



**BAT EMERGENCE AND ACTIVITY
SURVEY REPORT**

MR HAZEL

HARWOODS
WEST END LANE, HENFIELD
WEST SUSSEX, BN5 9RF

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CONTENTS

PAGE NO

Executive Summary	1
1. Introduction	2
2. Methodology	4
3. Results	5
4. Conclusions, Evaluation and Impact Assessment	8
5. Recommendations	9
6. References	11

Appendix A - Survey Map

Appendix B - Legislation

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EXECUTIVE SUMMARY

A series of bat emergence and activity surveys were undertaken within land at Harwoods, Henfield in July and August 2024. The assessment was required based on the results of a preliminary roost assessment (PRA) undertaken in July 2024 (CT Ecology 2024). At this time the outbuilding was assessed as having moderate potential to support roosting bats during the active period and in accordance with current guidelines, two bat emergence surveys were recommended in order to confirm the presence/ likely absence of bats and to enable an assessment regarding likely impacts of the proposal upon bats and any associated roost sites. Proposals are for the conversion of an existing outbuilding for ancillary residential accommodation. Access will remain as existing. No trees or boundary features will require removal to facilitate the works.

The main findings of the surveys are as follows:

- * Harwoods is within a rural location in the western extent of Henfield, in West Sussex. Land-use in the immediate vicinity comprises residential properties, woodland and agricultural fields, with connectivity for bats to pass through the wider landscape between the site and adjacent habitats.
- * Overall, the building has a number of potential ingress points associated with gaps around the roof; including open eaves and missing roof tiles. Internally, there were no void areas although potentially suitable roosting features were associated with the timber supporting frame. The building experienced high light levels throughout due to the presence of a number of windows. Overall, the building was assessed as providing potential for use both externally and internally by small numbers of crevice-dwelling and void-loving bats.
- * No bats emerged from the building during the emergence and activity surveys and therefore the likely absence of any bat roosts is confirmed. Owing to the likely absence of roosting bats, the proposed works are not anticipated to impact upon any bat roosts and a protected species mitigation licence (PSML) is not currently necessary in order to proceed with the works. Owing to the potential roosting features identified at the building and the high mobility of bats, there remains some potential for a transient bat to utilise the building in the future. In turn, precautionary measures are detailed in Section 5 in order to safeguard and prevent any detrimental impacts to bats or their roosts. The proposed works are not anticipated to cause any negative impacts upon the local bat population.
- * Proposals should aim to achieve a gain in biodiversity, in accordance with local and national planning policy and recommendations are provided in Section 5 of this report. Additional details are also provided in the associated PEA/PRA report (CT Ecology, 2024) which should also be referred to.

1. INTRODUCTION

Background

- 1.1 CT Ecology Limited was commissioned by Mr Hazel to undertake bat emergence and activity surveys in relation to a single building within land at Harwoods in Henfield, West Sussex (hereafter referred to as “the site”). The assessment was required based on the results of a preliminary roost assessment (PRA) undertaken in July 2024 (CT Ecology 2024). At this time the building was assessed as having moderate potential to support roosting bats and in accordance with current guidelines, two bat emergence and activity surveys were recommended in order to confirm the presence/ likely absence of bats and to enable an assessment regarding likely impacts of the proposal upon bats and any associated roost sites.
- 1.2 A summary of the results of the PRA are provided below.

