MILWARD HALL,
LEEK, STAFFORDSHIRE

SURVEY FOR BATS

Prepared for
Charles Wainwright Developments

July 2017

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1. INTRODUCTION

1.1 This report presents the results of surveys for bats carried out at Milward Hall in Leek, Staffordshire by Apex Ecology Limited. The report is based on field surveys that were carried out during May and June 2017, comprising of a visual inspection of the building for evidence of roosting bats, coupled with evening surveys to watch for emerging bats.

1.2 The project was undertaken for Charles Wainwright Developments. The proposal is to convert the building to contain 16 residential units, including extending the building to the north and reroofing. The proposals are shown on the drawing *Proposed Site Plan* produced by Croft Architecture Ltd (drawing number 2372-100, dated 5th February 2017). A planning application in relation to this has been submitted to Staffordshire Moorlands District Council (application reference SMD/2017/0460).

1.3 Milward Hall is a large two-storey building that is built from brick and has a hipped and tiled roof. It is currently vacant having been used as a youth centre until March 2015.

1.5 The building is located on Salisbury Street close to the centre of Leek. It is bordered by terrace housing to the south and west and buildings used as offices, retail and for leisure purposes to the north and east. There are few gardens or green spaces close to the building, although Brough Park lies 225m to the northeast and Westwood Recreational Ground 325m to the west. The OS grid reference for the building is SJ 9815 5646.

1.6 The report describes the methods used for the surveys and any constraints encountered, along with the results of the surveys, including a description of the building and any evidence of bats found. It then provides an assessment of the suitability of the building for roosting bats, interprets the findings in light of the proposals and makes recommendations.

1.7 Bats and their roosts are legally protected under European and domestic legislation. A summary of the key legislation protecting bats and their roosts is provided in Appendix I.

2. SURVEY METHODOLOGY

Search of Existing Bat Records

2.1 The local record centre, Staffordshire Ecological Record, was contacted for existing records of bats within a 2km radius of the site.

2.2 The results of a record search can help to set a site into the context of its surroundings, as well as provide valuable information on the known presence of bats in the local area.

Survey Methodology

2.3 An inspection of the building was undertaken followed by three evening surveys to watch for bats emerging from the building. The inspection was undertaken on the 4th April 2017, with the evening surveys carried out in May and June 2017.

2.4 Two surveyors undertook the inspection, with three surveyors undertaking each of the evening visits. The surveys were undertaken by Helen Ball, Max Robinson and Neil Watkin. Helen and Max are licensed to survey for and to handle bats:

Helen Ball - CLS001492 CL18 Level 2
Max Robinson - CLS001149 CL18 Level 2

Inspection of Building

2.5 An assessment of the building was made in terms of its suitability to support roosting bats. A number of factors were considered, including internal conditions, presence of features suitable for use by crevice dwelling and free hanging bats, proximity to foraging habitats/cover and potential for disturbance.

2.6 A description of the building was made and it was assigned to one of the following categories according to their assessed potential to support bats:

- Bat roost – evidence of use by bats present. Works affecting the roost would need to be undertaken under a statutory licence from Natural England, with precautionary and mitigation measures implemented as specified by the licence.

- High Potential – building exhibiting features very suitable for use by roosting bats (such as gaps between tiles and underfelt, gaps below ridge tiles, significant crevices within the walls) and offering optimal roosting opportunity. Often a number of suitable features will be present. Further survey (usually a minimum of three evening emergence and/or daw re-entry surveys) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. If no roost is identified, precautionary measures would need to be implemented during works to the building.

- Moderate Potential – building exhibiting features less suitable for roosting bats (such as superficial gaps within walls, gaps containing debris or cobwebs, limited areas of tiles or generally well-sealed tiling) and offering sub-optimal roosting

opportunity. Suitable roosting opportunity may be limited to a single or small number of features that can be searched for signs of use. Further survey (usually a minimum of two evening emergence and/or daw re-entry surveys) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. If no roost is identified, precautionary measures would need to be implemented during works to the building.

- Low/Negligible Potential – building exhibiting features very unlikely to be used for roosting or no features suitable for roosting. In practice, such buildings may have negligible potential for roosting. Precautionary measures may need to be implemented during works to the building, although in some cases no further action would be required.

2.7 A detailed visual inspection of the interior and exterior of the building was undertaken where accessible. The inspection followed standard methodologies set out in the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004) and *Bat Surveys – Good Practice Guidelines,* Bat Conservation Trust (Collins, 2016).

2.8 Externally, a visual inspection of features such as gaps in the building fabric was made for evidence of bat use from ground level. Evidence searched for included droppings and staining from fur-oil and urine. The survey was undertaken from the ground and aided by the use of close-focusing binoculars and a high-powered torch where necessary.

2.9 The internal survey of the building followed a similar approach, with a search made for bat droppings, prey residues (such as fly or moth wings) and urine stains, as well as resident bats.

