

# *Greena Ecological Consultancy*

## **PRELIMINARY ECOLOGICAL ASSESSMENT REPORT & STAGE II BAT ACTIVITY SURVEY**

**Tower View**

**Ridgeway**

**Nunney**

**Frome**

**BA11 4NU**

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**Brief:**

A preliminary ecological assessment report was requested to support a planning application for works to the site.

This ecological survey is intended to ascertain sufficient information to evaluate the situation adequately in preparation of the above-mentioned works. The information gathered will be necessary to comply with European regulations, which are connected with planning regulations and with The Wildlife and Countryside Directives and Habitat Regulations.

Consultation with the local Planning Authority is required.

## Summary

- Greena Ecological Consultancy was instructed by Lucy Marshall, owner of this property, to undertake this survey to support a planning application for development of the site into accommodation.
- The survey site comprised of a modern agricultural building comprising of stable stores and a garage at the south end.
- The site lies within Mells Valley Special Area of Conservation (SAC) consultation area B primarily for horseshoe bats.
- The site was surveyed in August 2022 and an activity survey conducted on the 15<sup>th</sup> August 2022.
- There were no bat signs found in the building. The building was deemed to have low bat roost potential so one bat activity survey was completed.
- There were no bats recorded emerging from the building.
- There were no birds nesting in the building during the time of the initial survey inspection.
- No other UK or European Protected Species was confirmed or likely.

# 1. Introduction

## 1.1 Background

Greena Ecological Consultancy was instructed by Lee Wright, architect of this property, to undertake this survey to support a planning application.

Greena have carried out extensive fieldwork for bats in the area where at least 14 species have been recorded.

The surrounding habitat offers high quality roosting and foraging opportunities for bats as well as nesting birds.

## 1.2 Legislation

### 1.2.1 Bats

All UK bat species and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5, under the Countryside and Rights of Way Act 2000, and under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Regulations designate bats as European Protected Species (EPS).

Taken together, the Acts and Regulations protecting bats make it an offence to:

- Deliberately kill, injure, capture or take bats;
- Deliberately disturb bats. This particularly relates to disturbance that is likely to:
  - Impair their ability to survive, breed or reproduce, or to rear or nurture their young;
  - Impair their ability to hibernate or (for migratory species) migrate; and/or
  - Affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy bat roosts;
- Possess or transport a bat or part of a bat, unless acquired legally; and
- Sell, offer for sale or exchange bats or parts of bats

A roost is any structure or place used for shelter or protection. Bats need to have access to a number of roosts because they use different roosts depending on the season, breeding status and prevailing weather conditions. For this reason, roosts are protected whether or not bats are present at the time.

As bats are designated EPS, development and building works that are likely to result in the disturbance of bats, damage or destruction of their roosts, or require bats to be caught or translocated, usually require an EPS licence to be obtained from Natural England before any works begin. Obtaining a licence involves completing an Application pack, including a Method Statement that details mitigation appropriate to maintaining the 'favourable conservation status' of the local bat population. Three conditions must be met before a licence can be granted:

- There is no satisfactory alternative;
- The development will not be detrimental to the maintenance of local bat populations at a 'favourable conservation status' in their natural range; and
- The development must be for 'imperative reasons of overriding public interest including those of a social or economic nature.

An EPS licence is required for all development activities if there is a reasonable likelihood that an offence against Conservation Habitats and Species Regulations 2017 (as amended), Wildlife and Countryside Act 1981 (as amended) or Environmental Damage Regulation 2009 (as amended) will be committed.

The following offence could potentially be committed by carrying out the proposed development if any bat species are present during the conversion works:

- Capturing or killing – a wild animal of a European Protected Species (EPS) could be deliberately captured, injured or killed (Reg 41(1)(a));
- Disturbing EPS – a wild animal of an EPS could be deliberately disturbed including in particular a disturbance which is likely to impair its / their ability to survive or hibernate (Reg 41(1)(b));
- Disturbing EPS while occupying a structure or place used for shelter or protection – includes intentional and reckless disturbance (s9(4)(b)WCA); and
- Damage of an EPS breeding site or resting place – (Reg 41(1)(d)) – strict liability

The above stated offences can be avoided where works are to take place when bats are not present and bat roost will be maintained unchanged. If roost is going to be available to bats at the time they usually occupy the structure, a continued ecological functionality of the site will be preserved. Suitable mitigation measures must be put in place prior, during and post works to ensure that continued ecological functionality will be maintained. In the case the above listed offences cannot be guaranteed to be avoided throughout the proposed development, an EPS licence to derogate must be sought.

