# 1 HAMPSHIRE ST, KENTISH TOWN, GREATER LONDON

# BAT SURVEYS

A Report to: SADA Architecture

Report No: RT-MME-150631

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## REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

| Report Version | Date | Completed by: | Checked by: | Approved by: |
|---|---|---|---|---|
| Final | 13/09/2019 | Jane Boland (Ecological Project Officer) | Paul Roebuck MCIEEM (South East Manager) | Dr Philip Fermor CEnv MCIEEM (Managing Director) |

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

## DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

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## VALIDITY OF DATA

The findings of this study are valid for a period of 12 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

# NON-TECHNICAL SUMMARY

In August 2019 SADA Architecture commissioned Middlemarch Environmental Ltd to undertake Bat Surveys at 1 Hampshire St, London, NW5 2TE. This assessment is required to discharge a planning condition.

To assess the potential for the existing buildings and trees on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on the 29th of August 2019.

The external and internal assessment of the building identified the presence of features considered to provide potential access points into the building or suitable roosting locations. The majority of these features were fully inspected and no evidence of bat activity (e.g. droppings, feeding remains, scratch marks, staining or bats) was recorded during the assessment of the building. Some sections of the building and the roof at height could not be viewed and therefore a thorough assessment could not be undertaken. The building was considered to provide low roosting potential for bats.

Good Practice Guidelines, published by the Bat Conservation Trust (Collins, 2016), recommends for structures with low bat roosting potential that at least one survey (consisting of either a dusk emergence survey or a dawn re-entry survey) be undertaken during the peak season for emergence/re-entry (May to August) to determine the presence/absence of roosting bats within the structure.

A nocturnal emergence survey was undertaken on 29thth of August 2019. Two common pipistrelle bats were recorded commuting from south to north high over the western vicinity of the site. No emergences or roosting bat activity were recorded during the nocturnal emergence survey.

Following the results of the nocturnal emergence survey, the following recommendations have been made:

**R1 1 Hampshire Street**

The building located at 1 Hampshire Street has been subject to a full suite of activity surveys in line with Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), and no bat roost was identified. The survey data obtained for the site is valid for 12 months from the survey date.

If development works to the surveyed building have not commenced within the 12-month timeframe it will be essential to update the survey effort to establish if bats have colonised the building in the interim. Updated Preliminary Bat Roost Assessments can be undertaken at any time of year. Updated surveys requiring nocturnal or dawn assessment will need to adhere to the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016) with the surveys undertaken between April and September inclusive. In the unlikely event that a bat is found during site works all works in that area must immediately cease and a suitably qualified ecologist should be contacted.

# CONTENTS

# 1. INTRODUCTION

## 1.1 PROJECT BACKGROUND

In August 2019 SADA Architecture commissioned Middlemarch Environmental Ltd to undertake Bat Surveys at 1 Hampshire St, in the Kentish Town Ward of the London Borough of Camden. This assessment is required to discharge planning condition 22. The wording of which is provided below. The works involve the demolition of the existing photographic studio buildings and redevelopment of the site to provide a 4-storey mixed-use building.

*Condition 22 - Prior to any internal or external demolition of buildings or any site clearance, a bat survey shall be submitted to and approved in writing by the local planning authority. This shall detail the methods and results of survey work to determine the presence or absence of roosting or foraging bats at this site. Should bats or their roosts be identified the applicant shall apply for, and obtain, a European Protected Species Licence and submit proof of this to the local planning authority before work commences. In addition, a method statement shall be submitted detailing features to be retained and added to site to maintain and replace roost features on the site.*

To assess the potential for the existing buildings on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on the 29th of August 2019. Further survey work, in the form of a Nocturnal Emergence Survey, was additionally undertaken on the 29th of August 2019.

This report details the results of the 2019 Preliminary Bat Roost Assessment, as well as the Nocturnal Emergence Survey.

All UK bat species are European protected species and they are capable of being material considerations in the planning process. A summary of the legislation protecting bats is included within Appendix 1. This section also provides some brief information on the ecology of British bat species.

