



Ecological Surveys and Contracting

Bat Scoping Survey

Author: Natalie Christie

Site: Rosedew Cottage, Great Doward, Herefordshire HR9 6DY

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Report authors:

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Client Informative:

Bat surveys generally consist of the following:

- 1) Preliminary ecological appraisal (bat scoping survey)
- 2) Biological data search (desktop study)
- 3) Dusk and dawn bat activity surveys (emergence Surveys)

The preliminary ecological appraisal (bat scoping survey) identifies any evidence of bat activity at the site and also the level of potential to accommodate roosting bats. The level of potential for roosting bats at the property may warrant further survey because bats may be present in trees and buildings at all times of year even though evidence is often absent. For example, some bats particularly like to use the area between the roof slates and the roofing membrane, this area is near impossible to inspect during a bat scoping survey and may hold evidence unseen from the surveyor. In cases such as this, dusk and dawn bat activity surveys between May and September (optimal survey period) are required and will usually identify any roost present. Please note: bat activity surveys carried out between September 30th and April 30th are “sub-optimal” and may be disregarded by local authority or by Natural England.

Where bat presence is confirmed, a European protected species (EPS) derogation licence (from Natural England) is required to allow any proposed development to proceed. An EPS derogation licence can only be applied for after planning consent has been granted by the local authority and usually take around 6 weeks to process from submission of the application. Please note: an EPS derogation Licence will only be issued if the following 3 tests have been met:

- 1) The purpose of the work is for preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.
- 2) There is no satisfactory alternative.
- 3) The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range.

The EPS licence application is supported by a method statement for the development which describes the actions which need to be taken to protect bats prior to, during and after work has ceased (mitigation).

The licence application requires a “Named Ecologist” who is usually employed to write the method statement & EPS licence application and oversee the project to its conclusion.

The mitigation proposals may include employing an ecological clerk of works to oversee the development and may also include a provision for post project monitoring of the mitigation.



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Executive Summary:

This is a brief summary of the findings. **Please read the entire report for full details.**

Introduction

- The purpose of this bat scoping survey report is to assess the use of the building by bat species. The report will take into account the potential of the building to accommodate roosting bats, any evidence discovered externally or internally and the quality of surrounding habitat for bat foraging or commuting.
- The proposed development to the cottage includes building an extension on the north elevation, which will include realigning the existing roof, and 2 existing casement windows (south elevation) will be replaced with floor length windows. The garage will be demolished.
- A bat scoping survey was commissioned by Mr & Mrs Ayling and carried out by Natalie Christie and Steve Wadley of AVA Ecology Ltd. on 24/01/2019.

Results

- The potential of the cottage and garage to support bats is regarded as negligible. 5 gaps identified on the north elevation of the cottage were deemed to have negligible potential to support bats after thorough endoscopic inspection by a bat licensed ecologist. (Steve Wadley). No access or evidence of bats was identified in the small roof void of the cottage.
- The sarking boards and felt roofing shingles of the garage are well sealed, there is no roof void and no evidence of bats, bat access points or potential roosting features were found.

Conclusion

- Further surveys (bat emergence surveys) will not be required to assess the building's potential to support bat species.
- An EPS licence was not deemed necessary, however, **an Ecological Construction Method Statement (ECMS) must be prepared by a suitably qualified ecologist prior to any works commencing.** The guidance listed within this ECMS must be strictly adhered to.
- The site is in close proximity to Wye Valley Woodland SAC and Upper Wye Gorge SSSI (both 30m away), so the impact of the development on foraging and commuting bats in the area will be potentially high and suitable mitigation measures must be listed within the ECMS.
- In terms of the favourable conservation status of bat species and in the absence of mitigation, this is a negligible risk proposal as it does not involve the following:
 - A maternity roost, hibernation roost, proposal involving Greater Horseshoe Bats, Lesser Horseshoe Bats, Barbastelle Bats, Bechsteins Bats, Leislars Bats, Serotine Bats, Grey Long-eared Bats, and Nathusius Pipistrelle Bats.
 - 3 different species of bats
 - A bat swarming or mating site
 - An accumulative impact from previous developments in the vicinity involving bats
- The client should consult with the local planning authority to determine whether a Habitats Regulations Assessment (HRA) is required, due to the close proximity of the site to Wye Valley Woodlands SAC and Upper Wye Gorge SSSI (both 30m from site). (As there is very little potential for bats, there is no risk of the SAC being impacted in terms of bats, but any drainage / foul water management changes may impact the SAC)



1. Introduction

This survey and report was led by Natalie Christie and reviewed by Steve Wadley of AVA Ecology Ltd.

