PRELIMINARY BAT ROOST ASSESSMENT

24 FALSTAFF AVENUE
EARLEY
READING
RG6 5TQ

Client: Saurabh Gupta
Our reference: ECO3911
Report date: 22 October 2025
Author: Matthew Stephenson BSc (Hons)
Checked by: Ryan Davies BSc (Hons) ACIEEM
REPORT ISSUED IN ELECTRONIC FORMAT

Tel: 01189 759387
Email: info@gsecology.co.uk
Web: www.gsecology.co.uk

GS Ecology Ltd - Registered in England and Wales - No: 7025591
Registered Office: 119 Highgrove Street, Reading, Berkshire, RG1 5EJ

This page is intentionally blank

Contents

1.0 Introduction 2
2.0 Methodology 4
3.0 Results 7
4.0 Assessment 9
5.0 Summary 12
Appendix 1 - Photographs 13
Appendix 2 - Bat ecology and conservation status 15
Appendix 3 - Legislation and planning policy 17
Appendix 4 - About GS Ecology 20

1.0 Introduction

Survey and reporting

1.1 This report details the results of a Preliminary Bat Roost Assessment of 24 Falstaff Avenue, Earley, Reading, RG6 5TQ

1.2 The survey, carried out on 26 September 2025, was undertaken to inform a planning application for the site.

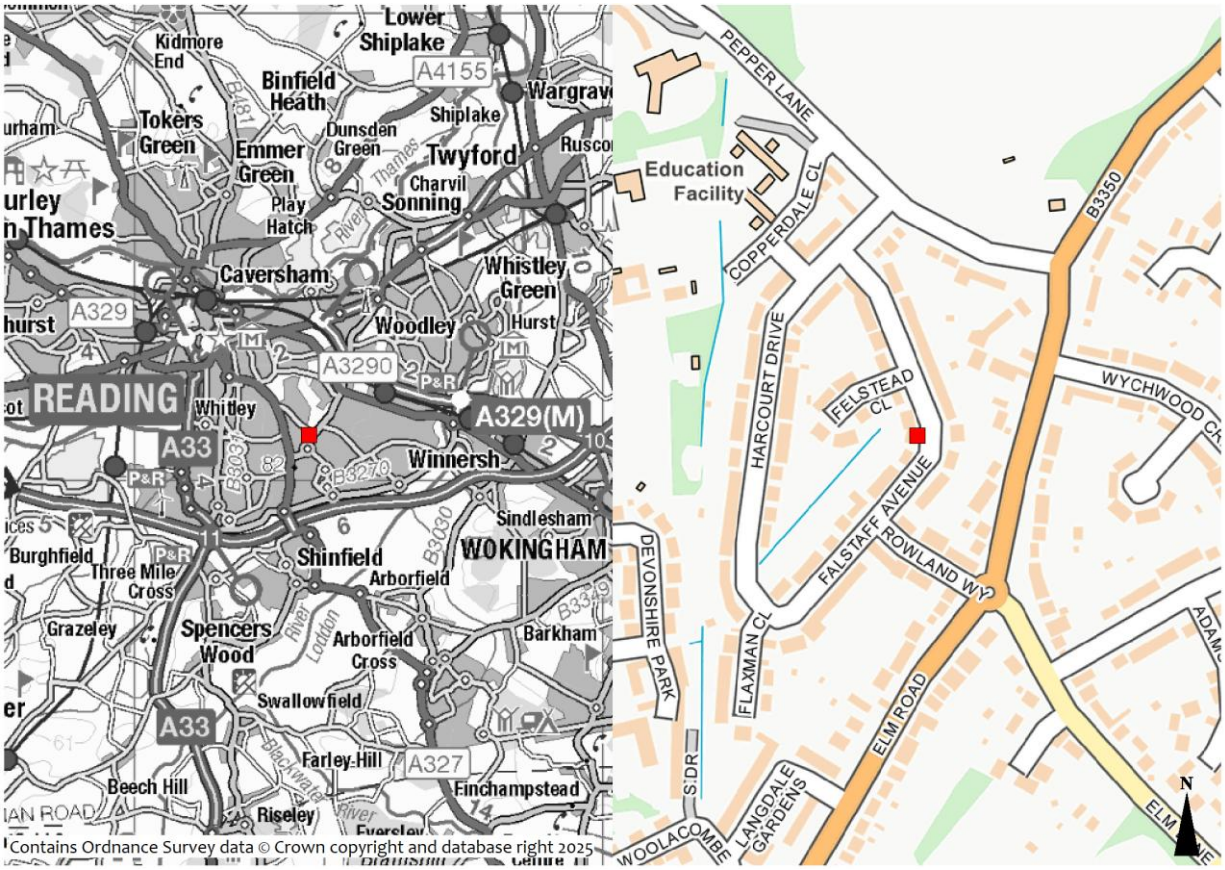
Application site

1.3 The application site is located midway along Falstaff Avenue, a residential road to the north west of Earley (Grid Reference SU73707098; Figure 1).

1.4 It comprises a detached house, driveway and rear garden.

1.5 The local planning authority is Wokingham Borough Council.

Figure 1 – Site location



Proposed works

1.6 It is proposed to convert the existing loft space into habitable accommodation, which will require the existing roof pitch to be raised. It is also proposed to erect a single storey rear extension. (see Figure 2).

1.7 No trees will be affected by the proposed works.

Figure 2 – Existing an proposed elevations

EXISTING

PROPOSED

2.0 Methodology

Desk study

2.1 A desk study data search was undertaken. This involved reviewing publicly available datasets and citations of statutory designated sites of importance for nature conservation and Natural England's Ancient Woodland Inventory for sites within the zone of influence of the survey area (considered to be a maximum of 500m in this case).

2.2 In addition, species records (on the MAGIC website[1]) were accessed, and aerial photographs and Ordnance Survey maps were studied for features of interest.

Bat survey

Daytime Bat Walkover (DBW)

2.3 A survey to assess the suitability of habitats for bats to roost, commute and forage within and adjacent to the site (where accessible). Habitat suitability was assessed as per Table 1 below.

Preliminary Bat Roost Assessment

2.4 This survey consisted of a detailed search of the interior and exterior of the building looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, an endoscope, a ladder and a high-powered torch were used as required.

2.5 Buildings are classified in terms of their suitability for use by roosting bats (see Table 2) and in accordance with the Bat Conservation Trust's Bat Survey Guidelines[2].

2.6 Classification is dependent on a number of factors including:

- Bats and/or signs of bats
- External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards)
- Setting
