Manor Farm, Hood Green

Bat Survey Report

23rd September 2021

Prepared by:

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Document ref: MBE/BAT/2021/84/01				
Purpose and Description	Originated	Checked	Reviewed	Date
For Planning	R Bell MCIEEM	P Middleton MCIEEM	R Bell MCIEEM	23/09/2021

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1. Summary

1.1.1 A preliminary roost assessment and two nocturnal surveys of buildings at Manor Farm were commissioned by architect Mark Booth of MBooth Design Ltd on behalf of the client Alex Sewell of Fairbank Investment on 13th August 2021.

1.1.2 The survey was undertaken to support a planning application to convert a single storey outbuilding to a dwelling and to renovate and extend the existing farmhouse.

1.1.3 This report details the results of a desk study, an internal and external inspection of the building on 17th August 2021, followed by dusk emergence surveys on 23rd August and 6th September 2021.

1.1.4 None of the historic bat records provided by South Yorkshire Bat Group relate to the site itself. The farmhouse (B1) was considered to offer a moderate level of bat roosting potential with the outbuilding (B2) offering a low level of bat roost potential.

1.1.5 No signs of bat roost presence were recorded during either the visual inspection or the two subsequent nocturnal surveys, demonstrating the probable absence of roosting bats.

1.1.6 No further survey effort is considered necessary, providing works commence within 12 months of the survey date. If works are to commence after this date, then Middleton Bell Ecology should be contacted to determine the requirement for update survey.

1.1.7 Works should proceed with caution and vigilance for unexpected bat presence, as single bats can roost almost anywhere. If bats are subsequently discovered, work should cease, and further advice sought without delay.

1.1.8 An ecological enhancement recommendation relating to roosting bats is included in this report.

2. Introduction

2.1.1 A preliminary roost assessment and two nocturnal surveys of buildings at Manor Farm were commissioned by architect Mark Booth of MBooth Design Ltd on behalf of the client Alex Sewell of Fairbank Investment on 13th August 2021.

2.1.2 The survey was undertaken to support a planning application to convert a single storey outbuilding to a single dwelling and to renovate and extend the existing farmhouse.

2.1.3 This report details the results of a desk study, an internal and external inspection of the building on 17th August 2021, followed by dusk emergence surveys on 23rd August and 6th September 2021.

2.1.4 Manor Farm is located off Stainborough Lane between Crane Moor and Hood Green, approximately 5.3km southwest of Barnsley town centre.

3. Habitat Assessment

3.1.1 Manor Farm is located on the opposite side of Stainborough Lane from Walker Wood a mixed woodland comprising part replanted ancient woodland together with semi-natural ancient woodland. The wider area comprises mainly mixed farmland interspersed with a relatively high proportion of woodland. The wider area is subject to low levels of artificial light spill.

3.1.2 The local area is likely to support a high density of bats comprising a varied range of species.

Table 1. Location and habitat table

Name and address: Manor Farm, Stainborough Lane, Crane Moor, S75 3HA			
OS Grid Ref. SE 31407 02011		Altitude. 135m	
Local Planning Authority: Barnsley Council			
Features on site and adjacent to site			
Feature	On site	Adjacent	Comments
Buildings	✔	✔	Located adjacent to offsite dwelling
River			Crane Moor Dike 320m south of site
Standing water			
Bridges tunnels and culverts			
Trees	✔	✔	Trees on edge of Manor Farm site with Walker Wood to north of Stainborough Lane
Woodland		✔	Walker Wood to north of Stainborough Lane
Grassland	✔	✔	Pasture borders survey site to south

Figure 1. Site location, as indicated by red circle

3.2 Aims

3.2.1 The survey was conducted to help determine the following:

- The presence/absence of roosting bats.
- Bat roosting areas and access/egress points into the structures.
- The level of bat roost potential associated with the structures.
- The number and species of bat roosting within the structures.
- Record signs of any use of the structure by nesting birds.
- Identify further survey work or mitigation requirements.

4. Methodology

4.1 Data Consultation

4.1.1 Bat records for locations within 2km of the site were obtained from South Yorkshire Bat Group (SYBG). These records were obtained for the same site in May 2020, in relation to a previous planning application (Application Reference 2020/0648).