Natalie Christie is an Ecologist with a BSc (Hons) in Zoology.

Memberships: Monmouthshire Bat Group (2018)
South East Wales Biodiversity Records Centre (2016)

Steve Wadley has extensive experience of bat conservation, research and commercial survey work in Wales and England.

Licences Held: Natural England class 4 bat survey licence (Number 2016-20666-CLS-CLS)
Natural England VBRV licence
Natural Resources Wales bat licence (74520a:OTH:CSAB:2017)
Natural Resources Wales VBRV (trainer) licence

Memberships: Chartered Institute of Ecology and Environmental Management (2012)
Monmouthshire Bat Group (2010)
Gloucestershire Bat Group (2011)

1.1 Site and Building Description

The site is a cottage and a small onsite garage located at grid reference SO 55674 15928 in Great Doward, Herefordshire. The habitat onsite is made up of hard standing, patio, grassland and mixed-species trees.

The cottage is currently occupied by the owners for residential purposes. The cottage has mostly brick and render walls, with some natural stone wall and wall with wooden cladding present at the most eastern end of the cottage. On the southern elevation there is a glass and brick conservatory, so there is moderate light spill at the southern side of the cottage. The cottage has a clay pan tiled roof with bitumen membrane. A total of 5 small gaps were identified along the northern elevation; 1 under a roof tile, 2 under the lead flashing, 1 in the masonry and 1 under a fold of bitumen membrane. The topography around the cottage is undulating. There is an existing artificial bat cave that has been constructed below the patio of the house on the southern elevation; this a level below the ground-floor of the cottage and is at a distance from the existing conservatory.

The garage is mostly a 'shelter' for a car that is open to the elements (see Fig. 19), with one small storage room at the southeast elevation. The walls consist of sarking boards (internally and externally) and the roof is made of felt roofing shingles. Internally, the garage has vaulted ceilings made with sarking boards.

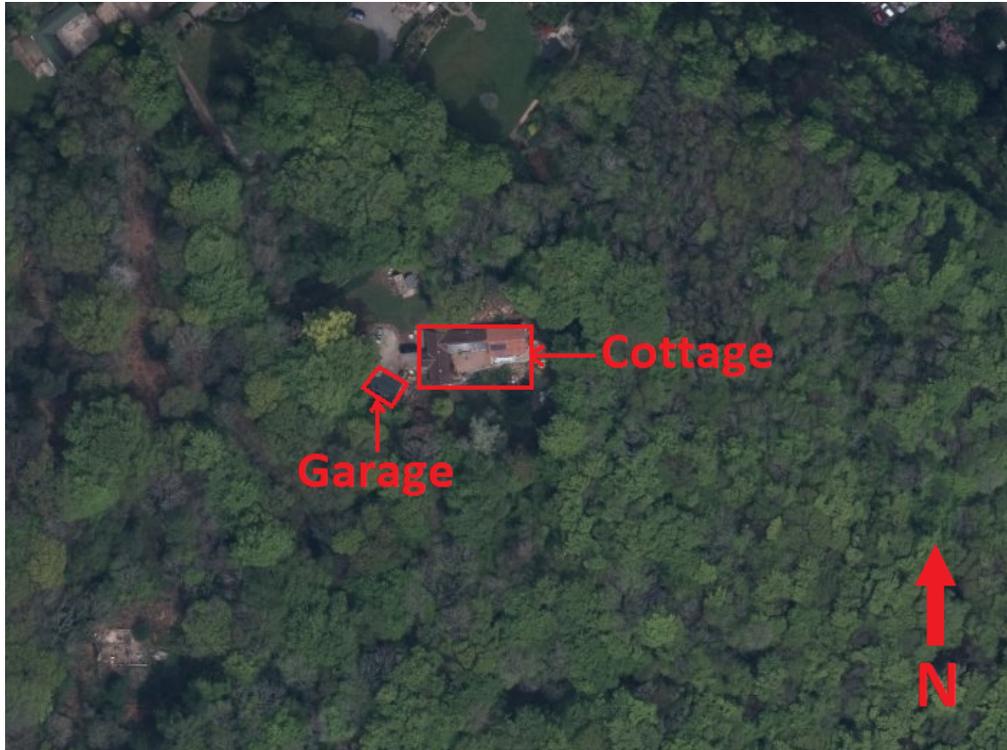


Figure 1. Site location. Contains Ordnance Survey data © Crown copyright and database right.

1.2 Proposed Development

The proposed development includes building an extension on the northern elevation of the cottage, which will include realigning the existing roof (see plans). The extension is proposed to extend approximately 4ft from the existing cottage and no vegetation is proposed for removal. Two casement windows currently present on the southern elevation of the cottage will be replaced with larger, floor length windows. The garage will be demolished.