- Night time light levels
- Disturbance levels
- Proximity of suitable foraging habitat and flight-paths (e.g. ponds, streams, woodland, large gardens, hedgerows)

Surveyor details

2.7 The survey was undertaken by Ryan Davies ACIEEM (senior ecologist) of GS Ecology Ltd.

2.8 Ryan holds a Natural England WML A34 Level 2 bat survey licence and is an associate member of the Chartered Institute of Ecology and Environmental Management with more than 10 years' experience as professional ecologist.

1 http://www.natureonthemap.naturalengland.org.uk/

2 Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Bat Conservation Trust

Table 1 – Habitat suitability scale for potential flight-paths and foraging bats

	Potential Suitability	*Description*
Potential Suitability of potential flight-paths and foraging habitats	High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. 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. Site is close to and connected to known roosts.
	Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
	Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. 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.
	Negligible[3]	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
	None [Not suitable]	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).

3Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant.' This category may be used where are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute)

Table 2 – Description of the categories used to assess a building's bat roost potential and the survey effort required to determine the likely presence or absence of bats

	Roost status	*Description*	*Survey effort required to determine the likely presence or absence of bats*
***Bat Roost Potential** Status*	Confirmed	Bats or evidence of bats found.	Surveys would be required to establish the status of the roost. Generally, three dusk emergence surveys between May and September. Optimum period May – August (two surveys should be undertaken during the optimal period). Surveys should be carried out at least three weeks apart.
	High	A structure 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 (For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Three dusk emergence surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period. Surveys should be carried out at least three weeks apart.
	Moderate	A structure 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 of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Two dusk emergence surveys, between May and September (one of the surveys needs to be carried out between May and the end of August). Surveys should be carried out at least three weeks apart.
	Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do 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 (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).	One dusk emergence survey between May and the end of August (but only if features will be affected by the proposals).
	Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No further surveys required.
	None [No potential]	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No further surveys required.