The full EPS licence generally applies if the proposed development is to cause greater than low ecological impact. A simpler and faster way of carrying out development with low ecological impact has been implemented by Natural England under the Bat Mitigation Class Licence (BMCL). It involved BMCL Registered Consultants who can supervise the proposed low impact development under their personal class licence, the need for preparation and processing of an EPS licence is vastly reduced. The development is carried out under a site registration prepared for the works and under the licenced ecologist. BMCL only covers low impact development affecting low numbers of “common” bats and providing the site in question does not serve as a maternity or hibernation roost.

### **1.2.2 Birds**

In the UK, with the exception of 13 ‘pest species’ of birds, which may be killed by authorised persons only, wild birds have general protection under The Wildlife and Countryside Act (1984). It is an offence to: kill, injure, capture or take a wild bird; take damage or destroy nests (in use or being built); and take or destroy eggs. Under Schedule I of the Act, some species (including the barn owl *Tyto alba*) are protected by special penalties at all times.

Birds receive additional protection under the European Communities Council Directives on the Conservation of Wild birds. This directive relates to the conservation of all species of birds naturally occurring in the world in European territory of the Member States, as well as their nests and habitats.

If any of the above resulted from a person being reckless, even if they had no intention of committing the offence, their action would still be considered an offence.

## 2. Aims and Objectives

The aim of the survey and supporting desk study was to satisfy the requirements of the National Planning Policy Framework (NPPF), identify ecological features within or near the site that could potentially pose a constraint to the proposed development and opportunities for incorporating biodiversity enhancements into the development proposals. The following ecological features were relevant to the survey carried out by Greena Ecological Consultancy:

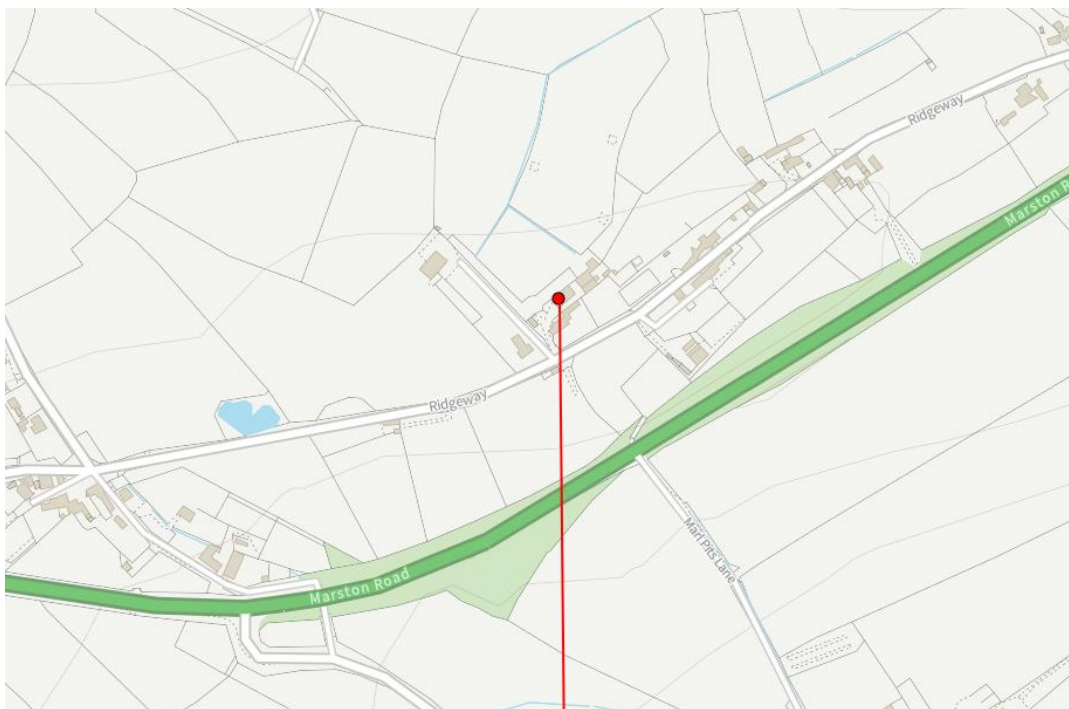
- Proximity of statutory and non-statutory designated wildlife sites;
- Proximity of Habitats and Species of principal Importance, or local Biodiversity Action Plan (BAP) habitats and networks of these habitats.
- Legally protected wildlife species; and
- All other species of wildlife potentially affected by the proposed development