1.3 Aims of the study

The aim of this study is to identify evidence of any use of the building by bat and roof nesting bird species. This survey report aims to assess the level of usage, classification of roost present, and any requirement for a European Protected Species mitigation licence (EPS). It will also provide mitigation proposals to be carried out prior to, during and after the works.



2 Methodology

2.1 Desk Study

A desk study was undertaken on 25/01/2019 to identify any ecologically significant records of European Protected Species existing on-site or within 2km and to identify European and UK designated sites (i.e. Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs) within a 2km radius. Freely available sources searched were MAGIC and the NBN Gateway.

A full data search was not carried out because the buildings are well maintained, relatively modern, single dwellings with negligible potential to support roosting bats. The extension is proposed to extend approximately only 4ft from the existing cottage and no vegetation is proposed for removal.

The local authority planning website was searched for information on historical developments within the zone of impact of the proposed works to assess cumulative impacts on bats.

2.2 Field Survey

The methods used were appropriate to achieve the aims of the survey and follow **Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition) The Bat Conservation Trust London and BS 42020:2013 Biodiversity (Code of practice for planning and development)**.

The building was inspected externally and internally using binoculars, ladders, camera and a high-powered torch. Photographs of any evidence of bat or bird activity and potential exit or entry points identified in the building were taken and noted for the report.

Date	24/01/2019	Notes
Weather	Overcast	
Cloud Cover	100%	
Temperature	1°C	
Wind Speed	0mph	
Name	Bat Licence	Experience
Natalie Christie	N/A	Graduate Ecologist
Steve Wadley	2016-20666-CLS-CLS	Bat Specialist



3 Results

3.1 Desk Study

3.1.1 Designated Sites

There are no designated sites of importance to bats within a 2km radius of the site. However, other Sites of Special Scientific Interest (SSSI) and Special Areas of Conservation (SAC) within a 2km radius of the site include the following:

SAC(s):	Wye Valley Woodlands	(30m)
	River Wye	(315m)
SSSI(s):	Upper Wye Gorge	(30m)
	River Wye	(315m)
	Great Doward	(725m)

3.1.2 Protected Species: Bats

Table 1 – The desk top survey identified the following bat roost records within a 2km radius in the last 10 years

Scientific Name	Common Name	Distance	Roost Type
<i>Barbastella barbastellus</i>	Barbastelle bat	<2km	Status Unknown
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle bat	<2km	Status Unknown
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle bat	<2km	Status Unknown
<i>Pipistrellus nathusii</i>	Nathusius' Pipistrelle bat	<2km	Status Unknown
<i>Plecotus auritus</i>	Brown Long-Eared bat	<2km	Status Unknown
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe bat	<2km	Status Unknown
<i>Rhinolophus ferrumequinum</i>	Greater Horseshoe bat	<2km	Status Unknown
<i>Myotis daubentoniid</i>	Daubenton's bat	<2km	Status Unknown
<i>Myotis nattererii</i>	Natterer's bat	<2km	Status Unknown
<i>Nyctalus noctula</i>	Noctule bat	<2km	Status Unknown
<i>Eptesicus serotinus</i>	Serotine bat	<2km	Status Unknown
<i>Myotis mystacinus/brandtii</i>	Whiskered/Brandt's bat	<2km	Status Unknown

Please note, Steve Wadley has been involved in the monitoring of SSSI caves at Great Doward including counting Greater and Lesser Horseshoe bats as part of the NBMP (Gloucestershire Bat Group).



3.1.3 Protected Species: Other

The desk top survey identified the following EPS records within a 2km radius:

Table 2 – The desk top survey identified the following other EPS records within a 2km radius in the last 10 years

Scientific Name	Common Name	Distance
<i>Arvicola amphibius</i>	Water vole	<2km
<i>Lutra lutra</i>	Otter	<2km
<i>Meles meles</i>	Badger	<2km
<i>Muscardinus avellanarius</i>	Hazel Dormouse	<2km
<i>Athene noctua</i>	Little Owl	<2km
<i>Tyto alba</i>	Barn Owl	<2km
<i>Triturus cristatus</i>	Great Crested Newt	<2km
<i>Vipera berus</i>	Adder	<2km

3.2 Field Surveys

3.2.1 Habitat Description

The onsite habitat includes hard standing, garden patio, grassland and mixed-species trees. There is also an artificial “bat cave” onsite, below the patio of the cottage at the southern elevation of the building (see Fig. 18 and 20). This was inspected by the licensed ecologist during the scoping survey on 24/01/2019 and no bats were found to be using this cave for hibernation. It is unknown whether bats utilise this cave for summer roosting. This cave is on the opposite side of the cottage (south elevation) to where the extension is proposed for construction (north elevation) and is at a distance from the casement windows proposed for replacement on the south elevation. However, the cave is in close proximity to the onsite garage, of which should consequently be demolished during the winter period when any potential summer roosting bats would highly likely be absent from the cave (see Section 6).

