

# Kirkburton Bath House

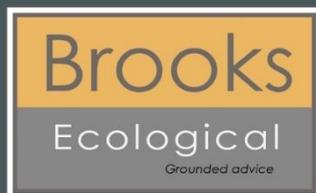


## Bat Emergence Survey Report

JSX4 Ltd

17/07/2024

ER-7229-01



<b>Report reference</b>	<b>ER-7229-01</b>
<b>Author</b>	Courtney Halstead BSc (Hons) Assistant Ecologist
<b>Technical Review</b>	Josh Birchall BSc (Hons) MCIEEM Senior Ecologist
<b>QA</b>	Chris Shaw BSc (Hons) MCIEEM Principal Ecologist
<b>Authorised</b>	Chris Shaw BSc (Hons) MCIEEM Principal Ecologist
<b>Date</b>	17/07/2024
<b>Report duration</b>	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



Brooks Ecological Ltd has prepared this report for the sole use of JSX4 Ltd. The information which we have prepared and provided is in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice. The report is in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party except the person, company, agent or any third-party for whom the report is intended without the prior written permission of Brooks Ecological Ltd. This report presents a snapshot of the site at the date it was surveyed; the conditions and the species recorded present, or likely absent, can change rapidly. Resurvey is recommended to any third-party seeking reliance on this report. The content of this report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third-party has not been independently verified by Brooks unless otherwise stated in the report. This report is the copyright of Brooks Ecological Ltd. Unauthorised reproduction or usage by any person is prohibited.

Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX  
 Phone: 01943 884451  
 01943 879129  
[www.brooks-ecological.co.uk](http://www.brooks-ecological.co.uk)  
 Registered in England Number 5351418

## **Summary Statement**

Survey has found evidence of three small day roosts within the bath house, garage and cottage at Kirkburton Bath House, Lowtown, Kirkburton.

A Natural England will be required prior to commencement of any works.

Current survey effort is considered sufficient for planning and license application purposes.

## Introduction

1. Subsequent to recommendations set out in JCA Preliminary Ecological Appraisal Report (21550/EIC, dated November 2023), Brooks Ecological was commissioned to carry out a Bat Emergence Survey at the proposed development Site at Low Town n Kirkburton, SE 19735 12449.
2. Survey was required at the disused cottage, garage and bath house, which was assessed as providing features with high bat roost suitability. In accordance with current best practice guidelines, buildings of high suitability need three evening emergence survey in order to confirm the presence or likely absence of roosting bats.

**Figure 1** The surveyed building - red line



## Method

3. Brooks Ecological specialises in bat surveys ranging from individual buildings through to complex sites requiring numerous visits with large teams. In terms of the survey effort, number of personnel and number of visits required to be able to properly evaluate the building(s) use by bats, we refer to the Bat Conservation Trust Survey Good Practice Guidelines (2023). However, these guidelines are not prescriptive, and we approach each site individually as required using our professional judgement and significant experience base.
4. In this case, three visits with a team of five surveyors each was deemed necessary to fully evaluate the potential use of the Site for roosting.
5. Surveys were carried out with surveyors positioned around the building to cover all aspects where bats could potentially emerge or return, and to establish activity levels around the Site.
6. The surveyors, using heterodyne detectors, an automated Anabat Scout Bat Detector and Echo Meter Touch 2, and T2Pro Night Vision Aid Device were in place at least 15 minutes before sunset and left once all species of bat would be expected to have left a roost and patterns of activity within the Site had been appraised. Conditions and dates are summarised in Table 1 below.

**Table 1** Survey conditions.

Date	Survey Type	Temp. Start/End	Weather
16.05.2024	Emergence	14/14°C	Dry. 90% humidity.100% cloud cover. Still (Beaufort 0).
11.06.2024	Emergence	10/10°C	Light rain for first 15 min, 95% humidity, 100% cloud cover, Still (B0)
04.07.2024	Emergence	14/13°C	Dry, 80% humidity, 25% cloud cover, gentle breeze (B3)

7. Survey directed by Joshua Birchall BSc (Hons) MCIEEM. Josh has over 9 years of professional bat survey experience, is a member of the South Lancashire Bat Group and is also registered to use the Class Survey Licence CL17 (Level 1).

**Box 1** *Bat roosts*

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

Transitional roosts

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.

