VALE ECOLOGY

Nu-Well Shopping Mall, Hough Lane, Barnsley, S73 0DR

Dusk Emergence Bat Survey Report October 2024

Vale Ecology Ltd. 2 Forest Walk, York, YO31 9JR info@vale-ecology.co.uk www.vale-ecology.co.uk 07526 035 337 Company Registration number: 15424745

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Prepared by	Thomas McQuillan
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1 Introduction

- 1.1.1.1 This report presents the results of a Dusk Emergence Bat Survey undertaken at Nu-Well Shopping Mall, Hough Lane, Wombwell, Barnsley, S73 0DR, in relation to the proposed residential development.
- 1.1.1.2 Nu-Well Shopping Mall is located at OS grid reference SE39920283 at an altitude of 63 m above sea level (refer to Figure 1). The site is located within an urban setting within the central region of the town of Wombwell, with Summer Street to the east and Hough Lane to the south.
- 1.1.1.3 The aim of the survey was to collect baseline data to determine the presence / likely absence of roosting bats within the buildings proposed for development. The survey was completed to inform planning decisions in relation to the proposed development and to determine the requirement for mitigation and compensation input.
- 1.1.1.4 The Dusk Emergence Survey was completed on 19th September 2024 under suitable weather conditions. This document also presents the results of a desktop study that was informed by information obtained from Barnsley Biological Records Centre.
- 1.1.1.5 A separate Preliminary Ecological Appraisal that includes a Preliminary Bat Roost Assessment will support the development proposals.



Figure 1. Approximate location of Nu-Well Shopping Mall shown by red outline (aerial imagery dated 2023).



2 Methodology

2.1 Desktop Study

2.1.1.1 Barnsley Biological Records Centre was contacted for records of bats within a 2 km radius of the Site. The following web sources were searched for statutorily protected sites and additional ecological data of most relevance: Multi-Agency Geographic Information for the Countryside (MAGIC), Ordnance Survey 1:25,000 mapping and aerial imagery (dating 1945, 2001, 2006, 2009, 2014, 2018, 2020, 2023).

2.2 Personnel

2.2.1.1 The Dusk Emergence Bat Survey was undertaken by Thomas McQuillan who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), holds Natural England survey licences for bats¹ and Great Crested Newts², is an Accredited Consultant³ on the Natural England bat Earned Recognition scheme, and has over 15 years' experience of ecological consultancy; with support from experienced surveyors.

2.3 Dusk Emergence Bat Survey

- 2.3.1.1 A Dusk Emergence Bat Survey was undertaken on the Nu-Well Shopping Mall on 19th September 2024. Three surveyors were present during the survey⁴.
- 2.3.1.2 Good views of all Potential Roost Features (PRFs) on the building proposed for development were held during the survey. The surveyors used Echo Meter Touch 2 Pro bat detectors. Night vision aids were used during the survey period; these included one Guide TK612 Gen2 Thermal Imaging Monocular camera covering the western elevations of the building and one Guide TK612 Gen2 Thermal Imaging Monocular camera covering on the eastern elevations of the building.
- 2.3.1.3 The dusk emergence survey conditions are summarised in Table 1. The survey was undertaken in accordance with current good practice guidelines⁵.

Date	19 th September 2024		
Sunset	19:09		
Survey duration 18:54 - 20:39			
Weather conditions	15.9 – 15.5 °C, dry, cloud 100 %, wind Bft 0 and humidity 75 %.		

Table 1. Bat Survey Conditions

2.4 Limitations

Dusk Emergence Survey

2.4.1.1 The dusk emergence survey was undertaken within the summer period when bats are most active (May to September) under suitable weather conditions. There were no significant constraints to the dusk emergence survey.



¹ Natural England Class Licence Registration No. 2015-11312-CLS-CLS - CL18 Level 2 (Bats).

² Natural England Class Licence Registration No. WML- CL09 & A29 Ref. 2023-66432-SC-SCI (Great Crested Newts).

³ Natural England Bat Earned Recognition Accredited Consultant Ref. BER0116.

⁴ Thomas McQuillan, Alex Parker and David Watkins.