The wider habitat consists of large woodlands, rivers, arable and pasture fields, detached residential dwellings, linear hedgerows and tree lines (Fig. 2 and 3). The village of Symond’s Yat is approximately 500m north of the site. The habitat surrounding the site is predominantly a large expanse of mixed-species woodland, which includes Wye Valley Woodlands SAC and the Upper Wye Gorge SSSI; both just 30m west and south of the site (Fig. 4). This habitat is ideal for bats, providing excellent foraging, commuting and roosting opportunities and connecting the site to further valuable habitat such as the River Wye SSSI / SAC (315m from site). The River Wye itself provides excellent opportunities to foraging and commuting bats and provides additional connectivity to the large expanses of surrounding valuable woodland habitat. The site is just 940m northwest of the Wye Valley Area of Outstanding Natural Beauty; an extensive conservation area of woodlands, river and rolling hills.

Overall, the expansive areas of dense and lush vegetation, and the River Wye SSSI/SAC, in the habitat surrounding the site is ideal for use by bats.



Figure 2. Habitat map. Contains Ordnance Survey data © Crown copyright and database right.



Figure 3. Water and woodland map. Contains Ordnance Survey data © Crown copyright and database right.

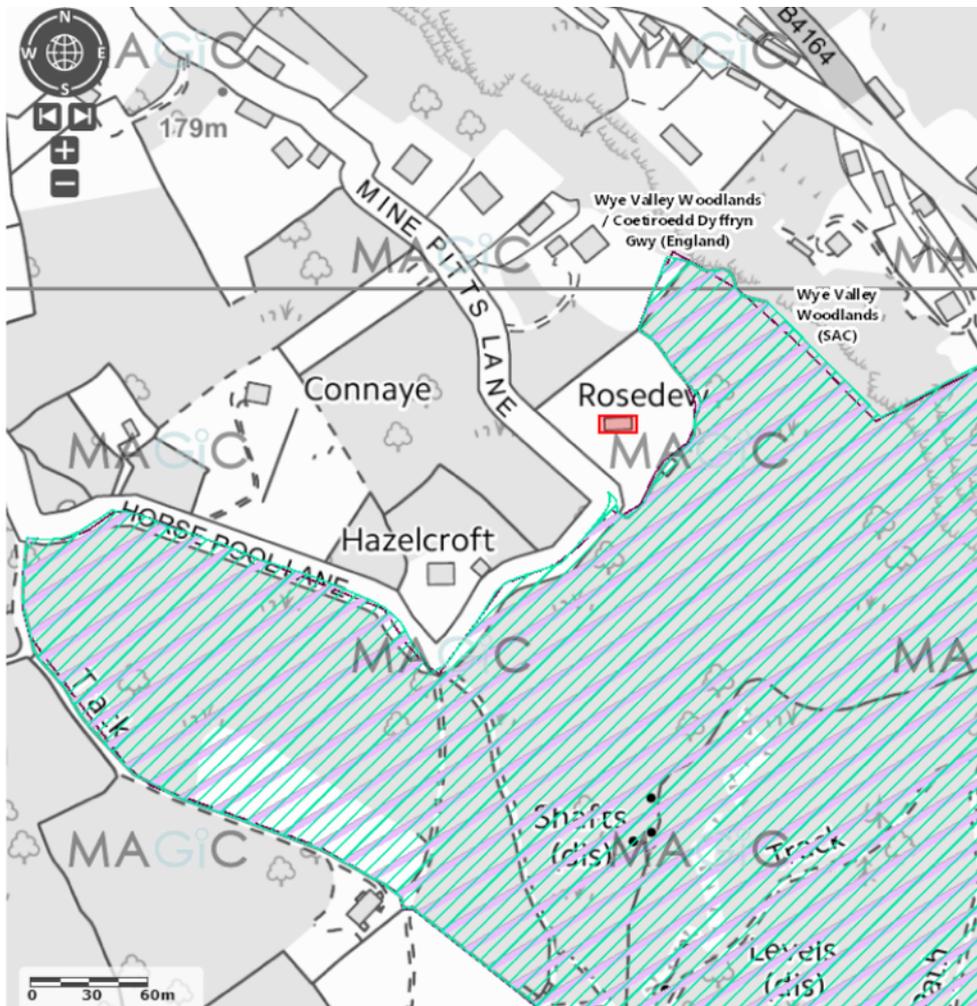


Figure 4. Map showing the close proximity of the site (red rectangle) to the Wye Vally Woodlands SAC (pink stripes) and Upper Wye Gorge SSSI (green stripes). Taken from Magic Maps Application © Crown Copyright and database rights 2019. Ordnance Survey 100022861.



