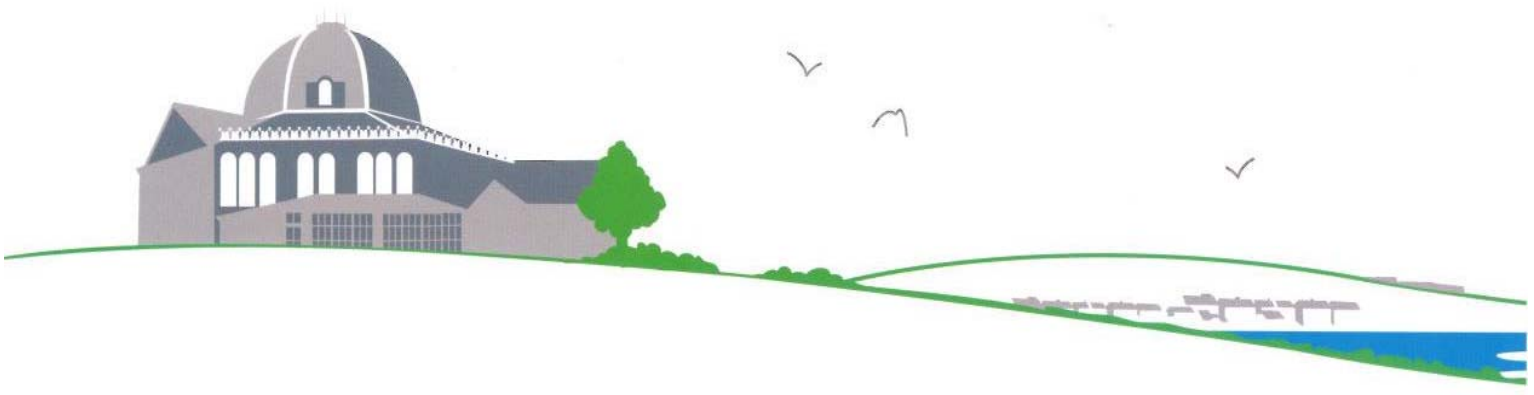
Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

# HUMPHRIES BUILDERS LTD

# 4 WOODHOUSE LANE, BIDDULPH

# BAT ROOST AND NESTING BIRD ASSESSMENT



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# 4 WOODHOUSE LANE, BIDDULPH

# BAT ROOST AND NESTING BIRD ASSESSMENT

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September 2017

*This project has been undertaken in accordance with PAA policies and procedures on quality assurance*.

Signed:_____

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# 1. INTRODUCTION

## Background

1.1 Penny Anderson Associates Ltd (PAA) was commissioned by VWB Architects, on behalf of Mr Kevin Humphries to carry out a survey for bats and nesting birds at No. 4 Woodhouse Lane, Biddulph (OS grid reference SJ 8900 5878), hereafter referred to as 'the site'. The proposals include demolition of the existing building, and construction of a new dwelling.

1.2 This report details the results of a daytime site visit and evaluates the results in the context of the proposed works, making recommendations for any further survey work, mitigation or ecological enhancement as required.

## Site Description

1.3 The site comprises a disused residential property and garden on Woodhouse Lane, Biddulph. The property is situated on the northern outskirts of the town, with other houses and gardens immediately to the south, east and west, with grassland used as sports facilities, and churchyard immediately to the north.

## Bat Biology

1.4 There are 17 species of native bats known to be resident (i.e. breed) in the British Isles. British bats feed entirely on insects and have developed a complex sonar system, known as echolocation, which enables them to find prey and navigate around their environment at night.

1.5 Habitat requirements vary widely, both on an individual and species level, although certain features, such as woodland, parkland, traditional pasture, marshes and areas of freshwater, are often focal points for foraging, as insects are plentiful in these areas (Mitchell-Jones 2004). Bats use linear features such as rivers, hedgerows, roads and woodland edges as landmarks in order to commute from one location to another (Schofield and Mitchell-Jones 2003).

