

Bat Evening Activity & Emergence Survey

**Client: Knott Booth Farm, off Broad Lane,
Burnedge, Rochdale, OL16 4QJ
(F180 - 2)**

FIELDODOLOGY WORKS



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REPORT CONTROL SHEET

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INTRODUCTION

The authors of the report are Julie Wickington and Mike Fisher. Julie has several years' experience in project development and ecological consulting for a range of schemes including residential, environmental enhancements and agriculture (Table 1). Mike is an experienced and Licenced Level 2 Bat surveyor.

Table 1 - Surveyor Credentials

Name	Description of credentials
Julie Wickington – Qualifying Member of CIEEM	Qualifications - BSc Human Ecology (Merit) - MSc Countryside Management (Merit) - MA Town and Country Planning (Pass)
	Experience and Training 27 years' experience of developing, planning and delivering conservation, regeneration and development projects. - Development and production of Ecological / Agricultural Baseline Assessments to inform BNG's and to apply for grant funding (2023 – to date) - Surveying and production of PEA's, DAFOR, HSI's for GCN, Habitat Regulation Assessments (2023 – to date) - CIEEM training undertaken for PEA production, BNG metric production, UKHab, Water Vole Mitigation. - Qualified MoRPH River Condition Assessor - Farmer
Mike Fisher	Qualifications (Bat Survey Licence Level 2 Class Survey Licence WML CL18) (Bat Roost Visitor Level 1 Class Survey Licence WML CL15)
	Experience and Training Over 30 years' experience and CPD training in Bat Surveying

Reason for Survey.

As part of the process to obtain planning permission to develop the site, a Preliminary Ecological Assessment (PEA) had been carried out on 23rd July 2025 on a Stable Block, Storage Barn, Garage, former cattery and the surrounding woodland and fields. After the field survey, it was considered prudent to do an evening activity and bat emergence survey during the active bat season, between May and September 2025.

EVENING ACTIVITY AND BAT EMERGENCE SURVEY.

The Survey

An evening activity and bat emergence survey was carried out to further assess the site, by observing:

- If bat roosts are present, or likely to be absent?
- Which bat species use the site for roosting?
- How many bats do these roosts support?
- Where are the bat roost access points?
- Where are the bat roosts?
- At what time of year are bats present?
- What types of bat roosts are present?
- What flight lines do the bats use after emerging from the roost?

The survey was undertaken within the barn complex and of the trees, shrubs and hedgerows growing in the Site and close by around the site boundaries. The first survey took place on 15th August 2025, and was carried out by four surveyors strategically positioned to ensure as good an observation, as possible of the targeted site.

Start time (15 minutes before sunset)	Sunset (15 th August 2025)	Finish time
20.21	20.36	22.36

Equipment

The equipment used during the survey consisted of close-focus binoculars, infrared night vision binoculars, powerful hand-held torches, an Echo Meter Touch 2 real-time expansion detector, Bat Box 3D heterodyne bat detectors, an Elekon Batscanner Bat Detector, and several Magenta heterodyne bat detectors, all with earphones.

Weather

The weather conditions at the second survey (15th August 2025) were good, and at the time of the survey it was dry with clear intervals. As there was a gentle breeze of 3mph, (Beaufort Scale 1, Calm), and a temperature taken during the survey of 22°C such conditions were thought to be optimal for a survey of this type.

Results

15th August 2025

Sunset on the 14th August 2025 was 20.36 hrs, and the survey started 15 minutes before sunset, at 20.21 hrs, and ended at 22.36 hrs, when it was determined that it was too dark to see the bats well, even with the aid of infra-red night vision binoculars, and that due to the timing, there was little likelihood that further bat emergence would take place. The context of the site is seen in **Figure 1**.

The first two bats observed were Common Pipistrelle., (*Pipistrellus pipistrellus*), both were seen and not heard flying behind the deciduous woodland and ditch along the western boundary. Feeding activity was heard and not seen, from behind the woodland from 21.04 to 21.14 hrs, (refer to pink oval on fig 2).

Later at 21.42 a single bat was observed commuting across from the woodland to the west of the Site across the fields to the east.

No other bat activity was observed through the centre of the complex, north or south. During the survey external lights were permanently on and it is probable that this was a detractor for bat activity.