3.2.2 External Survey

The external survey identified:

Building	Potential Level	External Description	Justification of Assessment
Cottage	Negligible	<p>Mostly brick and render walls, with some natural stone wall and wall with wooden cladding at the most eastern end of the cottage. It has a clay pan tiled roof. There is a glass and brick conservatory on the southern elevation. A bat cave is present below the patio on the southern elevation (see Fig.18 and 20); the entrance is below ground-floor-level. When inspected by a bat licensed ecologist (Steve Wadley), no bats were found to be using this cave for hibernation.</p>	<p>There is already moderate light spill at the southern side of the cottage from the conservatory. Therefore, it is highly likely that the replacement of 2 existing casement windows on the south elevation with floor-length windows will not significantly increase light-spill on this side of the house and will have potentially negligible impact on any bats using the bat cave. The cave is approx. 9m south from the casement windows and 1 level below ground-floor. It is on the opposite side of the cottage (south elevation) to the proposed extension (north elevation). The cave is fairly near to the onsite garage, of which should consequently be demolished during the winter period when any potential summer roosting bats would highly likely be absent from the cave (see Section 6).</p>
		<p>A total of 5 small gaps were found along the northern elevation; 1 under a roof tile (Fig. 8), 2 under the lead flashing (Fig. 7 and Fig. 9), 1 in the masonry (at the northwest corner; Fig. 6) and 1 under a fold of bitumen membrane (Fig. 10).</p>	<p>All 5 gaps were thoroughly inspected with an endoscope by a bat licensed ecologist (Steve Wadley) during the scoping survey. Upon endoscopic inspection, all 5 gaps were determined to have negligible potential to support roosting bats because they were very shallow and did not contain any evidence of bat usage (e.g. bat droppings, urine staining etc.).</p>
Garage	Negligible	<p>The walls are made of sarking boards and the roof is made of felt roofing shingles. The garage is mostly a car 'shelter' that is open to the elements (see Fig. 19), with one small, closed in</p>	<p>The garage is a small, modern build. The sarking boards, soffits and felt roofing shingles are well sealed, and no bat access points or potential roosting features were identified in any area of the garage. No evidence of bats was identified.</p>



storage room at the southeast elevation.

3.2.3 Internal Survey

The internal survey identified:

Building	Potential Level	Internal Description	Justification of Assessment
Cottage	Negligible	The cottage is occupied by the current owners for residential purposes. There is a very small roof void (740mm ceiling to rafters) and the roof has bitumen membrane (Fig. 25).	The roof void is very small and, when inspected, no evidence of bats or bat access points were identified within the roof void.
Garage	Negligible	The garage has vaulted ceilings with sarking boards (Fig. 23 & 24). Internally, the garage also has walls made of sarking boards. The main 'shelter' part of the garage is open to the elements and shelters a car. The closed room at the southeast elevation is used for storage of garden and house equipment.	There is no roof void and the sarking boards are well sealed. No evidence of bats or bat access points were found in any area of the storage room or shelter area of the garage. On top of this, the shelter area is open to the elements and would provide unfavourable conditions for roosting bats in this part.
Overall building potential level		Negligible (cottage and garage)	



4 Assessment

4.1 Survey Constraints (incl. equipment)

In terms of bat species present within 2km, some of the data from existing historical records (data taken from a range of freely available sources) may be incorrect due to the level of skill of the surveyors / recorders and also the limitations of equipment used to identify bat species. Some bat species, especially Myotis bats, sound very similar on detectors and look similar on sonogram analysis, therefore historical mistakes in species identification may have been made. Some of the data contained within the data search has been entered at a low resolution so accuracy of existing bat roost record locations is limited.

Surveys were carried out at an optimal time of year, no physical survey constraints were noted and it was possible to view or access all areas of the building.

4.2 Potential Impacts

4.2.1 Designated Sites

In the absence of mitigation, the proposed development would have potentially negligible impact on designated sites of importance to bats. This is because there are no designated sites of importance to bats within a 2km radius of the site.