‘The outbuilding is assessed as providing moderate potential for roosting bats due to the presence of a number of features associated with the roof tiles and eaves which provide some potential for use of the building both externally and internally by small numbers of crevice-dwelling and void-loving bats.’
- 1.3 Based on the overall condition of the building and nature of the potential roosting features supported, the potential for the building to support high conservation value roosts, such as maternity roosts, is significantly reduced.
- 1.4 No bats or secondary evidence to suggest recent bat presence was observed during the survey however based on the results of the current assessment, in accordance with current guidelines, two bat emergence and activity surveys are required in order to confirm the presence/absence of roosting bats.
- 1.5 The emergence surveys were led by Carly Teague, a suitably experienced ecologist with over 16 years’ experience as an ecological consultant. Carly has extensive experience in undertaking bat surveys and also has experience of implementing mitigation measures in relation to this species group. Carly is named as an accredited agent on Jack Kellet’s survey licence (Level 2 Class Licence for bats: WML-CL18). Survey assistance was provided by Naomi Forbes, a suitably experienced ecologist with over 17 years’ experience as an ecologist.
- 1.6 This report provides an assessment of the status of bats, providing information on their presence/ likely absence and distribution. Potential impacts of the proposed development are identified and measures to mitigate the effects of the development on this species group is discussed in outline.

- 1.7 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013; CIEEM, 2013 & 2016; Collins, 2023; Mitchell-Jones and McLeish, 2004).

Site Description

- 1.8 Harwoods is within a rural location in the western extent of Henfield, in West Sussex, accessed from West End Lane to the east. The application area comprises a residential dwelling and outbuilding with associated garden areas and mature boundary vegetation. The British National Grid for the centre of the site is TQ194 153. Residential properties are to the north, west and east with agricultural land and woodland blocks to the south. In the wider area, agricultural land and scattered farmsteads together with scattered residential properties extend in all directions.

Development Proposals

- 1.9 Proposals are for the conversion of an existing outbuilding for ancillary residential accommodation. Access will remain as existing. No trees or boundary features will require removal to facilitate the works. Proposals may also include minor alteration works to the roof of an existing porch on the main residential building.

2. METHODOLOGY

Bat Activity/Emergence Survey

- 2.1 A total of two dusk emergence/activity surveys were carried out in July and August 2024. A total of two surveyors using an Anabat Scouts together with two infra-red video cameras were used to identify the presence of possible roosts associated with the building and to record general bat activity in proximity to the building.
- 2.2 The survey focussed on the single building. The first surveyor was located to the north of the building with a view of the northern and western elevations. The second surveyor was located to the south of the building with a view of the southern and eastern elevations.
- 2.3 Cameras were located near to the surveyors, with a view of all elevations supporting potential roosting features. Cameras were checked throughout the survey by each of the surveyors to ensure they were functioning correctly.
- 2.4 All potential roosting features identified during the PRA were covered by the surveyors and cameras.
- 2.5 The evening survey commenced 20 minutes before sunset and continued for at least one and a half hours after sunset. The time of any bat pass, the species, and information regarding behaviour and flight direction, were recorded.

Constraints

Bat Survey

- 2.6 Bats are mobile animals and can move roost sites throughout the year although the survey was undertaken within the optimal survey period, with good weather conditions recorded during each survey including still air and no precipitation. It is considered that the survey provides an accurate representation of bats utilising the site at that time of year.

3. RESULTS

Dusk Emergence and Activity Survey

Survey 1

- 3.1 The survey was carried out on the 31st July 2024. Sunset was at 20:48hrs and the temperature at the start of the survey was 27°C, falling to 20.5°C at the end of the survey. The sky was clear with still air and no precipitation. The relative humidity was 64.8% at the start of the survey, increasing to 69% at the end.
- 3.2 A moderate level of bat activity was recorded at the site with a total of five species detected during the survey. The highest number of passes were from common pipistrelle (*Pipistrellus pipistrellus*), with a smaller number of passes from soprano pipistrelle (*Pipistrellus pygmaeus*), and occasional passes from serotine (*Eptesicus serotinus*), and noctule (*Nyctalus noctula*) and a single pass from a brown long-eared (*Plecotus auritus*). No bat roosts were associated with the building at the time of the survey. The highest level of activity was associated with the tree line along the northern boundary of the wider site.
- 3.3 The majority of passes were heard and not seen by both surveyors during the survey, with activity associated with tree lines and woodland to the north and south. The first bat pass was recorded by the surveyor to the north of the building at 21:06hrs which was a brief pass from a soprano pipistrelle, which was heard and not seen. Passes by common pipistrelle were then recorded frequently by both surveyors between 21:10hrs and 22:18hrs, with continuous foraging along the tree line to the north between 21:16hrs and 21:28hrs. Brief passes by serotine were recorded at 21:35hrs and 21:42hrs (heard and not seen) with serotine observed flying north-to south high above the site at 21:47hrs.
- 3.4 A brief pass by a brown long-eared was detected by the surveyor to the south at 21:47hrs, this was a brief pass and the bat was not seen. A brief pass by noctule was recorded at 22:16hrs to the south of the building (heard and not seen). The last bat pass of the survey was at 22:18hrs by common pipistrelle seen foraging over grassland to the north-east of the building.