1.6 Bats utilise different roosts at different times of the year. Between late October and March, bats hibernate; this requires an unexposed roost with a stable temperature, typically a cave, cellar or tunnel. Around March, the bats emerge and gradually move to their summer roosts, typically within man-made structures or suitable crevices in trees. During the spring and summer period female bats gather together at maternity roosts to give birth and rear their young. Most births occur between late June and mid-July, with the young able to fly within three to five weeks (Altringham 2003; Waters and Warren 2003). By the end of August, most of the young bats are independent and the colony begins to break up (Schofield and Mitchell-Jones 2003). Mating takes place between August and December, either at the winter hibernation site or at autumn breeding sites. The numbers of bats utilising these roosts can vary from single bats to hundreds of bats in a nursery colony or hibernation site (Altringham 2003).

1.7 Bats play an important role in many environments around the world, including pollination and insect control. In the UK, bats can tell us a lot about the state of the environment because they are top predators of common nocturnal insects and are extremely sensitive to changes in their surroundings, e.g. climate, landscape, agricultural intensification, development and habitat fragmentation. Populations of British bats have suffered severe declines in the past century, influenced by these factors.

## Legislative Context

1.8 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2010 (further amended in 2011 and 2012); further details can be obtained from the Joint Nature Conservation Committee (JNCC) website at www.jncc.defra.gov.uk.

1.9 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA) (1981) (as amended) and Countryside and Rights of Way (CRoW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).

1.10 At the national level, the UK Post-2010 Biodiversity Framework published in 2012 is the Government's response to the Convention on Biological Diversity (2010). It describes the UK's biological resources, and commits a detailed plan for the protection of these resources within the UK's devolved framework across England, Wales, Scotland and Northern Ireland. The document identifies future priorities for nature conservation and adopts a more strategic approach, including ecosystem services and sustainability alongside biodiversity. Despite administrative changes following devolution, there is still an underlying objective of protecting and enhancing a range of priority species and habitats, often still based on the objectives and classifications of the original UK Biodiversity Action Plan (BAP). Biodiversity 2020 is England's national biodiversity strategy. Building on the Natural Environment White Paper published in 2011, this provides a means of delivering the international and EU commitments to biodiversity. Under Biodiversity 2020, Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

1.11 Finally, the National Planning Policy Framework (NPPF), published in 2012 provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. The NPPF has replaced much previously existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for biodiversity, with a particular focus on the maintenance and creation of ecological networks. Furthermore, the NPPF also states that any planning proposals for which significant negative impacts on biodiversity cannot be avoided, mitigated or compensated should be refused. Biodiversity 2020 Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity in England within Section 74 of the CRoW Act 2000, and Sections 41 (England) of the NERC Act 2006. The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

a) protecting and enhancing valued landscapes, geological interests and soils;

b) recognising the wider benefits of ecosystem services; and

c) minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity,

including by establishing coherent ecological networks that are more resilient to current and future pressures.

1.12 Details of the protected species legislation relevant to this site can be found in Appendix 1.

# 2. METHODS

## Overview

2.1 Survey methodology followed current good practice guidelines published by the Bat Conservation Trust (Collins 2016) and all visits were undertaken within the appropriate season and with weather conditions considered to be suitable for bat survey.

2.2 Survey effort comprised a combination of daytime inspection and dusk emergence survey. The daytime survey was carried out by licensed bat ecologist Hazel Robson[1] MCIEEM[2] and assistant ecologist Rob Lamb. The emergence survey was carried out by licensed bat ecologist Helen Hamilton[3] MCIEEM and ecologist Caroline Boffey. All members of the survey team were appropriately qualified for their assigned roles based on the CIEEM competency framework (CIEEM 2013).

## Preliminary Daytime Assessment

2.3 The daytime survey comprised an inspection of the property, including the roof void, to enable an assessment of its potential to support roosting bats. A search was made for potential roost features that could be used by bats, such as small holes and crevices in soffits or beneath roof coverings and also potential access points for bats to enter/exit internal areas like lofts. A search was also made for any evidence of bat presence such as accumulations of droppings and feeding remains or sightings of the animals themselves. Binoculars (Avian F 8x42), torch (Clulite 1 million candlepower) and endoscope (Rigid Micro CA300) were used to inspect potential roost features where necessary.

2.4 The habitats within the site and immediately adjacent areas were also considered for their general suitability for commuting and foraging bats, to place the site in the context of its surroundings, as this can have a bearing on how likely it is for a roost to be present. The assessment of suitability is based on the broad criteria outlined in **Error! Reference source not found.** and **Error! Reference source not found.** below (Collins 2016), combined with the professional judgement and experience of the surveyor in recognising suitable habitat features and field signs of bats.

