PRELIMINARY BAT ROOST ASSESSMENT

107 NEW WOKINGHAM ROAD CROWTHORNE RG45 6JW

Client: Cantley Designs
Our reference: ECO3765
Report date: 28 March 2025
Author: Matthew Stephenson BSc (Hons)
Checked by: Giles Sutton MCIEEM CEnv
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

Survey and reporting

1.1 This report details the results of a Preliminary Bat Roost Assessment of 107 New Wokingham Road, Crowthorne, RG45 6JW.

1.2 The survey to inform the assessment was carried out on 27 March 2025.

Application site

1.3 The application site is located midway along New Wokingham Road, a residential road located to the north of Crowthorne (Ordnance Survey Grid Reference SU83266487; Figure 1).

1.4 It comprises a detached bungalow with a converted roof level, two outbuildings, gravel driveway, and front and rear gardens.

Details of proposed works

1.5 It is proposed to erect a single storey rear extension and a first-floor extension. It is also proposed to erect a new front porch and make changes to the dormer roof and windows (see Figures 2 and 3).

1.6 The garage to the rear of the house will be removed to facilitate construction of the single storey rear extension.

Figure 1 – Site location

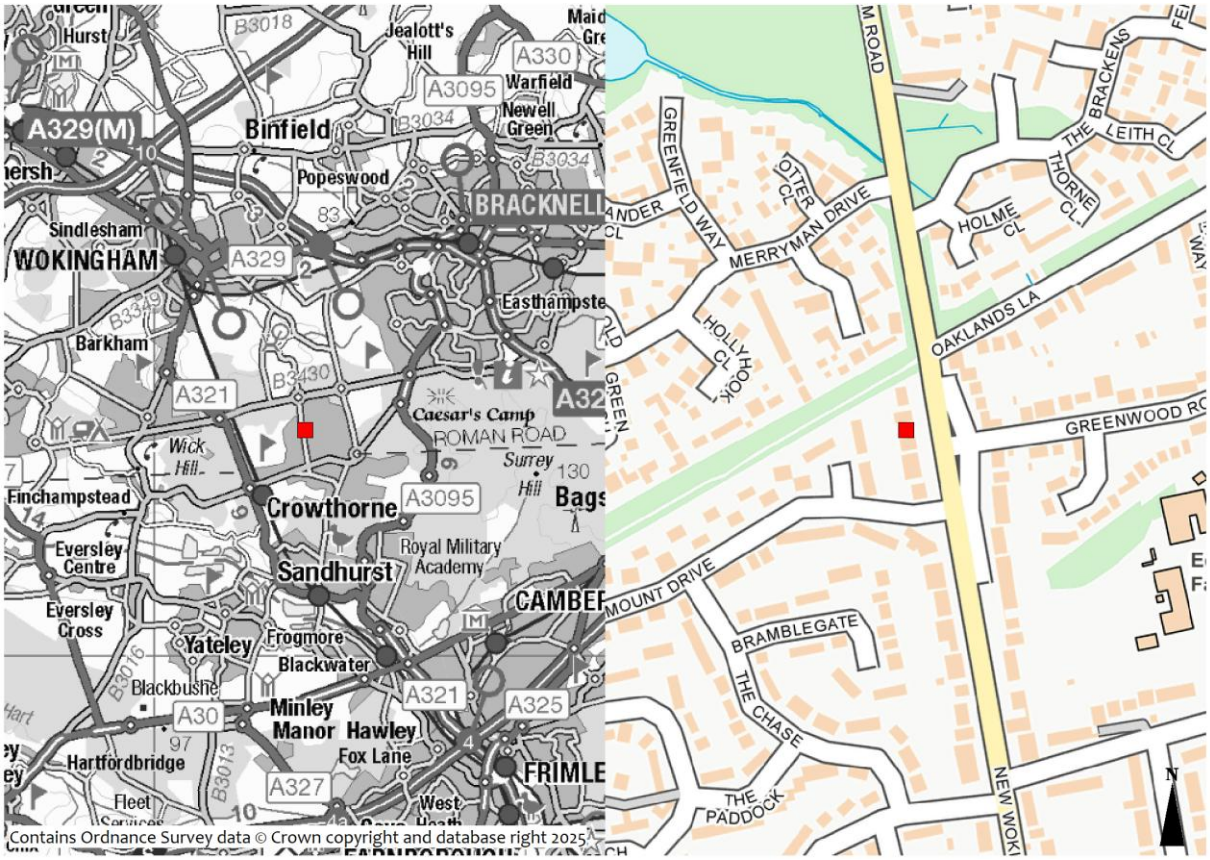
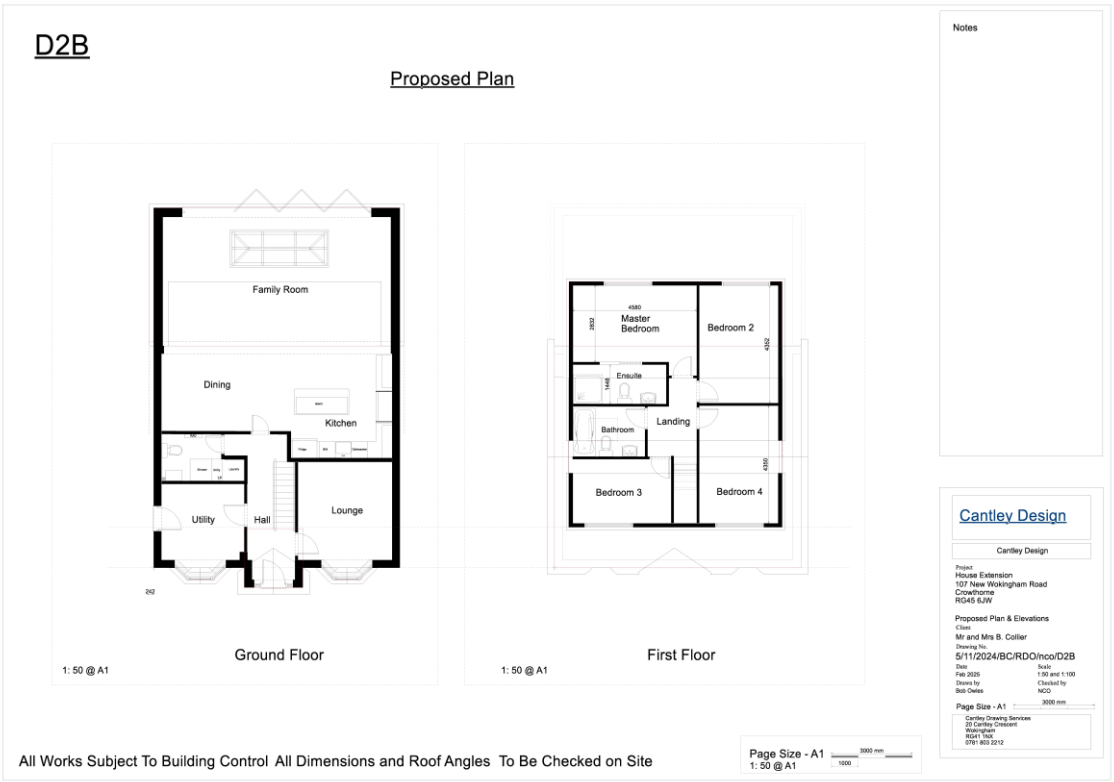


