BAT EMERGENCE SURVEY

22B HARLEY ROAD,

LONDON NW3 3BN

Commissioned by: **Kit Montague and Sei Howe**

Report Number: ASW/KMSH/075/27/2023
August 2023

ASW Ecology Ltd
Office/Mobile: 07710 150590
London Euston Woburn Place, 16 Upper Woburn Place, London WC1H 0BS
E-mail: andrew@aswecology.co.uk Website: www.aswecology.co.uk

CONTENTS

EXECUTIVE SUMMARY

1. During this Summer 2023 bat emergence survey, two bat species were recorded over or adjacent to the application site at 22B Harley Road. These were common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*).

2. There were no bat roosts present within the cottage at the application site, with no bats emerging at any time during this survey.

3. The bats were recorded foraging and commuting over the rear garden or within adjacent gardens.

4. The existing cottage is not being used by bats, most likely due to far more suitable buildings being present elsewhere in this area for roosting purposes.

5. Based on this bat emergence survey, there will be no negative impact to the local bat populations from the proposed demolition works at the application site, as long as all recommendations within this report are strictly followed by both the client and all contractors.

1. INTRODUCTION

- A Bat Emergence Survey was undertaken at 22B Harley Road, London NW3 3BN, during August 2023, for: Kit Montague and Sei Howe.

- The national grid reference for this site is: TQ269840.

- This bat survey was required due to the proposed demolition of the existing cottage and the replacement with a new dwelling.

- The main method used for this bat emergence survey, as well as the full results and the final recommendations can be found within this report.

- Both this survey and the report were undertaken and compiled by Mr Andrew S. Waller, Consultant Ecologist, ASW Ecology Ltd, with the help from an assistant ecologist.

- Mr Andrew S. Waller MSc BSc (Hons) MCIEEM, Director of ASW Ecology Ltd - has been a Consultant Ecologist since 1997, and has very extensive experience and knowledge of protected wildlife species including bats, for which he is fully licensed to survey throughout England by Natural England for consultancy purposes (Bat Class 2 Licence Registration Number: 2015-15703-CLS-CLS). He also has Natural England survey licences for great crested newts and barn owls. He has been studying bats for 30 years and wildlife in general for 41 years. He is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and meets the requirements of being a Suitably Qualified Ecologist.

2. METHODOLOGY

2.1 Bat emergence survey

- During August 2023, a Bat Emergence Survey was undertaken at the existing cottage at 22B Harley Road.

- A single bat emergence survey visit was undertaken at this site, due to the stated building present having been identified previously as having Low bat roosting potential.

- Two bat surveyors using both Bat Box Duet bat detectors and also Echo Meter Touch bat detectors were present on the bat survey visit.

- Night vision aids (NVA), mounted on tripods, mainly 1x Nightfox Whisker IR night vision camera and 1x HIKMICRO Lynx thermal imaging camera, were used on key features at the building, so to ensure that they were covered robustly for this survey and following current best practice guidance.

- The main aim was to determine the range of bat species present; the presence of any roosts during the survey period; and the presence of any key foraging areas and bat commuting routes.

- The dusk based visit was undertaken in suitable weather conditions only, so there was the best chance of finding any possible emerging bats. The dusk visit started before sunset and lasted for up to 2 hours after sunset.

- All results from this bat dusk survey can be found in the next chapter of this report and bat sightings shown in Map A in Appendix 2.

2.2 Constraints

- Due to the timing of this bat survey, only the Summer period could be covered. This is a standard constraint for any bat survey which can only investigate part of any year.

- The June to August period is important to bats, since this is when maternity roosts are present and young bats will be born. Large roosts are sometimes present within structures and trees, and can be very visible during bat emergence surveys. This survey was commissioned when bats will be very active and bat mating roosts can also be present now, so was timed at the key period of the year for bats.

- As always though, without taking into account any further active surveying or monitoring, this study can only provide a “snapshot” of the presence of bats at the site during the period of this study.

- Please also note that any bat survey report is valid for one year only, as stated in the BCT bat survey guidelines (BCT, 2016).

