

DUSK EMERGENCE SURVEY OF:

SPRINGHOLME BASINGSTOKE ROAD THREE MILE CROSS RG7 1AS

Client: Andrew Parsons – ATW Holdings Ltd

Our reference: ECO3775

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1.0 Introduction

Survey and reporting

- 1.1 This report details the results of a Dusk Emergence Survey of Springholme, Basingstoke Road, Three Mile Cross, RG7 1AS undertaken to inform proposals to extend the house.
- 1.2 The dusk emergence survey was carried out on 8 May 2025.

Application site

- 1.3 The application site is located midway along Basingstoke Road, a predominantly residential road running between Three Mile Cross and Spencers Wood, south of Reading (Grid reference SU71486766).
- 1.4 It comprises a detached bungalow, driveway, detached garage, and, front and rear gardens.

Background and proposed works

- 1.5 It is proposed convert the loft space into habitable accommodation, with the installation of two new dormer windows and six new rooflight windows.
- 1.6 The detached garage will be unaffected by the proposed works.
- 1.7 It is understood that no trees will be affected by the proposed works.
- 1.8 To inform the application a Preliminary Bat Roost Assessment was carried out by Dr Jonty Denton in January 2025 [see “PHASE 1 BAT SURVEY (Provisional Roost Assessment)” report dated January 2025].
- 1.9 Dr Denton’s report concluded:

“There was no sign of any activity in the loft. However, the clay tiled roof has a few potential openings and there is an opening into the soffit on the rear gable: Therefore, the property has low potential, and a phase 2 emergence survey is recommended.

A dusk emergence survey is recommended to identify whether bats are utilising the property. These can be carried out in suitable weather between May and the end of September.”

- 1.10 This report provides the results of the dusk emergence survey of Springholme (carried out by GS Ecology Ltd in 2025) only. Please refer to Dr Denton’s report for descriptions of the buildings and other habitats on site.

2.0 Methodology

Dusk emergence survey

- 2.1 A dusk emergence survey of the house was carried out on 8 May 2025. Three surveyors were present during the survey. Surveyors were equipped with professional ultrasonic bat detectors and bat calls were recorded to facilitate bat species identification with specialist software.
- 2.2 Night vision aids (NVAs) were also stationed around the building, so that all potential roosting features could be seen. Footage from the NVAs was reviewed the following day on desktop PCs using specialist software with the ability to motion track, zoom in and watch footage in slow motion.
- 2.3 The dusk survey started 15 minutes before sunset and continued until one and a half hours after sunset.
- 2.4 The survey was carried out in accordance with the Bat Conservation Trust's Bat Survey Guidelines¹. Timings, weather, and survey results are given in Appendix 1.

Surveyor details

- 2.5 The survey was undertaken by Justine Whitehead Qualifying CIEEM (accredited agent under Natural England WML A34 Level 2 bat survey licence), Richard Pike and Matthew Stephenson (both experienced bat surveyors) of GS Ecology Ltd.

3.0 Results

- 3.1 During the dusk emergence survey, carried out on 08 May 2025, 4 bat passes were recorded from 4 different species: Barbastelle (1 pass), common pipistrelle (1 pass) noctule (1 pass) and soprano pipistrelle (1 pass).
- 3.2 No bats emerged from, or went to roost in, the house during the survey.

¹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Bat Conservation Trust

4.0 Assessment and recommendations

Legislation

- 4.1 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).

Survey constraints

- 4.2 The survey was carried out at a time of year suitable for undertaking dusk emergence surveys, and there were no constraints to the survey.

Site status

Main house

- 4.3 Springholme was assessed as having “low” potential to host a bat roost.
- 4.4 However, no bats emerged from, or went to roost, in Springholme during a dusk emergence survey carried out in May 2025.
- 4.5 It is therefore concluded that the building does not currently host a bat roost and there should be no bat related constraints to the proposed works.

Further survey requirements

- 4.6 There are no requirements for further surveys. However, if the works on site haven’t commenced by May 2027 (i.e. two active seasons after the last survey) an updated survey should be undertaken to determine if the status of the site for bats has changed.

Planning policy

- 4.7 Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System (NB this document has not been revoked by the 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. 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. ”

- 4.8 In this case, because it has been established that the proposed works are very unlikely to have any adverse impact upon bats (or other protected species) the proposals will be in accordance with the above planning policy.