## 1.2 SITE DESCRIPTION AND CONTEXT

The development site, which measures approximately 0.01 ha, is located within a predominately residential and commercial area in the London Borough of Camden, centred at National Grid Reference TQ 29724 84966.

At the time of the survey, the site was dominated by buildings and hardstanding. Hampshire Street lies to the west of the site. The wider landscape was dominated by residential and commercial buildings.

## 1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

| Document Name / Drawing Number | Author |
|---|---|
| Existing and Proposed Drawings | SADA Architecture |

**Table 1.1: Documentation Provided by Client**

# 2. METHODOLOGY

## 2.1 PRELIMINARY BAT ROOST ASSESSMENT

In line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004) and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), a Preliminary Bat Roost Assessment of the building was conducted during daylight hours. A visual assessment was undertaken to determine the presence of any Potential Roost Features (PRFs), together with a general appraisal of the suitability of the site for foraging and commuting. Table 2.1 provides examples of PRFs. Any accessible PRFs were inspected using binoculars, a torch and endoscope for evidence of possible bat presence. Buildings were surveyed externally and internally. For reasons of health and safety, the survey was only undertaken in areas accessible from 3.5 m ladders.

| Example of Potential Roost Features |
|---|
| Externally<br>• Access through window panes, doors and walls;<br>• behind peeling paintwork or lifted rendering;<br>• behind hanging tiles;<br>• weatherboarding;<br>• eaves;<br>• soffit boxes;<br>• fascias;<br>• lead flashing;<br>• gaps under felt (even including those of flat roofs);<br>• under tiles/slates;<br>• existing bat and bird boxes; and<br>• any gaps in brickwork or stonework permitting access into access to cavity- or rubble-filled walls.<br>Internally<br>• behind wooden panelling;<br>• in lintels above doors and windows;<br>• behind window shutters and curtains;<br>• behind pictures, posters, furniture, peeling paintwork;<br>• peeling wallpaper, lifted plaster and boarded-up windows;<br>• inside cupboards and in chimneys accessible from fireplaces.<br>• within attic voids:<br>• the top of gable end or dividing walls;<br>• the top of chimney breasts;<br>• ridge and hip beams and other roof beams;<br>• mortise and tenon joints;<br>• all beams (free-hanging bats);<br>• the junction of roof timbers, especially where ridge and hip beams meet;<br>• behind purlins;<br>• between tiles and the roof lining; and<br>• under flat felt roofs. |

**Table 2.1: Potential Roost Features (Adapted from Collins, 2016)**

## 2.2 NOCTURNAL EMERGENCE SURVEY

### 2.2.1 Overview of Nocturnal Emergence Survey

The building was classed, according to the criteria outlined in Table 2.2 below, as having low potential to support roosting bats as limited features of interest to bats were identified during the daytime survey. In line with Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), a nocturnal emergence survey was carried out.

| Suitability | Description |
|---|---|
| **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 and surrounding habitat. |
| **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 – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed). |
| **Low** | A structure with one or more potential roost sites that could be used by individual bats opportunistically. 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 or hibernation). |
| **Negligible** | Negligible habitat features on site likely to be used by roosting bats. |

**Table 2.2: Classification of Structures with Bat Potential (Adapted from Collins, 2016)**

### 2.2.2 Nocturnal Emergence Bat Survey

In line with the specifications detailed Bat Surveys: Good Practice Guidelines (Collins, 2016), the nocturnal survey commenced 20 minutes prior to sunset and continued until 120 minutes after sunset. The nocturnal emergence survey was conducted using electronic bat detectors (Echo Meter Touch 2 Pro and Bat Box Duet with associated recording devices) to facilitate the detection of bats and to aid in the determination of species of bat using the site.

# 3. SURVEY RESULTS

## 3.1 PRELIMINARY BAT ROOST ASSESSMENT

### 3.1.1 Introduction

The Preliminary Bat Roost Assessment was conducted on the 29th of August 2019 by Paul Roebuck, (South East Manager) and Nick Davey (Ecological Project Officer) for Middlemarch Environmental Ltd.