3. BAT SURVEY RESULTS

3.1 Bat emergence survey

Bat emergence survey visit 1 – 29/8/2023

Sunset time: 7.55pm
Weather: Dry mainly, with drizzle at start, mild, light wind and cloudy (8/8CC)
Temp (sunset): 17°C (end: 16°C)
Windspeed (max): 4 mph
RH: 73%
Invertebrates present: small flies, moths and spiders

Bat Species	Time Noted	Location
Common Pipistrelle	8.08pm	Rear garden boundary
Common Pipistrelle	8.14pm to 8.17pm	At rear gardens
Common Pipistrelle	8.25pm	At rear garden
Soprano Pipistrelle	8.27pm	Over adjacent garden
Common Pipistrelle	8.35pm	From adjacent garden
Soprano Pipistrelle	8.47pm and 9.06pm	Heard over rear garden
Soprano Pipistrelle	9.14pm	Along trees
Common Pipistrelle	9.19pm	Along trees
Common Pipistrelle	9.21pm	Heard only over rear garden. No further bat contacts to the end of the survey visit

4. CONCLUSIONS

4.1 Significance of the bat emergence survey

- During this bat emergence survey, a total of two bat species were at or over the application site at 22B Harley Road. These were common pipistrelle and soprano pipistrelle.

- There were no bat roosts present within the existing cottage, with no bats emerging at any time during the bat survey period.

- The bats were recorded both foraging and commuting over the rear garden but mainly within adjacent gardens.

- An early common pipistrelle was detected during this survey but from a different property. This may well suggest that a nearby house does have a bat roost present.

- The existing cottage is clearly not being used by bats, most likely due to far more suitable buildings being present elsewhere in this area for roosting purposes.

- No other bat species were recorded during this survey, but would be expected in the wider area, especially at local green spaces such as noctule and Leisler's bat.

- Please see the next chapter of this report for the best practice guidance that must still be followed during the future development works by all contractors and the client.

4.2 Impact assessment

In the absence of any mitigation measures or precautions, the following direct or indirect impacts from the proposed development works at 22B Harley Road, would be predicted as:

DIRECT: There was no bat roost present at the stated building, so there cannot be any negative impact to the bat populations in the area due to the proposed demolition works. There is no risk of any bats being disturbed, injured or killed by the works, or any bat roosts to be damaged or lost. **Impact magnitude predicted: Nil**

INDIRECT: Since no high quality bat foraging habitat or commuting routes will be impacted or lost, without mitigation, there will be no impact from the development here. **Impact magnitude predicted: Nil**

4.3 Summary of the legal protection of bats in the UK (Simplified summary only of the legislation – please see other texts for full details)

4.3.1 THE LEGAL PROTECTION OF BATS IN ENGLAND AND WALES

Introduction

All species of bats in England and Wales are protected by law. Their legal protection derives from two sources:

- the strict species protection provisions of the EU Habitats Directive as implemented in England and Wales by Part 3 of the Conservation of Habitats and Species Regulations 2017 (the **"2017 Regulations, amended by the 2019 Regulations due to Britain leaving the EU"**); and

- Part 1 of the Wildlife and Countryside Act 1981 (as amended).

Conservation of Habitats and Species Regulations 2017 ("2017 Regulations", as amended by the 2019 Regulations)

The 2017 Regulations came into force on 30th November 2017, amended by the 2019 Regulations. They replace the previously applicable regulations (Conservation (Natural Habitats, &c) Regulations 1994 and the 2010 Regulations) in relation to England and Wales. The 2017 Regulations are the principal means by which the EU Habitats Directive is transposed in England and Wales.

The Regulations contain a number of Parts which set out the protection to be afforded to "European Protected Species" ("EPS"), which includes all species of British bats. The list also includes other species which are rare on a European scale, such as great crested newts, otters and dormice.

Under the 2017 Regulations both bats themselves and their "breeding sites and resting places" (most commonly their roosts) are protected.

