

Benwin, Darfield
Bat and Bird Survey Report
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1. Summary

- 1.1.1 A preliminary roost assessment at a site/dwelling named 'Benwin' in Darfield was commissioned by the architect Mark Booth of M Booth Design Ltd, on behalf of the client Mr L Webster, on 30th March 2021. A single further nocturnal survey was commissioned on 13th August 2021.
- 1.1.2 The survey was undertaken to support a planning application likely to include demolition of existing site buildings to facilitate construction of a new dwelling.
- 1.1.3 This report details the results of a desk study, together with an internal and external inspection of the building undertaken on 1st April 2021. A dusk emergence survey of the bungalow was undertaken on 25th August 2021.
- 1.1.4 No historic records of bat roosting were obtained for the site and no evidence of bat roosting was recorded during the field survey. The dwelling was however considered to display low bat roosting potential, whilst the outbuilding, shed and site trees displayed negligible bat roost potential.
- 1.1.5 The nocturnal survey undertaken has demonstrated the probable absence of roosting bats from the bungalow. No further survey effort is considered necessary, providing works commence within 24 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.
- 1.1.6 Demolition of the outbuilding and any tree removal should either be undertaken outside the main bird nesting period (March-August), or be preceded by a nesting bird check.
- 1.1.7 Given the site is located within the Dearne Valley Nature Improvement Area, it is recommended that a single integrated bat box is installed at wall top height in the south or west elevation of the new building.

2. Introduction

- 2.1.1 A preliminary roost assessment at a site/dwelling named 'Benwin' in Darfield was commissioned by the architect Mark Booth of M Booth Design Ltd, on behalf of the client Mr L Webster, on 30th March 2021. A single further nocturnal survey was commissioned on 13th August 2021.
- 2.1.2 The survey was undertaken to support a planning application likely to include demolition of existing site buildings to facilitate construction of a new dwelling.
- 2.1.3 This report details the results of a desk study, together with an internal and external inspection of the building, undertaken on 1st April 2021. A dusk emergence survey of the bungalow was undertaken on 25th August 2021.
- 2.1.4 The surveyed dwelling has an associated outbuilding and shed and is located in a mid-size plot off Pinfold Lane, Darfield.

3. Habitat Assessment

- 3.1.1 The Benwin plot includes lawn, which surrounds the dwelling with scattered trees also present. Residential housing adjoins the site to the north and west, with a public house to the east and Penfield Lane to the south.
- 3.1.2 Beyond Penfield Lane to the south is the River Dearne corridor, which includes a small area of deciduous woodland and amenity grassland between the survey site and watercourse. The River Dearne is tree lined across much of its length, whilst a former railway line further to the east now comprises a linear woodland belt.
- 3.1.3 The tree lined River Dearne provides valuable bat foraging habitat in the local area and therefore it is considered that despite the street lighting along Penfield Lane, the locality would be expected to support a moderate number of bats belonging to a range of species.
- 3.1.4 It is noted that Benwin falls within the Dearne Valley Nature Improvement Area (NIA). Nature Improvement Areas (NIA) were established to create joined up and resilient ecological networks at a landscape scale. Barnsley Council's Biodiversity and Geodiversity Supplementary Planning Document specifies that within the NIA, specific biodiversity enhancements over and above the minimum mitigation/ compensation measures are required.

Table 1. Location and habitat table

Name and address: Benwin, Pinfield Lane, Darfield, Barnsley, S73 9HJ			
OS Grid Ref. SE 41925 04554		Altitude. 25m	
Local Planning Authority: Barnsley Metropolitan Borough Council			
Features on site and adjacent to site			
Feature	On site	Adjacent	Comments
Buildings	✓	✓	Located in area of low density housing, bordered by other dwellings
River			River Dearne c.90m southeast of site
Standing water			Nearest pond c. 400m east of site

Name and address: Benwin, Pinfield Lane, Darfield, Barnsley, S73 9HJ			
Bridges tunnels and culverts			Bridges associated with River Dearne
Trees	✓	✓	Scattered trees on and adjacent to site
Woodland		✓	Small woodland block c.75m south of site
Grassland	✓	✓	Lawn surrounding dwelling

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 any evidence of bird nesting in the surveyed buildings.
- 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 requested from South Yorkshire Bat Group (SYBG).
- 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

Internal and External Visual Inspection

4.2.1 The following personnel conducted the preliminary roost assessment on 1st April 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).
- Recording of any signs of nesting bird usage of the buildings.

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

- Clulight
- Binoculars
- Endoscope
- Ladders
- Camera

Nocturnal Survey

4.2.4 The following personnel conducted the nocturnal surveys:

- Amanda Murphy (QualCIEEM; Class license WML-A34-Level 2, 2020-47913-CLS-CLS) and Dr Kate Denton (MCIEEM; Class license WML-A34-Level 4, 2018-32828-CLS-CLS)

4.2.5 The following activity was carried out in compliance with relevant Bat Survey Guidelines (Collins 2016):

- Two-person dusk emergence survey on 25th August 2021

4.2.6 The dusk emergence survey continued from 15 minutes prior to sunset until 90 minutes after this time with surveyors positioned at the northern and southern corners of the bungalow.