This report has been produced with reference to current guidelines for preliminary ecological appraisal (CIEEM, 2017).

## 3. Site Description

The site is located to the south of Nunney village at OS grid reference ST7432344925 (see Figure 1). The nearest agricultural land lies around the site, the nearest hedgerows lie 50m north east, and the nearest woodlands lie 1.5km south of the site. There is a Greater horseshoe flight corridor 330m away to the southwest where bats ranging from Asham Quarry roost to the west where they pass beneath the A361 to the south.

**Figure 1: Site Location**



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### 3.1 Site Description

The building is a modern agricultural building with stables and a garage at the south corner. It has solid concrete block walls with a cement fibre roof. There is no underlining, and no enclosed ridge or wall tops.

There are no suitable wall top potential roosting sites except for the gable covings. The interior is light except for the garage area which is enclosed so no access to bats or birds.

**Photograph 1: Open Wall Top**



**Photograph 2: Stables**



**Photographs 3 and 4: Sealed Wall Tops**



**Photograph 5 and 6: Exterior of the Building**



**Photograph 7: Cement Fibre Roof**



**Photographs 8 and 9: Edge coving gaps**



## 4. Methods

Surveyor Geoff Billington MCIEEM (Greena Ecological Consultancy, holder of Natural England class 3 and 4 bat survey licences) undertook a daytime inspection of the building on the 8<sup>th</sup> August 2022, and then on the 15<sup>th</sup> August 2022 a bat activity survey was completed.

No overall desktop search has been carried out for bat records because already 14 bat species have been recorded by Greena and others in the local area including the four more common Annex II species, so this assemblage are taken to be the species occurring in the area.

Searches were made for the following:

- Past records in this actual site;
- Nearest designated site; and
- Nearest bat licence that has been issues

### 4.1 Bats

The building was surveyed using the following methodology:

- a) Signs of residency by bat species. This consisted of a slow methodological search for roosting bats and their signs. Droppings on walls, windowsills and in roof space (where present) can be used to identify species and scratch marks and staining at roosts and exit holes shows the presence of bats. Similarly, the presence of spiderwebs at a potential roost entry can often indicate an absence of bats; and
- b) An assessment of the potential of a building to provide a roost either in the summer (maternity) or winter (hibernation).

The overall habitat was assessed as very high potential for foraging and commuting bats.

The interior and exterior of the building was inspected with the aid of a high-powered torch and articulating endoscope to locate potential roosting sites, discover points of egress for bats or any signs of bats such as droppings, wear marks, staining and feeding remains.

An evening bat emergence survey was conducted on 15<sup>th</sup> August covering the cement fibre edge coving of both gables.

This bat activity surveys were carried out by Geoff Billington using two Anran cameras with built in infrared illumination. The cameras were used with a time-synchronized EcoObs Batcorder bat detectors containing recorders.

The manufacturer's specifications of the high-definition cameras lists its range for both, colour (daytime, dusk) and black&white (post-dusk to complete darkness) during infrared illumination as 100ft (30.48metres). The cameras are fitted with a varifocal (adjustable) 2.8-12mm lens covering the field view from very wide (up to 100 degrees) to narrow and zoomed in. The setting is manual, and a maximum possible view of the surveyed structure is always ensured prior to the start of the survey. The smart IR technology enables the cameras to automatically adjust the intensity of the infrared lighting based on the distance objects are located from the camera (wide dynamic range enhancement). The recording from each night is subsequently viewed by an experienced licensed bat ecologist with the possibility to rewind and view segments repeatedly, providing much higher accuracy of the assessment than the traditional in-field survey method alone.