It is a criminal offence to do the following (note that this is not an exhaustive list of all offences but rather a list of offences which will be of most relevance to developers):

a. to damage or destroy a breeding site or resting place of a bat (even if bats are not present at the time);

b. to deliberately capture, injure or kill a wild bat;

c. to intentionally or recklessly disturb a bat in its roost or to deliberately disturb a group of bats, in particular:

    i. any disturbance of bats which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or

    ii. any disturbance of bats which is likely to impair their ability to hibernate or migrate; or

iii. any disturbance of bats which is likely to affect significantly the local distribution or abundance of the species to which they belong;

d. to have in one's possession or to control or to transport or to sell or exchange or offer to sell or exchange any live or dead bat or part of a bat which has been taken from the wild; or any part of, or anything derived from, a bat or any part of a bat; and

e. to intentionally or recklessly obstruct access to a bat roost.

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of the company may also be prosecuted if the offence has been committed with their consent or connivance, or is attributable to their neglect.

Wildlife and Countryside Act 1981 ("WCA 1981")

The WCA 1981 protects a wide range of animals, plants and habitats in the UK. All British bat species are afforded protection under Part 1 of the WCA 1981, in addition to the protection they have under the 2019 Regulations.

As regards England and Wales the following offences apply to protect bats under the W&CA 1981:

a. to intentionally or recklessly disturb any bat while it is occupying a structure of place which it uses for shelter or protection (s9(4)(b) WCA 1981);

b. to intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection (s9(4)© WCA 1981);

c. attempting either of the above (s18(1) WCA 1981).

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of that company may also be prosecuted if the offence has been committed with their consent or connivance or is attributable to their neglect (s69(1) WCA 1981).

5. RECOMMENDATIONS

5.1 Best practice guidance – bats and development

- As a standard precaution only as per any development related site, the future demolition contractors should be fully aware of the legal protection of bats and what to do if an unexpected bat is found or suspected at the site during all works at the house.

- This is especially relevant during any soft stripping works, where external/internal features may be removed by hand, such as roof tiles, ridge tiles, slates, fascias, soffit boxes, stonework, brickwork, timbers, roofing felt and lead flashing, for example.

- Bats and their evidence such as droppings can unexpectedly be present under such features and be completely hidden until accidentally uncovered.

- If any new bat evidence such as crumbly droppings composed of insect remains or an actual bat is seen, during the building related works, then such work must stop and a licensed bat consultant contacted immediately for urgent advice.

- Usually, late summer/early autumn e.g. late August/September/October or early spring e.g. April/early May, are ideally the best times to work on such structures, as this avoids both the main bat breeding season and the winter hibernation period.

- **However, since no bat evidence and no bat roosts have been found at the building at this application site, there are no bat related constraints in regards to when the demolition works can commence.**

5.2 Best practice guidance – breeding birds and development

- **FOR AWARENESS ONLY:** As per any development related site, the general advice is that no vegetation eg trees, bushes, shrubs, hedges, bramble scrub or dense ivy cover should be removed during the bird nesting season as all bird nests are fully protected by law, and this includes whilst a nest is being built by the adult birds. This also includes buildings that have been proved to have active bird nests present.

- If any nests are present within the proposed development footprint during the works phase, then these must be left alone until the young birds have fully fledged from the nest and no further breeding attempts are to take place.

- The bird nesting season in the UK, currently runs mainly from mid-January to September, but sometimes birds can start breeding before or after this period e.g. some resident birds can start building nests during the first half of January or earlier, including crows, magpies, feral pigeons and woodpigeons.

- Therefore, September to mid-December can be the best months for such works, although with a bird watching brief for any early or late nesters as stated above. An ecologist can be present on site during the clearance work so to search vegetation, where possible, before strimming commences.

5.3 Biodiversity enhancement options for bats

5.3.1 Bat boxes

- As a biodiversity enhancement option for the client, it would be recommended for them to install at least two to three bat boxes at the site for local bats to use.

- The bat box model proposed would be the 2F Schwegler Bat Box and this is a high quality bat box which will be used by a number of different bat species, including for the bat species recorded flying here. This box is made of woodcrete and is a long lasting box.