3.0 Results

Weather conditions

3.1 Weather conditions during the survey were 16°C, 8/8ths cloud cover, wind at Beaufort scale 1 and no rain.

Desk study

Statutory sites of importance for nature conservation

3.2 There are no statutory sites of importance for nature conservation within 500m of the application site.

Ancient woodland

3.3 There is a single area of woodland listed on Natural England's Ancient Woodland Inventory within 500m of the application site - Redhatch Copse - located approximately 360m to the southeast.

Bat licence records

3.4 Within 2km of the application site there are five records of licences issued by Natural England for works affecting bat roosts on The MAGIC website. These records are summarised in Table 3 below.

Table 3 – Summary of Natural England licence records within 2km of the application site

Distance and direction from the application site	Species affected	Roost type	Year licence was issued
0.7km North	Common pipistrelle, brown long eared bat	Breeding	2010
1.1km North	Common pipistrelle, soprano pipistrelle	Non-breeding	2012 & 2014
1.3km North	Common pipistrelle	Non-breeding	2010
1.6km North-west	Common pipistrelle, soprano pipistrelle	Non-breeding	2014, 2014 & 2015
1.7km South east	Common pipistrelle, brown long eared bat	Non-breeding	2011

Surrounding land use

3.5 The application site is located midway along Falstaff Avenue, a residential road to the north west of Earley. Adjacent to the site in all directions are similar-sized residential properties and their associated gardens with trees. The gardens directly south west of the site abut one another to form an area of continuous green space with a number of trees.

3.6 Further east (approximately 170m) are the grounds of Leighton Park School which include amenity grassland playing fields bound by sections of woodland.

3.7 Approximately 200m to the north of the site lie the grounds of the University of Reading, comprising numerous scattered trees, a large area of woodland and a lake.

3.8 Further south east (approx. 360m) is Redhatch Copse, a block of ancient woodland.

3.9 The habitats surrounding the site are of 'moderate' to 'high' suitability for commuting and foraging bats (see Table 1)

Habitats within the application site

3.10 The application site comprises a detached two-storey house, brick-paved driveway and rear garden.

3.11 The driveway is bound in places with ornamental shrub planting. The rear garden has a flagstone patio, amenity grassland lawn, scattered rose bushes, two mature apple trees, and, a garden shed (unaffected by the proposals).

Bat survey (preliminary roost assessment)

3.12 24 Falstaff Avenue is a-detached, two-storey house with partly-rendered, cavity brick walls. The main roof has a shallow pitch and is clad with flat, concrete tiles, with a chimney stack located at its southern end. There is a secondary pitch at the rear also clad with concrete tiles. At the front of the house, there is a wooden-framed porch with a pitched roof, clad with concrete tiles and lined with felt.

3.13 The house has UPVC soffits at the eaves and UPVC bargeboards at the gable ends.

3.14 Generally, the house is in good condition, with the roof and ridge tiles tightly fitted. However, the house has a number of features which are suitable for use by roosting bats including:

- Gaps in mortar at the gable verge
- Gaps where the bargeboard of the main roof meets the soffit of the north western roof
- Gaps between the felt and wall where the porch joins the house

3.15 Internally the house has a pair of interconnected lofts – which run below main and rear roof pitches. The roof has wooded beams and ridge boards and is lined with mix of bitumen felt (eastern roof aspect) and breathable membrane (all other roof aspects). Both lofts are insulated with fibreglass, and the main loft is boarded out.

3.16 Approximately 15 bat droppings – akin to those of pipistrelle bats – were found stuck to the southern end wall.

3.17 24 Falstaff Avenue is assessed as having "high" bat roost potential (Table 2).

4.0 Assessment

Survey constraints

4.1 The survey was carried out at a time of year suitable for undertaking preliminary bat roost assessments.

4.2 It was not possible to fully access the north western loft space (below the rear roof pitch) due to its small size. However, this is not considered to represent a significant constraint to the survey as in any case, a further dusk emergence surveys of the building would need to be undertaken to determine the presence or likely absence of roosting bats within the building.