At no time were bats seen to have emerged/entered from any other part of the targeted buildings. Particular attention was given to potential exit and entrance points from the passage way between buildings BA1 and BA2 and from the demolished section of wall to the eastern elevation of building BB proposed for demolition in Phases 2 and 3 of the project. In addition, no bat activity was observed around any of the trees nor the holes or gaps of the buildings, neither was any bat seen to enter or exit from these points during the whole survey.

During this survey 3 swallows (*Hirundo rustica*) was seen swooping around the muck midden at the north/west of the stables.

Evaluation of results and impact.

Bats

The bat activity observed at the Site was found to be along the Site's western and northern perimeter woodlands with intermittent feeding and commuting. The limited vegetation found to the west and north of the Site has high value, especially for Common Pipistrelle species, as an [initial] foraging area with eventual commuting, and further feeding to the woodlands to the north and along the linear frontage of Broad Lane. To enhance biodiversity, it is proposed that bat and bat boxes are placed on the existing buildings gable ends (see the improved cavity bat box below) and that bird boxes are placed on suitable tree on the wider site. A number of trees should also be planted in-lieu of the small self-set trees proposed for removal from the triangle of land at the east of the Site.



[Improved Cavity Bat Box | NHBS Practical Conservation Equipment](#)

This Improved Cavity Bat Box is suitable for the British cavity-dwelling bats - including the Brown Long-Eared, Daubenton's, Natterer's, Bechstein's, Grey Long-Eared, Whiskered, Brandt's and Nathusius' Pipistrelle bats - these species together make up about 20% of UK bats.

The external panels are made from 12mm Exterior Grade FSC plywood and are stained with black water-based wood stain, both to improve the boxes heat insulation. The multiple crevices allow for different temperature characteristics, and the internal ceramic heat sink, improves temperature stability.

The box has a single large cavity inside with a wide entrance with accurately sized opening, ideal for cavity dwelling bats, and which will deter unwelcome birds.

There is a 'Bat Ladder' at the base of the box which facilitates bats landing and climbing into the box. This continues inside of the box making it easy for the bats to move around and grip the surface. The ladder acts as a 'convective heater' for the box - when the sun shines on the ladder, warm air rises into the box and does not come out when the outside cools.

It is easy and safe, to mount the box, either to building walls, or nearby trees, as it is relatively lightweight. The floor also slides out (after removing 1 screw), to enable cleaning out and inspection, where permitted.

There is potential to enhance additional linear landscape features, in the Knott End complex to improve foraging links from this Site to the adjacent linear corridors.

The existing and proposed artificial lighting across the site at the west and southern elevations of the proposed development will require careful consideration, to ensure that the feeding and commuting lines are enhanced/not compromised. For the proposed developments, no external lighting is to be installed at the west or southern elevations.

Mitigation measures to be included are described below.

Breeding birds & Other mammals.

The survey showed that building BA2 is currently in use by nesting birds during August, the proposed construction of the project, has the potential to disturb any future nesting activity.

Mitigation and enhancement

1. In order to improve linear landscape features to the nearby western and southern line of trees, it is proposed that additional trees are planted in these corridors, species used, will likely be native varieties.
2. Additional external roosting boxes will be installed on site, following completion of building work. A minimum of 2 x roost boxes will be installed to the building, each at a minimum height of 4m from ground level.
3. A swallow nest site mitigation plan is required (see below).
4. Installation of bird boxes to the existing trees.
5. Installation of hedgehog boxes and the creation of a hedgerow highway in the rear gardens of the properties.

Conclusions

Planning consent will be sought for:

- Phase 1 – Construction of a residential lodge on land to the northeast of the Site.

- Phase 2 – Demolition of Buildings A-1, A-2, A-3 and subsequent construction of residential annex with associated car parking.
- Phase 3 – Potential demolition of Building B.

Preliminary examination of the buildings indicated that they have 'negligible/low' potential as a bat roost.

No bats were observed emerging, and neither bat droppings, nor urine splashes, were found within any building spaces during August 2025.

Fieldology Works Ltd were commissioned to undertake a minimum of 1 bat activity surveys to determine the emergence and activity of the buildings at Knott Booth Farm by roosting bats. The survey was also designed to assess the presence of any breeding birds using the building.

A comprehensive set of mitigation measures will be required, as detailed above.

The initial survey showed that have not historically nor are currently being used by birds during the nesting season. In the second survey a review of the buildings was undertaken to see if bird nesting had changed, but conditions were still the same.

In order to improve linear landscape features to the nearby western and southern line of trees it is proposed that additional trees are planted from the southwestern edge of the site, to enhance the existing canopy cover. Species used, will likely be native varieties. Additional roosting features will be installed externally following completion of building work on site.