4.2.7 The following equipment was used during the surveys:

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

4.3 Survey Limitations

4.3.1 No constraints to an effective bat survey were encountered.

5. Results

5.1 Data Consultation

5.1.1 A total of 82 records were received from SYBG with species positively identified comprising common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Daubenton's bat *Myotis daubentonii* and noctule *Nyctalus noctula*. Other records provided were attributed to either an unidentified *Nyctalus* species, an unidentified *Pipistrellus* species or an unidentified species of bat.

5.1.2 No records were provided for the site. The closest record to site comprises a pipistrelle maternity roost (104 bats), recorded in 1991 from a location c.130m to the east.

5.1.3 No EPS licences have been issued for locations within 2km of the site.

5.2 Field Survey

Internal and External Visual Inspection

5.2.1 No evidence of roosting bats was recorded from either buildings or trees in the survey area. The dwelling was however considered to display low bat roosting potential, whilst the outbuilding, shed and site trees displayed negligible bat roost potential.

5.2.2 Site trees and the outbuilding have good potential to support nesting birds, however, the dwelling has relatively little potential for this use.

5.2.3 Site buildings are described in detail below with their layout shown in Figure 2.

Bungalow

5.2.1 The dwelling comprises a brick-built 1960s bungalow with a pitched slate covered roof with clay ridge tiles and mortar-filled verges (Plates 1 & 2). A brick-built chimney extends through the roof. The dwelling has uPVC framed double-glazed windows, timber soffits and plastic guttering. A small low-height coal store with a flat concrete roof is built into the slope, immediately southwest of the dwelling.

5.2.2 The exterior of the bungalow is in a fairly good state of repair with no missing mortar associated with gable verges and the soffits largely devoid of features. It was however noted that bedding mortar was missing from several locations beneath the ridge (Plate 3), presenting the opportunity of bats entering the ridge tunnel (area between ridge tiles and ridge beam) to roost. In addition to potential bat access points beneath ridge tiles, flashing at the base of the chimney is also lifted in places.

- 5.2.3 Internally the roof is lined with hessian backed Type 1F bituminous felt and suspended on purlins, rafters, a ridge beam and laths. The roof void is 2.5m high the ceiling is lined with 200mm of glass-fibre insulation (Plate 4). The brick chimney extends through the roof void. No signs of bat presence were noted from the roof void with this area generally quite clean and easily inspected with the exception of some light cobwebbing and several clusters of harlequin ladybirds *Harmonia axyridis*. The felt is in good condition and no light can be seen entering the void from outside.