Site status

4.3 24 Falstaff Avenue is assessed as having 'high' potential to host roosting bats (see Table 2). This is because the building has a number of features potentially suitable for use by roosting bats, is situated in habitats of 'moderate' to 'high' suitability for commuting and foraging bats, and, bat droppings were found inside the loft space.

4.4 The proposed works will destroy or disturb a number of potential roost features (identified during the preliminary survey). If these features were to be used by roosting bats the roost could be disturbed, damaged, or destroyed.

4.5 As such, to determine if (and if so, how) bats will be affected by the proposals further dusk emergence surveys detailed below would need to be undertaken. This information would be needed to inform the planning application and to obtain a licence for derogation from the provisions of The Conservation of Habitats and Species Regulations 2017 for works affecting bats (should surveys show that a licence is required).

4.6 Appendix 2 provides further information on bat ecology and legislation.

Further survey requirements

4.7 The Bat Conservation Trust's Bat Survey Guidelines (referred to by Natural England in their advice to planning officers) state that to determine if a building hosts a bat roost, where it has a 'high' potential to host a bat roost (as is the case here), three dusk emergence surveys should be carried out between 1 May and 30 August (one can be carried out sub-optimally in September). At least two of these should be carried out between May and the end of August.

4.8 During the survey, surveyors equipped with professional ultrasonic bat detectors and night vision aids, are stationed around the building so that all potential roosting features can be seen. The surveys start fifteen minutes before dusk and continue for an hour and a half after sunset.

4.9 Surveys need to be spread over the survey season as much as practicable with at least three weeks between surveys and sufficient surveyors to cover all features potentially suitable for use by roosting bats need to be present.

4.10 In this case three surveyors would be needed to survey the building.

Legislation

4.11 All species of bats receive special protection under UK law. It is a criminal offence under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations), deliberately or recklessly to destroy or damage their roosts, or to disturb, kill or injure them without first having obtained for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

4.12 In order to obtain such a licence, the SNCO must apply the requirements of the Regulations and, in particular, the three tests set out in sub-paragraphs 55(2)(e), (9)(a) and (9)(b). These are as follows:

(1) Regulation 55(2)(e) states that a licence can be granted for the purposes 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".

(2) Regulation 55(9)(a) states that the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied "that there is no satisfactory alternative".

(3) Regulation 55(9)(b) states that the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."

The licensing process

4.13 If a building hosts a bat roost and the roost will be affected by the works (as is the case here), a licence and for development works affecting bats (i.e. for derogation from the provisions of the Habitat Regulations) must be obtained before works that affect the bat roost commence. This involves submitting a licence application to Natural England with a detailed mitigation plan informed by surveys undertaken in accordance with national guidelines.

4.14 Natural England takes 30 working days to process a licence application (although for low conservation status roosts it is possible to register sites under the low impact class licence which takes up to three weeks).

4.15 The licensing process is separate and distinct from planning permission, but the Local Planning Authority has statutory obligations under the Habitat Regulations. They need to be satisfied that the proposals are likely to meet the three tests of the Habitat Regulations (see above) and that a licence is likely to be obtained from Natural England before they issue planning permission[4].

Mitigation

4.16 To comply with planning policy and wildlife legislation it will be necessary to ensure that following development the "favourable conservation status" of bats will be maintained. This means that if a building does host a bat roost, and if this will be affected, lost or made unsuitable for use by bats, then appropriate mitigation (including a replacement roost) will need to be provided.

4.17 The type of mitigation required will depend on the species of bat(s) using the roost(s) and its status but normally comprises the provision of bat boxes, bricks or tiles.

Planning policy

4.18 Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System (referred to in the National Planning Policy Framework) reads:

4 The courts have considered the application of a planning authority's duty under the Habitat Regulations (and therefore the Habitat Directive) in the cases of Woolley vs Cheshire Borough Council (2009) and Morge vs Hampshire County Council (2010). In the Morge vs Hampshire County Council case the supreme court has ruled that it cannot see why planning permission should not be granted unless the proposed development:

- Would be likely to offend the prohibitions in Article 12(1) and
- Would be unlikely to be licensed as a derogation from those provisions

"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. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. "

4.19 In this case, because the extent to which bats (a protected species) will be affected has not been established, the local planning authority are unlikely to issue planning permission until the further surveys detailed above have been carried out.