- The bat boxes can be located on separate trees eg one per tree ideally, so there is a better chance of them being used by bats, or onto buildings.

- Bat boxes should be installed at least six metres up a tree trunk, facing mainly South-east or South-west and with enough space for bats to fly under the box easily. Although one bat box should be facing North or West so this will provide additional microclimates for bats. No artificial lighting must illuminate any of the installed bat boxes as this would deter bats from using the boxes.

- The NHBS is a good ecological equipment supplier and this bat box model can be purchased from them. The web link for this bat box is:

  http://www.nhbs.com/title/158629/2f-schwegler-bat-box-general-purpose

5.3.2 Bat friendly planting

- It would also be advantageous if any bat friendly planting can be introduced to any new landscaping scheme, if applicable, by the use of night scented plants, which will attract insects which bats prey on.

- Native plants should always be chosen ideally since these species will have the most benefits to wildlife. But the occasional non-invasive hybrid or exotic would be fine.

- Suitable border plant species can include corn flower, field poppies, mallow, evening primrose, cherry pie, soapwort, sweet rocket, bladder campion, Nottingham catchfly, night-scented catchfly, ox-eye daisy, primrose and yarrow.

- Herbs can also be very good for insects and include borage, coriander, fennel, lavender, rosemary, chives and thyme.

- Trees, shrubs and climbers suitable for insects, so to benefit bats, include dog rose, elder, gorse, guilder rose, English oak, goat willow, silver birch, blackthorn, hawthorn, hazel, honeysuckle, ivy and jasmine.

- Further information can be provided on the above if needed.

5.3.3 Bats and lighting

- It will be important that dark corridors are allowed for bats at night, especially along the site boundaries. This will mean that bats, can use the local gardens and other green spaces, especially whilst commuting between sites. This can be ensured by the use of dark buffer zones.

- Artificial lighting can cause a vacuum effect at greenspaces and at other sites, where such artificial light will pull flying insects at night away from areas where bats feed. So adjacent darker areas will have less insects for bats to survive on and that negatively affects the life cycles of the insect species present (BCT, 2018).

- The future lighting scheme must be bat friendly and adhere to best practice on this aspect. There must be no UV elements to the new lighting and no metal halide or fluorescent sources used (BCT, 2018).

- Additionally, a warm white spectrum should be used, with no blue light components. LED luminaires should also be used, as this has a reduced impact on bats.

- In regards to any future lighting, it would be beneficial for both insect populations and for bats, any new security lighting is set on motion sensors and with short timers (1 minute).

- Light spillage must also be curtailed, with reduced glare and light spillage with lighting near to windows.

- Such lighting within dwellings can be recessed. Lighting must be directed to where it is required only and baffles or hoods should be used to achieve this.

- Screening by vegetation such as new trees, bushes and shrubs can also be used to mitigate the effects of any new lighting scheme.

- The following latest best practice guidance note must be read and followed, in regards to how lighting affects bats and how to mitigate this at a site:

  https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

6. REFERENCES

(1) Altringham, J.D. (2003) British Bats. HarperCollins*Publishers*, London.

(2) Bat Conservation Trust (2018) Bats and artificial lighting in the UK – Bats and the Built Environment Series. Guidance Note 8. BCT, London.

(3) Collins, J. (Ed) (2016) Bat Surveys for Professional Ecologists – Good Practice Guidelines (3rd Ed). Bat Conservation Trust, London.

(4) Entwistle, A.C. et al (2001) Habitat Management for Bats. JNCC, UK.

(5) Mitchell-Jones, A.J. (2004) Bat Mitigation Guidelines. English Nature.

(6) Mitchell-Jones, A.J. and McLeish, A.P. (2004) The Bat Workers' Manual. 3rd Ed. JNCC.

(7) Treweek, J. (1999) Ecological Impact Assessment. Blackwell Science Ltd, UK.

