
PHASE 1 BAT & NESTING BIRD SURVEY

**Mill Farmhouse, Ewen,
Gloucestershire, GL7 6BT**

23rd August 2023

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Control Sheet

General Report Information	
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Prepared by	Dr Jon Russ
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1 Introduction

1.1 Background to activity/development

This report has been prepared by Dr Jon Russ at the request of William Hathaway of Eastabrook Architects acting on behalf of their clients CJ and Karen Gibson. Planning consent is being sought from Cotswold District Council to modify the kitchen building at Mill Farmhouse, Ewen, Gloucestershire, GL7 6BT and potentially undertake works to a small stone outbuilding (garden store) located directly south of the kitchen. The local planning authority will require a bat and nesting bird survey to inform the planning process.

1.2 Site description

The site proposed for development, Mill Farmhouse (GR: ST999974), is located at the western edge of the village of Ewen in rural Gloucestershire (Figure 1). The site is surrounded by converted farm buildings and open farmland comprising arable cropland and pasture connected by a network of hedgerows and treelines. There are woodlands located around 600m to the north-west, south-west and east of the site. The River Thames is located 350m to the west. River, woodland, treelines and hedgerows represent good habitat for bats. In addition, the variety of habitats is likely to support a relatively diverse bird population.

1.3 Proposed works

Planning consent is being sought from Cotswold District Council to modify the kitchen building at Mill Farmhouse, Ewen, Gloucestershire, GL7 6BT and potentially undertake works to a small stone outbuilding (garden store) located directly south of the kitchen.

1.4 Planning and legislative context

The information below is intended only as guidance to the legislation relating to these species. The Acts themselves should be referred to for the correct legal wording.

Bats – Legislative context

All bats are included in Schedule 2 of The Conservation of Habitats and Species Regulations 2017, which implements the requirements of the Habitats Directive in England, Scotland and Wales and in Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations (Northern Ireland) 1995 (as amended) which implement the requirements of the Habitats Directive in Northern Ireland. Bats and their breeding sites or resting places are protected under Regulation 39. An amendment to the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 came into force in Northern Ireland on 21st August 2007 (Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007).

It is an offence for anyone without a license to:

- Intentionally or recklessly/deliberately injure, take or kill a bat;
- To possess a bat (unless obtained legally) whether alive or dead;
- Intentionally or recklessly/deliberately damage, destroy or obstruct access to any place that bats use for shelter or protection whether bats are present or not;

- Intentionally or recklessly/deliberately disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- deliberately disturb bats in such a way as to be likely significantly to affect—
 - (i) the ability of any significant group of bats to survive, breed, or rear or nurture their young;
 - or
 - (ii) the local distribution or abundance of that species;

Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.

Recent amendments to the Habitat Regulations in 2007 have removed many of the defences. This includes the commonly relied upon 'incidental result defence', which previously covered acts that were the incidental result of an otherwise lawful activity and which could not reasonably have been avoided. As the incidental result of a lawful operation defence has been removed from legislation (Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007) operators are now open to this strict liability offence, whether the damage occurs by accident or not. An offence will only be committed if the deliberate disturbance is likely to significantly affect a significant group of animals of that species' ability to survive, breed, or rear or nurture its young or is likely to significantly affect the local distribution or abundance of that species. Deliberate disturbance of a protected animal (species on Schedule 5 which includes EPS) in its place of shelter or protection will continue to be an offence under the Wildlife and Countryside Act 1981. However, the incidental result of a lawful operation defence will be available for that offence where the disturbance could not have been reasonably avoided.

In England, Scotland and Wales all bat species are protected under the Wildlife and Countryside Act 1981 (WCA) (as amended) through inclusion in Schedule 5. The existing offences under the Wildlife and Countryside Act (1981) as amended which cover obstruction of places used for shelter or protection, disturbance and sale still apply to European protected species.

In England and Wales, the WCA was amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence ('or recklessly' to S9(4)(a) and (b)), makes species offences arrestable, increases the time limits for some prosecutions and increases penalties.