4.2.2 Bat Roosts

In the absence of mitigation, the proposed development would have a potentially negligible impact on bat roosts. It is highly unlikely that bats are using the buildings to roost. When the 5 gaps identified along the northern elevation of the cottage were inspected with an endoscope by a bat licensed ecologist, they were found to be very shallow and contained no evidence of bats (such as droppings, urine staining etc.) and as such were deemed to have negligible potential to support roosting bats.

4.2.3 Bat Foraging and Commuting Habitat

In the absence of mitigation, the proposed development would have potentially high impact on bat foraging and commuting routes. The development is located only 30m east and north of Wye Valley Woodland SAC and Upper Wye Gorge SSSI (see Fig. 4); habitats highly likely to be utilised by foraging and commuting bats in the area. Potential disturbance to these bats could come from:

- Increased light-spill from any external lighting scheme, particularly along the north elevation of the cottage
- Increased noise, dust and vibrations during works

The new extension will extend out approximately 4ft from the northern elevation of the building, but no vegetation is proposed for removal therefore any potential foraging and commuting routes will not be directly removed during the development.



4.2.4 Overall Bat Impacts (Cumulative Impacts)

There are no previous or ongoing developments in the area resulting in an impact on bats. The proposed development is not considered to result in any cumulative impacts on bats.

4.2.5 Favourable Conservation Status Impact

Local Impact	-	Negligible
Regional Impact	-	Negligible
National Impact	-	Negligible

The cottage and garage both have negligible potential to support roosting bats. The proposed development will therefore have a potentially negligible impact the favourable conservation status of bats.

4.2.6 Roof nesting birds

In the absence of mitigation, the proposed development would have potentially negligible impact on nesting birds. No roof nesting birds were identified during the scoping survey. No vegetation is proposed for removal during the proposed development.

4.2.7 Other Ecological Impacts

No other ecological impacts are predicted to result from the proposed development.



5 Legislation and Policy Guidance

This legislation must be considered at all stages of development.

All bat species occurring in the UK are fully protected by European and UK law.

5.1.0 All bat species and their roosts are legally protected under the Wildlife & Countryside Act 1981 (& as amended) and the Conservation of Habitats and Species Regulations 2017 which implements the provisions of EC Directive 92/43 (“The Habitats Directive”), the latter of which has been subject to legal interpretation within case law comprising (amongst others) *Morge (FC) (Appellant) v Hampshire County Council (Respondent)*: Hilary Term [2011] UKSC 2 On appeal from: 2010 EWCA Civ 608. More generally, under the Natural Environment and Rural Communities (NERC) Act 2006 a Planning Authority has a duty to conserve biodiversity.

Planning Policy

5.1.1 Planning policy is set out in the National Planning Policy Framework and with further guidance provided in ODPM Circular 06/2005, which defines the duty of Planning Authorities when considering applications for developments that may affect legally protected species. Additional consideration is required in respect of UK Biodiversity Action Plan (BAP) and Local (LBAP) Priority Species

5.1.2 Wildlife & Countryside Act 1981 (& as amended)

5.1.3 All bat species are listed on Schedule 5 of the Wildlife & Countryside Act 1981 (& as amended) and receive legal protection under Part 1, Section 9, sub-section (4) (b & c) which states:

Subject to the provisions of this Part, a person is guilty of an offence if intentionally or recklessly—

(b) he / she disturbs any such animal while it is occupying a structure or place which it uses for shelter or protection; or

(c) he /she obstructs access to any structure or place which any such animal uses for shelter or protection.

5.1.4 Conservation of Habitats and Species Regulations 2017

5.1.6 Part 3, regulation 41, paragraph (1) of the Conservation of Habitats and Species Regulations 2017 states that:

A person who—

(a) deliberately captures, injures or kills any wild animal of a European protected species,



- (b) deliberately disturbs wild animals of any such species,
- (c) deliberately takes or destroys the eggs of such an animal, or
- (d) damages or destroys a breeding site or resting place of such an animal,

is guilty of an offence.

5.1.7 Part 3, regulation 41, paragraph (2) states that disturbance of animals 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) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) to affect significantly the local distribution or abundance of the species to which they belong.

5.1.8 The offence in paragraph 2.6.2 above applies regardless of the stage of the life of the animal in question.

5.1.9 Under the terms of the Habitats Directive, developments that would result in a breach of the protection afforded to European Protected Species (EPS) may nevertheless be allowed by derogation under Article 16 which is transposed by Regulation 44 of the Conservation of Habitats and Species Regulations 2017. By derogation, licences may be issued for certain prescribed purposes listed in Regulation 44(2)(a) - (g) where the licensing authority is satisfied that two tests are met, which are set out in Regulation 44(3): -

A licence must not be issued unless there is no satisfactory alternative; and

It must not be issued unless the action authorised by the licence would not be detrimental to maintaining the population of the species concerned at a favourable conservation status in its natural range.