APPENDIX 1:

Photographs A-C

(Photos are dated 29/8/2023)

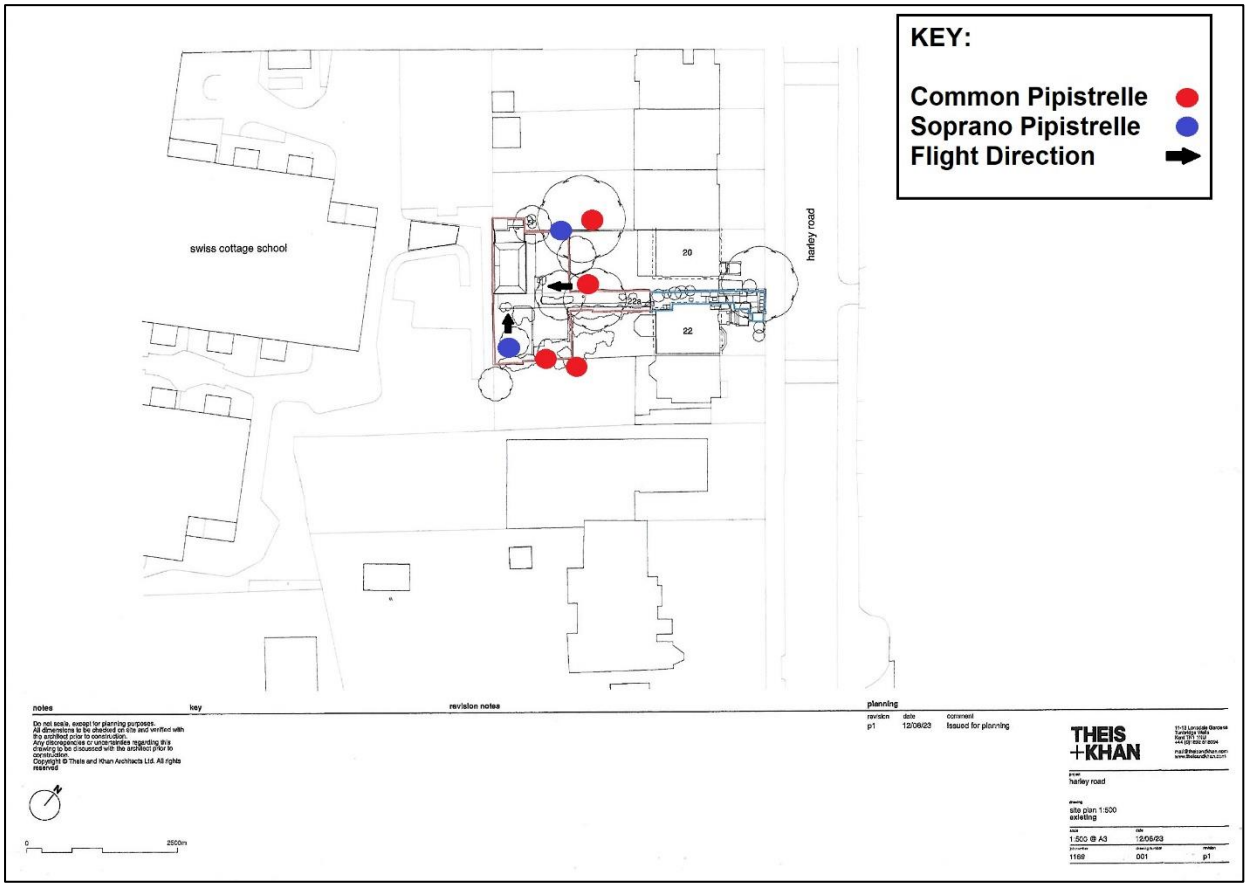
Photograph A
There were no bats emerging from the cottage during this bat dusk survey

Photograph B
Bats such as common pipistrelles did forage over the rear garden at night and over adjacent gardens

Photograph C
Example photograph using a night vision aid (NVA) at the cottage frontage – taken with a Nightfox Whisker digital night camera, mounted on a tripod

APPENDIX 2:

Map A – Location of bat sightings - 2023



APPENDIX 3:

Selected bat sonogram for the bat emergence survey

Figure 1 – Bat sonogram of a Common Pipistrelle – feeding next to the rear garden