Exemptions can be granted from the protection afforded to bats under the Habitat Regulations, by means of a EPS (European Protected Species) Habitats Regulations licence obtained from Natural England.

A 'EPS Habitats Regulations Licence' could be required for:

- Demolition of a building known to be used by bats prior to development of a site
- Conversion of barns or other buildings known to be used by bats
- Removal of trees known to be used by bats as well as tree pruning
- Significant alterations to roof voids known to be used by bats
- Road building or widening
- Bridge strengthening

There are three tests, which must be satisfied, before a licence can be issued to permit otherwise prohibited acts;

- Regulation 53(2)(e), for the purpose of preserving 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; or
- Regulation 53(2)(f) for the purpose of preventing the spread of disease; or
- Regulation 53(2)(g) for the purpose of preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other forms of property or to fisheries; subject to Natural England being satisfied that the application additionally meets:
 - Regulation 53(9)(a) that there is no satisfactory alternative; and
 - Regulation 53(9)(b) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

A European Protected Species License is required before the commencement of any development that might impact on bats or their roosts.

Birds – Legislative context

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

- Intentionally kill, injure, or take (handle) any wild bird.
- Intentionally take, damage or destroy any wild bird nest whilst in use or being ‘built’.
- Intentionally take or destroy a wild bird egg.
- Have in one’s possession or control a wild bird (dead or alive), or egg, (unless one can show that it was obtained legally).

Some species of bird listed under Schedule 1 (e.g. Barn Owls, of the Act receive extra protection. For these species it is an offence to:

- Intentionally or recklessly disturb any wild bird whilst ‘building’ a nest or whilst in, on, or near a nest containing eggs or young.
- Intentionally or recklessly disturb any dependent young of wild birds.

Disturbance may be deemed reckless if it is committed by someone who could be expected to know that the bird(s) might be present but failed to check.

Under the 1981 Act (Part 1, section 25) local authorities are given the function of bringing this legislation to the attention of the public and may institute proceedings for any offence committed within their area. The police are empowered to enter onto any land and search, or stop and search, any person where an offence is suspected (section 14). Anyone found guilty of an offence is liable to a fine of up to £5,000 or imprisonment for a term not exceeding six months, or both.

Planning policy and Biodiversity Action Plan context

The National Planning Policy Framework (NPPF) is guidance for local planning authorities on the content of their Local Plans but is also a material consideration in determining planning applications. The NPPF has replaced much of the existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. However, the government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9 remains valid.

The Natural Environment and Rural Communities (NERC) Act 2006, in particular Section 40, places a duty on public bodies to have regard to the conservation of biodiversity. This duty is guided by the

habitats and species lists in Section 41 of the Act, within which seven bat species are included: 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*) bats. These seven species are also listed as Priority Species within the UK Biodiversity Action Plan (UKBAP), (the UK Government's response to the Convention on Biological Diversity).

1.5 Objectives

The bat survey was commissioned to assess:

- what species of bat are present at the site;
- what types of bat activity are occurring within the site;
- whether or not bats are roosting within the site; what population levels (size and importance) are present at the site;
- and to make recommendations on any further action that may be required to provide sufficient information for the local planning authority to support a planning application

A nesting bird survey was commissioned to:

- determine the use or otherwise of the site by nesting birds;
- determine the value of the site to nesting birds;
- make an assessment of the potential impacts and effects of the proposed development of the site on nesting birds;
- determine the legal implications of the proposed development; and
- recommend appropriate mitigation measures to remove or reduce impacts.

2 Methods

2.1 Pre-survey data search

As the scale of the proposed development is small a pre-survey data search of biological records was not carried out. A search using the MagicGov and Nature on the Map (Natural England) websites was performed to identify sites of nature conservation.

2.2 Surveyor information

The survey was carried out by Dr Jon Russ CEnv, MIEEM (Natural England Class 3 & 4 Bat Licences CLS2294).