5.2 Natural Environment and Rural Communities (NERC) Act 2006

5.2.1 Under the Natural Environment and Rural Communities (NERC) Act 2006 a Planning Authority has a duty to conserve biodiversity. This duty is set out at Section 40, which states:

“(1) Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.



(2) In complying with subsection (1), a Minister of the Crown, government department or the National Assembly for Wales must in particular have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.

(3) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat..."

5.2.2 National Planning Policy Framework (NPPF)

5.2.3 In the most basic terms, Paragraph 109 of the 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..."

5.2.4 In addition, Paragraph 117 identifies the need for planning policies to identify and map components of local ecological networks (both designated sites and stepping stones in between), and promote the preservation, restoration and enhancement of UK BAP Priority Habitats and ecological networks, whilst also promoting the protection and recovery of Priority Species.

5.2.5 ODPM Circular 06/2005

5.2.6 ODPM Circular 06/2005 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."

Therefore:

"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."

However:



“Bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development.”

5.2.7 Biodiversity Action Plans (BAP)

5.2.8 The UK Biodiversity Action Plans were established in order to provide detailed strategies for the conservation of the most threatened habitats and species at a national level. Such habitats and species are known as ‘Priority Habitats’ and ‘Priority Species’. Lists of Priority Habitats and Species are updated regularly to ensure they remain relevant to the true conservation situation.

5.2.9 Under Section 40 of the NERC Act 2006, Planning Authorities must “have regard” for the conservation of biodiversity in England, when carrying out their normal functions. In particular, Local Planning Authorities will use it to identify the species and habitats that require specific consideration in dealing with planning and development control.

5.3.0 There are currently seven species of bat listed as UK BAP Priority Species comprising Barbastelle bat (*Barbastella barbastellus*), Bechstein’s bat (*Myotis bechsteini*), noctule bat (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), Brown Long-Eared bat (*Plecotus auritus*), Greater Horseshoe bat (*Rhinolophus ferrumequinum*) and Lesser Horseshoe bat (*Rhinolophus hipposideros*).

6 Working Method Statement

6.1 Mitigation Proposals

Please Note: if the plans change after this report is submitted then **new mitigation may be required**.

6.1.1 Pre Works Mitigation

- a) Due to the proximity to the SAC, an **Ecological Construction Method Statement (ECMS)** must be prepared by a suitably qualified ecologist prior to any works being carried out. The guidance presented within the ECMS must be strictly adhered to.
- b) A NE bat licenced ecologist must be employed to be onsite prior to works commencing. Please ensure at least 2 weeks’ notice is given to inform the ecologist of the physical works start date.
- c) Any change to plans after the date of the issue of the mitigation licence must be notified to the ecologist and NE by the licence holder prior to works commencing.



6.1.2 Construction Mitigation

- a) A toolbox talk regarding bats and legislation must be given to contractors by the ecologist prior to works commencing.
- b) All roofing material, wooden barge boards, sarking boards and wall material must be removed carefully by hand and undersides inspected. Roof slates must be removed carefully in an upwards direction and the undersides inspected for bats prior to storage or disposal.
- c) All identified gaps under the lead flashing, under roof tiles, under folds of roof membrane etc.) must be inspected with an endoscope by a licensed ecologist immediately prior to repointing, filling-in or removal of the fascia/tiles/flashing.
- d) If bats are discovered at any stage of the development the ecologist must be informed immediately and works stopped until the ecologist has given advice.
- e) The ecologist must have the necessary equipment to take a discovered bat into captivity and the captive bat will be either released that evening at dusk on site or be placed into a Pre-positioned bat box and allowed to fly at its own will. If weather conditions are poor the bat will be kept overnight by the ecologist and released on site on an evening when the weather conditions are considered optimal.
- f) As the artificial bat cave is in close proximity to the onsite garage, the garage must consequently be demolished during the winter period (October – March) when any potential summer roosting bats would highly likely be absent from the cave. Details of timings will be listed within the ECMS.
- g) Any external lighting must be low level, low wattage, on a timed PIR switch and must not shine directly at the trees and woodland habitat surrounding the site. Details will be provided within the ECMS.
- h) One 2F Schwegler Bat Box must be installed onsite prior to any works commencing, within an onsite tree that is not to be removed (see Fig. 5). This will act as a receptor site for any bats discovered during the works.
- i) Bat-friendly timber treatments must be used on any timbers used in the new build.