[1] *H Robson - Natural England class licence registration number 2015-10504-CLS-CLS, survey level 2 (WML-CL18)*

[2] *Full member of Chartered Institute of Ecology and Environmental Management*

[3] *H Hamilton - Natural England class licence registration number 2015-15940-CLS-CLS, survey level 2 (WML-CL18)*

## Table 1 Bat Roost Assessment Criteria (Collins 2016)

| Suitability | Description of Roosting Habitats |
|---|---|
| Negligible | Negligible habitat features on site likely to be used by roosting bats. |
| Low | A structure with one or more potential roost sites that could be used by individual bats opportunistically, but does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.<br>A tree of sufficient size to contain potential roost features but none seen from the ground or only those with very limited suitability.<br>(i.e. suitable for occasional day roosting but unsuitable for maternity or hibernation roost.) |
| Moderate | A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost type of high conservation significance<br>(i.e. suitable for day roosting but unsuitable for maternity or hibernation roost.) |
| High | A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.<br>(i.e. suitable for maternity and/or hibernation roost.) |
| Confirmed Roost | A structure or tree with evidence of bat presence, i.e. droppings, feeding remains, audible bat calls heard during daytime survey or sightings of the animals themselves, existing (reliable) record of bats roosting at the location. |

## Table 2 Bat Habitat Suitability Assessment Criteria (Collins 2016)

| Suitability | Description of Commuting / Foraging Habitats |
|---|---|
| Negligible | Negligible habitat features likely to be used by commuting or foraging bats. |
| Low | Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.<br>Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub. |
| Moderate | Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.<br>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water. |

| Suitability | Description of Commuting / Foraging Habitats |
|---|---|
| High | Continuous, high quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br>High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.<br>Site is close to known roosts. |

2.5 Potential presence of nesting birds was also considered, with particular attention paid to any scope for notable species such as house sparrow (*Passer domesticus*) or house martin (*Delichon urbica*). Any incidental field signs were noted.

## Dusk Emergence Survey

2.6 One dusk emergence survey was carried out to confirm presence/likely absence of roosting bats and, in the event of a roost being found, to highlight roost entrances and enable bat roost characterisation. (The number of surveys was determined by the assessed status of the building from the preliminary inspection.)

2.7 The survey lasted for approximately two hours, commencing approximately 15 minutes prior to sunset to take in the most likely periods when bats would be observed emerging from a roost site. Surveyors were positioned at vantage points on each side of the building to observe any bats entering or exiting potential roost features. Each surveyor was equipped with a Batbox Duet bat detector to aid detection in the field and an Anabat SD1 to record bat calls and enable sonogram analysis to confirm identification of any species found to be roosting.

2.8 Weather conditions were recorded at the start and end of each survey. Temperature and humidity were measured using a hygro-thermometer (810-190 www.etiltd.com). Wind was estimated using the Beaufort Wind Force Scale, ranging from 0 calm to 5 moderate breeze (NB while the scale extends to force 12 hurricane, 6 or higher would be unsuitable conditions for survey). Cloud cover was estimated using the standard meteorological scale of oktas (eighths), where 0/8 is a completely clear sky and 8/8 is completely overcast.

## Limitations

2.9 Different species of bats use buildings in different ways. Species such as brown long-eared bats (*Plecotus auritus)* typically use roosts with large enclosed spaces and fly around inside prior to emerging, which frequently leaves evidence such as droppings and feeding remains in visible areas. Species such as pipistrelle bats (*Pipistrellus* sp.) tend to utilise small cavities and crevices and, therefore, evidence of their presence may not be apparent during a visual inspection.

2.10 Daytime inspection, therefore, provides an assessment of the suitability of a structure for use by roosting bats but cannot necessarily confirm presence/absence of all bat species. However, the combination of daytime assessment and dusk survey is consistent with current standards for survey effort and therefore the results are considered to be robust.

# 3. RESULTS

## Daytime Inspection

3.1 Photographs of the site are provided in Appendix 2. A description of the results is provided under the sub-headings below.

### *Roosting Bats*

3.2 The building was found to be a two-storey 1930s residential property constructed of rendered brick with a hipped roof covered with clay tiles. There were also single-storey extensions at the side and rear providing garage space and utility / storage rooms. The building was disused and in a poor state of repair.

