Date: May 2022

Contract Ref: 2455

BAT SURVEY REPORT

NO. 71 LILLINGTON ROAD, LEAMINGTON SPA, WARWICKSHIRE, CV32 6LF

for

MRS M. BENNETT

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CONTROL SHEET

Mrs M. Bennett
No. 71 Lillington Road, Leamington Spa, Warwickshire, CV32 6LF
Bat Survey Report

	Name	Position
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Contract No.	Project Contact	Revision No.	Date of Issue
2455	Cassie Needham	1	26 May 2022

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1. RECOMMENDATIONS

1. No further bat surveys are required to support the planning application for this site as the potential for bats to occur and adverse impacts to arise during works is considered to be negligible.

2. Removal of roof materials (*e.g*. tiles) must be undertaken by hand under the direct supervision of a suitably licensed ecologist. A tool-box talk will be provided by the licensed ecologist prior to any works commencing to the property. This talk will indicate an appropriate procedure of working to minimise disturbance and the risk of inadvertently harming bats. **In the unlikely event that roosting bats and/or signs of roosting bats are discovered, works must cease until such time as the statutory authority (Natural England) has been consulted and any advice and licenses obtained as required to complete the works lawfully.**

3. In line with Government policy on biodiversity, the following opportunities to compensate for development impacts and enhance the site for bats are recommended:
    - Installation of one bat box on either a built structure or suitable mature tree within the landownership of No. 71 Lillington Road. Recommended boxes include the Vivara Pro WoodStone Bat Box, Eco Kent Bat Box and the 2FE Schwegler Wall-Mounted Bat Shelter. The box should be installed at least 4m above ground-level (not above windows/doors) and preferably south/west-facing.

4. This report is considered valid for 12 months for planning purposes (CIEEM, 2019). Update surveys may be required to reassess the condition of the site (and its suitability for bats) should this 12-month period be exceeded.

2. SUMMARY OF RESULTS

1. Development proposals are for the demolition of single-storey aspects at the rear of No. 71 Lillington Road (extensions, conservatory and garage), construction of replacement single-storey extensions and the full re-roofing of the property. Focus Environmental Consultants have been appointed by Mrs M. Bennett to provide advice on the potential impact of the proposals upon bats and make recommendations as appropriate to ensure compliance with wildlife legislation and recognised best practice.

2. A Preliminary Roost Assessment of the property (centred on Ordnance Survey grid reference SP 32214 67653) was undertaken on 16 December 2021 (Focus Environmental Consultants, 2021).

3. A single bat dropping, broadly characteristic of those from a brown long-eared bat was recorded within a void of the main building during the Preliminary Roost Assessment. The main building of No. 71 Lillington Road was identified as having ‘moderate’ suitability for bats and the garage was identified as having ‘low’ suitability with reference to published guidelines (Collins, 2016). Therefore, further specialist bat surveys were recommended.

4. One dusk emergence and one pre-dawn return survey was undertaken at the site on 5 May 2022 and 20 May 2022 respectively by three experienced and/or appropriately licensed surveyors.

5. No bats were observed roosting within the main building or the garage.

6. Bat foraging and commuting activity was observed on site during all of the surveys. The following bat species were recorded on / passing through the site; common pipistrelle, soprano pipistrelle, brown long-eared bat and noctule.

3. DISCUSSION & CONCLUSIONS

3.1 Interpretation of Results

No bats were seen roosting within the buildings at the site during the dusk emergence and pre-dawn return surveys. Only one bat dropping was observed during the Preliminary Roost Assessment within the main building. The bat dropping is considered likely to be a result of opportunistic exploration, rather than the result of a roosting bat. Four bat species were recorded foraging and/or commuting at the site. The activity surveys were undertaken during suitable weather conditions and supported by automated bat detectors.

Taken collectively, the survey results obtained through the preliminary roost assessment and follow-up dusk emergence and pre-dawn return surveys, have confirmed that the on-site buildings do not support an active bat roost.

