a species. These Regulations also remove the 'incidental result defence'. In other words, it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity. Natural England can grant European Protected Species (EPS) licences in respect of development to permit activities that would otherwise be unlawful.

2.4 Under Section 40 of the Natural Environment and Rural Communities Act (2006), public bodies, including Local and Regional Planning Authorities, have a duty to 'have regard' to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England. This is known as The England Biodiversity List, all of which make up the UK BAP Priority Species. Regional Planning Bodies and Local Planning Authorities will use it to identify the species that should be afforded priority when applying the requirements of PPS9 to maintain, restore and enhance species and habitats.

2.5 Seven bat species are UK BAP (2007) Priority Species. These are:

- Brown long-eared bat
- Barbastelle bat
- Bechstein's bat
- Noctule
- Greater horseshoe bat
- Lesser horseshoe bat
- Soprano pipistrelle

2.6 Two bat species are recorded within 2 km of the site. These are:

- Common pipistrelle
- Daubenton's bat

3.0 Methodology

Inspection Survey

3.1 The internal and external inspection survey was conducted on 13th December 2011. Weather conditions on the day of the survey were overcast with a light breeze and a temperature of 4 °C.

3.2 All bat species resident in the UK have been recorded using buildings and built structures, e.g. bridges, at some time during the year (Bat Conservation Trust, 2007). Buildings were inspected externally and internally, where access was available, for signs of bat activity. These typically include bat presence, droppings, feeding remains, urine stains and grease marks. Equipment used to aid the survey included low and high-powered torches, ladders, binoculars and an endoscope.

3.3 Notes were made on the following in accordance with the guidelines published by the BCT (2007) for the surveying of buildings and built structures:

- Type and age of building
- Type of construction
- Presence of potential roost features, e.g. hanging tiles, raised tiles, roof voids
- Information or evidence of work having been undertaken that could affect use of the structure by bats
- Amount and location of evidence of bats such as presence of live or dead bats, droppings, grease marks, urine stains, characteristic smell of bats.

3.4 In the absence of any evidence, structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience. For example, a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential. Conversely, a pre-20th-century or early 20th-century building with many features suitable for use by bats close to good foraging habitat would have high potential.

Nomenclature

3.5 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. A list of all species recorded on site and those mentioned in the text but not necessarily occurring on site together with scientific names is given in *Appendix 1*. Vascular plants and Charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2008), with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

4.0 Results

Inspection Survey

Surrounding Landscape

4.1 The site and surroundings provide potential foraging habitat for a number of bat species. The adjacent hedgerows and gardens could be used by foraging bats. The surrounding landscape comprises residential buildings and gardens and is likely to support bats, although hedgerows and residential gardens are all potential feeding and commuting areas for bats.

Building 1

The existing coach house has a gable ended slate roof with a stone structure. The stone structure is in fairly good condition, providing little opportunity for bats or birds to inhabit due to low number of crevices for bats to inhabit what crevices that were noticeable were investigated with the aid of endoscope with care and vigilance.

The roof of the building is slated and has few raised or dislodged tiles though the gable ended coach house showed missing mortar which would provide access into the building what raised tiles were evident and were missing mortar was noted these were inspected for bat activity i.e. droppings though none were identified during the inspection. Moss was noticeable accumulating on the slated roof covering up any potential raised tiles and ornamental climber was dominating North West elevation of the building.

All doors and windows were in good condition providing no potential opportunities for bats, birds or owls to gain access to the building.

No bat droppings, scratch marks or oil marks from fur were evident during the external inspection (note that the external environment can remove evidence of bat activity).

4.2 The internal inspection of the coach house is divided up into three separate rooms on the ground level and two small roof voids. The three ground rooms are currently used as storage, the inspection found part of the roofing was visible by the damaged ply board, during the inspection a small amount of crevices were visible for potential bat roost opportunity these were inspected with care and vigilance using a video endoscope to locate any bat activity during this inspection no bat activity was identified. The two small roof voids were also inspected for bat potential and activity the roof voids showed little opportunities for bats to utilize due to the lack of crevices and the high density of cob webs as with the ground floor inspection the roof void was check for any signs of bat activity.

No bat droppings, scratch marks or oil marks from fur were evident during the external inspection.

5.0 Evaluation

5.1 A summary of the results and an evaluation of coach house potential to support bat roosts is presented in Table 1.

Table 1: Classification of roost potential in buildings

Building Number	Roost Potential	Rationale
1	**Low**	Shows small amount of potential for bats due to no evidence of bats using the coach house and the few roosting opportunities for bats.

6.0 Impacts and Recommendations

Impacts

6.1 The farm buildings are to be redeveloped into a dwelling. The following potential impacts have therefore been identified:

- Coach House shows limited opportunities to support bats; therefore, the impact is regarded as low.

Recommendations

- If redevelopment is programmed for winter (October to April inclusive), it is proposed that a method of soft stripping the residential property and garage under an ecological watching brief is undertaken, since this is the time when bats are least likely to be present within the building. As a precaution, it is also recommended that the roof tiles are removed by hand, as there may be crevices which could not be viewed from the ground. The ecologist would then check within any crevices exposed, such as wall cavities and underneath the wall plate for any evidence of bats. Once the bat ecologist is satisfied that all potential bat roosting points have been removed/checked, the building can be demolished without further ecological constraints.