Figure 2 –Proposed elevations

Figure 3 - Proposed roof plans



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

2.3 A bat survey was undertaken. This comprised:

Daytime Bat Walkover (DBW)

2.4 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 Roost Assessment (PRA)

2.5 This survey consisted of a detailed search of the interior and exterior of the buildings 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.

2.6 The buildings were 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].

2.7 Classification was 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

2.8 The survey was undertaken by Ryan Davies ACIEEM (senior ecologist) and Matthew Stephenson (assistant ecologist). Ryan is an associate member of CIEEM and holds a Natural England WML A34 Level 2 bat survey licence.

[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 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 13^{O}C, 8/8ths cloud cover, wind at Beaufort scale 1, with no rain.

Desk study

Statutory sites of importance for nature conservation

3.2 There are two statutory sites of importance for nature conservation within 500m of the site. Heath Lake Local Nature Reserve (LNR) located approximately 200m to the north. It includes Heath Lake Site of Special Scientific Interest (SSSI).

3.3 This area is 22 hectares in size and comprises Heath Lake surrounded by a large area of dense broadleaved woodland, some of which is listed on Natural England's Priority Habitat Inventory [Deciduous Woodland (England)].

Ancient woodland

3.4 There are no areas of woodland listed on Natural England's Ancient Woodland Inventory within 500 of the application site.

Bat licence records

3.5 Within 1km of the site there are seven records of licences issued by Natural England for works affecting bat roosts on The MAGIC website (and 18 records within 2km) . These records are summarised in Table 3 below.

Table 3 – Summary of Natural England bat licence records within 1km of the application site

Distance and direction from the application site	Species affected	Breeding site	Year licence was issued
0.4km South east	Common pipistrelle, soprano pipistrelle	No	2013
0.8km West	Brown long-eared, common pipistrelle, soprano pipistrelle	No	2013
0.8km South east	Brown long-eared, soprano pipistrelle	No	2016
0.8km South	Common pipistrelle	No	2016
0.8km South	Common pipistrelle, Whiskered bat	Yes	2016, 2017
0.8km South	Common pipistrelle	No	2015

Surrounding land use

3.6 The application site is located midway along New Wokingham Road, a residential road located to the north of Crowthorne.