3.3 On the exterior, there were several cracks in the render and the brickwork beneath, particularly at the south eastern corner near the large curved windows. There were also gaps around some of the wooden window frames on the front elevation.

3.4 The ground floor garage and utility rooms were found to be very damp, with water ingress via the roof. These rooms were considered to be unsuitable for bats.

3.5 The roof void was a single large space with height to ridge of approximately 2.5m and fully lined with bitumen felt. The floor was concreted over the joists. No bat droppings or feeding remains were found and there were extensive cobwebs at the ridge and hanging from rafters.

### *Nesting Birds*

3.6 The overhanging eaves were generally suitable structure for use by house martins but there was no evidence of the mud nests used by these species. There were no obvious gaps at the eaves that could provide access to potential nesting sites for species such as house sparrows and no evidence of nesting was found inside the utility rooms or loft.

## Dusk Emergence Survey

3.7 Common pipistrelle bats were detected from approximately 20 minutes after sunset and then encountered infrequently throughout the remainder of the survey, with a maximum of one individual seen at any one time.

3.8 Soprano pipistrelle (*Pipistrellus pygmaeus*) bats were occasionally seen commuting through the site, with the earliest individual recorded at approximately 25 minutes after sunset. A *Myotis* bat was also detected twice commuting through the site, at approximately 50 minutes and one hour after sunset.

3.9 All individuals were seen to fly into the site from elsewhere and no bats were seen to enter or exit roost on the building at any point during the survey.

3.10 Levels of artificial lighting were noted to be relatively high, particularly at the front of the house which was illuminated by street lamps (BCT, 2007).

# 4. EVALUATION AND RECOMMENDATIONS

## Roosting Bats

4.1 Although the building does provide some potential roost features, based on the survey results there is no evidence of bats roosting in the building.

4.2 The surveys have followed current good practice standards for having confidence in a negative result and therefore the results are considered to be robust. As there is no evidence of use by roosting bats, no mitigation or compensation is required for demolition of the building and a licence application to Natural England will not be necessary.

4.3 Bats are a highly mobile species and can investigate and begin using new roost sites. If the demolition of the building has not been undertaken within two years of the date of this report, the site should be reassessed for bats to ensure that any decisions or actions taken at that time are based on up to date survey data.

4.4 In addition to this, National planning policy recommends that opportunities for ecological enhancement are sought with any new development proposals. A simple enhancement measure could be to include bat boxes at the site, attached either to new buildings or retained trees to provide opportunities for roosting in future.

## Nesting Birds

4.5 There was no evidence of bird nests on the building, although there the dilapidated structure does provide some opportunities, mostly within the single-storey sections.

4.6 All nesting birds, their nests, eggs and dependent young are protected under the WCA1981 (as amended) therefore if demolition is carried out during the period March to September (i.e. within the main nesting season) it would be good practice to check for active nests immediately beforehand. Any active nests would need to be left *in situ* until the young have fledged.

4.7 Simple ecological enhancement for birds could include provision of nest boxes suitable for species that may use the site post-development, with boxes for suburban species of elevated conservation concern such as house sparrow or house martin being of particular value.

# 5. REFERENCES


Altringham, J.D., 2003. *British Bats*. New Naturalist Series 93. Harper Collins.

BCT, 2007. *Bats and lighting in the UK- bats and the built environment series* <www.bats.org.uk>

CIEEM, 2013. *Competencies for Species Surveys: Bats*. Chartered Institute of Ecology and Environmental Management.

Collins J. (ed.) 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.)*. The Bat Conservation Trust.

Mitchell-Jones A.J., 2004. *Bat Mitigation Guidelines*. English Nature.

Schofield H.W., and Mitchell-Jones, A.J., 2003. *The Bats of Britain and Ireland*. The Vincent Wildlife Trust.

Waters D., and Warren R., 2003. *Bats*. The Mammal Society.