5.0 Summary

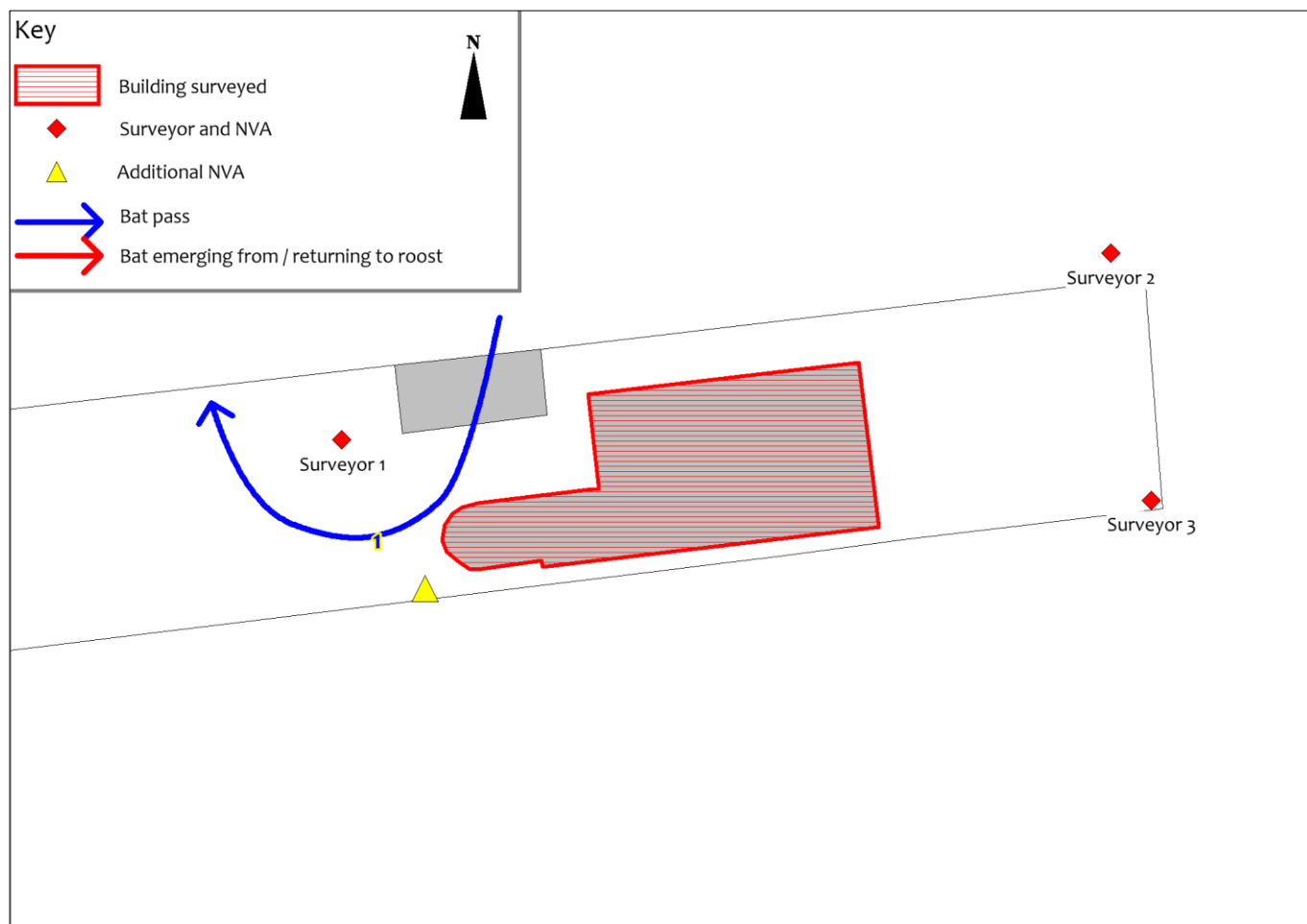
- 5.1 Springholme was assessed as having “low” potential to host a bat roost. This is because the building has a number of features potentially suitable for use by a low number of crevice-dwelling bats.
- 5.2 However, no bats emerged from, or went to roost, in the house during the dusk emergence survey carried out in May 2025. It is therefore concluded that the building does not currently host a bat roost and there should be no bat related constraints to the proposed works.

Appendix 1 - Bat survey results

Survey 1

Date	08/05/2025	Weather	Start	End
Sunset time	20:38	Temperature (Celsius)	13	11
Start time	20:23	Cloud cover (8ths)	0	1
End time	22:08	Wind (Beaufort scale)	2	0
		Rain	None	None
Surveyor 1	JW	Surveyor 2	MS	
Bat detector	EM Touch	Bat detector	EM Touch	
Surveyor 3	RP			
Bat detector	EM Touch			

Surveyor	Time	Species	Number of bats	Map ID	Notes
1, 2 and 3	21:17	Common Pipistrelle	1	1	Commuting
1	21:35	Soprano Pipistrelle	1	N/A	Not seen
1 and 3	21:59	Noctule	1	N/A	Not seen
2	21:57	Barbastelle	1	N/A	Not seen



Infrared images from the darkest point of survey (all taken on Nightfox Whisker)

Surveyor 1 (2x NVAs)



Surveyor 2



Surveyor 3



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

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

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

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 5 - 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