- If redevelopment takes place outside the winter period (May to September) it is proposed that a pre demolishment works a dusk and dawn within 24 hour and a further dusk survey is carried out by suitably qualified bat ecologists.

- If a bat roost is discovered during the watching brief or survey, all work must cease and it may be necessary to undertake further surveys and seek advice from Natural England in order to commence with the demolition works

New Development

- Michael Gavaghan Wildlife Consultancy recommends that all new re/developments include small access points suitable for bat access, wall mounted bat boxes or '1FR' style bat tubes rendered into new buildings. Further information of providing access for roosting bats can be found on the Bat Conservation Trust website http://www.bats.org.uk/pages/new_build.html and within Appendix 2. It is recommended that bat boxes are installed within trees surrounding the site, such as the Schwegler 2F-DFP.

- The landscaping of the proposed development should also take into consideration bats and other wildlife and it is recommended that only native tree and shrub species are planted. In particular, no plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 should be planted during the landscaping of this development. For further details of Schedule 9 plants visit the Defra website: www.defra.gov.uk/wildlife-pets/non-native.

- The lighting design of the new development should be considered at an early stage; light spill should be avoided on to nearby trees and hedges/shrubs and any security lighting should be on a timer to prevent over lighting. Security lighting should also face down and not spill onto nearby habitats.

7.0 References

Bat Conservation Trust (2007). *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust: London.

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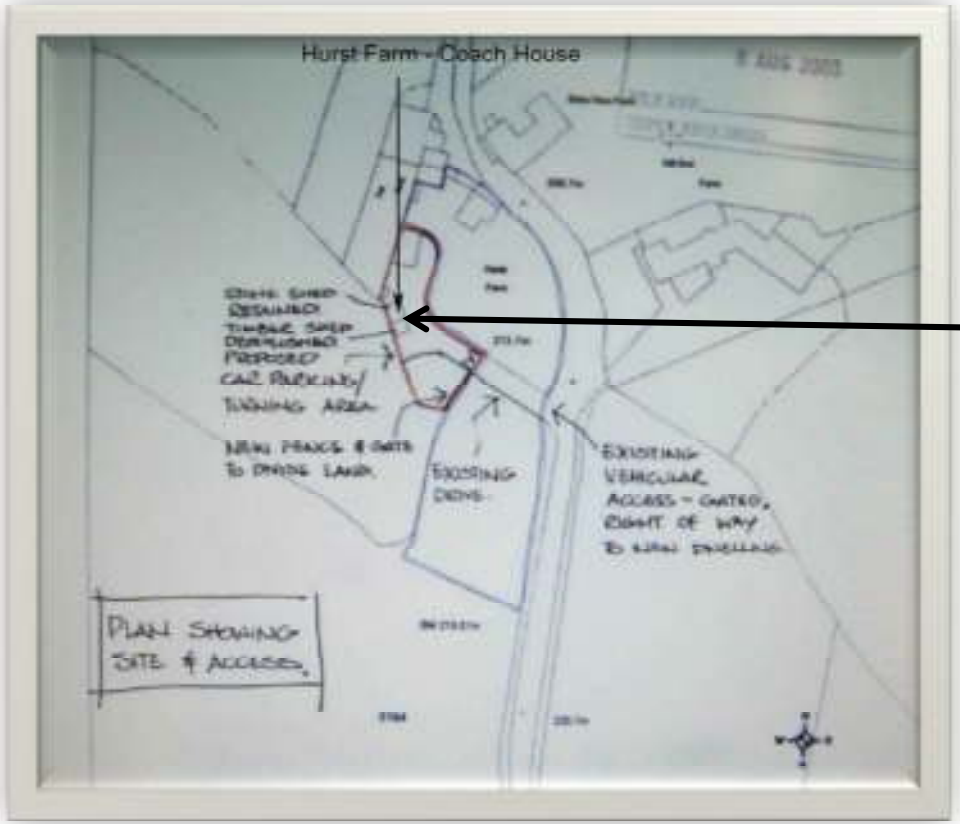
Wildlife and Countryside Act 1981 (and amendments) (c.69). London: HMSO.

8.0 Plans

Building Location Plan





9.0 Photographic Plates



Plate 1: showing Coach House to be re-developed.



Plate 2: showing Coach House potential access point for bats and birds



Plate 3: showing Coach House internal view



Plate 3: showing Coach House potential roosting and nesting opportunity

10.0 Appendix 1

Flora and Fauna mentioned in text

(Not necessarily occurring on site)

Mammals	
Barbastelle bat	*Barbastella barbastellus*
Bechstein's bat	*Myotis bechsteinii*
Brown long-eared bat	*Plecotus auritus*
Soprano pipistrelle	*Pipistrellus pygmaeus*
Common pipistrelle	*Pipistrellus pipistrellus*
Greater horseshoe bat	*Rhinolophus ferrumequinum*
Lesser horseshoe bat	*Rhinolophus hipposideros*
Daubenton's bat	*Myotis daubentonii*
Whiskered bat	*Myotis mystacinus*
Brandt's bat	*Myotis brandtii*