4.1.2 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was also undertaken to identify historic European Protected Species (EPS) licences obtained for locations within 2km of the site.

4.2 Field Survey

Preliminary Roost Assessment

4.2.1 The following personnel conducted the preliminary roost assessment on 17th August 2021:

- Robert Bell (MCIEEM; Bat Survey Class license WML-A34-Level 4, 2016-25236-CLS-CLS)

4.2.2 The following activities were carried out during the surveys in compliance with relevant Bat Survey Guidelines (Collins 2016):

- A brief inspection and assessment of the site and habitats present to within 300m.
- An extensive examination of all parts of the buildings both inside and out to record structural features and condition and to record features that may be suitable for roosting bats. Particular attention was paid to any crevices or gaps in walls, lintels, gaps between beams and joists and to the possibility of finding droppings stuck to walls, floors or other surfaces, or insect remains below beams, among a number of other factors. All signs indicative of a bat roost presence including live or dead bats, droppings, feeding remains, scratch marks and staining were recorded.
- An assessment of the buildings' bat roost potential (negligible, low, moderate, high or confirmed roost).

4.2.3 In addition:

- Recording of any signs of nesting bird usage from the buildings.

4.2.4 The following equipment was used or at hand during the survey:

- Clulight
- Binoculars
- Endoscope
- Ladders
- Camera

Nocturnal Surveys

4.2.5 The following personnel conducted the nocturnal surveys:

- Robert Bell (RB), Amanda Murphy (AM) (QualCIEEM; Class license WML-A34-Level 2, 2020-47913-CLS-CLS), Greg Slack (GS) (MCIEEM; Class license WML-A34-Level 4, 2017-28068-CLS-CLS), Louisa Malloy (LM) (Grad CIEEM; Class license WML-A34-Level 1, 2016-22694-CLS-CLS), Dave Gash (DG) and Ian Wright (IW)

4.2.6 The following activities were carried out in compliance with relevant Bat Survey Guidelines (Collins 2016):

- Five-person dusk emergence survey – 23rd August 2021 – B1 & B2 (Figure 2)– RB, AM, GS, LM & DG
- Two-person dusk emergence survey – 6th September 2021 – B1 – RB & IW

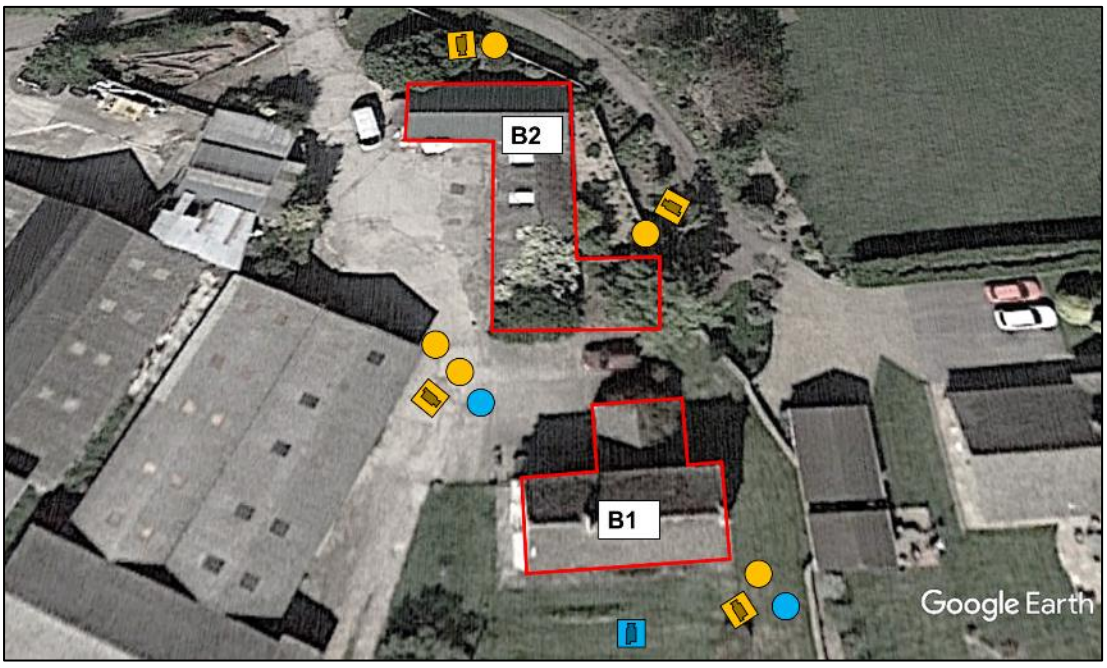
4.2.7 The decision was made to undertake two dusk surveys rather than a dusk and dawn survey. The rationale for this decision was that the buildings being surveyed could be well covered from the surveyor positions chosen. In addition, the use of high specification cameras allowed survey observations to be re-checked and roost locations pinpointed, thus rendering the main benefit of dawn surveys (precise location of roosts) redundant in this instance. Furthermore, as many bats return to roost before a dawn survey commences, it is inevitable that dawn surveys often under-record bat roosts present in buildings.