5.0 Summary

5.1 24 Falstaff Avenue is assessed as having 'high' potential to host roosting bats. This is because the building has a number of features potentially suitable for use by roosting bats, it is situated with habitats of 'moderate' to 'high' suitability for commuting and foraging bats, and, bat droppings were found inside the loft space.

5.2 The proposed works will destroy or disturb a number of potential roost features. If these features were to be used by roosting bats the roost could be disturbed, damaged, or destroyed.

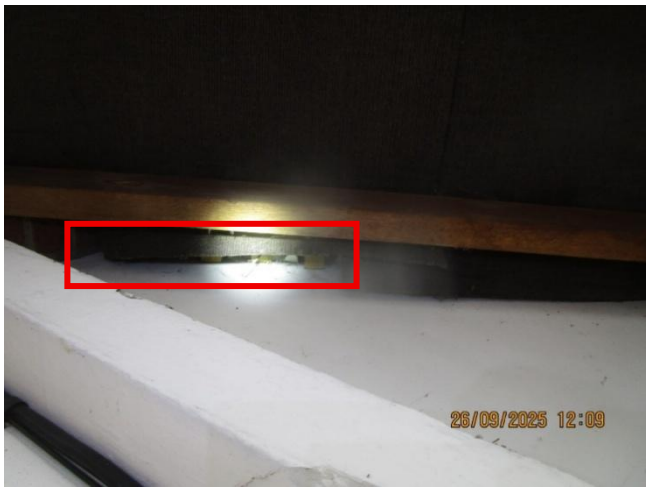
5.3 As such, to determine if roosting bats will be affected by the proposals three dusk emergence surveys between May and the end of August would need to be undertaken. If it is determined that a bat roost (or roosts) will be affected by the works, a licence to disturb or destroy a bat roost would need to be obtained from Natural England before works commence.

Appendix 1 - Photographs

Photos 1 and 2 – 24 Falstaff Avenue viewed from the front and the rear

Photos 3 and 4 – Examples of missing mortar under verge tiles

Photo 5 – Gaps between the felt and wall where the porch joins the house, and, Photo 6 - Gaps where the bargeboard and soffit meets



Photos 7 and 8 – Inside the main loft (left) and north western loft (right) of 24 Falstaff Avenue

Photos 8-11 – Examples of bat droppings found at the southern end wall of the main loft

Appendix 2 - Bat ecology and conservation status

Background

Bats are the only true flying mammals and belong to their own taxonomic group, the *Chiroptera*. Worldwide there are almost 1,000 species, with 16 in the UK. All species in the UK are insectivorous. They have a highly sophisticated echolocation system that allows them to avoid obstacles and catch invertebrates, either in flight or by picking them off water, the ground or foliage.

Bat species in the UK

There are 16 species of bat that are known to exist in the UK mainland, with a further two - the greater mouse eared bat *Myotis myotis*, and the parti-coloured bat *Vespertilio murinus* - that are thought to occur as rare migrants or to have small populations in the UK. Bats in the UK belong to one of two taxonomic families, the Rhinolophidae (horseshoe bats) and the Vespertilionidae (all other UK bats).

Bat Conservation Status

Bat populations have undergone a significant decline in the past sixty years. For example, estimates from the National Bat Colony Survey suggest that the UK pipistrelle population (one of our commonest bat species), declined by approximately 70% between 1978 and 1993. Factors contributing to this decline include:

- Loss of, and damage to, roosting sites, including buildings, trees, and underground structures (mines, tunnels, ice-houses, cellars, etc).
- Loss and fragmentation of suitable insect-rich feeding habitats such as wetlands and deciduous woodland.
- Reduction in the abundance and diversity of insect prey due to intensive agriculture, particularly over-grazing and the use of pesticides.
- Loss of linear features such as tree-lines and hedgerows, depriving bats of commuting routes between roosts and feeding areas.
- Loss of winter roosting sites in buildings and old trees.
- Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.