Weather conditions were recorded and are presented in Table 3.1.

| Parameter | Conditions |
|---|---|
| Temperature (°C) | 22 |
| Cloud Cover (%) | 40 |
| Precipitation | None |
| Wind Speed (Beaufort) | F1 |

**Table 3.1: Weather Conditions During the Preliminary Bat Roost Assessment**

### 3.1.2 Constraints

It was not possible to externally inspect features at roof level in detail due to the position and height of the roof on the building.

### 3.1.3 Survey Results

#### 3.1.3.1 1 Hampshire Street

The building complex (Plates 3.1 and 3.2) was comprised of a large double height brick-built building with a pitched roof, connected to a smaller two-storey block with a hipped pitched roof on the north east side, with an additional three single-storey blocks with flat roofs along the front façade.

**Plate 3.1 Building Complex Overview**

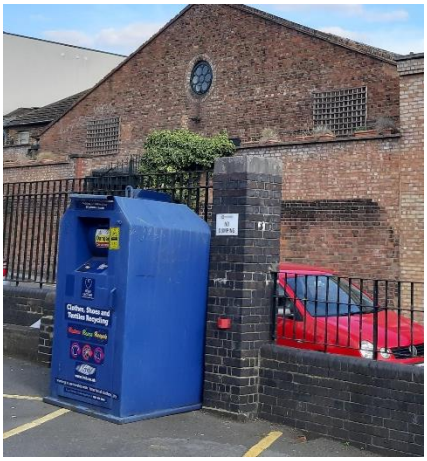

**Plate 3.2 Building Complex Overview**

Some external features were identified that could provide potential access into the building. Inspection of the internal areas revealed mostly intact floors, walls and ceilings and these areas were determined to have low suitability for roosting bats.

*External Assessment*

The main double height building had a pitched asbestos sheet roof with a brick gable facing the front façade with a small circular window. The two-storey building had a hipped pitched roof with slate tiles and a row of double-glazed uPVC windows on the upper floor, which were well sealed and in good condition. The single-storey buildings had flat bitumen-felt sealed concrete roofs with skylight features and with no windows present.

The brickwork was observed to be in generally good condition, however small cracks (Plates 3.3 and 3.4), holes (Plates 3.5 and 3.6) and a gap in the brickwork for piping (Plate 3.6) were identified which could allow

for potential bat ingress into the structure. Additionally, lifted lead flashing was identified on the corners of the pitched roofs (Plates 3.7 and 3.8) which could be utilised opportunistically as a roost for individual bats. Finally, a small area of dense ivy growth was present on the westernmost single-storey building (Plate 3.9) which could potentially obscure ingress points into the structure.

**Plate 3.3 Cracks in Brickwork Near Roof**

**Plate 3.4 Cracks in Brickwork Near Roof**

**Plate 3.5 Holes in Brickwork**

**Plate 3.6 Gap in Brickwork for Pipe**


**Plate 3.7 Lifted Lead Flashing**

**Plate 3.8 Lifted Lead Flashing**

**Plate 3.9 Dense Ivy Growth**

A close inspection of the entirety of the roofs was not feasible due to the height and position on the building. Ridge tiles visible along the top of the roof of the two-storey building were recorded as intact (Plate 3.10). From a ground level review, roof tiles appeared to be tightly fitted and flush to the building and no evidence of bats was recorded. The asbestos sheeting, where visible, was in moderately good condition with some slight lifting observed (Plate 3.11). A full inspection of the roofs was not possible, however, due to their height and location on the building.

**Plate 3.10 Tiled Roof**

**Plate 3.11 Asbestos Roof**

The features listed above were inspected where possible during the external survey and were considered to be generally low value for use as roost locations and no evidence of roosting bats, e.g. droppings, urine staining, feeding remains or scratch marks, was recorded. Not all features at height could be fully inspected.