As the evening bat activity and emergence survey results, conclusively showed no activity, then development work for this site can proceed, if the mitigation measures included in the Preliminary Ecological Assessment, Fieldology Works Ltd (2025), and the Bat Emergence and Activity Report (2025) are strictly adhered to.

Since bats, particularly Pipistrelles and Soprano Pipistrelles are opportunistic, an absence of roost evidence at present, does not preclude the low possibility of small numbers of bats, using the site, its buildings or boundaries, occasionally in the future and/or at other times of year. Note that this survey is not a roost identification nor a hibernation survey to guarantee the presence/absence of a roost. Hence it was considered that the likelihood of a significant roost (such as a maternity roost), being established as very unlikely. Lone and satellite roosting likelihood was thought to be negligible/low in the Buildings, as bats prefer to in-habitat (warm occupied buildings) which were present in close proximity.

The desk-top survey in the PEA noted recent records of Bat sp (Chiroptera), Common Pipistrelle (*Pipistrellus pipistrellus*), Pipistrelle sp (*Pipistrellus*), Daubenton's Bat (*Myotis daubentonii*), Lesser Noctule (*Nyctalus leisleri*), Nathusius's Pipistrelle (*Pipistrellus nathusii*) and Noctule Bat (*Nyctalus noctula*), with over 60 records in the conurbation of High Crompton and Crompton with further activity at Balderstone and Lower Place. The nearest record to the Site is at Moorgate East in 2021, 0.37km southwest from the Site.

The adjacent habitats had the potential to support only low to moderate numbers of foraging common pipistrelles, but low numbers of other species of bats was possible. **It was concluded that since there is no evidence of the presence of bat roosts within the targeted buildings, that the proposed changes to the site, will not have significant implications on the population status of local bat species. For the demolition works to commence and the mitigation specifications are to be approved and followed.**

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) while they are breeding. There was potential for the empty buildings and habitats including the trees and nearby woodlands, to be used by birds for both roosting and nesting purposes.

During the survey, although some birds were observed around the site (refer to above), and nests were found in Building BA2 it was concluded that some buildings were probably currently being used by nesting birds, and it was thought that due to the time of year, some species will have already fledged their young.

It was understood that there will be site clearance work carried out during the planned development (limited to the small self-set trees and shrubs during Phase 1), and that should there be any further requirement, this will be kept to a minimum. The other woodlands with mitigation, should not be affected by the planned development. Finally, as bats use linear features such walls of buildings, lines of trees or fencing, for foraging, navigating, and commuting routes, it was concluded that any small loss of the habitats, and any future development work on the site, would not affect the overall foraging or commuting potential for bats in the area.

RECOMMENDATIONS

In summary, during the Evening Nocturnal Bat Activity Emergence Survey carried out in August 2025, there was no evidence of any emergence or roosting activity, found in the building, and there was no roosting activity observed in trees or shrubs on the Site. **It is concluded that since there is no evidence of roosting bats, there will NOT be a requirement for an EPS mitigation licence (as issued by Natural England), However along with best-practice, precautionary measures and mitigation should be applied.**

However, since bats, particularly Pipistrelles are opportunistic, the lack of roost evidence within the site, does not preclude the low possibility of further small numbers of bats, using the Site occasionally in the future, and/or at other times of year. It is considered that the likelihood of a significant roost (such as a maternity roost) being established within the structures or trees on the empty buildings is highly unlikely.

The proposed development comprises:

- Phase 1 – Construction of a residential lodge on land to the northeast of the Site.
- Phase 2 – Demolition of Buildings A-1, A-2, A-3 and subsequent construction of residential annex with associated car parking.
- Phase 3 – Potential demolition of Building B.

It is considered that the proposed changes to the Site, as laid out in the planning application(s), can commence with minimal risk to Bats and that the mitigation and enhancement measures stated in this report are adhered to.

Swallow Nest Site Mitigation Plan

Swallows and their nests are fully protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird. It is an offence to intentionally take, damage or destroy the eggs, young or nest of a swallow whilst it is being built or in use.

The Act allows for fines or prison sentences for every bird, egg or nest destroyed.