Roosts

Bats use a variety of roosts of different types including trees, buildings, caves, mines and other structures. Most species are colonial and roost in groups. This can make populations particularly vulnerable to loss of roosts as the loss of a single roost may affect the whole population. Some species hang in obvious locations, such as the timbers near to the apex of a roof, others roost in cracks and crevices, such as the gaps under tiles, and as such can be very difficult to locate.

During the winter (November to February), when there is a reduction in insect numbers, bats hibernate to conserve energy. They prefer sites with a constant low temperature and a high relative humidity. On mild winter's nights, bats may wake up and feed. However, bats are particularly vulnerable to disturbance at this time of year, as flying in winter uses up large quantities of energy that cannot easily be replaced.

In the spring, after emerging from hibernation, bats often move from site to site and may congregate in small groups. Female bats gather together in the summer (approximately May to August dependant on species) in maternity roosts. Once the young have stopped suckling, and the baby is independent, bats tend to disperse and use other roosts. Maternity roosts are particularly vulnerable to disturbance, as

bats may have come from a wide geographical area, and have a strong tradition of returning to the same roost year after year.

During the late summer and early autumn males occupy mating roosts which are visited by several females. After mating some species gather together at swarming sites to fatten up prior to hibernation.

Habitat associations

In addition to roosts, bats also need foraging habitats to find suitable food resources, and commuting routes to get to these areas. As would be expected, the highest numbers of bats are found in areas with abundant invertebrates. Some species specialise in catching small invertebrates in flight, whilst others specialise in catching larger invertebrates such as moths and beetles. The distances that bats travel to foraging areas varies between species; records have shown some greater horseshoe bats travel up to 22km to forage, although many species will typically feed within 1km of a roost.

Bats, especially the smaller species, tend to follow linear features (such as hedgerows and tree lines) to their foraging habitats and will often not cross open spaces. A gap of 10m in a linear feature will often not be crossed by bats, and it is important that developments do not create such gaps if linear features are used by bats.

Appendix 3 - Legislation and planning policy

Planning Authorities have a legal duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning application might affect important protected sites, species or habitats, information on the species, habitat or site likely to be affected, together with an assessment of the impacts of the proposals, will almost certainly be required.

The legal duty for Planning Authorities to have regard to the conservation of biodiversity was introduced in the 2006 Natural Environment and Rural Communities Act (The NERC Act). This act clarified existing commitments with regard to biodiversity, raised the profile of biodiversity and aimed to make the consideration of biodiversity a natural and integral part of policy and decision making.

In addition to the NERC Act there is also national and international biodiversity legislation. This includes legislation in relation to protected species and sites which operates outside of the planning system. Local Authorities and developers have a duty to comply with this legislation.

National planning policy

Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (this document has not been revoked by the recently published National Planning Policy Framework) states that:

'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.'

As such, in line with national planning policy, most planning authorities will ask for this information to be provided before a planning decision is made and in many cases before it is registered.

Local planning policy

In addition to national planning policy, most councils have planning policies to protect biodiversity, and to enhance it where practicable within and adjacent to development sites.

European protected species

The United Kingdom hosts a number of European Protected Species (EPS) of animals (table 1) and plants (table 2). These species receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017, to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or injure the species without first having obtained the relevant licence from Natural England.

Planning Authorities have a statutory duty under these regulations to have regard to the requirements of the Habitats Directive and need to be satisfied that the development is likely to receive a licence from Natural England, and therefore comply with the Habitats Directive, before granting planning permission.

Table 1 – European Protected Species of Animal found in the UK

Common name	Scientific name
Bats, Horseshoe (all species)	*Rhinolophidae*
Bats, Typical (all species)	*Vespertilionidae*
Butterfly, Large Blue	*Maculinea arion*
Cat, Wild	*Felis silvestris*
Dolphins, porpoises and whales (all species)	*Cetacea*
Dormouse	*Muscardinus avellanarius*
Frog, Pool	*Rana lessonae*
Lizard, Sand	*Lacerta agilis*
Moth, Fisher's Estuarine	*Gortyna borelii lunata*
Newt, Great Crested (or Warty)	*Triturus cristatus*
Otter, Common	*Lutra lutra*
Snail, Lesser Whirlpool Ram's-horn	*Anisus vorticulus*
Snake, Smooth	*Coronella austriaca*
Sturgeon	*Acipenser sturio*
Toad, Natterjack	*Bufo calamita*
Turtles, Marine	*Caretta caretta*
	Chelonia mydas
	Lepidochelys kempii
	Eretmochelys imbricata
	Dermochelys coriacea