3.2 Predicted Impact in Absence of Mitigation

No active bat roosts have been recorded during the surveys. As such, the proposed works are considered unlikely to impact upon roosting bats.

3.3 Predicted Scale of Impact

No active bat roosts have been recorded at the site during the surveys. The prior acquisition of a bat mitigation (development) licence is therefore **not required** as the potential for bats to occur and significant impacts to arise during works is considered to be negligible.

4. ANNEXES

4.1 Photographs

4.2 Survey Data

4.3 Plans

4.4 Survey Objectives

4.5 Limitations

4.6 Methods & Parameters

4.7 Background Data

4.8 References & Bibliography

4.9 Bat Ecology & Legislation

4.1 Photographs

Plate 1: The front (eastern) elevation of the property. Photograph looking west.

Plate 2: The rear (western) elevation of the property. Photograph looking east.

Plate 3: The southern end of the attic in the void of the main roof.

Plate 4: The void at the rear-facing (western) eave.

4.2 Survey Data

4.2.1 Nocturnal Surveys

A brief summary of the results of each nocturnal survey is provided below, along with sonograms. Field survey recording sheets are held by Focus Environmental Consultants and are available on request.

Dusk Emergence Survey (05/05/2022):
Surveyor 1 was positioned east of the property.
Surveyor 2 was located south-west of the property.
Surveyor 3 was located north-west of the property.

The survey started at 20:23. The first bats detected were two common pipistrelles to the rear of the property at 20:53. Common pipistrelle activity was detected throughout the survey with occasional noctule, soprano pipistrelle and brown long-eared bat passes. The survey ended at 22:08.

Dusk Survey Count:
No bats were observed emerging from the property.

Pre-dawn Return Survey (20/05/2022):
Surveyor 1 was positioned east of the property.
Surveyor 2 was located south-west of the property.
Surveyor 3 was located north-west of the property.

The survey started at 03:34. The first bat detected was a common pipistrelle at 03:46. Occasional common pipistrelle and noctule passes were recorded during the survey. The survey ended at 05:19.

Dawn Survey Count:
No bats were observed returning to roost within the property.