Photograph 1: A view from the NVA to the south of the building at the darkest point of the survey.



Photograph 2: A view from the NVA to the north of the building at the darkest point of the survey.

Survey 2

- 3.5 The survey was carried out on the 29th August 2024. Sunset was at 19:52hrs and the temperature at the start of the survey was 22°C, falling to 19°C at the end of the survey. The sky was clear with still air and no precipitation. The relative humidity was 68.2% at the start of the survey, increasing to 72.5% at the end.
- 3.6 A reduced level of bat activity was recorded at the site compared to the July survey with a total of three species detected during the survey. The highest number of passes were from common pipistrelle, with a smaller number of passes from soprano pipistrelle, and a single pass from noctule. No bat roosts were associated with the building at the time of the survey. The highest level of activity was associated with the tree line along the northern boundary of the wider site.
- 3.7 The majority of passes were heard and not seen by both surveyors during the survey, with activity associated with tree lines and woodland to the north and south, which was similar to the first survey. The first bat pass was recorded by the surveyor to the north of the building at 20:05hrs which was a brief pass from a common pipistrelle, observed foraging over the rear garden to the north of the building. Passes by common pipistrelle were then recorded frequently to the north of the building between 20:07hrs and 20:43hrs. A noctule was then recorded by both surveyors at 21:20hrs. The bat was heard and not seen but suspected to be commuting along the tree line to the south-east. This was the last pass of the survey.



Photograph 1: A view from the NVA to the south of the building at the darkest point of the survey.



Photograph 2: A view from the NVA to the north of the building at the darkest point of the survey.

4. CONCLUSIONS, EVALUATION AND IMPACT ASSESSMENT

- 4.1 A series of two bat emergence and activity surveys have been carried out within the site at Harwoods in order to confirm the presence/likely absence of roosting bats. No bats emerged from the building. The general level of bat activity associated with the site and immediate environs was moderate. Based on the results of the survey, the likely absence of any high conservation value roosts such as maternity roosts are confirmed. Based on the time of the first bat passes and level of activity associated with the tree line to the north of the building, common and soprano pipistrelle roosts are likely to be in proximity to the site, with habitats in the north of the site forming part of the core sustenance zone for bats associated with these roosts.
- 4.2 Owing to the previously identified potential roosting features, there remains some potential for an occasional or transient bat to roost at the building and in turn precautionary measures are required in order to safeguard roosting bats.

Impact Assessment

- 4.3 The building will be retained and refurbished as part of the proposals. No bat roosts have been located at the building and the likely absence of bat roosts is confirmed, in turn the proposed works are not anticipated to impact upon any bat roosts and a protected species mitigation licence (PSML) is not necessary in order to proceed with the works. The proposed works are not anticipated to cause any negative impacts upon the local bat population.
- 4.4 Owing to the previously identified potential roosting features, there remains some limited potential for a transient bat to roost at the building and in turn precautionary measures are required in order to safeguard roosting bats.

5. RECOMMENDATIONS

- 5.1 Recommendations are detailed below. A summary of relevant legislation is provided in Appendix B.