Dr Jon Russ is a terrestrial and behavioural ecologist with a specialist interest in bats. As Director of Ridgeway Ecology Ltd and through his academic research and work with the Bat Conservation Trust he has managed, designed and carried out large- and small-scale bat surveys and bat monitoring programmes in the UK and the tropics. He has extensive experience with the United Kingdom and European Union legislation regarding bats and has been a fully licensed bat worker for over 20 years, holding bat conservation, education and scientific licences for radio-tracking, mist-netting, ringing, harp-trapping, ultrasonic playback and DNA sampling. His publication record includes a large number of articles in scientific journals as well as other publications including the widely used book, "The Bats of Britain and Ireland: Echolocation, Sound Analysis, and Species Identification", "Review of ASSI designation for bats in Northern Ireland", "The Northern Ireland Bat Action Plans" which he coordinated and delivered, "British Bat Calls: A Guide to Species Identification" and the recently published "Bat Calls of Britain & Europe". In addition, Jon has a great deal of experience in avoidance, mitigation and compensation measures relating to bats and development.

2.3 Field surveys

The bat survey was undertaken in accordance with current best practice guidelines, which include: Bat Mitigation Guidelines (Mitchell-Jones, 2004); The Bat Workers Manual (Mitchell-Jones & McLeish, 2004); and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins 2016).

A nesting bird survey was also undertaken in accordance with reference to *Field Guide to Nests, Eggs and Nestlings of British and European Birds* (Collins Field Guide 1985); *Survey techniques* (Barn Owl Trust 2010); and *Barn owls on site: A guide for developers and planners 2nd Edition* (English Nature 2002).

2.3.1 Habitat survey

A survey of the habitats that may be used by roosting bats was carried out.

2.3.2 Bat roost survey/Nesting bird survey(s)

On the 16th August 2023, the buildings were surveyed for potential roost sites and signs of bats. The survey utilised a ladder, a high-powered torch, binoculars and an endoscope (Ridgid CA-300 with 6mm and 9mm camera heads). The external inspection involved looking for bat droppings on the ground, stuck to walls or roof tiles and on windows and sills and recording suitable entry and exit points. The internal inspection focused on those areas which may be suitable for roosting bats, such

as ridge tiles, gable walls, joints and crevices in wood, crevices in walls as well as searching for bat droppings and feeding signs on the floors and other surfaces.

The following criteria were used to determine the roosting potential of the buildings.

Table 1. Description of roosting potential categories

Roosting potential	Criteria
Good	Buildings that have many areas suitable for roosting with a large number of potential access points. These are normally in sheltered locations, subject to low variation in temperature. Buildings with good potential could be used for a whole range of roosts including maternity roosts.
Moderate	Buildings with a smaller number of areas suitable for roosting, but still supporting features that could be attractive to bats and potentially support maternity roosts.
Limited	Buildings with limited roosting opportunities. These may be in locations that are subject to wide temperature fluctuations and drafts. They could be used as occasional or transient roosts, but are unsuitable for maternity roosts. Buildings that would otherwise be moderate to good potential but have reduced value due to other factors such as exposed location, separation from nearby foraging habitat, or presence of strong streetlight.
Low	Buildings that have no obvious places for bats to roost, but could be used on a sporadic or occasional basis for feeding or solitary day roosting.
Negligible	Buildings that appear unsuitable for roosting bats due to a clear lack of roosting spaces such as voids etc and/or absence of suitable access points. Such buildings in practice are rare.

A general search was made in and around the building for signs of nesting birds such as pellets, feathers, droppings, nests and nest debris.

2.3.3 Bat activity survey(s)

n/a

3 Results

3.1 Pre-survey data search

3.1.1 Designated sites

There are no statutory designated sites within 1km of the site.

3.1.2 Protected species

A Ecological Impact Assessment carried out Ethos Environmental Planning (dated January 2022) by identified a common pipistrelle day roost in a nearby building within the site and also a large roost of common pipistrelles underneath the roof of a building just outside the site boundary.

3.2 Field Surveys

3.2.1 Habitat description

The focus of the survey is a kitchen building with breakfast room extension and a garden store. For detailed descriptions see 3.2.2.