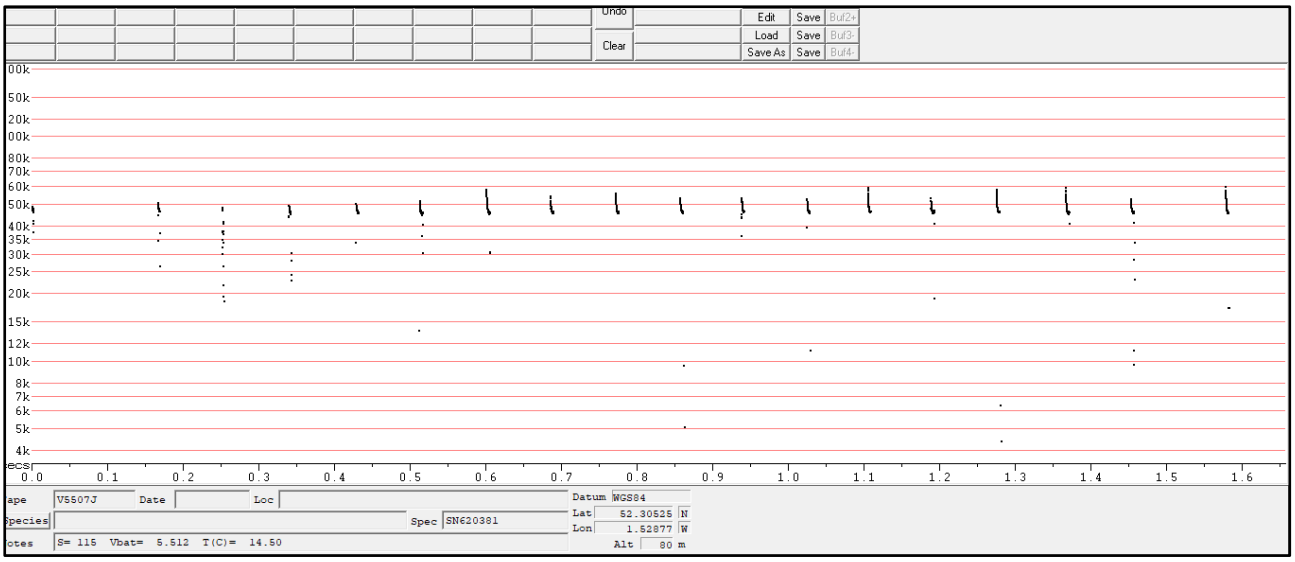

Figure 1: Showing a common pipistrelle echolocating at 21:19 on 5 May 2022, during the dusk emergence survey at No. 71 Lillington Road, Leamington Spa.

4.3 Plans

Plans:

4.3.1 Location Plan

4.3.2 Dusk Emergence Survey Plan

4.3.3 Pre-dawn Return Survey Plan

4.3.1. Location Plan

Site

Please note: this plan is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

NORTH

Client: Mrs M. Bennett
Site: No. 71 Lillington Road, Leamington Spa, Warwickshire, CV32 6LF
Title: Location Plan
Contract: 2455
Date: May 2022

4.3.2 Dusk Emergence Survey Plan

KEY:

- S# — Surveyor number & location
- A — Anabat location
- Common pipistrelle activity
- Noctule activity
- Brown long-eared bat activity

NORTH

Client: Mrs M. Bennett
Site: No. 71 Lillington Road, Leamington Spa, Warwickshire, CV32 6LF
Title: Dusk Emergence Survey Plan
Contract: 2455
Date: 5 May 2022

Please note: this plan is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

4.3.3 Pre-Dawn Return Survey Plan

KEY:

S# Surveyor number & location

A Anabat location

→ Common pipistrelle activity

NORTH

Client: Mrs M. Bennett
Site: No. 71 Lillington Road, Leamington Spa, Warwickshire, CV32 6LF
Title: Pre-Dawn Return Survey Plan
Contract: 2455
Date: 20 May 2022

Please note: this plan is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

4.4 Survey Objectives

The objectives of the survey were:

- to carry out nocturnal bat roost surveys based on the suitability of the building for bats and previous daytime survey work completed;
- to provide specialist advice on the possible presence of bats in relation to the planning process;
- to report survey results, likely development impacts and make appropriate recommendations for further surveys and/or works as necessary to ensure compliance with wildlife legislation and standard best practice; and
- to identify appropriate avoidance, mitigation, compensation and enhancement measures as required to demonstrate compliance with the 'mitigation hierarchy' and requirements of local and National biodiversity policies (*e.g.* the 'biodiversity duty' enshrined within S.40 of the NERC Act 2006, NPPF *etc*).

4.5 Limitations

No significant survey limitations were encountered.

4.6 Methods & Parameters

Emergence, Activity and Pre-dawn Surveys:

The nocturnal surveys were conducted by experienced and/or appropriately licensed surveyors using a variety of equipment with the aim of providing maximum confidence in the presence or absence of roosting bats. Surveyors were situated at strategic points around the site, to ensure full visual coverage of potential bat emerge/return points and roosting locations. The property was observed for the duration of the surveys, in order to record the emergence of any bats.

Survey Parameters:

Table 1: Details of survey parameters for No. 71 Lillington Road, Leamington Spa.

Date	Survey Type	Sunset / Sunrise	Survey Start & End Times	Weather Conditions	Surveyors & Licence No.	Equipment
16 December 2021	Daytime	n/a	n/a	Dry, still and overcast.	G. Davison: 2015-13029-CLS-CLS	Ladders, high-powered torch with red filter, endoscope.
5 May 2022	Dusk Emergence	20:38	Start: 20:23 End: 22:08	Dry and still. Start: 17°C End: 15°C Relative humidity: 43% Beaufort scale: 0 Cloud cover: 10%	C. Needham: 2016-23451-CLS-CLS T. Darby (n/a) J. Jamieson (n/a)	Anabat Walkabout x 2, Batbox Duet, EMT2 Pro and Anabat Express x 2.
20 May 2022	Pre-dawn Return	05:04	Start: 03:34 End: 05:19	Dry, cool and overcast. Start: 12°C End: 12°C Relative humidity: 82% Beaufort scale: 0 Cloud cover: 100%	K. Warren: 2021-52120-CLS-CLS J. Toogood (n/a) T. Darby (n/a)	EMT2 Pro, EMT Pro, Magenta 4, Anabat Walkabout and Anabat Express.