Bats

- 5.2 No further survey work is currently deemed necessary in relation to the current proposals and the works may proceed without the need for a PSML.
- 5.3 Owing to the presence of potential roosting features and the mobile nature of bats, a precautionary approach must be implemented to ensure that there are no detrimental impacts to bats. This approach must include:
- * All roof tiles together with the underlying battening and timber supporting frame must be removed by hand by appropriate contractors. The reverse of all materials must be checked for any bats and roof tiles removed individually, avoiding scraping the tiles over/together.
 - * The removal of roof tiles/works on the timber supporting frame must avoid the peak winter hibernation period and in turn, works to remove/replace the roof tiles/battening must only commence between April and November inclusive.
 - * If a bat is unexpectedly discovered during the removal of materials or demolition activities:
 - All works must immediately stop and any machinery at the site switched off;
 - A licensed bat ecologist be contacted as soon as possible;
 - The bat/s must be left in-situ, if they have been uncovered, carefully replace the original covering ensuring the bat/s are not crushed. If this is not possible, the bat/s should be covered with a soft cloth or loose covering.
- 5.4 If bats are found during the works, all further activities on the building may need to be delayed whilst a suitable mitigation strategy is devised. This may require further surveys if an appropriate licence is required from Natural England. Appropriate compensatory measures would potentially need to be created/incorporated at the site and there would be time constraints associated with delays and licence conditions.
- 5.5 If the proposed works to the building have not commenced within 18 months of the completed surveys, the building must be re-surveyed in order to identify whether the status of bat roosts has changed.

Biodiversity Enhancement Measures and Net Gain

- 5.6 Recommendations made in relation to site enhancement within Section 5 of the associated PEA/PRA report compiled for the current application (CT Ecology 2024) should be implemented at the site in order to provide a net gain in biodiversity, in accordance with local and national planning policies.

Bat Boxes

- 5.7 A series of two bat boxes should be fixed to the refurbished building and/or retained boundary trees within the landownership of the applicant post works. Greenwoods small single crevice bat boxes are recommended but there are also other good quality beech or pressure treated soft wood boxes on the market. The bat boxes should be oriented south-west to south-east and located at least 3m above ground level and ideally directly below the eaves if a box is sited on the building.

6. REFERENCES

- * British Standards Institute (2013). 24040:2013. *Biodiversity-Code of Practice for Planning and Development*. Standards Policy & Strategy Committee. Milton Keynes: BSI.
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- * Mitchell-Jones, T. & McLeish, A.P (2004). *The Bat Workers' Manual* (3rd Ed). Joint Nature Conservation Committee, Peterborough, UK.
- * CT Ecology (2024). *Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment*. Harwoods, Henfield, West Sussex. Unpublished report for Mr Hazel. West Sussex: CT Ecology.
- * Natural England (2015). *Standing advice for local planning authorities to assess impacts of development on bats: Survey and Mitigation for development projects*. [on-line]. Available from <https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects> [Accessed on 26/11/2024].
- * The British Standards Institution. (2013). *Biodiversity – Code of practice for planning and development BS42020:2013*. BSI Standards Limited