4.2.8 The following equipment was used during the surveys:

- Wildlife Acoustics EM Touch bat detectors and iPad/iPod recorders
- One to four Canon XA10 video cameras and infra-red lights

4.2.9 The layout of surveyors and video cameras during the two nocturnal surveys is shown in Figure 2.

Figure 2. Building numbering and nocturnal survey plan



4.3 Survey Limitations

4.3.1 No significant survey constraints were encountered.

5. Results

5.1 Data Consultation

5.1.1 South Yorkshire Bat Group provided 659 bat records for locations within 2km of the site, however, no bat records related to the site itself.

5.1.2 Species positively identified in the records included common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, whiskered bat *Myotis mystacinus*, Natterer's bat *Myotis nattereri*, Daubenton's bat *Myotis daubentonii*, noctule *Nyctalus noctula* and Leisler's bat *Nyctalus leisleri*. The closest record to site comprised a bat roost belonging to an unidentified species, recorded in 2007 from a building approximately 290m northwest of the site.

5.1.3 One European Protected Species (EPS) mitigation licence has been issued for a single location within 2km of the site. This license, issued in 2013, relate to impacts upon a whiskered bat breeding site and soprano pipistrelle roost located approximately 1.8km southeast of the site.

5.2 Field Survey

Preliminary Roost Assessment

5.2.1 No evidence of bat roosting was recorded in either of the surveyed buildings. The farmhouse (B1, Figure 2) was considered to offer a moderate level of bat roost potential. The outbuilding (B2) was considered to offer a low level of bat roost potential. No evidence of bird nesting was noted from either building.

Plate 1. Southeast corner of farmhouse (B1)

Description – Farmhouse (B1)

5.2.2 The two-storey stone farmhouse has a single storey extension on the north elevation, a two storey extension on the western end of the building and a lean-to porch at the western end of the north elevation. Anecdotal evidence from the resident reveal the

farmhouse to date from the 1500s, however, it appears to have been largely re-built/constructed in the 1800s. The dwelling mainly has pitched roofs with imitation stone (concrete) roof and ridge tiles, whilst the porch has Welsh slates on a single pitch roof. The two storey section of the dwelling has stone copings and lead flashing is present at the base of two stone chimneys. The walls are rendered on the north and west elevations. The dwelling has a mixture of uPVC and wood fascia boards with a section of soffit on the south elevation. Windows are uPVC framed and double-glazed. Dense clematis *Clematis* is present on the north gable of the single storey extension.

Plate 2. Northwest corner of farmhouse

Plate 3. Southwest corner of farmhouse

Potential roost features on building exterior – Farmhouse (B1)

5.2.3 The walls are well pointed, and the roof tiles largely lack crevice spaces between tiles. Potential roost features on the exterior are largely limited to occasional gaps in bedding mortar on ridge tiles, crevices behind fascia boards (Plate 4) and some lifted sections of lead flashing associated with chimneys.

Plate 4. Crevice visible between fascia board and rendered wall on north elevation of farmhouse

Internal inspection – Farmhouse (B1)

5.2.4 The main farmhouse roof is lined with Type 1F felt and suspended on king-post trusses, with a ridge beam, purlins, rafters and battens. A 2m high void is formed with c.200mm of glass fibre insulation on the ceiling. No signs of bat presence or potential access points were noted, however, rat *Rattus norvegicus* droppings were noted and the space was found to be very cobwebby. The single storey extension has a 1m high roof void, which is similarly lacking in any signs of bat presence.