Table 2 – European Protected Species of Plant found in the UK

Common name	Scientific name
Dock, Shore	*Rumex rupestris*
Fern, Killarney	*Trichomanes speciosum*
Gentian, Early	*Gentianella anglica*
Lady's-slipper	*Cypripedium calceolus*
Marshwort, Creeping	*Apium repens*
Naiad, Slender	*Najas flexilis*
Orchid, Fen	*Liparis loeselii*
Plantain, Floating-leaved water	*Luronium natans*
Saxifrage, Yellow Marsh	*Saxifraga hirculus*

Nationally protected species

Many species of animal are protected under the 1981 Wildlife and Countryside Act (as amended). 'Full protection' applies to EPS and some non EPS species such as the water vole. This prohibits the intentional killing, injuring or taking (capture. etc); possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or to buy. Many species, such as common species of reptile and amphibian, are protected from intentional killing and injuring and trading.

Badgers

Badgers and their setts are protected under the 1992 Protection of Badgers Act and the Wildlife and Countryside Act 1981 (as amended). It is illegal to intentionally or recklessly kill, injure or take badgers or to interfere with a badger sett. Interference with a sett includes blocking tunnels, or damaging the sett in any way, and could include blocking a badger pathway if it were to stop badgers entering or leaving a

sett. Penalties for offences can be severe, with fines of up to £5,000 plus up to six months' imprisonment, for each illegal sett interference, badger death or injury.

Work that disturbs badgers occupying a sett is illegal without the appropriate licence from the relevant statutory authority being held. Natural England issue licences for reasons including science, education or conservation, for development such as the building of houses and for investigation of offences against badgers. They also issue licences for the prevention of serious damage to land, crops or other form of property, as well as for agriculture, forestry, drainage operations and prevention of the spread of disease.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), whilst they are actively nesting or roosting. Section 1 of this Act makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

In addition, bird species listed under Schedule 1 of the Act receive extra protection. The Act states that 'it is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird'.

In practice this means that in areas where birds are likely to be nesting works should not be undertaken during the nesting season, which is generally considered to be March to September, although this very much depends on weather conditions, habitats and the species involved. If works cannot be avoided then areas should first be checked for nesting birds. Habitats likely to host nesting birds include trees, hedgerows and dense scrub, buildings, reedbeds and riverine habitats and open areas with tussocky vegetation.

Appendix 4 - About GS Ecology

Established in 2009, GS Ecology is an independent ecological consultancy in Berkshire. We carry-out surveys and ecological consultancy services for public and private sector clients including in Berkshire, Oxfordshire and Hampshire, London and the south of England. We can advise you on cost effective sustainable solutions for your project, whether it be a bat survey to inform a planning application, the ecology chapter of an Environmental Statement or a Woodland Management Plan.

Our work is undertaken by experienced and qualified ecologists, who are members of the Chartered Institute of Ecology and Environmental Managers. Our services include:

- Ecology surveying and reporting to inform planning applications, e.g.
  - Preliminary Ecological Appraisal
  - Extended Phase 1 Habitat Survey in Hampshire, Berkshire, Oxfordshire, London and Southern England
  - Protected species surveys, e.g. badgers, dormouse, great crested newts
  - Bat surveys in Oxfordshire, Berkshire, Hampshire, London and Southern England
- Code for sustainable homes or BREEAM ecology assessments – to demonstrate the sustainability of a new building
- Protected species licensing such as bat and great crested newt licences for development sites after planning permission has been obtained
- Providing advice to land managers and writing ecological management plans, such as woodland management plans and farm environmental plans for England woodland Grant Scheme and Environmental Stewardship applications
- Providing ecology advice to Local Authorities and Local Planning Authorities