Appendix A

Survey Map

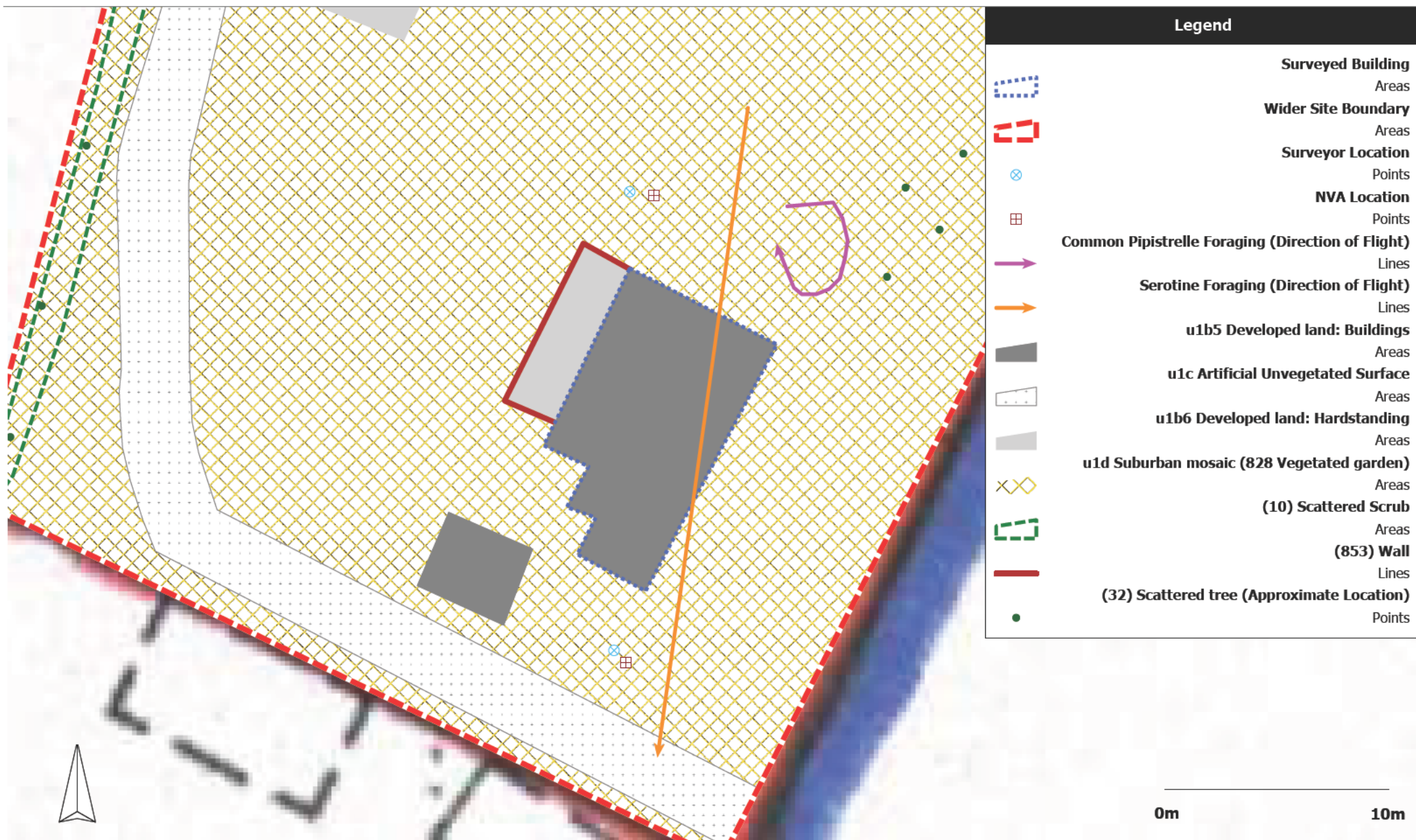


Figure 1: Harwoods Bat Emergence and Activity Survey Map

Drawn by: CT
Date: 27/11/2024
Scale: See Map

Appendix B

Legislation

LEGISLATIVE FRAMEWORK

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of the EC Habitats Directive¹ is to conserve plants and animals which are considered to be rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include

- * Countryside and Rights of Way (CRoW) Act 2000
- * Deer Act 1991
- * Natural Environment & Rural Communities (NERC) Act 2006
- [REDACTED]
- * Wild Mammals (Protection) Act 1996

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- * intentional or reckless disturbance (at any level);

¹ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

- * intentional or reckless obstruction of access to any place of shelter or protection; and
- * selling, offering or exposing for sale, possession or transporting for purpose of sale

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- * deliberate killing, injuring or capturing of Schedule 2 species (all bats);
- * deliberate disturbance of bat species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- * deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- * damage or destruction of a breeding site or resting place; and
- * keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

A Protected Species Mitigation Licence (PSML) issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.