4.7 Background Data

Pre-existing Information on the Bat Species at the Survey Site:

A Preliminary Roost Assessment was completed at the site on 16 December 2021 by an experienced and appropriately licensed surveyor from Focus Environmental Consultants (see Focus Environmental Consultants, 2021). Please refer to this report for full descriptions of the site and scope of works.

Status of Bat Species:

Survey results have confirmed that No. 71 Lillington Road does not support an active bat roost.

4.8 References & Bibliography

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4.9 Bat Ecology & Legislation

Only two different families of bats occur in the UK, of which the most numerous are the "vesper bats" or ***Vespertilionidae***. Only two members of the ***Rhinolophidae*** or "horseshoe bats" occur in the UK, namely the greater and lesser horseshoe bat. The UK currently supports 17 different resident species of bat from these two family assemblages. One of these, Alcathoe's bat (*Myotis alcathoe*) has only been discovered as resident in 2010. The greater mouse-eared bat (*Myotis myotis*) was previously thought to be extinct as a UK mammal species until a single individual was discovered in 2002 at a known hibernation site in Sussex, this may yet turn out to be resident species but is currently regarded by the Bat Conservation Trust as a vagrant/occasional winter visitor. Another species, the pond bat (*Myotis dasycneme*) is increasingly being identified in the UK and may currently be in the process of colonising the country from continental Europe.

British bats are entirely insectivorous, and consume a variety of invertebrate species of various shapes and sizes from the smallest gnats and midges to cockchafers, ground beetles and spiders. Bats are increasingly regarded as being species of conservation concern owing to a decline in both numbers and range. The reasons for these declines are thought to relate primarily to changing agricultural practices (in particular intensification of agriculture and increased use of pesticides) and direct loss of foraging habitats and roosts from human development such as infrastructure projects and conversion of agricultural buildings (see *e.g.* JNCC, 2004; www.bats.org.uk). All UK bats utilise echolocation to navigate within their environment and hunt for food. It is increasingly being discovered that echolocation calls can also have an important 'social communication' function between bats.

Bats are strictly nocturnal unless disturbed, diseased or starved of food due to adverse weather conditions. Consequently bats require a place of shelter and protection (commonly termed a roost) from predators during the daytime. Bat roosts can be found in a variety of both natural and anthropogenic situations including buildings (residential, agricultural, industrial, modern and ancient), mature trees, bridges, tunnels, caves and mines. Purpose built bat boxes are now commercially available and bats will use these, as well as taking advantage of unoccupied bird boxes if available.

Bats are mobile throughout the year and may use different types of roost according to the particular needs of their lifecycle. Different roost types include maternity roosts, hibernation roosts, satellite roosts, day roosts, night roosts, transitional roosts, feeding perches and mating roosts. The most significant roosts in terms of bat numbers and conservation significance are 'maternity roosts' and 'hibernation roosts'. Pregnant female bats will aggregate in maternity roosts to give birth and rear their single offspring (twins occur rarely). These types of roost are normally associated with warm, protected sites. During colder months of the year, bats go into hibernation and require sites with stable temperatures high humidity levels. Bats do not always use roosts in a predictable fashion and tree-dwelling species are notoriously nomadic and will move between a variety of different tree roost sites. By contrast maternity roosts tend to be the most loyally occupied from year to year, although again this differs between the different bat species.