⁵ Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

3 Results

3.1 Desktop Study

- 3.1.1.1 Please note the paucity of records for certain areas may be attributed to lack of survey and recording input rather than a limited number of bats within an area.
- 3.1.1.2 Information provided by Barnsley Biological Records Centre (BBRC) is included in Appendix 3. BBRC supplied 35 records within the search area, with records dated between 1988 and 2013. Species recorded within 2 km of the Site included Daubenton's, Noctule, Common Pipistrelle, Soprano Pipistrelle, *Pipistrellus sp., Myotis sp.,* and unknown bat species. There are no bat records for the surveyed building. Records mostly consist of in-flight observations and roosts within the area of Wombwell. There are no Granted European Protected Species Application for bat species within 2 km of the Site:

3.2 Dusk Emergence Bat Survey

3.2.1.1 During the dusk emergence bat survey on 19th September 2024, no bats were recorded to emerge from roosting locations within the surveyed building. During the survey, foraging and commuting activity was recorded within the site and local area from Noctule, Common Pipistrelle and Soprano Pipistrelle bats. Raw survey data is shown in Table 2.

Time	Notes					
DW - positione	d to the north-west of the Nu-Well Shopping Mall					
18:54 - 20:39	Thermal imaging camera set-up to face the north-west elevations of the building.					
19:37	Common Pipistrelle registration – not seen					
19:39	Common Pipistrelle pass – between surveyed building and dwelling to the north.					
19:41-44	Common Pipistrelle pass – between surveyed building and dwelling to the north.					
19:46	Common Pipistrelle pass – between surveyed building and dwelling to the north.					
19:50	Soprano Pipistrelle registration – not seen					
19:52	Common Pipistrelle registration – not seen					
20:01	Common Pipistrelle registration – not seen					
20:02	Common Pipistrelle registration – not seen					
20:05	Common Pipistrelle registration – not seen					
20:09	Common Pipistrelle registration – not seen					
TM - positioned	to the east of the Nu-Well Shopping Mall					
18:54 - 20:39	Thermal imaging camera set-up to face the east elevations of the building.					
19:39	Common Pipistrelle pass – between surveyed building and dwelling to the north.					
19:47	Soprano Pipistrelle registration – not seen					
19:54	Common Pipistrelle registration – not seen					
20:01	Noctule registration commuting pass					
20:05	Common Pipistrelle registration – not seen					
20:31	Soprano Pipistrelle registration – not seen					
AP- positioned	to the south of the Nu-Well Shopping Mall					
19:48	19:48 Soprano Pipistrelle registration – not seen					

Table 2. Dusk Emergence Bat Survey Results (19/09/2024)

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4 Conclusions & Recommendations

4.1 Conclusions

- 4.1.1.1 This report presents the results of a Dusk Emergence Bat Survey undertaken at Nu-Well Shopping Mall, Hough Lane, Wombwell, Barnsley, S73 0DR, in relation to the proposed residential development.
- 4.1.1.2 Nu-Well Shopping Mall is located within an urban setting within the central region of the town of Wombwell, with Summer Street to the east and Hough Lane to the south.
- 4.1.1.3 The Dusk Emergence Survey was completed on 19th September 2024 under suitable weather conditions. Barnsley Biological Records Centre was contacted for records of bats within a 2 km radius of the Site.
- 4.1.1.4 A separate Preliminary Ecological Appraisal that includes a Preliminary Bat Roost Assessment will support the development proposals.
- 4.1.1.5 Barnsley Biological Records Centre supplied 35 records within the search area, with records dated between 1988 and 2013. Species recorded within 2 km of the Site included Daubenton's, Noctule, Common Pipistrelle, Soprano Pipistrelle, *Pipistrellus sp., Myotis sp.*, and unknown bat species. There are no bat records for the surveyed building. Records mostly consist of in-flight observations and roosts within the area of Wombwell. There are no Granted European Protected Species Application for bat species within 2 km of the Site:
- 4.1.1.6 During the dusk emergence bat survey on 19th September 2024, no bats were recorded to emerge from roosting locations within the surveyed building. During the survey, foraging and commuting activity was recorded within the site and local area from Noctule, Common Pipistrelle and Soprano Pipistrelle bats.
- 4.1.1.7 No evidence of bat roosting activity was recorded within Nu-Well Shopping Mall during the dusk emergence bat survey on 19th September 2024.