All exterior elevations of the building were observed, on the survey.

## 4.2 Birds

The interior and exterior of the building was inspected during the day time visit in August 2022 for bird species, and to locate signs of use such as nests and/or droppings.

## 5. Survey Constraints

The site was fully accessible so there were no survey constraints.

## 6. Results

No known ecological surveys have been undertaken at Tower View prior to this first visit conducted by Greena Ecological Consultancy in August 2022.

### 6.1 Existing Records

**Table 1: Bat Species Recorded in the Local Area**

Bat Species in the Local Area	Barbastella barbastellus
	Eptesicus serotinus
	Myotis bechsteinii
	Myotis daubentonii
	Myotis brandtii
	Myotis nattereri
	Myotis mystacinus
	Nyctalus noctule
	Pipistrellus pipistrellus
	Pipistrellus pygmaeus
	Pipistrellus nathusii
	Plecotus auritus
	Rhinolophus ferrumequinum
Rhinolophus hipposideros	

The nearest bat licence was 850m northwest of the site in 2016 for destruction of a resting place for brown long eared, common and soprano pipistrelles, greater and lesser horseshoe, natterers and whiskered bats. There is another bat licence 920m northwest of the site in 2014 for destruction of a resting place for brown long-eared and lesser horseshoe bats. A third licence is granted 1.1km northwest of the site in 2010 for destruction of a resting place for brown long eared bats. Another licence was granted 1.3km east of the site for destruction of a resting place for brown long eared and lesser horseshoe bats in 2017. A current active bat licence exists 220m to the east for serotine, brown long eared and common pipistrelle bats.

The nearest designated site is Postlebury Wood (SSSI) which lies 1.5km south and is designated for being a large, relatively undisturbed woodland of antiquity, which has been developed on poorly-drained Oxford Clays. There is also Holwell Quarries (SSSI) which lies 1.62km west of the site and is designated for having an assemblage of Triassic, lower Jurassic and Middle Jurassic fissure fillings. Cloford Quarry (SSSI) lies 2km west of the site and is designated for having Triassic and Jurassic sediments.

The site lies within Mells Valley Special Area of Conservation (SAC) consultation area B primarily for horseshoe bats.

## 6.2 Building Survey Bats

There were no signs of bats evident inside of the building but with the edge coving it was graded low bat roost potential.

No signs of horseshoe bats so no implications to the bat SAC.

## 6.3 Bat Activity Survey Results

A bat activity survey was completed on the 15<sup>th</sup> August 2022, with sunset at 20:31. The weather was deemed to be optimal for the survey.

	Temp (°C)	Wind	Cloud (%)	Rainfall
Start	19	0	15	0
End	19	0	80	0

### West Gable

#### *Batcorder Recordings*

Time	Species	Notes
20:57	45P	Foraging to W
21:17	45P	Heard to S
21:23 – 21:24	45P	Foraging to W

*Video Recordings* – No bats emerged

### East Gable

#### *Batcorder Recordings* –

Time	Species
20:53 – 20:54	2x LE
20:55	2x 45P, 3x LE
20:59 – 21:23	12x 45P

*LE – Long Eared, 45P – Common Pipistrelle*

*Video Recordings* – No bats emerged.

## 6.4 Birds

There was no evidence of birds on the interior/exterior of the building.

## 7. Discussion and Recommendations

### Bats

There was no evidence of bats using the building both inside and in the coving so there are no requirements.

### Birds

Ensure no birds are nesting when the building work takes place. If there are, leave alone until fledged.

## Enhancements

Under the National Planning Policy Framework developments should aim to enhance biodiversity where possible. Where possible put in a couple of bat boxes (installed at least 4m above the ground) and a couple of bird boxes (installed 1.5-3m above the ground).

Where possible plant some native trees.

## 8. References

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