*Internal Assessment*

The internal area (Plates 3.12-3.15) consisted of a large open working photography/film studio, with two loft style rooms and smaller rooms utilised for storage and support facilities located in the adjoining structures. The internal space had mostly intact floors, walls and ceilings with the exception of lifted and damaged roof panels in one of the loft rooms (Plates 3.16 and 3.17).

**Plate 3.12 Internal Overview**

**Plate 3.13 Internal Overview**

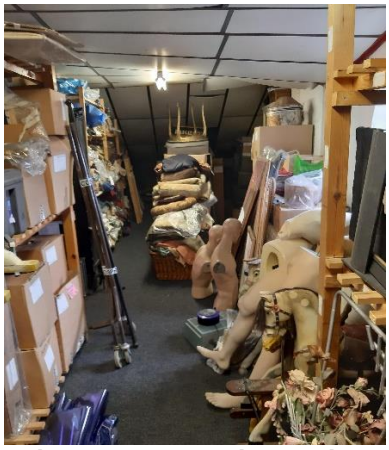

**Plate 3.14 Internal Overview**

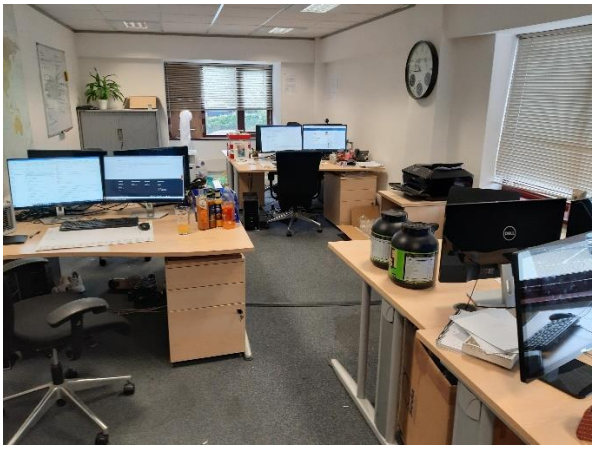

**Plate 3.15 Internal Overview**

**Plate 3.16 Lifted Roof Panels**

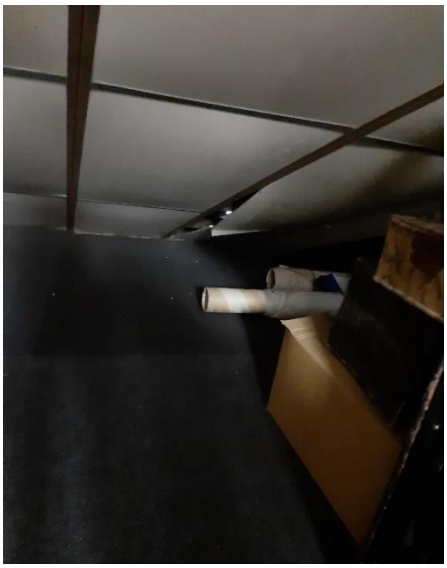

**Plate 3.17 Damaged Roof Panels**

A loft space with a timber framework and felt sarking was present as depicted in Plates 3.18 and 3.19. This space was timber framed, approximately 2 m high, and cluttered with storage. The felt sarking was intact and there was no visible entry points for bats.