# 6. ABBREVIATIONS

| | |
|---|---|
| BAP | Biodiversity Action Plan |
| EU | European Union |
| CRoW | Countryside and Rights of Way |
| JNCC | Joint Nature Conservation Committee |
| NERC | Natural Environment and Rural Communities |
| NPPF | National Planning Policy Framework |
| PAA | Penny Anderson Associates Ltd |
| SSSI | Sites of Special Scientific Interest |
| WCA | Wildlife and Countryside Act 1981 (as amended) |

# APPENDICES

# APPENDIX 1

## Summary of Relevant Species Legislation

# SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CRoW) Act 2000 and the Conservation of Habitats and Species Regulations 2010, and this legislation is applicable to England and Wales. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make 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 (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2010.

The Conservation of Habitats and Species Regulations 2010[1] state that a person commits an offence if they:

(a) deliberately capture, injure or kill any wild animal of a European protected species,

(b) deliberately disturb wild animals of any such species, in such a way as –

  (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or

  (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or

  (iii) to affect significantly the local distribution or abundance of the species to which they belong;

(c) deliberately take or destroy the eggs of such an animal, or

(d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), that are frequently found in buildings, are listed as a 'Priority Species' under the under the 2011 biodiversity strategy for England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services,* under the 2012 UK Post-2010 UK Biodiversity Framework. These Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity in England and Wales within Section 74 of the CRoW Act 2000, and Sections 41 (England) and 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006. Section 11 of the National Planning Policy Framework (NPPF) states that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible. The NPPF also includes the requirement to contribute to the Government's commitment to halt the overall decline in biodiversity and to promote the reservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets. Reference is made to Circular 06/2005 *Biodiversity and*

[1] *These regulations have been slightly amended by The Conservation of Habitats and Species Regulations 2012*

*Geological Conservation - Statutory Obligations and Their Impact within the Planning System* in respect of statutory obligations for biodiversity and geodiversity conservation.

Local authorities in England are required to ensure that where significant harm resulting from development cannot be avoided (through locating on alternative sites with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, planning permission is refused. The commitment to preserving, restoring or enhancing biodiversity is further emphasised for England and Wales in Section 40 of the NERC Act 2006.

*Please note: the above text provides a brief summary of the legislation in relation to bats in England and Wales and the original Acts, Regulations and any amendments should be referred to for the precise wording.*

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# SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CRoW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

> 'If any person intentionally,
>
> (a) kills, injures or takes any wild bird;
>
> (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
>
> (c) takes or destroys an egg of any wild bird,
>
> he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CRoW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

> 'If any person intentionally or recklessly,
>
> (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
>
> (b) disturbs dependent young of such a bird,
>
> he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as barn owl (*Tyto alba*), black redstart (*Phoenicurus ochruros*), wood lark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species.

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by authorised persons at all times. This includes species such as carrion crow (*Corvus corone*), black-billed magpie (*Pica pica*), feral pigeon (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

*Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.*

# APPENDIX 2

## Site Photographs

**Plate 1**

Front elevation of property with single-storey garage.

**Plate 2**

Rear elevation with single-storey extension. Occasional gaps beneath mortar on ridge tiles – potential roost features for bats.

**Plate 3**

Cracks in render and brickwork beneath around curved windows on south eastern corner – potential roost features for crevice-dwelling bats.

**Plate 4**

Small gaps around window frame and in brickwork on front elevation – potential roost features for crevice-dwelling bats.

**Plate 5**

Interior of garages – very damp with extensive water ingress through roof. Unsuitable for roosting bats.

**Plate 6**

Ground floor utility room with sloping roof – very damp with extensive water ingress through roof. Unsuitable for roosting bats.

