Bat Day Time Survey

Stable Block at Cowdale Hall, Buxton, Derbyshire.

January 2012

Notice to readers

This report has been prepared by Absolute Ecology 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).

Capability

Matthew Haydock – HND, ND, MIEEM, Natural England Bat Licence Number **20111404**. 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

Absolute Ecology was commissioned to undertake a bat and bird survey of a stable block at Cowdale Hall, Cowdale, Buxton, Derbyshire, SK17 9SE, to inform a proposed planning application to convert the stable block into a dwelling. The following report details the legislation protecting bats and our methodology, findings and recommendations.

The Stable block was considered to have low potential to support roosting bats, due to the low roosting opportunities such as gaps and the gaps that were available were confidently inspected with care and diligence. During the inspection no evidence of bats was identified, it is therefore considered due to the described, no further bat survey is considered necessary. The building may be redeveloped as planned.

During the inspection for bird and owl activity no evidence was identified that the stable block has been used for nesting by birds or owls it is therefore concluded that the potential impact on the species is considered to be low.

Contents

1.0 Introduction

Background

1.1 Absolute Ecology was commissioned to undertake an internal and external inspection survey for the bat roost potential of an existing stable block on a site known as Cowdale Hall, Cowdale, Buxton, Derbyshire, SK17 9SE, to inform a proposed planning application to convert the stable block to dwellings.

1.2 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.

1.3 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

1.4 The stable block is a small stone and breeze blocked building located within a complex of farm buildings comprising Cowdale Hall. The farm is immediately adjacent to the small hamlet of Cowdale, approximately 2 km south-east of Buxton. The surrounding buildings are a mixture of large agricultural barns, smaller converted barns and farmhouses. The farm complex is connected by trees to an extensive broad-leaf wooded river valley. Several active quarries lie along the valley. The remainder of the surrounding environment comprises mixed-use agricultural land and scattered trees. Field boundaries are generally stone walls rather than hedgerows, which are characteristic of the Peak District.

The proposed planning application is for conversion of the stable block into one dwelling for letting.

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

- Common pipistrelle
- Brown Long-eared
- Whiskered bat

3.0 Methodology

Inspection Survey

3.1 The internal and external inspection survey was conducted on 12th January 2012, which was a cloudy, dry day with a temperature of approximately 6ºC.

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 property is located in Buxton; a suburban area. There was plentiful habitat in the local area comprising mostly of gardens and agricultural land. There were numerous other houses and trees nearby which may provide potential bat roosting sites

Building 1

4.2 The external inspection of the stable block which is a mixed structure with stone and white washed breeze block showed low level of potential roosting opportunity for bats, the roofing is gable ended, cement single layered roofing boarding, the frontage of the building is partially open fronted, though at one side is stable doors which is often left open in summer also with an intact window. The open fronted and potentially the stable doors would provide sufficient access for bats and birds to gain access to the internal of the stable.

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).

The internal inspection of the stable block is divided into two rooms and entrance point from the open front. The inspection found that one room was actively used by horses and the second used as storage for the likes of hay and straw. The stable block had no roof void to inspect. Each room was investigated for signs of bat activity and potential roosting opportunities as well as for nesting birds and owls. The stone work and breeze blocked structure of the stable block showed little potential for roosting bats due to dominates of cob webs and cement between each of the stone walling. Each crevice that showed potential was intensively investigated with care and diligence by the use of a seesnake 2 video endoscope, this inspection found no evidence to suggest bat activity. The roofing of the building which is timber framed with a single layer of cement boarded roofing showed little in the way of potential to support roosting bats.

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

No bird or barn owl evidences was identified during the internal inspection.

5.0 Evaluation

5.1 A summary of the results and an evaluation of each building's potential to support bat roosts is presented in Table 1.

Table 1: Classification of roost potential in buildings

Building Number	Roost Potential	Rationale
Stable block	**Low**	The inspection of the buildings showed low potential of roosting opportunity, no bat evidence in the form of droppings was evident.

6.0 Impacts and Recommendations

Impacts

6.1 The stable is to be converted into a new dwelling. The following potential impacts have therefore been identified:

- The stable shows few opportunities to support bats, what opportunities were available were intensively inspected. No evidence in the form of droppings, scratch marks stain-age or corpses was identified during the inspection therefore the potential impact on bats is considered to be low.
- No active or old bird nests were identified during the inspection of the stable block therefore it is considered that the impact regarding birds and owls are low.

Recommendations

New Development

- Absolute Ecology recommends that all re/development 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.

- It would be highly beneficial to provide a range of nest sites near or on the new dwelling for birds to use in future. Retention of crevices within the external walls for cavity-nesting birds such as sparrows and tits would be ideal; if this is not possible, a range of wooden nesting boxes suitable for different species could be attached to the barn or nearby buildings.

- 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.

BSBI (2008). *BSBI 2007 List.* [Online]. Available at: http://www.bsbi.org.uk/html/database.html [accessed on 20th October 2010].

The Conservation of Habitats and Species Regulations 2010. SI 2010/490.

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Countryside and Rights of Way Act 2000 (c.37). London: HMSO.