3.2.2 Bat roost survey/Nesting bird survey(s)

Kitchen/Breakfast Room (Photographs 1-4)

Single-storey stone building. The gable roof on the main part of the building is covered with Cotswold stone slates and the roof of the mono-pitch room over the breakfast room is covered with Welsh slate.

Bats

The roof of the breakfast room is sealed but there are several openings under the slates on the kitchen building leading to the cavity between the slates, battens and lining (e.g. Photograph 5). The bottom slates between overlapping slates were quite dusty indicating that bats had not used the although it was not possible to fully inspect the cavities.

There is a cavity between the east wall and the wooden lintel that could potentially be used by crevice-dwelling bats. However, this did not contain any evidence of use by bats, probably because the cavity is open on the opposite side.

There is a gap under the fascia on the south side of the building but the opening and cavity are probably too large to be used by bats (Photograph 7).

Nesting birds

There was no evidence of nesting birds.

Garden Store (Photographs 8-10)

Small detached stone building. The gable roof is covered with Cotswold stone slates and is lined with boarding and sarking. The building appears to be in regular use.

Bats

There are several openings under the slates leading to the cavity between the slates, battens and lining (e.g. Photographs 11 and 12). As for the kitchen building, the bottom slates between overlapping slates were quite dusty indicating that bats had not used the although it was not possible to fully inspect the cavities.

There is a small opening at the top of the east gable wall (Photograph 13). This did not contain any evidence of bats.

The eaves of the building are sealed (e.g. Photograph 14).

The interior of the building contains exposed timbers suitable for perching (Photographs 15 and 16). However, there was no evidence of bats and the fine cobwebs in the roof void indicate that bats have not been present.

There is a crevice in the door lintel (Photograph 17). This was full of mouse droppings.

Nesting birds

There was no evidence of nesting birds.

3.2.3 Bat activity survey(s)

n/a

3.2.4 Interpretation and evaluation of survey results

Bats

There was no evidence of bats in either the garden store or the kitchen building. It was not possible to inspect the cavities under the slates but given the dust within the opening to the cavities and the

fact that bats are more likely to use the nearby higher cavities under slates on the roof of the adjacent house, it is unlikely that they are used by bats.

Based purely on the categorisation of buildings as detailed in the current guidelines (Collins 2016) which do not take evidence, or lack of evidence, into account, both buildings are considered to be of low bat roosting potential.

Nesting Birds

There was no evidence of nesting birds.

4 Assessment

4.1 Constraints

None.

4.2 Potential impacts of the development

Planning consent is being sought from Cotswold District Council to extend the kitchen building and potentially undertake works to the small stone outbuilding (garden store). As neither of these buildings contained any evidence of bats and as the Cotswold stone slates will be unaffected this work is unlikely to have an impact on this group of species.

The proposed work is unlikely to affect nesting birds.

5 Recommendations and mitigation

Bats

There was no evidence of bats within the described kitchen building and garden store at Mill Farmhouse, Ewen (see 3.2.2. and 3.2.4). Based purely on the categorisation of buildings as detailed in the current guidelines (Collins 2016) which do not take evidence, or lack of evidence, into account, both buildings are considered to be of low bat roosting potential. As such (and as the proposed work will not affect the roofs) no further survey work is considered necessary.

Planning consent is being sought from Cotswold District Council to extend the kitchen building and potentially undertake works to the small stone outbuilding (garden store). As neither of these buildings contained any evidence of bats and as the Cotswold stone slates will be unaffected this work is unlikely to have an impact on this group of species. However, the following must be adhered to.

- All work must be carried out carefully with the expectation that bats may be found. If bats are observed within the building at any time work must cease immediately and Natural England (0300 0601582) or the ecologist for this project must be contacted for advice.

The development of the site provides an opportunity to improve the roosting opportunities for bats within the area. Bats could be encouraged to roost within the site by:

- Installing a bat box at the top of the west wall of the garden store located away from windows and lights (e.g. Photograph 18).