Evening Emergence Surveys

2.10 The building was subject to three evening surveys to watch for emerging bats. These were undertaken on the 23rd May, 13th June and 27th June 2017. The surveys commenced approximately 0.5 hours before sunset and finished 1.5 – 2 hours after sunset.

2.11 Three surveyors positioned themselves externally around the building during the surveys to watch for emerging bats. One of the surveyors was positioned at the top of the external staircase on the rear of the building.

2.12 The surveyors used bat detectors (Bat Box Duet, Stag Electronics) to identify the presence and identity of bats. This model of bat detector has two modes of detection. In addition, Anabat SD1 CF Detectors (from Titley Electronics, Australia) were placed around the exterior of the building to constantly record any bat activity (such as emerging or foraging bats). Bat calls picked up by the Anabats were written onto a compact flash card and, where necessary, analysed on a PC to confirm species.

2.13 To aid in identifying any roost access points, a Sony camcorder with nightshot facility was used along with infra-red LED lighting to record activity.

2.14 The table below summarises the weather conditions during the evening and dawn surveys.

Date	Weather Conditions	Temperature
23rd May 2017	Dry, calm (0), 20-40% broken cloud cover.	Start: 15.7°C End: 13.1°C
13th June 2017	Dry, calm (0) - light air (1), slightly humid, overcast with 60% cloud cover by end of survey.	Start: 16.1°C End: 14.2°C
27th June 2017	Dry although threatening rain, light air (1), overcast	Start: 14.2°C End: 13.1°C

Constraints to the Survey

2.15 The roof void could not be accessed for inspection due to the height of the ceiling. The height of the building and limited access into the surroundings meant that views of the rear roof were restricted.

2.17 No other constrained encountered.

3. SURVEY FINDINGS & INTERPRETATION

Review of Existing Bat Records

3.1 Staffordshire Ecological Record provided information on bats that have been recorded previously from within a 2km radius of the site.

3.2 Bats have been recorded on 56 occasions, with five species known to be present - whiskered *Myotis mystacinus,* Natterer's *M. nattereri*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus and* brown long-eared *Plecotus auritus.* No records are known from the site, with the closest record known 230m to the northeast – a common pipistrelle roost. The majority of the records are of common pipistrelles recorded in areas of the town, with a large maternity roost of this species (numbering 200-300 bats when counted in 1987) located 1440m to the east. A large maternity roost of soprano pipistrelles (365 bats) lies 1375m to the east. Two roosts of brown long-eared have been identified (650m and 1385 m away) as well as two Natterer's roosts (1025m and 1045m away). There are likely to be a number of other roosts using houses and other buildings locally. The majority of the records are of bats recorded in flight or as sick/injured individuals found on the ground.

Survey Findings

3.3 No bats have been recorded associated with the building during the surveys. The building is shown in the Plates.

Inspection of Building

3.4 The building is large and constructed over two-storeys. It is built from brick and has finished stone eaves, lintels and front door surround. The brickwork is in good condition. A number of vent/drainage holes are present on the rear brickwork, although all those inspected were heavily cobwebbed and contained no signs of use by bats.

3.5 The building has a hipped roof clad in tiles that seem to be well fitted with occasional gaps noted. The ridge tiles are also well fitted, with the odd gap visible. Wooden fascia boarding is present on the rear of the building. This has a number of gaps behind that could be used by bats for roosting.

3.6 Fixed metal stairs are present on the rear of the building. The surveyors accessed these during the survey to inspect the rear façade of the building.

3.7 The majority of the upper floor is taken up by a large room with a high vaulted ceiling that is plastered. A small loft hatch is present in the ceiling, although this is too high for accessing safely and hence the roof void could not be inspected. The large upper room is well lit and sealed. There are also smaller rooms on this floor including offices, a kitchen and toilets. The lower floor contains a number of small office rooms.

3.8 The building offers moderate potential for bats to use for roosting hence it was subject to follow on surveys to assess for the presence of roosting bats. In such

cases, two follow on surveys would be normally undertaken but as the roof void was not accessible a third visit was carried out.

3.9 A small car park with a metalled surface is located to the immediate north of the building. This contains a small corrugated roof storage shed (with no bat roosting potential). The car park and rear of the building are enclosed by dry-stone and brick walls.

Evening Emergence Surveys

3.10 No bats were seen to emerge during the evening emergence surveys. Common pipistrelles were recorded foraging particularly to the north and rear (west) of the building during the surveys, with many observed flying from the north/northeast. Common pipistrelles were recorded frequently during the first survey on the 23rd May, with 'feeding buzzes' heard. During the survey on the 13th June, common pipistrelles were recorded flying and foraging by surveyors on all sides of the building for much of the duration of the survey. Limited activity was recorded on the final survey on the 27th June.

Interpretation

3.11 No roosts have been found associated with the building. It offers moderate potential for roosting due to the presence of gaps behind the rear fascia board and below ridge and common tiles.

