

IPSTONES PARK FARM, IPSTONES, STAFFORDSHIRE

INSPECTION OF BUILDINGS FOR BATS

Prepared for Mark and Sarah Bennion

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1. INTRODUCTION

- 1.1 This report presents the results of a survey for bats at Ipstones Park Farm, Ipstones, Staffordshire undertaken by Apex Ecology Limited. The report is based on a field survey that was carried out in May 2017, which comprised a visual inspection of buildings for evidence of roosting bats.
- 1.2 The project was undertaken for Mark and Sarah Bennion. The proposal is to convert the buildings to create a granny flat and a planning application is due to be submitted to Staffordshire Moorlands District Council in relation to this. The proposals are shown on the drawing *Proposed Barn Conversion for Granny Flat* (proposed) prepared by Malcolm Sales (drawing numbers 1612/14/03 and 04, dated March and April 2017 respectively). Apex Ecology surveyed the buildings ten years ago for the owner in relation to a different development proposal (which was not undertaken). No evidence of bats was found during the survey (a day-time inspection), although potential roosting opportunities were identified.
- 1.3 The buildings comprise the south-western end of the farmhouse and front singlestorey 'porch' extension, plus three single-storey outbuildings that are attached the farmhouse.
- 1.4 Ipstones Park Farm lies in a rural setting off Park Lane, 1.5km to the east of Ipstones and north of Foxt. It is located on the southern slope of Ipstones Edge and is surrounded by meadows and rush pasture, with patches of moorland and scattered scrub lying to the north. There is much woodland to the south, including Blackbank Wood 250m away. This in turn is connected to continuous woodland that predominates throughout much of the Churnet Valley and tributaries. The OS grid reference for the farm is SK 0391 4965.
- 1.5 The report describes the methods used for the survey and any constraints encountered, along with the results of the survey, including a description of the buildings and any associated evidence of bats found. It then provides an assessment of the suitability of the buildings for roosting bats and makes recommendations in light of the proposals.
- 1.6 Bats and their roosts are legally protected under European and domestic legislation. A summary of the key legislation protecting bats 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 1km of the site. 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 Methods

- 2.2 The survey was undertaken on the 11th May 2017 by Helen Ball and Max Robinson who are licensed by Natural England to survey for bats (Natural England licence registration numbers CLS001492 CL18 Level 2 and CLS001149 CL18 Level 2).
- 2.3 An assessment of the buildings was made in terms of their 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.
- 2.4 A description of each building was made and they were assessed in terms of their suitability to support roosting bats and assigned to one of the following categories:
 - Bat roost evidence of use by bats present. Works affecting the roost would normally need to be undertaken under a statutory licence from Natural England, with precautionary and compensation/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.
- 2.5 A detailed visual inspection of the interiors and exteriors of the buildings for evidence of bats was undertaken. This followed standard methodologies set out in the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004) and *Bat Surveys Good Practice* Guidelines (Hundt, 2012).
- 2.6 Externally, the buildings were walked around and a visual inspection of features such as windows and window ledges and gaps in the building fabric was made for evidence of bat use. Evidence searched for included droppings and staining from fur-oil and urine. Features such as lifted or broken ridge and common tiles, gaps at the tops of walls, open windows and doorways were noted that could provide potential access points for bats to enter and roost within the buildings. The survey was undertaken from the ground and aided by the use of close-focusing binoculars and high-powered torches where necessary.
- 2.7 The internal survey of the buildings 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. A note was made of evidence of any other protected species encountered incidentally encountered during the survey, such as signs of use by nesting birds.

Constraints to Survey

2.8 No constraints encountered.

3. SURVEY FINDINGS & INTERPRETATION

Review of Existing Bat Records

- 3.1 Staffordshire Ecological Records were contacted to provide records of bats for the site and local area within a 1km radius.
- 3.2 SER hold not records of bats from the search area. This is likely due to a lack of recording in the local area rather than a paucity of bats. The habitats surrounding lpstones Park Farm support some excellent opportunities for bats to use for foraging.

Survey Findings

- 3.3 The survey has identified that some of the buildings offer roosting opportunities of high potential for bats, although no evidence of bats was found. The buildings are depicted in the Plates.
- 3.4 The buildings comprise the south-western end of the farmhouse and front singlestorey 'porch' extension, plus three single-storey outbuildings that are attached the farmhouse. For the purposes of clarity in reporting, the buildings have been numbered B1-B5.

B1

- 3.5 The south-western end of the farmhouse is two-storey and built from stone, with a tiled and pitched roof. The external stone-work and mortar is well-pointed and the tile ends on the gable wall are mortared, with no gaps evident. There are numerous gaps below the ridge tiles at the front, with odd gaps on the rear (northern side). There are also many gaps below the common roof tiles on both roof pitches.
- 3.6 The interior of B1 is open to the roof apex. There are gaps between the internal stonework, as well as along the tops of the walls. The roof is supported by tie beams. Traditional underfelt is present below the tiles and this is in good condition with no gaps or tears visible. In places the ridge board is cobwebbed, but is generally clean. There are two doorways that are closed and well-sealed and no gaps are present in the lintels of the doorways or windows. The building is used for storage and as a workshop. It is relatively dark inside and generally the interior appears to be well sealed. This building offers high roosting potential.