Council Directive 92/43/EEC ("The Habitats Directive") is transposed into UK law through the Conservation of Habitats and Species Regulations 2017. Bats are a European Protected Species (EPS), and are listed in Annex IV of the Habitats Directive. This affords both the bats and their roosts with strict protection. Some bat species have a higher conservation concern in Europe. The habitats supporting these species can be designated as Special Areas of Conservation (SACs) and the bat species concerned are listed under Annex II of the Habitats Directive. Bats listed on Annex II include the greater and lesser horseshoe bats, the Bechstein's bat and barbastelle. Actions and activities that are prohibited by this legislation are:

- deliberate capture, injury or killing of a bat;
- deliberate disturbance of a bat and in particular disturbance which is likely to; impair their ability:
    - to survive, to breed or reproduce, or to rear or nurture their young, or
    - in the case of animals of a hibernating or migratory species, to hibernate or migrate;
    - or to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, any bat or any part of a bat or anything derived from one.

Substantial penalties including fines and custodial sentences are now in place for offenders under the Conservation of Habitats and Species Regulations 2017.

The primary legislative Act covering wildlife in the UK is the Wildlife and Countryside Act 1981 (WCA), which affords protection to all bat species. The WCA has seen numerous amendments since it was brought into force, of which the most recent and arguably significant have been the Countryside and Rights of Way (CRoW) Act 2000, the Natural Environment and Rural Communities (NERC) Act 2006 and the Conservation of Habitats and Species Regulations 2017 (described above). The intentional or reckless damage of roosts or disturbance of bats is specifically prohibited under the WCA as amended. The offence of 'reckless' disturbance and damage is not contained within the Conservation Regulations and has thus been retained within WCA.

Because bats are known to use many roost sites on a regular basis year on year, legal precedent indicates that these roosts should be regarded protected regardless of whether bats are present at the time they are inspected. Legislative changes and amendments have now completely removed the defence of harmful actions being "the incidental result of an otherwise lawful operation" for EPS, which was previously afforded under the Wildlife and Countryside Act 1981 (as amended).

A number of British bat are described as being of ‘of principal importance for the purpose of conserving biological diversity’ under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC). The NERC Act places a specific ‘biodiversity duty’ upon all national and local government departments to ensure the conservation of Biodiversity.

The National Planning Policy Framework (NPPF) sets out the government’s planning policies for England and how they should be applied to achieve the over-arching goal of ‘sustainable development’.

5. QUALIFICATIONS & EXPERIENCE

Focus Environmental Consultants® has the expertise to provide sure-fire environmental solutions to a wide range of projects. The company ethos forges the highest standards of professional scientific practice with a best value approach for our clients. Our core area of expertise is in the production of specialist environmental reports and advice to support planning applications. Our comprehensive services include Preliminary Ecological Appraisals (PEA), Ecological Impact Assessment (EcIA), Habitat Regulations Assessment (HRA) and fulfilling protected species surveys, licensing and mitigation requirements. Focus Environmental Consultants is a CIEEM Registered Practice, with all ecological staff being members of this professional body. Our flexible approach, range of skills and broad project experience from major infrastructure contracts to small private developments allows us to adapt to your individual requirements. As well as offering a full suite of ecological services, Focus Environmental Consultants can provide expert arboricultural advice and reports and is building an enviable reputation for innovative habitat creation and management solutions. Focus Environmental Consultants is situated in Worcestershire, providing a convenient and central UK location.

Cassie Needham BSc (Hons) MSc MCIEEM

Cassie is a Senior Ecologist with over nine years of experience in the ecological consultancy field. She holds a BSc (Hons) degree in Geography with Ecology from the University of Sussex and an MSc in Conservation from University College London. Cassie is experienced in conducting Preliminary Ecological Appraisals, Ecological Impact Assessments (EcIA) and Habitat Regulations Assessments (HRA) as well as surveys for protected species; great crested newts, reptiles, white-clawed crayfish, bats, hazel dormice and water voles. She also holds Natural England survey licences for bats (Class 2), great crested newts, hazel dormice and white-clawed crayfish and is a Certificated Surveyor in Japanese Knotweed. Cassie has held Natural England Mitigation (development) licences for great crested newts and numerous Natural England licences to close or disturb badger setts. Cassie is a Full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).