4. RECOMMENDATIONS

4.1 No evidence that bats use the building for roosting was found during the survey. As the building provides moderate grade features that bats could potentially use for roosting, it is recommended that a precautionary approach be undertaken during works to reduce the likelihood of an offence being committed. It is advised that all personnel undertaking the work be made aware of these requirements and follow the advice below.

4.2 It is advised that this report be issued to all parties undertaking works to the building and the information it contains adhered to by all site operatives in order for works to be carried out within the law. Failure to follow the advice set out in the method statement may result in an offence being committed, delays to work and a statutory mitigation licence needing to be sought from Natural England.

4.3 It is advisable that the personnel undertaking the work be familiar with how to identify bats and their droppings. Information on bat identification can be found readily on the Bat Conservation Trust website.

4.4 It is also advisable that a licensed bat ecologist be available to respond rapidly by visiting the site and/or providing additional advice should bats be found present and attendance necessary (see Para. 4.8).

4.5 During works, any ridge and roof tiles to be removed would need to be carefully stripped by hand to avoid injury to any undiscovered bats that may be present. The tiles would then need to be lifted vertically and outwards and inspected below for bats or signs of bats, such as droppings[1].

4.6 If affected, the wooden fascia board on the rear of the building would need to be carefully removed by hand (pulled away from the building to avoid crushing any bats roosting behind) and inspected behind (and in any gaps in the brickwork) for bats or signs of bats, such as droppings.

4.7 Should bats be found to be present, they would need to be left *in situ* and not handled or touched. If a bat is disturbed and it wishes to fly then it should be allowed to do so. If a bat is uncovered, for instance by lifting of a tile, then the tile should be gently placed back with care taken not to crush the bat below. Alternatively, a plastic or cardboard box with ventilation holes could be temporarily be placed over the bat to protect the bat.

4.8 Should bats or evidence of roosting bats (such as bat droppings) be found, works would need to be suspended and the licensed bat ecologist contacted to help resolve the situation and consulted on as to the best method to proceed. Apex Ecology can be contacted on 01782 346494. A statutory licence from Natural England may need to be obtained and, as part of this, additional survey may necessary (which may be seasonally constrained), along with mitigation, such as the provision of a replacement roost.

[1] Bat droppings are small and black/brown in colour. They appear similar to mouse dropping except when crushed they crumble into dust (unless wet). Mouse droppings are soft and can have an odour when fresh, but become hard very quickly. Hands should be disinfected after touching droppings.

5. REFERENCES

Collins, J. (ed). (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines.* 3rd Edition. Bat Conservation Trust, London.

Mitchell-Jones, A. J. (2004). *The Bat Mitigation Guidelines.* English Nature, Peterborough.

PHOTOGRAPHS



1. Milward Hall



2. Upper floor – large room

APPENDIX 1 - LEGISLATION RELATING TO PROTECTED SPECIES DISCUSSED IN THE REPORT

The information below is intended only as guidance to the legislation relating to these species and relates solely to England and does not purport to provide legal advice. It is recommended that the legislative documents be referred to for the full legal wording and the services of a relevant specialist sought where legal advice is required.

Bats

There are seventeen different species of bat in the UK; some are very rare whilst others are widespread. However, because the populations of most species have declined in past decades, all British bats have been protected by law.

Bats are protected in England under European Legislation via the Conservation (Natural Habitats and Wild Flora and Fauna (92/43/EEC)) or 'The Habitats Directive'. The Directive is transposed into UK law via the Conservation of Habitats and Species Regulations 2010 (Statutory Instrument 2010/0490 known as the Habitats Regulations), which came into force on the 1st April 2010. The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 (Statutory Instrument 1994/2716) and amendments. Due to their inclusion on Schedule 2 of the Habitats Regulations, bats are considered 'European Protected Species'.

In summary, this legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat;
- damage or destroy a breeding site or resting place of any bat;
- possess a bat (alive or dead) or any part of a bat.

Disturbance of bats includes in particular any disturbance which is likely:

(a) to impair their ability:

(i) to survive, to breed or reproduce, or to rear or nurture their young; or

(ii) to hibernate or migrate; or

(b) to affect the local distribution or abundance of the species to which they belong.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended), which has also been amended by the Countryside and Rights of Way (CRoW) Act, 2000.

In summary, this legislation makes it an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
- intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection.

In addition, under UK's Biodiversity Action Plans seven British bat species are listed as 'Priority Species'. These include barbastelle *Barbastella barbastellus,* Bechstein's *Myotis bechsteinii,* noctule *Nyctalus noctula,* soprano pipistrelle *Pipistrellus pygmaeus,*

brown long-eared *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe *Rhinolophus hipposideros.*

NERC ACT AND BIODIVERSITY

A number of UK habitats and species are also included on the list of habitats and species which are of principal importance for the conservation of biodiversity in England as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act. The NERC Act came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of NERC Act to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England. In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

The impact that this legislation has on the Planning system is also outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their Impact within the Planning System. This states:
The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult English Nature [now Natural England] before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise developers that they must comply with any statutory species' protection provisions affecting the site concerned.