B2

3.7 A single-storey 'porch' extension is present on the front of the farmhouse. It provides an entranceway into the farmhouse (including B1) and contains a small hallway, toilet and utility room. A roof void is present that is approximately 1.25m in height. The ridge board in the roof void is heavily cobwebbed and the roof is lined with traditional underfelt; the roof void appeared well-sealed. Externally, the walls are pebble-dashed and are well-sealed. The ridge tiles are mortared in place with the odd gap present. There are many gaps below the common roof tiles. This building offers high roosting potential.

Apex Ecology Limited June 2017 Report HB/170610 **B**3

3.8 This is a single-storey outbuilding built from stone and brick, with a pitched and tiled roof. It is attached to the southern-western gable end of the farmhouse. There are a plethora of gaps below the ridge and common tiles, which are very uneven. Internally, the roof is supported by a king-post roof trusse and purlins, with brick pillars supporting the purlins. The tiles are lined below with underfelt. A couple of tears are present in the underfelt but it is otherwise intact. The ridge board is relatively clean. Glazed windows are present on the rear (northern) wall and a large door is located on the front wall; this has a wide gap above it when closed providing potential access for bats and birds into the interior. The building is used for storage. Seven old barn swallow nests were present in this building. This building offers high roosting potential.

B4

3.9 This single-storey section adjoins B3 and is built from stone. It has a pitched roof of corrugated sheeting and traditional ridge tiles. The underside of the ridge tiles can be seen from the room below. The roof is supported by wooden purlins and ridge beam. The exterior of the stone gable end wall is well sealed. The internal walls are plastered and painted and contain few gaps. The interior is open and well-lit and is used for storage. It connects with B3 via an open doorway. There is a large door on the front wall, which has a large gap above when closed providing a potential means of access into the interior for bats and birds. Indeed, birds are using the interior for nesting as an a wren nest and a barn swallow nest both in active use were present, along with disused barn swallow nests. This building offers negligible roosting opportunities for bats.

B5

3.10 This section is known as the poultry shed and attaches to the front (south) side of B3. It is built from stone, with rendered and painted walls internally. It has a sloping roof clad in corrugated sheeting. The doorway leading into it is open. This building offers negligible roosting opportunities for bats.

Interpretation of the Survey Results

- 3.11 Building B1, B2 and B3 offer high potential to be roosted by bats for roosting. The roofs are tiled and lined with underfelt and there are a large number of gaps below the ridge and common tiles on these buildings. Thus there are ample opportunities for bats to access and roost in gaps between the tiles and underfelt lining, a favoured roosting place for bats. It appears a number of these gaps may have appeared in the intervening period since the survey in 2007 was carried out. Internally, there are also some gaps in the walls of the buildings that may also offer suitable roosting.
- 3.12 No signs of bats were found associated with building B4 and B5. They have negligible roosting opportunities for bats.

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4. RECOMMENDATIONS

<u>Bats</u>

- 4.1 The proposals are shown on the drawing *Proposed Barn Conversion for Granny Flat* prepared by Malcolm Sales (drawing numbers 1612/14/03 and 04, dated March and April 2017 respectively).
- 4.2 Given that buildings B1, B2 and B3 offer high potential for roosting (largely associated with gaps between the ridge/common tiles and underfelt), and that the proposed conversion will very likely require work to the roofs such as re-roofing and insulating, it is recommended that follow-on bat surveys be undertaken. These would help to determine whether bats make use of the buildings for roosting and, if so, the extent of bat use; the species of bat present; the status of any roost/s; numbers of bats present; and roost and access points to be determined, thus enabling impacts to be assessed and appropriate compensation and mitigation to be designed where applicable to off-set impacts on bats. The recommendation for follow-on survey follows the advice on assessment of buildings contained within *Bat Surveys Good Practice Guidelines* (Collins, 2016).
- 4.3 The follow-on survey would need to consist of three evening emergence or dawn re-entry surveys, with surveyors present externally and internally watching for bat emergence from/re-entry into, and activity associated with the buildings. Sufficient surveyors would need to carry out the survey to adequately view the buildings. The surveys would need to be undertaken during a time of year when bats are most active. Such surveys can be undertaken between May and September according to Bat Conservation Trust guidelines, with May to August being the optimal period (September is considered sub-optimal).
- 4.4 In view of the legal protection afforded to bats (see Appendix I), a statutory licence would need to be sought from Natural England should bats or their roost sites be affected by the proposals. In order to issue a licence, Natural England would require detailed and up-to-date information about the status of bat roosts and bat use of the building and a commitment to appropriate mitigation measures where applicable. In addition, planning permission (usually full) would have to have been granted for the development (again where applicable).
- 4.5 In order to obtain a licence from Natural England, the following three tests would need to be satisfied:
 - there is no satisfactory alternative;
 - the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range; and
 - the action authorised preserved public health or public 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.
- 4.6 Building B4 and B5 hold negligible roosting potential and no further consideration of bats in relation to works to these buildings should be necessary.