Office of the Deputy Prime Minister (2005) *Planning Policy Statement 9: Biodiversity and Geological Conservation*. The Stationery Office, Norwich.

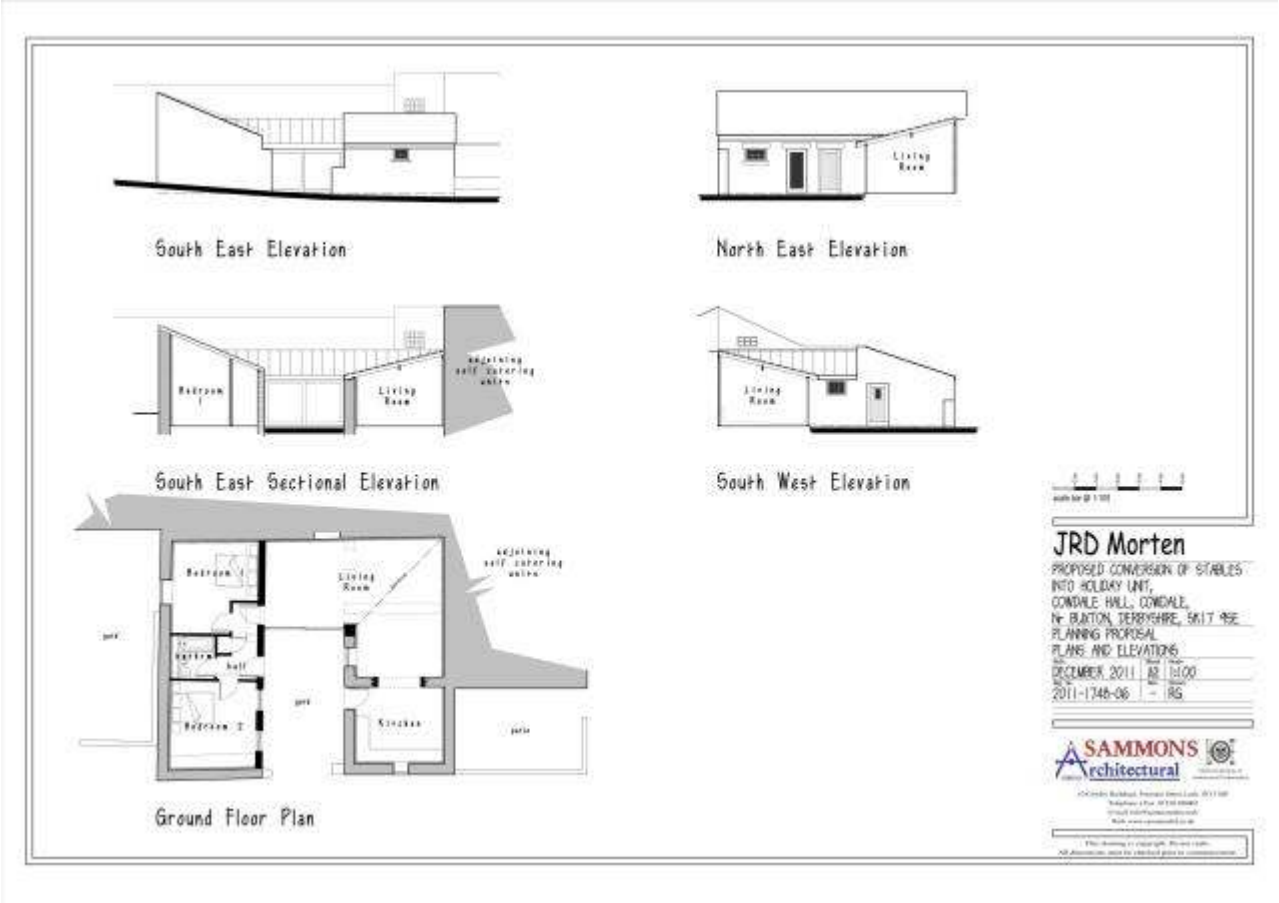
UK Biodiversity Action Plan (2007). *UK List of Priority Species.* Joint Nature Conservation Committee. [Online]. Available at: http://www.ukbap.org.uk/NewPriorityList.aspx [accessed on 20th October 2010].

Biodiversity Action Reporting System (2010). *Biodiversity Action in Staffordshire.* BARS. [Online]. Available at: http://ukbap-reporting.org.uk/plans/map_county.asp?X=%7BD7D87E4F%2D9520%2D48D6%2D93E0%2DD2698BA05B9D%7D&CTRY=%7B7C884413%2D1AC7%2D48B6%2DADCD%2D23CBA1482CD6%7D&WES= [accessed on 20th October 2010].

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

8.0 Plans

Building Location Plan



9.0 Photographic Plates

Plate 1: Showing stable to be converted into dwelling and potential access point.

Plate 2: Showing an internal view of stable block.

Plate 3: Showing a potential bat and bird inhabitation opportunity which was investigated with a video endoscope, with care and vigilance no bat activity indentified.

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*
Whiskered bat	*Myotis mystacinus*
Brandt's bat	*Myotis brandtii*