- The relocation of the existing and historic birds nests should not occur until all young have fledged (not before 1st November). It is recommended that an Ecologist visits the targeted building to ensure that the nests are not occupied prior to any disturbance or relocation. At this time it can be observed how many of the nests are being actively used and how many are historic. As a minimum the replacement nest boxes should be equal to the number of nests in relative recent active use.
- Swallows should have alternative nest sites provided for them if existing sites will be lost as a result of a development.
- As seen in the target Building, Swallows nest either in a single pair or in small loose clusters of pairs or colonies. The nests are made from straw bound together with mud and saliva, then lined with feathers. They form a 'cup', open at the top from where the chicks can be seen peering over the edge while waiting for food. Nests are usually built inside swallow nest cup buildings, for example, in stables, barns, porches, under bridges or accessible loft voids.
- An existing building [barn] can be improved on the site of Knott Booth Farm, by no later than the end of March, to encourage swallows to nest in it. In the wider site there are multiple covered and enclosed barns where either historic or artificial nest cups can be relocated or installed.
- Roughwood timber can be installed towards the top of the walls with the top of the timber between 6 and 8cm from the ceiling which could be utilised by swallows for building their own nests.
- Another option is to provide a purpose-made covered nest box structure can be installed at the ridge of a gable wall or at the eaves of a building (see figure 3 below). Creating a door in the side of the box means that the nest cups can be cleaned after the chicks have fledged. This may encourage the swallows to breed again and raise a second clutch in the same year.
- All entrances and are to be securely covered when the nests have been removed to aid the relocation to the new nest sites.

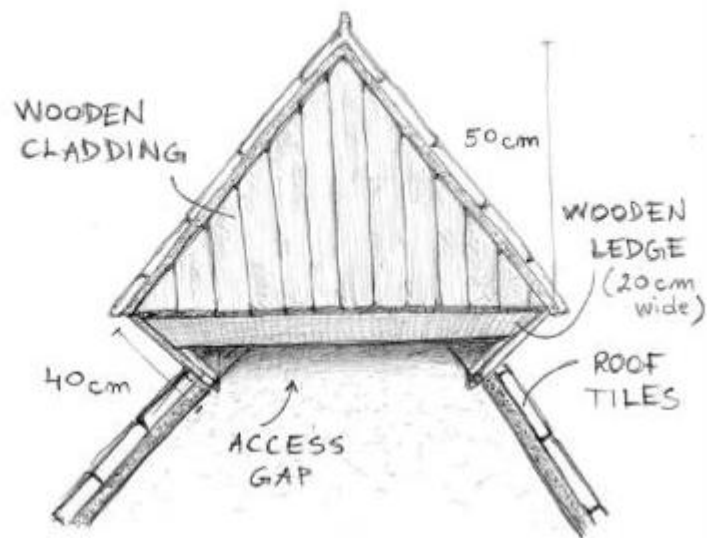


Figure X – Design of Swallow Nest Box – at top of eaves.

Accessed from Acer Ecology: Providing Ecological Solutions

([Swallow Nest Site Mitigation - Acer Ecology](#)) Accessed 30.06.25.

REFERENCES

- Bat Conservation Trust (2018) Bats and artificial lighting in the UK. Bats and the Built Environment series, Guidance Note 08/18. Institution of Lighting Professionals.
- Collins, J (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4TH edn). The Bat Conservation Trust, London.
- Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.
- Mitchell-Jones, A.J. (2004) Bat mitigation guidelines. English Nature.