Plate 5. Roof void of farmhouse

Description – Outbuilding (B2)

5.2.5 Sections of the single storey outbuilding have been constructed differently. The central section of B2 is constructed of stone and brick with a pitched concrete-asbestos corrugated sheet covered roof with a wooden fascia board (Plate 6). A mix of wooden and metals doors are present in the west elevation with very thick ivy *Hedera helix* cover on the south gable. The northern section of B2 has walls comprising a mixture of stone, concrete block and brick, with wood cladding in places above (Plates 6 & 7). This section of the building has a pitched roof covered in corrugated metal sheeting with a metal ridge and verge capping. This section of the building is in active use as a meat processing area, with double steel doors in the east gable. Adjoining the south end of B2 is a garage constructed from prefabricated concrete panels with a gently sloping corrugated concrete-asbestos sheet roof (Plate 8). This section of the building has an up-and-over door and a missing rear window.

Plate 6. East elevation of outbuilding (B2)

Plate 7. Northwest corner of outbuilding

Plate 8. Garage at southeast corner of outbuilding

Potential roost features on building exterior – Outbuilding

5.2.6 The stone wall on the east elevation is eroded and includes a number of voids which were found to be dry and dusty internally (Plate 9). There was also a fairly superficial crevice behind the fascia board on the west elevation. Similar narrow and fully inspected crevices are present behind metal verge capping at the northern end of the building, with a collapsed section of brickwork on the north elevation, exposing a crevice behind the outer brick skin (Plate 10).

Plate 9. Dry and dusty hollows in stone wall on east elevation

Plate 10. Collapsed section of brickwork on north elevation of outbuilding

Internal inspection – Outbuilding

5.2.7 The central section of the outbuilding interior is open to the underside of the roof sheeting with no roof void present and the space used for storage (Plate 11). At the north end of the building is a 1m high roof-void with 100mm of glassfibre insulation on the ceiling (Plate 12). No signs of bat presence were noted from any area section of the interior.

Plate 11. Interior of central section of outbuilding

Plate 12. Roof void at northern end of outbuilding

Nocturnal Surveys

23rd August 2021 – dusk emergence survey

5.2.8 The temperature at the beginning of monitoring was 17°C, with a very light breeze (Beaufort Scale Force 1) and 20% cloud cover. The temperature dropped to 15°C during the survey with other weather conditions remaining the same. It was dry throughout the survey. Sunset was at 20:18.

5.2.9 No bat roosting activity was recorded at any stage of this survey.

5.2.10 The first bat recorded comprised a common pipistrelle, heard at 20:27 (9 minutes after sunset), by the surveyor adjacent to Stainborough Lane, at the northern end of the site. This was followed shortly after by a noctule, recorded by four surveyors passing over the site at 20:29. Thereafter, intermittent common pipistrelle activity was recorded by all surveyors, with a pass by a bat of the *Myotis* genus recorded from the east side of the site at 21:22. In addition, two soprano pipistrelle passes were recorded during the survey.

6th September 2021 – dusk emergence survey

5.2.11 The temperature at the beginning of monitoring was 20°C, it was calm and there was 20% cloud cover. The temperature dropped to 17°C during the survey with other weather conditions remaining the same. It was dry throughout the survey. Sunset was at 19:45.

5.2.12 No bat roosting activity was recorded at any stage of this survey.

5.2.13 The first bat recorded comprised a noctule, heard at 19:38 (7 minutes before sunrise). The next bat observation comprised two soprano pipistrelles, which commuted past the east gable of the farmhouse at 19:59 & 20:00, with these bats suspected to have emerged from the off-site house to the east. The first common pipistrelle observation comprised a bat commuting north to south past the farmhouse east gable at 20:05.

Thereafter intermittent common pipistrelle activity was recorded by both surveyors interspersed by three further noctule passes. At 21:06 a single *Myotis* bat, suspected to be a whiskered bat was observed commuting across the south elevation of the farmhouse.

6. Assessment

6.1 Summary and Evaluation of Findings

6.1.1 The farmhouse (B1) was considered to offer a moderate level of bat roosting potential with the outbuilding (B2) offering a low level of bat roost potential.