**Plate 3.18 Loft Overview**

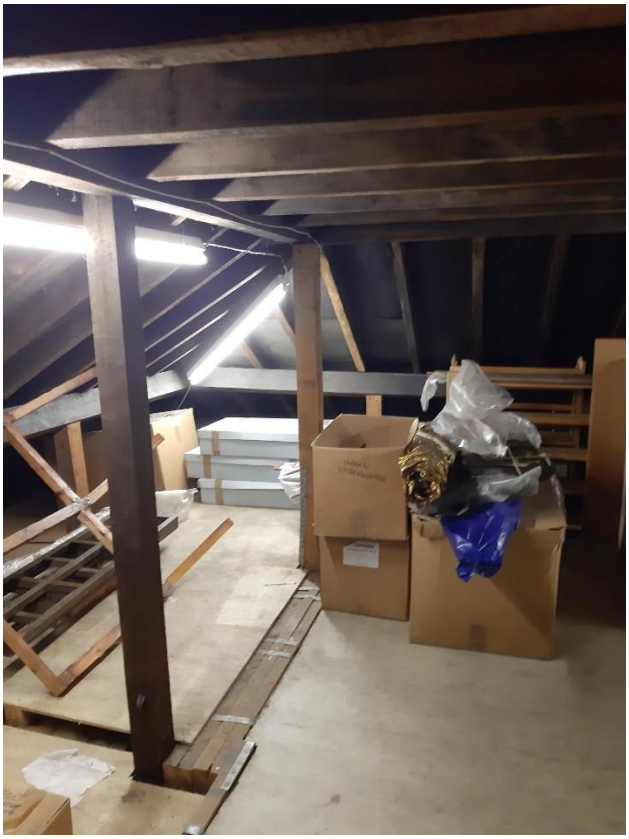

**Plate 3.19 Loft Overview**

A full inspection of the loft in areas which were possible to view identified no evidence of bats such as odour, urine staining, droppings and feeding remains. It was not possible to fully inspect all features within the loft space and as such the bat roosting potential of this area could not be determined. An additional loft style room at the top of the building was located on the northern aspect. This room was also cluttered with storage. There was damaged and lifted roof panels that provided potential access into the space for bats. However, this area was used frequently for storage and was relatively well lit from the circular window. No evidence of bats was recorded.

### 3.1.4 Site and Surrounding Habitats

The site is situated within a residential and commercial area of Camden. The building is set within an area dominated by hardstanding. Habitats within 1 km of the site which provide suitable roosting, foraging and commuting opportunities for bats include:

- Railway lines;
- Residential properties with associated gardens;
- Pockets of open green space; and,
- Recreational grounds.

The wider landscape is composed primarily of busy roads, residential housing and commercial buildings. In general, the urban location of the site provides sub-optimal foraging and roosting habitat for the surrounding habitat. The site and the immediate surroundings are subject to street lighting and high levels of traffic movement which may deter these species. In general, the surrounding environment has low - moderate value for bats.

## 3.2 NOCTURNAL EMERGENCE SURVEY

The nocturnal emergence survey was undertaken on 16th May 2019 by Paul Roebuck, South East Manager and Nick Davey, Ecological Project Officer. The weather conditions recorded at the time of the survey are detailed in Table 3.2.

| Parameter | Conditions | |
|---|---|---|
| | Start | Finish |
| Temperature (°C) | 20 | 20 |
| Cloud Cover (%) | 0 | 0 |
| Precipitation | 0 | 0 |
| Wind Speed (Beaufort) | F1 | F1 |

**Table 3.2: Weather Conditions During Nocturnal Emergence Survey**

The nocturnal emergence survey commenced 120 minutes prior to sunrise and continued until 15 minutes after sunrise. Sunset was at 19:54 hrs (BBC Weather Centre Data for Camden).

One species of bat, common pipistrelle *Pipistrellus pipistrellus* was recorded during the survey.

**Common pipistrelle**
Two common pipistrelle bats were detected in the western vicinity of the site at 20:17 (23 minutes after sunset). The bats were observed commuting high over the site from a southerly to northerly direction. The bats were not detected emerging from any features on the site and the location and amplitude of the detection was consistent with commuting between adjacent allotments and gardens.

No other species of bat were detected or observed during this survey. Analysis of the sound recordings did not identify any further species of bat.

# 4. DISCUSSION AND CONCLUSIONS

## 4.1 SUMMARY OF PROPOSALS

Specifically, the works will involve the demolition of the existing buildings at 1 Hampshire Street, Camden and redevelopment to provide a 4-storey building with 334 sqm of commercial floorspace and 16 residential units with terraces at front and rear within the same footprint. The works are required to help discharge a planning condition.