Birds

There is no current evidence of nesting. However, in Britain, all wild birds are granted legal protection under the Wildlife & Countryside Act 1981 (as amended), the Bern Convention and the EC Birds Directive. The legislation protects the birds and their eggs and nests while being built or in use. This protection makes it an offence intentionally kill, injure, take or have in possession any wild bird or egg. It is also an offence to intentionally damage or destroy the nest of any wild bird while it is being built or in use. Therefore, the following must be adhered to:

- If nesting birds are observed when a qualified ecologist is not present, work must stop and they must be contacted for advice. A suitable 'no work' buffer zone will need to be created around the nest and work may not be able to continue until the young have fledged.

6 References

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7 Figures



Figure 1. Location of the site (arrowed). 1:25000

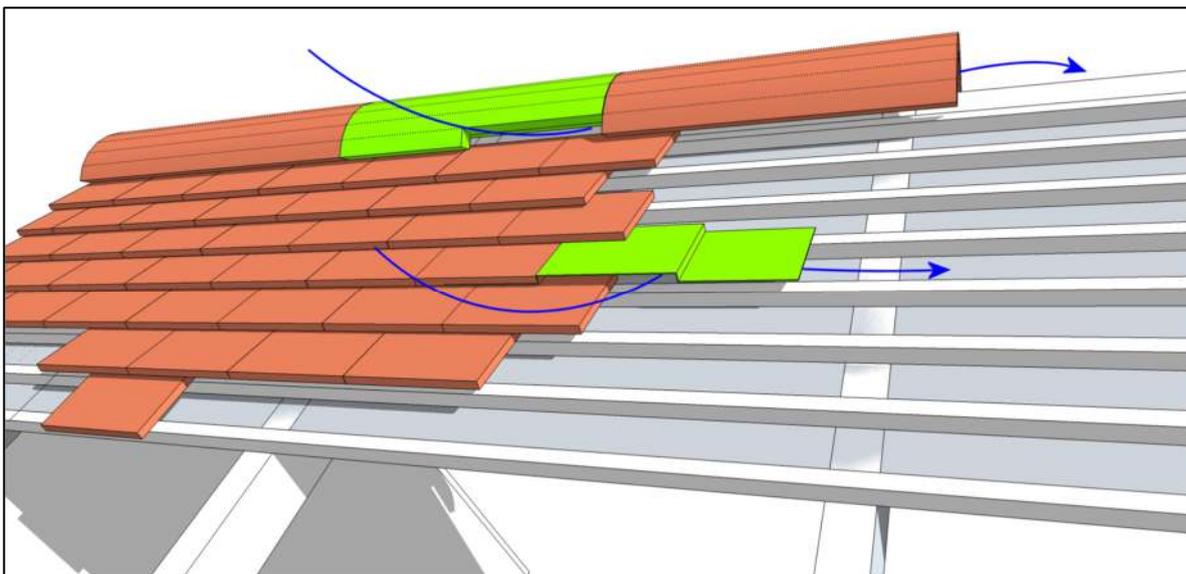


Figure 2. Access to the tile/lining cavity via a modified ridge tile and a lead saddle

8 Photographs



Photograph 1. The south elevation of the breakfast room



Photograph 2. The west elevation of the breakfast room



Photograph 3. The east elevation of the breakfast room



Photograph 4. The roof of the breakfast room



Photograph 5. Example of the slates on the roof of the kitchen



Photograph 6. Gap between the lintel and east wall of the breakfast room



Photograph 7. Opening under the fascia on the south side of the breakfast room



Photograph 8. The north and east elevations of the garden store



Photograph 9. The south and east elevations of the garden store



Photograph 10. The west elevations of the garden store



Photograph 11. Example of an opening under a slate in the roof of the garden store



Photograph 12. Further example of an opening under a slate in the roof of the garden store



Photograph 13. Small opening at the top of the east gable wall of the garden store



Photograph 14. Thesealed area under the eaves of the garden store



Photograph 15. The interior of the garden store



Photograph 16. Exposed timbers in the garden store



Photograph 17. Crvice in the door lintel of the garden store



Photograph 18. Greenwood's EcoHabitats single cavity bat box

END OF REPORT



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