3.7 Adjacent to and further in all direction are residential properties and their associated gardens with numerous trees. The nearby roads—New Wokingham Road, Heathermount Drive, and Oaklands Lane—are all lined with mature trees,

3.8 Approximately 200m to the north is Heath Lake SSSI and LNR (see above). This woodland extends further north and east, merging with Gorrick Plantation, a 25 hectare predominantly coniferous woodland. These sites are well connected to the application site via lines of mature trees.

3.9 Approximately 500m east is East Berkshire Golf Club which contains interspersed woodland listed on Natural England's Priority Habitat Inventory [Deciduous Woodland (England)]. This is also well connected to the application site via lines of mature trees.

3.10 The habitat surrounding the application site is therefore assessed as having 'high' suitability for commuting and foraging bats.

Habitats within the application site

3.11 The application site comprises a detached bungalow with a converted roof level, detached garage, gravel driveway, and front and rear gardens.

3.12 The front garden consists of a gravel driveway, introduced shrub planting, and two mature oak trees adjacent to New Wokingham Road.

3.13 The back garden comprises a patio, short cut, well-maintained, grassland lawn, ornamental trees, and a wooden-panelled shed which is unaffected by the proposals.

Preliminary Roost Assessment

Main House

3.14 107 New Wokingham Road is a detached bungalow with a converted roof level. It has painted cavity brick walls, and the roof is pitched and clad with interlocking concrete tiles. There are large dormers (which cover the majority of the main roof) with a flat felt roof and sides clad with hanging tiles.

3.15 There is an attached car port with timber clad walls and a flat, felt roof and a single storey section at the rear with a flat, felt roof.

3.16 There are wooden facias and soffits at the eaves.

3.17 The house has a number of features potentially suitable for use by roosting bats including:

- Gaps under hanging tiles throughout the building
- Gaps under lead flashing at the hanging tiles
- Gaps between the soffits and hanging tiles
- Gaps in the soffit boxes

3.18 Internally the house has no loft space.

3.19 107 New Wokingham Road is assessed as having 'moderate' potential to host a bat roost (see Table 2).

Detached garage

3.20 To the rear of the bungalow is a detached single-storey garage with prefabricated concrete walls and a UPVC and brick wall frontage. It has a pitched roof clad with interlocking clay tiles. The garage has wooden soffits at the eaves. The roof tiles, ridge tiles, and soffits are all in good condition with no gaps present that lead into any crevices or internal spaces.

3.21 Internally, the garage is open to the roof. There are wooden beams and a ridge board, and the roof is lined with felt.

3.22 The garage has no features potentially suitable for use by roosting bats and is assessed as having "negligible" potential to host a bat roost (see 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.

Site status

4.2 107 New Wokingham Road is assessed as having 'moderate' potential to host roosting bats (see Table 2). This is because the building has a number of features suitable for use by roosting bats and is located in habitat of 'high' suitability for commuting and foraging bats.

4.3 As such, to determine if (and how) bats will be affected by the proposals further dusk surveys would need to be undertaken (see below). 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).

4.4 The garage has no features suitable for use by roosting bats and can be demolished with minimal risk of harming bats.

Further survey requirements

4.5 The Bat Conservation Trust's Bat Survey Guidelines state that to confirm if a building hosts a bat roost, where it has 'moderate' potential to host roosting bats (as is the case here), two dusk emergence surveys should be carried out between 1 May and 31 August (although one could be carried out in September). If these surveys show that a bat roost is present, then an additional survey would need to be carried out to confirm its status.

4.6 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.

4.7 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.

4.8 In this case two surveyors would be needed to survey the house.

Legislation

4.9 All species of bats receive special protection under UK law and 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 the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

4.10 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

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

4.12 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).

4.13 The licensing process is separate and distinct from planning permission, but the Local Planning Authority has statutory obligations under the Habitat Regulations. This means that the Local Planning Authority needs 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 can issue planning permission[4].

Mitigation

4.14 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.

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

Planning policy

4.16 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:

"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 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

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

5.0 Summary

5.1 107 New Wokingham Road is assessed as having 'moderate' potential to host a bat roost. This is due to its location - in habitat of 'high' suitability for commuting and foraging bats – and the presence of numerous features potentially suitable for use by roosting bats.

5.2 To determine if it does host a bat roost (and if so the status of the bat roost), further surveys between May and the end of August would need to be carried out. 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).

5.3 The garage is assessed as having 'negligible' potential to host a bat roost because it has no features suitable for use by roosting bats and can be removed with minimal risk of harming bats.

Appendix 1 - Photographs

Photos 1 and 2 – 107 New Wokingham Road viewed from the front and the rear

Photos 3 and 4 – Examples of gaps under hanging tiles and between the soffits and hanging tiles

Photo 5 – Gaps under lead flashing, and Photo 6 – Hole in soffit box

Photos 7 and 8 – The garage at 107 New Wokingham Road, with no suitable features to hots roosting bats.

Photos 9 and 10 – Front and rear gardens, including the shed which is unaffected by the proposals

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