## 4.2 SUMMARY OF PRELIMINARY BAT ROOST ASSESSMENT

The external assessment of the building identified the presence of features considered to provide potential access points into the buildings or suitable roosting locations. Features identified which bats could utilise included:

- Holes and cracks within the brickwork;
- Pipe holes in brickwork;
- Ivy cover; and
- Lifted lead flashing.

The majority of these features could be fully inspected and no evidence of bat activity (e.g. droppings, feeding remains, scratch marks, staining or bats) was recorded during the external assessment of the building. Some sections of the building and roof at height could not be viewed and therefore a thorough assessment could not be undertaken of these areas.

Taking into account the structural characteristics, the immediate surrounding habitat and the constraints encountered during the survey, it is deemed that the structure has low potential for roosting bats. There was not sufficient evidence to conclude whether the buildings are utilised by roosting bats and further survey work was undertaken.

## 4.3 SUMMARY OF BAT SURVEY

**Nocturnal Emergence Survey**
Two bats were recorded onsite during the nocturnal emergence survey conducted on the 29th of August 2019. The bats were observed commuting over the site and no bats were detected emerging from any features on the site.

## 4.4 SITE EVALUATION AND ASSESSMENT OF POTENTIAL IMPACTS

The site is dominated by the building and associated hardstanding which are relatively poor for bats although insect prey may be present in low numbers as a small amount of vegetation is present behind the buildings on site.

Due to the high levels of street lighting, roads and the immediate surrounding habitat in an urbanised context, the potential for bats being present foraging and commuting within the site boundary is determined as low - moderate. Should bats be found roosting within the building, there is potential for direct harm, injury and disturbance.

# 5. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

**R1 1 Hampshire Street**

The building located at 1 Hampshire Street has been subject to a full suite of activity surveys in line with Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), and no bat roost was identified. The survey data obtained for the site is valid for 12 months from the survey date.

If development works to the surveyed building have not commenced within the 12-month timeframe it will be essential to update the survey effort to establish if bats have colonised the building in the interim. Updated Preliminary Bat Roost Assessments can be undertaken at any time of year. Updated surveys requiring nocturnal or dawn assessment will need to adhere to the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016) with the surveys undertaken between April and September inclusive. In the unlikely event that a bat is found during site works all works in that area must immediately cease and a suitably qualified ecologist should be contacted.

## REFERENCES AND BIBLIOGRAPHY

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# APPENDIX

**LEGISLATION**

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any 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.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

For England:
The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*.

The reader should refer to the original legislation for the definitive interpretation.

**ECOLOGY**

At present, 18 species of bats are known to live within the United Kingdom, of which 17 species are confirmed as breeding. All UK bat species are classed as insectivorous, feeding on a variety of invertebrates including midges, mosquitoes, lacewings, moths, beetles and small spiders.

Bats will roost within a variety of different roosting locations, included houses, farm buildings, churches, bridges, walls, trees, culverts, caves and tunnels. At different times of the year the bats roosting requirements alter and they can have different roosting locations for maternity roosts, mating roosts and hibernation roosts. Certain bat species will also change roosts throughout the bat activity season with the bat colony using the site to roost for a few days, abandoning the roost and then returning a few days or weeks later. This change can be for a variety of reasons including climatic conditions and prey availability. Bats are known live for several years and if the climatic conditions are unfavourable at a particular roost, they may abandon it for a number of years, before returning when conditions change. Due to the matriarchal nature of bat colonies, the locations of these roosts can be passed down through the generations.

Bats usually start to come out of hibernation in March and early April (weather dependent), when they start to forage and replenish the body weight lost during the hibernation period. The female bats then start to

congregate together in maternity roosts prior to giving birth and a single baby is born in June or July. The female then works hard to feed her young so that they can become independent and of a sufficient weight to survive the winter before the weather gets too cold and invertebrate activity reduces. Males generally live solitary lives, or in small groups with other males, although in some species the males can be found living with the females all year. The mating season begins in the autumn. During the winter bats hibernate in safe locations which provide relatively constant conditions, although they may venture outside to forage on warmer winter nights.