Figure 2. Layout of surveyed buildings

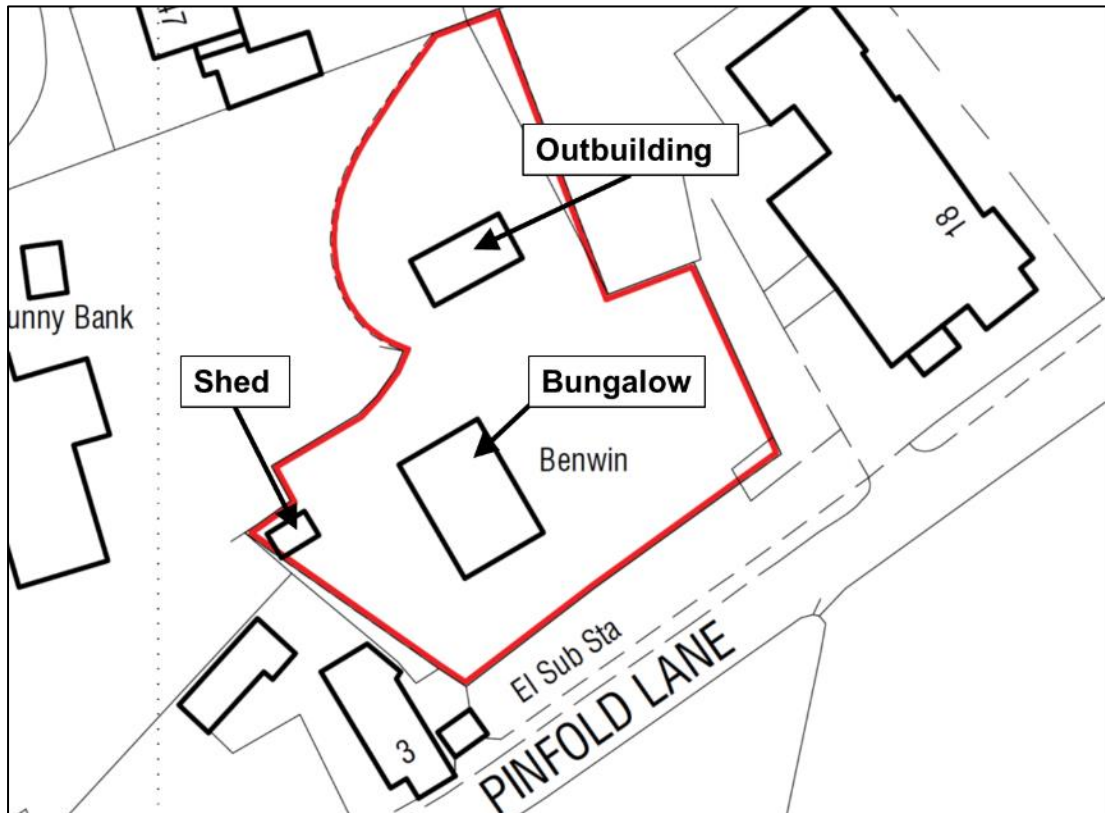


Plate 1. North corner of bungalow



Plate 2. West corner of bungalow



Plate 3. Missing ridge mortar adjacent to southeast gable



Plate 4. Roof void of bungalow



Outbuilding

- 5.2.4 The outbuilding comprises a single-skin brick-built structure with a gently sloping (mono-pitched) corrugated metal-sheet covered roof which is partly collapsed. Timber cladding is present at the top of the side elevations, with a timber stable door also present. A single metal-framed single pane window is located in the northwest elevation (Plate 5).
- 5.2.5 No features offering more than negligible roost potential were recorded from the exterior of the outbuilding.
- 5.2.6 Internally the outbuilding roof is unlined and suspended on timber beams, though it is partly collapsed (Plate 6). No evidence of roosting bats or nesting birds was noted within the outbuilding and no potential roost features were noted.

Plate 5. North corner of outbuilding



Plate 6. Interior of outbuilding



Shed

- 5.2.7 A simple timber shed with a pitched felt covered roof and timber barge boards is located at the western end of the site (Plate 7).
- 5.2.8 No building features offering more than negligible bat roost potential were recorded from either the exterior or interior of the shed with no evidence of bat roosting recorded from this building.

Trees

No features offering more than a negligible level of bat roost potential were recorded from site trees.

Plate 7. Southeast elevation of shed



Nocturnal Survey

25th August 2021 – dusk emergence survey

- 5.2.9 The temperature at the beginning of monitoring was 19°C, with a very light wind (Beaufort Scale (BS) Force 1) and 95% cloud cover. The temperature dropped to 17°C during the survey with the wind level staying the same and cloud cover decreasing to 50%. The weather was dry throughout. Sunset was at 20:11.
- 5.2.10 No bat roosting activity was recorded during the survey.
- 5.2.11 The first bat activity recorded during the survey comprised a bat visually observed flying high above trees to the north of the dwelling at 20:28, however no echolocation calls were heard from this bat. At 20:33 a common pipistrelle bat was recorded foraging to the north of the bungalow with quite regular foraging by up to two bats of this species, recorded between this point to the end of the survey. At 20:36 a noctule bat was seen and heard passing over the site, with a soprano pipistrelle heard at 20:37.

6. Assessment

6.1 Summary and Evaluation of Findings

- 6.1.1 No evidence of bat roosting was recorded from any location on site.
- 6.1.2 The bungalow offers low potential to support roosting bats whilst the outbuilding, shed and site trees offer no more than a negligible level of roost potential.
- 6.1.3 The nocturnal survey undertaken has demonstrated the probable absence of roosting bats from the bungalow.
- 6.1.4 No evidence of current bird nesting was recorded, however, site trees and the outbuilding offer good potential for use by nesting birds.

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 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

- 6.2.7 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), 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

Bats

- 6.3.1 No further bat survey is considered necessary providing works commence within 24 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 Given the site is located within the Dearne Valley NIA, it is recommended that a single integrated bat box is installed at wall top height in the south or west elevation of the new building. A suitable design of box would comprise the Build-In Woodstone Bat Box (Plates 8-10).

Plates 8, 9 & 10. Build-in WoodStone Bat Box



Birds

- 6.3.3 Demolition of the outbuilding and any tree removal should either be undertaken outside the main bird nesting period (March-August), or preceded by a nesting bird check.

6.4 Conclusions

- 6.4.1 No further bat survey effort is considered necessary, providing works commence within 24 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
25/08/2021	Common pipistrelle	Benwin, Pinfield Lane, Darfield, Barnsley	SE 41925 04554	Feeding x 2 bats
25/08/2021	Soprano pipistrelle	Benwin, Pinfield Lane, Darfield, Barnsley	SE 41925 04554	Pass
25/08/2021	Noctule	Benwin, Pinfield Lane, Darfield, Barnsley	SE 41925 04554	Pass