



**106-116 Westfield Road, Caversham, Reading,
Berkshire RG4 8HJ**

Bat Activity Survey Report

June 2020

***on behalf of* Prospect Developments London Ltd**

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1 Introduction

1.1 Site Description

106-116 Westfield Road, referred to as the 'site' for the purposes of this report, is located in the suburb of Caversham, Reading, Berkshire RG4 8HL. The approximate Ordnance Survey grid reference for the site is SU 716 749.

The site comprises four terraced buildings to the west side of Westfield Road. The site is surrounded on all sides by built development and roads, with habitats limited to private gardens and areas of amenity parkland. The River Thames is located approximately 530m to the south.

1.2 Background

A Preliminary Roost Assessment (PRA) was undertaken on 12th November 2019 by RSK ADAS Ltd. No bats or evidence of bats were found during this survey, but two buildings (Building 1 and Building 4) were considered to have the potential to offer shelter to roosting bats.

Throughout Building 1, there were multiple external access points such as holes in the soffits, lifted lead flashing around the chimneys, gaps under ridge and hip tiles, slipped and broken slates, gaps between the soffits and the walls and gaps under the eaves. Due to the number of suitable roosting features, Building 1 was classed as having a 'moderate' suitability for roosting bats.

Buildings 2 and 3 were considered to have 'negligible' suitability for roosting bats as the structures provided no roosting features.

Building 4 contained few external access points such as a missing apex ridge tile on the northern elevation, lifted tiles, and gaps between the eaves and wooden boarding and was classed as having 'low' suitability.

Buildings 1 and 4 offered moderate and low suitability, respectively, for crevice dwelling bats. It was therefore recommended that two emergence/re-entry bat surveys are undertaken on Building 1 and one emergence/re-entry bat survey is undertaken on Building 4.

1.3 Aims of Study

The aims of this study are to undertake the recommended emergence/re-entry surveys of Building 1 and Building 4, and to provide a report of the results.

1.4 Bat Ecology

Bats are the only mammals to have developed the ability of true flight. At present, over 1,100 species of bat are recognised worldwide, making bats the second largest mammal group after rodents. As well as flight, bats have evolved a system of navigation and orientation using echolocation which has allowed many species to become nocturnal. There are 18 species of bat that occur within the British Isles, of which 17 are known to breed. More species occur in the south and west of the country, with species numbers declining towards the north and into Scotland.

All bat species in the UK are nocturnal and feed exclusively on insects (they are insectivorous) which they catch in flight during their night-time activity, using echolocation to locate and home-in on their prey. Bats will roost during the daytime and seek out dark, enclosed and undisturbed places in which to do so, often using a variety of roosting sites within their home range. Different roost sites are used for different purposes (such as mating, giving birth and hibernation) and at different periods of a bat's life cycle.

During the summer, female bats will gather together in a maternity or breeding roost. In the UK, this starts to occur towards the end of May and the females will seek out a warm and undisturbed site in

which to give birth. Because maternity roosts require a particular set of environmental attributes (such as location, temperature, orientation and size), breeding bats tend to return to roost and breed in the same locations year after year. Given that bats live a relatively long time (anywhere from 10-20 years), and only give birth to one pup a year, maternity colonies are crucial to the reproduction and survival of the local population and can be very sensitive to environmental change.

Relatively little is known about hibernation roosts, as tracking and locating hibernating bats is very difficult. However, many species (particularly those within the genera *Myotis* and *Rhinolophus*) have been found within underground sites such as caves, mines and cellars, where the temperature remains constant and low throughout the winter allowing the bats to remain in a state of torpor. The spring and autumn are periods of transition and bats can use a number of different locations on a temporary basis, often moving between roosts as environmental conditions change and temperatures fluctuate. In the autumn, bats will mate and it has been shown that male and female bats will gather at particular locations (such as a building, cave or tree) to meet, socialise and mate.

Bats choose to roost in a number of different locations, depending on the species, their activity pattern and the period of their lifecycle. Certain species, such as the pipistrelles, favour crevices and small cavities for roosting and will use features such as cracks, crevices and small rot holes in the boughs and trunks of trees and within certain features of buildings such as boxed eaves, gaps under roof tiles, hanging tiles and soffit boards. Other species favour large, uncluttered roof spaces and lofts within buildings where they can hang up on the underside of the roof and use the interior space for flying prior to emergence. Hollow trees, cellars, caves, barns, churches and cavity walls can also all be used for roosting, given suitable access. Certain species, such as the noctule, favour roosting sites within trees whilst others tend to favour buildings. Roost sites may be used by only a very small number of bats, such as solitary males, or may offer shelter to tens or hundreds of bats within maternity and hibernation roost sites.