**Box 2** *Legal background*

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Habitats Regulations 2010 which means that it is important for detailed and well-designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

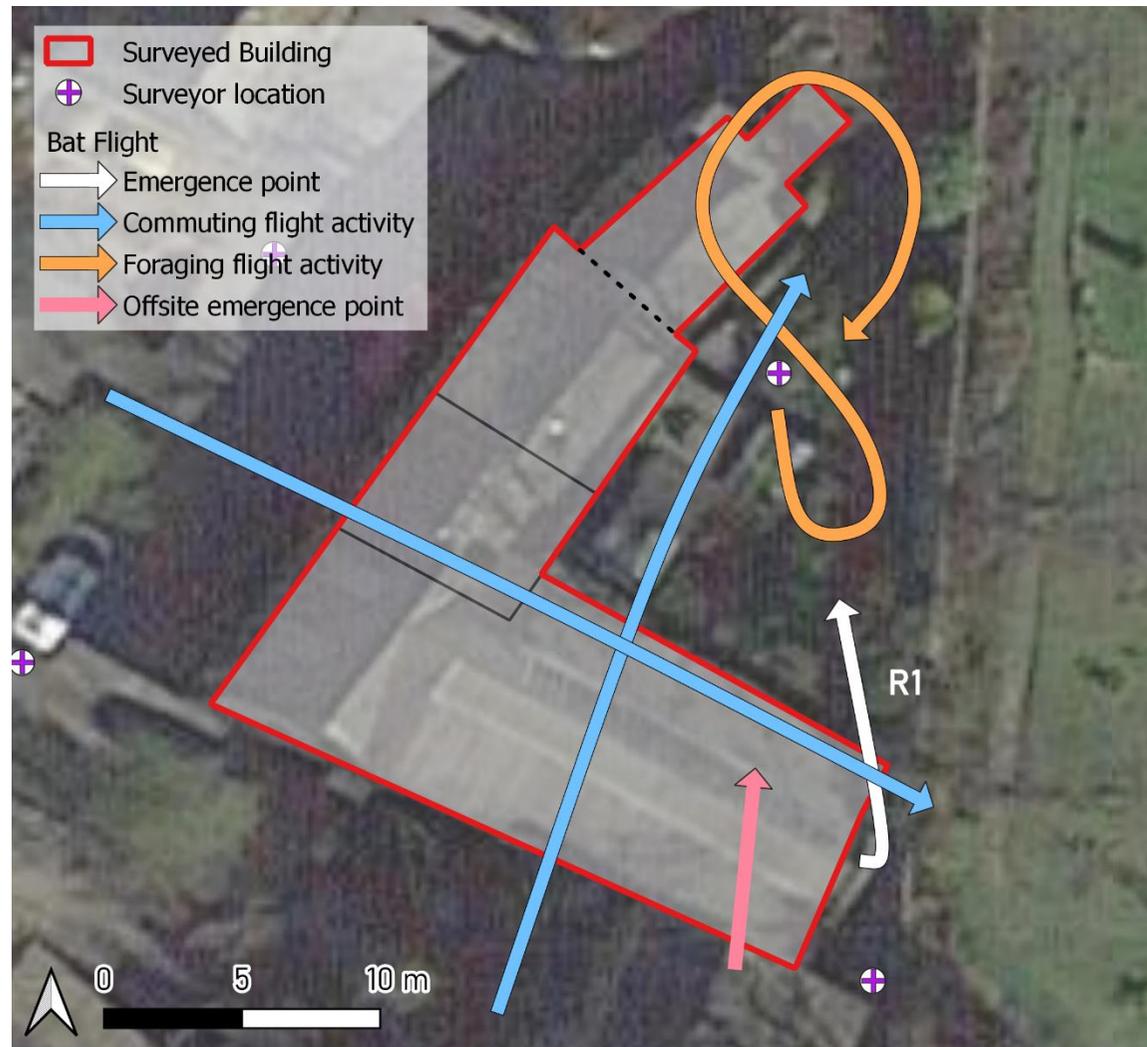
Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

## Survey Results

Emergence - 16<sup>th</sup> May 2024 (sunset 21:04)

8. Surveyors were positioned so as to cover all features with bat roost suitability.
9. Overall, bat activity was considered to be low, with only a handful of contacts being made by individual bats.
10. The first contact was logged at 21:27, when an individual common pipistrelle was observed commuting north from the south of the Site. This was closely followed at 21:30 by an individual common pipistrelle commuting east from west of the Site.
11. At 21:31 a bat was seen to emerge from a gap in brick mortar on the eastern gable of the bath house, not calling (R1).
12. This was followed at 21:33 by observations of an individual common pipistrelle foraging over the north of the garden, which continued intermittently until 21:46.
13. At 21:46 a possible emergence was seen from the chimney stack of an off-site building not being directly observed.
14. At 22:02 a single noctule was heard flying high over the Site.