4.7 In the highly unlikely event that bats or evidence of roosting bats (such as bat droppings¹) be found during works to B4 and B5, works would need to be suspended and a licensed bat ecologist would need to be contacted to resolve the situation and consulted as to the best method to proceed. A statutory licence from Natural England may need to be obtained and, as part of this, additional survey (which may be seasonally constrained) may need to be carried out, along with mitigation and compensation such as the provision of replacement roosting features.

<u>Birds</u>

- 4.8 The presence of nesting birds can be avoided as a constraint to the proposals by timing works to avoid the bird nesting season. Should works need to be carried out during the bird nesting season then a watching brief for birds would need to be undertaken by an ecologist prior to any works commencing and during the works to check for the presence of nesting birds. The findings of the watching brief would be used to ascertain the best method to proceed to avoid impacting upon nesting birds, which would be set out via a method statement. The bird nesting season is generally deemed to run from March to August inclusive, although some species such as barn swallow can nest outside this period.
- 4.9 Barn swallows and wren use some of buildings for nesting. The buildings also contain suitable opportunities for other bird species to construct nests. Barn swallow is a bird of conservation concern (Eaton *et al*, 2009) having declined in recent years and is experiencing a widespread reduction in the number of suitable nesting areas as a result of development works such as barn conversions and restoration of farm buildings.
- 4.10 Where possible, replacement nesting for barn swallows to compensate for loss of nesting sites associated with the development works should be provided. This could be achieved by enabling barn swallows to access a dark covered or roof area in one of the buildings. To make this area suitable for nesting by barn swallows the following would need to be carried out:
 - ensuring the nesting area has low light levels as barn swallows require this for nesting.
 - providing open access/an access point directly into the nesting area to give a clear flight path for barn swallows. The access point would need to be a minimum of approximately 1000mm wide by 500mm high.
 - providing support structures in the roof area onto which barn swallows can construct nests, such as artificial nesting cups (such as the Schwegler no. 10 swallow nest) and rough-sawn wooden battens (with approximately 100mm projection) located in suitable locations. These

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.

would need to be located with at least 100mm clearance between the top of the nesting cup/batten and the above ceiling and be spaced around the interior of the roof area. The nests sites would also need to be at least 2000-3000mm above floor level/ground.

- installation of perches consisting of rough wooden poles in suitable locations.
- to reduce the incidence of bird droppings and nesting debris being deposited on any items below, deflector boards can be placed below each nest site or a false ceiling could be installed.
- the design and installation of nesting provision would need to have ecologist involvement.
- 4.11 Bird boxes (such as the Schwegler Avianex box or similar) suable for other bird species could also be installed on the walls of buildings in suitable locations. The boxes would need to be installed at least 3m above ground and not face due south.

5. <u>REFERENCES</u>

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

Eaton MA, Brown AF, Noble DG, Musgrove AJ, Hearn R, Aebischer NJ, Gibbons DW, Evans A and Gregory RD (2009) *Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man.* British Birds 102, pp296–341.

PHOTOGRAPHS



1. Southern elevations of B1, B2, B3 and B5.

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Ipstones Park Farm, Ipstones, Staffordshire Inspection of Buildings for Bats



2. Northern (rear) elevations of B4, B3 and B1 (left to right)



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Β4

4. Interior of B1

Ipstones Park Farm, Ipstones, Staffordshire Inspection of Buildings for Bats

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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.

<u>Bats</u>

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*.

<u>Birds</u>

All wild birds, their nests and eggs are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is, therefore, an offence (subject to certain exceptions) to:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- take or destroy the egg of any wild bird.

In addition to the above, in accordance to amendments of the Wildlife and Countryside Act by the Countryside and Rights of Way Act 2000, it is an offence to:

- intentionally or recklessly disturb any species listed on Schedule 1 of the Wildlife and Countryside Act whilst building a nest, or whilst it is on, in or near a nest containing eggs or young; and
- disturb the dependant young of a Schedule 1 bird.

For example, barn owl is protected under Schedule 1 of the Wildlife and Countryside Act, protecting them from intentional or reckless disturbance during the breeding season (which is normally considered the time from when the female makes the first nest 'scrape' and lays the first egg until the time when the last dependent young stops returning to the nest (English Nature, 2002/3)).

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

Apex Ecology Limited June 2017 Report HB/170610 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.