The suitability of roosting sites is also highly influenced by the location or context of a tree, building or cave. Roost sites are most often favoured when they are within close proximity to foraging habitats and where those habitats are connected to one another within the landscape by features such as hedgerows, woodlands, rivers or sunken lanes along which bats disperse and 'commute' from place to place. Suitable foraging habitats are any places where insect prey is diverse and abundant such as woodlands, ponds, lakes, rivers, scrub, hedgerows and unimproved grassland or pasture. Thus, the ecological context of a site is very important for determining if bats may be present within a roost and the potential for a roost to be present tends to be much higher within rural or village locations.

2 Bat Activity Surveys

2.1 19th May 2020

A bat activity survey was undertaken at dusk on 19th May 2020.

The survey was undertaken by Edward Bodsworth *MA (Cantab) PhD MCIEEM* (Natural England Level 3 and Level 4 Licence nos. 2020-45379-CLS-CLS & 2020-45382-CLS-CLS), Jan-Piet Stuursma (Natural England Level 2 Licence no. 2018-37063-CLS-CLS), Robbie Birkett *MSci* (Natural England Licence no. Level 1 2019-39934-CLS-CLS), Oliver Bevan *BSc*, Reuben Hayden *BSc* and Jenny Hull.

Best practice guidelines (Collins, 2016) recommend that bat activity surveys are undertaken in the period May to August, inclusive. The surveyors were positioned to the west and east sides of the buildings, so as to clearly observe all of Building 1 and all of Building 4.

The survey commenced at 20:45, with sunset at 20:57, and continued until 22:30. The weather was a light breeze (Beaufort Scale 2), clear (10% cloud), dry and warm (20°C at the start of the survey, dropping to 17°C by the end).

The surveyors were equipped with Echometer Touch and Anabat SD2 bat detectors to listen to and record bat calls, and to analyse sonographs in real time. Bats were identified to species level where possible, and notes made on roost locations, behaviour and activity.

2.2 2nd June 2020

A bat activity survey was undertaken at dawn on 2nd June 2020.

The survey was undertaken by Edward Bodsworth *MA (Cantab) PhD MCIEEM* (Natural England Level 3 and Level 4 Licence nos. 2020-45379-CLS-CLS & 2020-45382-CLS-CLS), Jan-Piet Stuursma (Natural England Level 2 Licence no. 2018-37063-CLS-CLS), Robbie Birkett *MSci* (Natural England Licence no. Level 1 2019-39934-CLS-CLS) and Oliver Bevan *BSc*.

The surveyors were positioned to the west and east sides of Building 1; Building 4 was not included in this survey.

The survey commenced at 03:20, with sunrise at 04:50, and continued until 05:00. The weather was still (Beaufort Scale 1), clear (0% cloud), dry and cool (13°C at the start and end of the survey).

The surveyors were equipped with Echometer Touch and Anabat SD2 bat detectors to listen to and record bat calls, and to analyse sonographs in real time. Bats were identified to species level where possible, and notes made on roost locations, behaviour and activity.

3 Results

3.1 Bats

No bats were seen to emerge from Building 1 or Building 4 at dusk on 19th May 2020. No bats were seen to re-enter Building 1 at dawn on 2nd June 2020.

Relatively low levels of bat activity were recorded during both surveys, with surveyors recording 3-5 passes of both common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *P. pygmaeus* during the dusk survey. No other species were recorded, and levels of activity were lower at dawn. Bats were seen flying past the buildings, through the site, and over Building 1.

Given the above, roosting bats are considered to be absent from both Building 1 and Building 4.

3.2 Birds

One swift *Apus apus* was seen to re-enter the eaves at one of the gable ends to the east (street side) of the building, as indicated in Figure 1. It is assumed that this is a nest location for a pair of swifts.



Figure 1. Approximate location of re-entering swift at dusk on 19th May 2020; indicated by the white arrow.

3.3 Legislative Guidance

3.3.1 Bats

As with many animal species within the UK, declines in the abundance and distribution of many bat species have been documented through recent decades. The reasons for these declines are various and complex but it is considered that the major factors are changes in land use and agriculture, the loss of woodlands and hedgerows and the loss of suitable roosting sites.

Bats are particularly sensitive to human activity due to the fact that they roost within buildings, trees and underground structures such as mines, and the availability of suitable roost sites is considered to be a key factor in the conservation of bats within the UK. As a consequence, all species of bat and their roost sites are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and under The Conservation of Habitats and Species Regulations 2017. Taken together, these make it an offence to:

- (a) Deliberately capture or intentionally take a bat
- (b) Deliberately or intentionally kill or injure a bat
- (c) To be in possession or control of any live or dead wild bat or any part of, or anything derived from a wild bat
- (d) Damage or destroy a breeding site or resting place of such an animal or intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection
- (e) Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection
- (f) Deliberately disturb any bat, in particular any disturbance which is likely
 - to impair their ability;
 - (i) to survive, breed, reproduce or to rear or nurture their young; or
 - (ii) in the case of hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong

A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.