**Figure 2** Summary of bat activity observed during emergence survey.



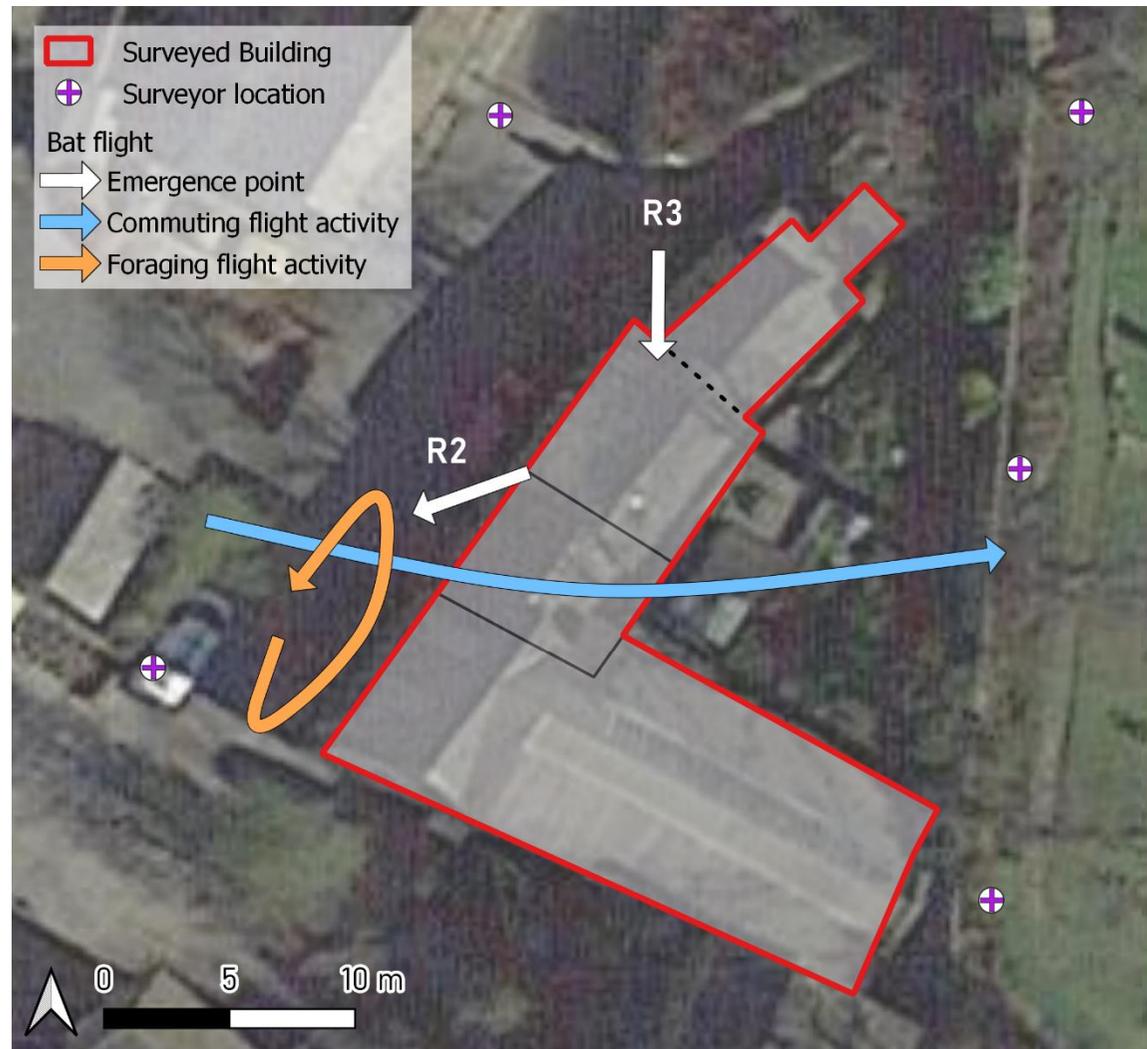
Emergence - 11<sup>th</sup> June 2024 (sunset 21:36)

15. Surveyors were positioned so as to cover all features with bat roost suitability.
16. Overall, bat activity was considered to be low, with only a few contacts being made by individual bats.
17. The first contact was logged when an individual common pipistrelle was observed commuting east from west of the Site at 21:42.
18. This was followed by a second observation of individual common pipistrelle, commuting south from north of the Site at 21:59.
19. A single common pipistrelle was heard foraging, but not seen, at 22:03, by surveyors to the east of the buildings.
20. No new roosts were found on this visit.