Figure 1: Site Context

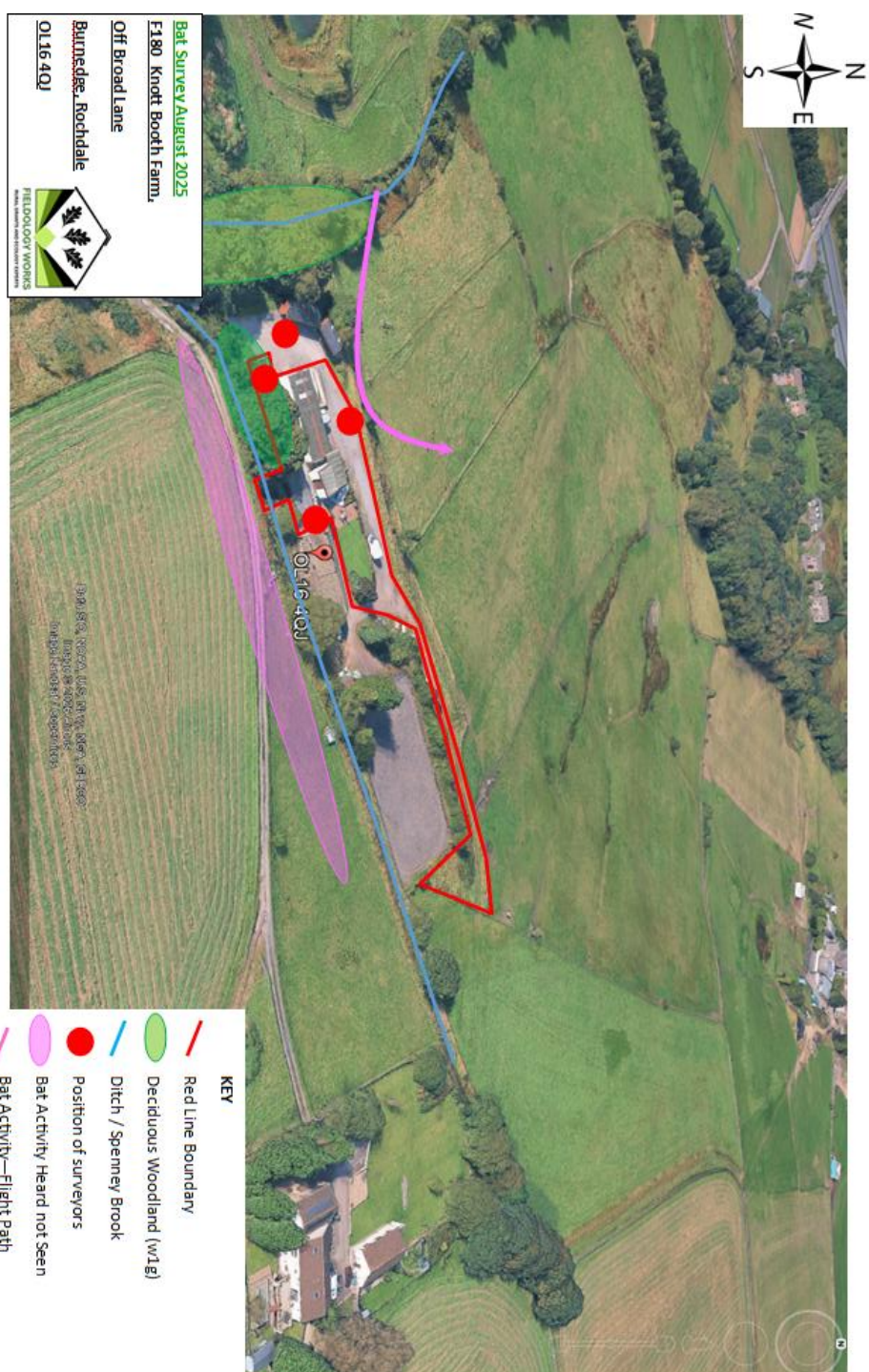


Figure 2: Bat and bird emergence and activity – Survey.



TERMS OF BUSINESS

This fee proposal has been produced in good faith and in line with the specified details to Provide a fair reflection of our required involvement based upon our judgment and experience.

However, due to the nature of ecological survey work, this involvement may evolve should we encounter issues at the appraisal stage, if there is a significant departure from the original brief, or should unforeseen issues arise. Should this occur, we will notify you as soon as possible and prior to the addition of any further charges.

This cost estimate will remain valid for three months following the date of its production, after which we reserve the right to amend the document to reflect current market conditions. Our fee proposal includes various ecological assessment services aimed at ensuring compliance in your development project. The specific services are detailed within the fee estimate, and adjustments are noted where applicable.

The assessment works will be invoiced after the assessment/report has been produced when paid, the final report will be released to the client. Any additional services or disbursements required beyond the scope of this fee proposal will be reported to and agreed with the client, based on an hourly charge-out rate of £__ /hour plus VAT and disbursements.

By accepting this fee proposal, the client confirms: The correct ownership details for the site, including details of any adjoining land in the applicant's ownership, have been supplied.

That with respect to the Local Planning Authority/Council for the site, the applicant is not one of the following: a member of staff, an elected member, related to a member of staff, or related to an elected member.



The general term of business for Fieldology Works Ltd apply to this fee proposal. A copy of these terms is attached to this fee proposal and can also be found using the following link: [Fieldology Works Ltd Terms and Conditions](#). Fieldology Works (google.com) By accepting this fee proposal, you also accept the general terms of business for Fieldology Works Ltd.

Should you have any questions or require further clarification regarding this fee proposal, please do not hesitate to contact us

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