6.1.3 Post construction Mitigation

- a) Monitoring of the development mitigation was not deemed necessary due to the low-scale of the development and because the impacts of the proposed development on bats are predicted to be minimal. However, usage of the artificial bat cave in summer by bats should be monitored and records sent to the local biodiversity records centre (Herefordshire Biological Records Centre)

6.2 Further Survey

Further survey was not deemed necessary as enough information was gained during the scoping survey to attain a confident and accurate assessment of use of the building by bat species.



6.3 Requirement for Licence

A European protected species licence was not deemed necessary, however, an Ecological Construction Method Statement (ECMS) must be prepared by a suitably qualified ecologist prior to any works commencing. The guidance listed within this ECMS must be strictly adhered to.

The client should also consult with the local planning authority to determine whether a Habitats Regulations Assessment (HRA) is required, due to the close proximity of the site to Wye Valley Woodlands SAC and Upper Wye Gorge SSSI (both 30m from site).



7 Conclusion

The potential of both the cottage and the garage is regarded as negligible. All 5 small gaps identified on the northern elevation of the cottage were thoroughly inspected with an endoscope by a bat licensed ecologist. All 5 gaps were determined to have negligible potential to support roosting bats as they were very shallow and contained no evidence of bat usage (e.g. droppings). The cottage roof void is small (740mm ceiling to rafters) and no evidence of bats was found. The sarking boards, soffits and felt roofing shingles of the garage are well sealed and there is no roof void. No evidence of bats was found in the garage.

Further survey was not deemed necessary as enough information was gained during the scoping survey to attain a confident and accurate assessment of use of the building by bat species.

A European protected species licence was not deemed necessary, however, **an Ecological Construction Method Statement (ECMS) must be prepared by a suitably qualified ecologist prior to any works commencing.** The guidance listed within this ECMS must be strictly adhered to.

The ECMS will state that a bat licenced ecologist must be employed to be onsite prior to works commencing. Please ensure at least 2 weeks' notice is given to inform the ecologist of the physical works start date.

The site is in close proximity to Wye Valley Woodland SAC and Upper Wye Gorge SSSI (both 30m away), therefore the impact of the development on foraging and commuting bats in this area will be potentially high and suitable mitigation measures must be listed within the ECMS. Potential disturbance to these bats could come from:

- Increased light-spill from any external lighting scheme, particularly along the north elevation of the cottage
- Increased noise, dust and vibrations during works.

The client should consult with the local planning authority to determine whether a Habitats Regulations Assessment (HRA) is required, due to the close proximity of the site to Wye Valley Woodlands SAC and Upper Wye Gorge SSSI (both 30m from site).



8 References

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Joint Nature Conservation Committee. (2004). The bat workers' manual (3rd Edition). Eds: Mitchell-Jones, A.J. & McLeish, A.P.

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Tan 5 Planning Policy in Wales.

The Conservation of Habitats and Species Regulations 2017 (as amended).

The Wildlife and Countryside Act 1981 (as amended).



Appendix I: Plans

Plans not yet available.

Appendix II: Supporting Photographs & Graphs



Figure 5. Example of a 2F Schwegler Bat Box, available at:
<https://www.nhbs.com/browse/search?q=schwegler+bat&qtview=158629>



Figure 6. Gap in the masonry on the north elevation of the cottage.



Figure 7. Gap between the lead flashing and a bargeboard on the northern gable of the cottage.



Figure 8. Gap under a roof tile on the north elevation of the cottage.



Figure 9. Gap under lead flashing on the north elevation of the cottage.



Figure 10. Gap under a fold of bitumen membrane on the north elevation of the cottage.



Figure 11. West elevation of the cottage.



Figure 12. Northwest corner of the cottage, looking at the north elevation.



Figure 13. North elevation of the cottage. The proposed extension will extend approx. 4ft from this elevation.



Figure 14. North elevation of the cottage.



Figure 15. East elevation of cottage.



Figure 16. Southeast corner of the cottage. The conservatory can be seen.



Figure 17. South elevation of the cottage. The two casement windows can be seen on the south elevation. The patio adjacent to the south elevation at ground-floor level. The image was taken from one level below the ground-floor of the cottage.



Figure 18. Southeast elevations of the cottage. The cottage is 'L' shaped. Bat cave is pictured.



Figure 19. Northern corner of the garage.



Figure 20. Southern corner of the garage. Eastern elevation and southern elevation of the cottage can be seen.



Figure 21. Eastern corner of the garage, mostly looking at the southeast elevation.



Figure 22. Western corner of the garage.



Figure 23. Internal view of the garage's ceiling and walls made with sarking boards (storage room).



Figure 24. Internal view of the garage's ceiling and walls made with sarking boards (shelter).



Figure 25. Small roof void of the cottage.