**Figure 3** Summary of bat activity observed during emergence survey.

Emergence -4<sup>th</sup> July 2024 (sunset 21:38)

21. Surveyors were positioned so as to cover all features with bat roost suitability.
22. Overall, bat activity was considered to be low, with only a few contacts being made by individual bats.
23. The first contact was logged at 21:58 when a common pipistrelle was seen commuting east from west of the Site.
24. At 22:11 a common pipistrelle was observed emerging from the eaves of the join between the garage and the cottage (R2)
25. At 22:33, a common pipistrelle was observed entering the north facing verge of the cottage (R3).
26. An individual common pipistrelle was observed foraging under a lamp to the south west corner of the Site at 22:19, and common pipistrelle were heard but not seen at intermittent intervals throughout the night.

**Figure 4** Summary of bat activity observed during emergence survey.

**Figure 5** View of Roost 1 Location - missing mortar, eastern gable of bath house



**Figure 6** View of Roost 2 location - eaves at join between garage and cottage



**Figure 7** View of Roost 3 location - corner of eaves and north facing verge of cottage



**Figure 8** View of chimney breast - location of offsite roost.



## Evaluation & Conclusion

27. Three evening emergence surveys in the peak season have confirmed the presence of three small day roosts (R1-3), occupied by individual common pipistrelle bats, located in the wall of the eastern gable of the bath house, and at the verge and within the roof of the cottage, see figure adjacent.
28. The presence of larger roosts elsewhere on Site is not suspected. Current survey information is considered sufficient for planning and licensing purposes.
29. The presence of a small day roost, occupied by individual common pipistrelle, is suspected within the chimneybreast of the building off site
30. Survey has shown that the roosts are used by low numbers of common species of bat and, although legally protected, the roost would be assessed by Natural England as being of 'low conservation significance'.
31. Proposals include renovation of the building to convert into housing. This, or any other potential disturbing works to the building, will require a license from Natural England to be in place to derogate offences that will arise through disturbance, damage or destruction of the roost. This may be a Bat Mitigation Class Licence (BMCL) or European Protected Species Mitigation Licence (EPSML).

### *Enhancement*

32. The NPPF puts emphasis on development delivering biodiversity enhancement above and beyond mitigating or compensating for any impacts. To this end the new development could include integral bat roost features to offer suitable habitat in the long term.

**Figure 9** Summary of roost locations



## Natural England Licence

33. In proceeding to use, or apply for use of either license, it will be important that certain conditions are met. These are discussed below in relation to the application site:

Has sufficient survey been carried out - is sufficient information known about the roost and its use?

34. Yes - three presence/ absence surveys have been undertaken during the peak season by a team of experienced and licensed surveyors using suitable teams of assistants and equipment.

35. Activity across the rest of the Site was low and larger roosts are not suspected.

Has detailed planning permission been granted for the site and have all conditions relating to wildlife been discharged?

36. No, planning permission is currently being sought.

37. It will be important to review any wildlife-based conditions at the earliest opportunity, as a licence can only be applied for once full planning permission has been secured, and all pre-commencement planning conditions relating to ecology have been discharged.

Can the project satisfy the three licensing tests as outlined in The Conservation of Habitats and Species Regulations 2010?

(i) FCS Test (Regulation 53(9)(b) - Can the favourable conservation status of bats be protected?

38. Yes - the roosts appear to be of low conservation significance, and their loss will not impact significantly on bat populations.

(ii) Purpose Test (Regulation 53(2)(e) - Is the purpose of the proposed activity one which is licensable and demonstrable?

39. Yes - the project would be able to apply under the purpose of 'Imperative Reasons of Over-riding Public Interest' (IROPI), meaning that proof of its economic and social imperative would be required.

40. In presenting the application, the ecologist may need to be provided with access to the project's planning consultant and relevant documents.

(iii) The No Satisfactory Alternative Test (Regulation 53(9)(a) - Have alternatives to the proposed activity been considered and ruled out?

41. Yes - The buildings in their current state are clearly not fit for habitation and the development of the Site for a new residence completed to modern and quality standards could not accommodate the retention of the roost features.

42. You would however need to present information which showed that alternatives in terms of the use of the Site, the layout, and timing of works had been considered and the design arrived at represents the least disturbing/affecting possible.