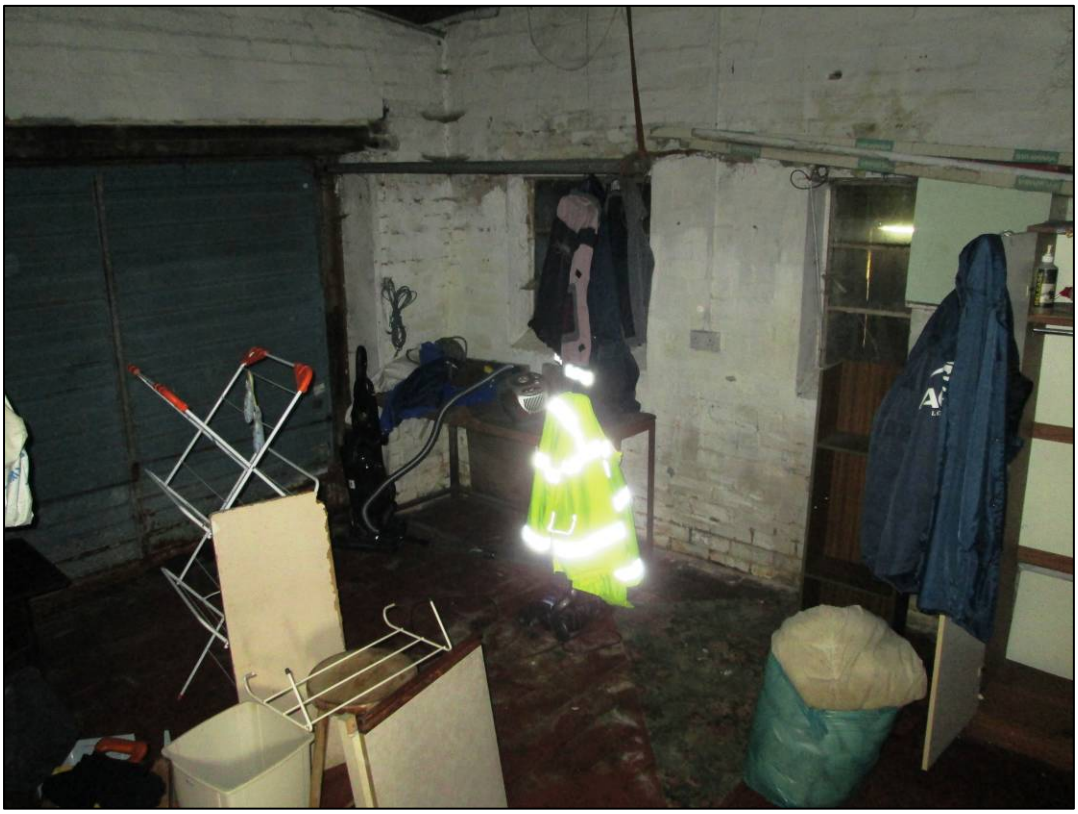

**Plate 7**

Ground floor utility room with hipped roof. Dark and damp and no evidence of bats.

**Plate 8**

Hipped roof of utility room supported by wooden rafters and lined with felt. Extensive cobwebs and no evidence of bats.

**Plate 9**

Roof void of house – wooden rafters and lined with felt. No evidence of bats.

**Plate 10**

Extensive cobwebs around ridge and hanging from rafters in roof void.

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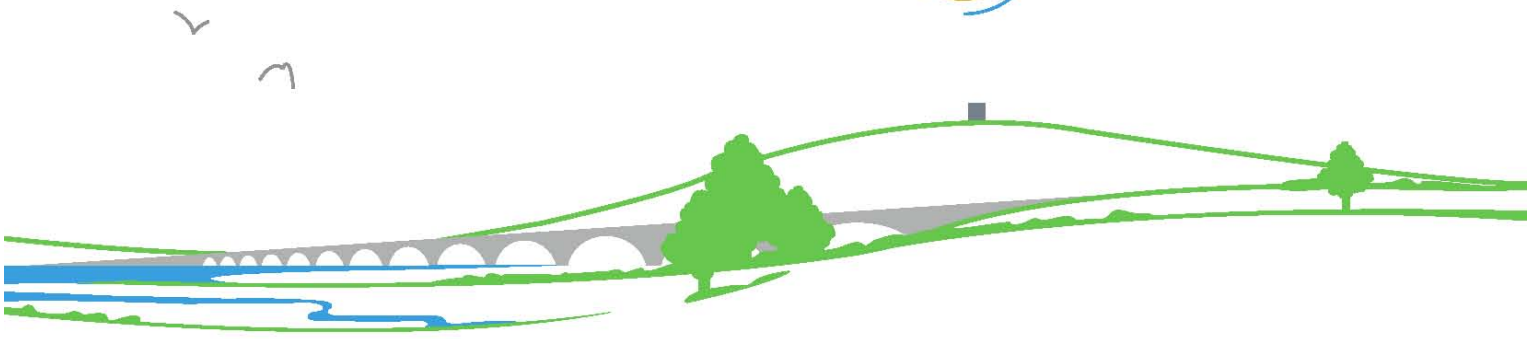

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