6.1.2 No signs of bat roost presence were however recorded during either the visual inspection or the two subsequent nocturnal surveys.

6.1.3 The nocturnal survey works undertaken have demonstrated the probable absence of roosting bats.

6.2 Legislation and Policy Guidance

Bats

6.2.1 Bats receive protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended).

6.2.2 It is an offence to:

- Deliberately capture (or take), injure or kill a bat.
- Intentionally or recklessly disturb bats whilst they are occupying a structure or place used for shelter or protection or obstruct access to any such place.
- Damage or destroy the breeding or resting place (roost) of a bat.
- Possess a bat (live or dead), or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.
- Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.

6.2.3 The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.

6.2.4 In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". It notes that "conserving biodiversity includes restoring or enhancing a population or habitat". Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, brown long-eared *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle bats are included as priority species within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.

6.2.5 Where it is proposed to carry out works which will have an adverse impact on roosting bats, the site must either be registered on the Bat Mitigation Class Licence (BMCL) or a European Protected Species (EPS) license must first be obtained from Natural England. This requirement applies even if no bats are expected to be present when the work is carried out.

6.2.6 The National Planning Policy Framework for England was revised in 2021. This document states that plans should 'promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'.

Birds

6.2.1 All wild birds are protected under the Wildlife and Countryside Act 1981, which makes it illegal (subject to exceptions) to:

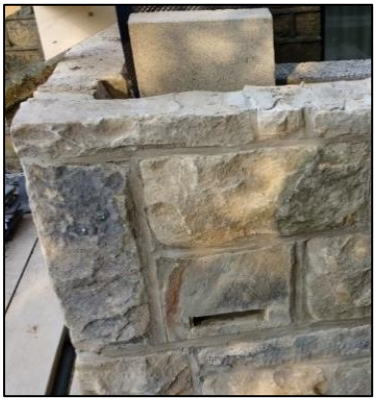
- Intentionally kill, injure or take any wild bird.
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

6.3 Further Survey, Recommendations and Enhancements

6.3.1 No further bat survey is considered necessary providing works commence within 12 months of the survey date. If works commence after this time, then Middleton Bell Ecology should be contacted to determine the requirement for update survey works to be undertaken.

6.3.2 No bats were recorded roosting on site during the survey works and consequently there is no compulsory requirement for mitigation. However, in order to enhance the ecological value of the site and in accordance with the aims of the National Planning Policy Framework (2021), it is suggested that a bat roosting feature is added as part of the re-development. It is advised this feature comprises either an offset fascia board (with a 15-20mm crevice gap between the board and wall), or either an integrated or externally mounted bat box, such as the Build-in WoodStone Bat Box or Ibstock Enclosed Bat Box C (see Plates 13, 14 & 15). If the decision is made to install a bat box, then it should be sited close to the wall top on a south or west elevation. For further information on appropriate bat roosting features please contact Middleton Bell Ecology.

Plates 13, 14 & 15. Examples of integrated bat boxes


6.4 Conclusions

6.4.1 No further bat survey effort is considered necessary, providing works commence within 12 months of the survey date. If works are to commence after this date, then Middleton Bell Ecology should be contacted to determine the requirement for update survey.

6.4.2 Works should proceed with caution and vigilance for unexpected bat presence, as single bats can roost almost anywhere. If bats are subsequently discovered, work should cease, and further advice sought without delay.

7. References

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines. The Bat Conservation Trust.

Appendix 1. Records Appendix

In accordance with the legal requirements of bat licensing, bat records collected during surveys are supplied to the relevant biological record centres and bat groups. The records to be supplied in accordance with this survey are shown below.

Date	Species	Site Address	OS Grid Reference	Notes
23/08/2021	Noctule	Manor Farm, Stainborough Lane, Crane Moor,	SE 31407 02011	Pass
23/08/2021	Soprano pipistrelle	Manor Farm, Stainborough Lane, Crane Moor,	SE 31407 02011	Pass
06/09/2021	Probable whiskered bat	Manor Farm, Stainborough Lane, Crane Moor,	SE 31407 02011	Pass
23/08/2021	Common pipistrelle	Manor Farm, Stainborough Lane, Crane Moor,	SE 31407 02011	Feeding