Although the law provides strict protection to bats, it also allows this protection to be set aside (derogation) under The Conservation of Habitats and Species Regulations 2017 through the issuing of licences. Where a lawful operation is required to be carried out, but which is likely to result in one of the above offences, a licence may be obtained from Natural England (the statutory body in England with responsibility for nature conservation) to allow the operation to proceed. However, in accordance with the requirements of The Conservation of Habitats and Species Regulations 2017, a licence can only be issued where the following requirements are satisfied:

- The proposal is necessary ‘to preserve 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’;
- ‘There is no satisfactory alternative’;
- The proposals ‘will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range’.

3.3.1.1 Bat Mitigation Class Licence (BMCL)

In 2015, Natural England launched a new class licence (WML-CL21), which provides a streamlined process to the European Protected Species Licence (EPSL) described above. The Bat Mitigation Class Licence (formerly the Low Impact Bat Class Licence) permits work that has a low impact on certain bat species and certain roost types, but which still needed to be licensed in order to meet legal requirements. Specifically, the criteria for using the class licence are set out below.

Bat species

The low impact licence can be used for sites where the following species are roosting:

- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Brown long-eared (*Plecotus auritus*)
- Whiskered (*Myotis mystacinus*)
- Brandt’s (*Myotis brandtii*)
- Daubenton’s (*Myotis daubentonii*)
- Natterer’s (*Myotis nattereri*)

Assemblage of bats

Sites that support a maximum of three bat species listed above can be registered for the class licence. Sites with a more diverse assemblage of bat roosts must apply for an individual European Protected Species (EPS) licence.

Number of bats

Sites that support individuals or small numbers (in total) of the bat species listed above can register for the low impact class licence. If more than one bat species will be affected, it is the total number of bats which must be considered. The conservation status of bats varies across regions and must be considered by the ecologist when determining what constitutes ‘small numbers’.

Roost type

The Bat Mitigation Class Licence applies to roosts of low conservation significance, and is regulated to cover the following types of roosts in buildings:

- Feeding roosts
- Night roosts

- Day roosts
- Transitional roosts / occasional roosts

Sites with roosts of higher conservation significance such as maternity roosts, hibernation sites or swarming sites do not qualify.

Number of roosts

The Bat Mitigation Class Licence is applicable to sites that support no more than three roosts in total (across all structures).

Impacts

Natural England's Bat Mitigation Class Licence permits activities resulting in the disturbance and/or capture of certain bat species (listed above) and/or the damage or destruction of roosts of low conservation significance.

Natural England's Bat Mitigation Class Licence is held by Registered Ecological Consultants and sites must be registered with, and approved by, Natural England before any licensable work can commence. The ecological consultant must apply to Natural England's Sustainable Development Wildlife Licensing to register the site with at least 3 weeks (15 working days) notice and no more than 12 weeks before commencement of any licensable activities.

3.3.2 Nesting Birds

Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between March and August inclusive.

4 Potential Impacts

4.1 Bats

The surveys indicate that roosting bats are absent from the buildings at 106-116 Westfield Road. There is no evidence to indicate that the buildings are being used as a place of shelter/protection by roosting bats. Works to the buildings are unlikely to result in any significant impacts on bats or the places that they use for breeding, shelter and/or protection (roosts) and no specific compensation measures are considered necessary (Mitchell-Jones 2004).

Since no significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2017, a European Protected Species (bat) licence will not be required for the proposed works to proceed. Since there are no predicted impacts on bats or their habitats, it is not necessary to consider the 'three tests' of The Conservation of Habitats and Species Regulations 2017 in this instance.

4.2 Nesting Birds

The surveys indicate that one pair of swifts are using the eaves at one of the eastern gables as a nest site. Works to this area during the nesting period (April to September, inclusive) have the potential to result in damage or destruction of the nest, and the killing/injury of eggs and young.

5 Recommendations

5.1 Further Surveys

No further surveys are considered necessary at this stage.

5.2 Mitigation & Enhancement

5.2.1 Bats

As previously discussed, a European Protected Species (bat) Licence is not considered to be necessary for works to proceed. This is due to the fact that roosting bats are considered to be absent from the buildings.

Timing

No timing constraints are considered necessary.

Careful Work Practices

As bats are a highly mobile species, contractors should be briefed with regard to the fact that individual bats can often exploit very small crevices as roost sites (such as gaps under tiles) and that bats can move between roost sites on a regular basis.

In the unlikely event that bats or significant evidence of bats (for example large accumulations of fresh bat droppings) are encountered during the extension, works should stop immediately, and advice sought from a suitably qualified ecologist.

Enhancement

Given the relatively poor nature of the surrounding habitats for bats, enhancement measures such as bat boxes are not currently recommended. This is due to the fact that the features are unlikely to be adopted by bats.

5.2.2 Nesting Birds

It is understood that there are no proposed works to the area where the nesting swifts were observed. However, if there are to be works in this area, it is recommended that they are undertaken in the period September to March, to avoid the nesting period of swifts.

6 References

Altringham, J., 2003. *British Bats*. Harper Collins.

Collins, J. 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)*. The Bat Conservation Trust, London.

Mitchell-Jones, A., 2004. *Bat Mitigation Guidelines*. English Nature.