### Mitigation

43. Natural England will not require specific mitigation for the licensed (BMCL) loss of this roost. However, replacement roost features are always recommended so as to comply with the NPPF.

44. Mitigation could include external bat boxes being incorporated into the new build. An interim bat box will also be required, which would be placed in trees or on buildings around the edge of the Site allowing the introduction of new roosts at an early stage of development and prior to the loss of the identified roost.

45. In terms of the refurbishment of 'the Barns', the following method should be agreed under license, but should not be the subject of any condition of planning.

- Prior to any works commencing at the Site, the ecologist will conduct a Site meeting and toolbox talk with contractors. This will make clear the licensed method and the principle that should any additional roosts be encountered during refurbishment, that works will stop immediately whilst the ecologist's advice is sought.
- The roost features should be retained as the last to be worked upon, with any demolition works taking place prior. This will encourage any bats present to move away of their own accord and avoid the chance of them relocating to other crevices in other buildings on-Site.
- The interim box will be installed prior to refurbishment of the roost building.
- Once, and only once, a licence is in place will any works to the identified roost features will commence.

- As the first stage of these works, safe access will be provided to the roost features to allow their full inspection. Next, the ecologist will oversee the soft demolition of the identified roost features. The ecologist will confirm the absence of bats or effect the removal of an appropriate number of bats to the interim bat box mounted on a nearby tree or building.
- Once the ecologist has confirmed in writing that bats are absent, refurbishment of the roost buildings can be completed.
- Permanent roost features will then be built into the fabric of the new build or installed externally as appropriate, and its correct installation confirmed by the named Ecologist.

## References

- Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>
- Collins, J. 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition)*. London: The bat Conservation Trust.
- Department for Levelling Up, Housing and Communities. 2023. *National Planning and Policy Framework*. London: Her Majesty's Government. [Online]. Available from: [https://assets.publishing.service.gov.uk/media/65819679fc07f3000d8d4495/NPPF\\_December\\_2023.pdf](https://assets.publishing.service.gov.uk/media/65819679fc07f3000d8d4495/NPPF_December_2023.pdf)
- Government Circular 06/05: Office of the Deputy Prime Minister (ODPM) 2005. *Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System*. London: Her Majesty's Government. [Online]. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7692/147570.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf)
- His Majesties Government. 2024. *Bat Licenses*. [Online]. [Accessed 15<sup>th</sup> January 2024]. Available from: <https://www.gov.uk/government/collections/bat-licences#bat-mitigation-licences>
- His Majesties Government. 2024. *European Protected Species policies for mitigation licenses*. [Online]. [Accessed 15<sup>th</sup> January 2024]. Available from: <https://www.gov.uk/guidance/european-protected-species-policies-for-mitigation-licences>
- Institute of Lighting Professionals (ILP) and Bat Conservation Trust (BCT). 2018. *Guidance Note GN08/23: Bats and Artificial Lighting At Night*. Rugby: Institute of Lighting Professionals. [Online]. Available from: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>
- Mitchell-Jones, A.J. 2004. *IN136 Bat Mitigation Guidelines*. Peterborough: English Nature. [Online]. Available from: <https://webarchive.nationalarchives.gov.uk/ukgwa/20140605171643/http://publications.naturalengland.org.uk/publication/69046?category=31008>
- Mitchell-Jones, A.J. and McLeish, A.P. 2004. *Bat Workers Manual (3<sup>rd</sup> Edition)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/e5888ae1-3306-4f17-9441-51a5f4dc416a>
- The Conservation of Habitats and Species Regulations 2010. (No. 490)*. London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/uksi/2010/490/contents/made>
- The Royal Society for the Protection of Birds (RSPB). *Magenta Bat 4 (heterodyne) detector*. [Online]. [Accessed 4<sup>th</sup> January 2024]. Available from: <https://shopping.rspb.org.uk/wildlife-friendly-garden/wildlife-garden-cameras-detectors/bat-detectors/magenta-bat-4-bat-detector.html>
- Titley Scientific. 2024. *Anabat Scout Active Bat Detector*. [Online]. [Accessed 4<sup>th</sup> January 2024]. Available from: <https://www.titley-scientific.com/uk/anabat-scout.html>
- Wildlife Acoustics. *Echo Meter Touch 2 Pro for Android*. [Online]. [Accessed 4<sup>th</sup> January 2024]. Available from: <https://www.wildlifeacoustics.com/products/echo-meter-touch-2-pro-android-2>
- Wildlife and Countryside Act 1981. (c.69, Schedule 9)*. London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1981/69/schedule/9>