4.2 Recommendations

Bats

4.2.1.1 The survey results presented within this report should feed into the Preliminary Ecological Appraisal and be used to determine the requirement for mitigation and compensation input for the project subject to the development proposals.



Appendix 1. Legislation & Conservation Context

<u>Bats</u>

Bats are fully protected through The Conservation of Habitats and Species Regulations 2010 as European Protected Species (EPS). They also receive some protection through inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

It is an offence to deliberately capture, injure or kill a bat. It is an offence to damage or destroy a breeding site or resting place of a bat. It is an offence to deliberately disturb a bat; in particular any disturbance which is likely (a) to impair their ability - (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or (b) to affect significantly the local distribution or abundance of the species to which they belong.

Under the Wildlife and Countryside Act 1981 (as amended), it is also an offence to intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; or obstruct access to any structure or place which any such animal uses for shelter or protection.

The 'appropriate authority' (Natural England in England) has powers to issue licences for various purposes including - (a) scientific or educational purposes... and (e) preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment. The appropriate authority shall not grant a licence under this regulation unless they are satisfied - (a) that there is no satisfactory alternative, and (b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range. It is an offence for any person authorised by virtue of a licence to which this paragraph applies to contravene or fail to comply with any condition which the licence requires him to comply with.



Appendix 2. Photographs

Photo 1. Nu-Well Shopping Mall – southern elevations.



Photo 2. Nu-Well Shopping Mall – southern and eastern elevations.





Photo 3. Thermal Imaging Camera – view from TM survey position.



Photo 4. Thermal Imaging Camera – view from DW survey position.





Appendix 3. BBRC Records & Site Location Plan

Grid ref	Location	Address	Date	Species	Comments/notes
SE405026	Wombwell	Park Hollow, 1	26/06/1994	Bat	exit count
SE396032	Wombwell	York Street, 11	13/07/2000	Bat	
SE404025	Wombwell	Poplar Road,19	29/07/2001	Bat	exit count
SE4002		Wombwell, Barnsley MDC	25/05/2005	Bat	roost probably Pipistrelle
SE405030	Park Hill Brick Pits LWS		05/07/2013	Myotis Bat species	feeding over lake
SE405030	Park Hill Brick Pits LWS		05/07/2013	Myotis Bat species	
SE405031	Wombwell	Park Hill Brickworks	14/09/1992	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	23/09/1992	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	12/10/1992	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	09/02/1993	Daubenton's Bat	visual in crevices
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	01/03/1993	Daubenton's Bat	
SE405031	Wombwell	Park Hill Brickworks	17/03/1993	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	21/04/1993	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	27/05/1993	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	23/03/1994	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	11/04/1994	Daubenton's Bat	visual in crevices
SE405031	Wombwell	Park Hill Brickworks	29/03/2001	Daubenton's Bat	visual in crevices
SE406030	Wombwell Park Hill Brick Pits	Park Hill Brickworks	12/07/2010	Noctule Bat	feeding
SE405030	LWS		05/07/2013	Noctule Bat	
SE405030	Park Hill Brick Pits LWS		05/07/2013	Noctule Bat	several feeding overhead
SE404026	'BARNSLEY MBC'	7 Poplar Road Wombwell	14/07/1988	Pipistrelle	1
SE404026	'BARNSLEY MBC'	7 Poplar Road Wombwell	20/07/1988	Pipistrelle	1
SE404026	'BARNSLEY MBC'	7 Poplar Road Wombwell	20/07/1988	Pipistrelle	roost exit count 8
SE405026	'BARNSLEY MBC'	3 Park Hollow Wombwell	10/08/1991	Pipistrelle	roost exit count 85
SE4002	'BARNSLEY MBC'	Lundhill Road Wombwell	01/09/1994	Pipistrelle	1
SE405026	'BARNSLEY MBC'	8 Park Hollow Wombwell	25/07/1995	Pipistrelle	1
SE401023	'BARNSLEY MBC'	Wombwell High School	24/06/2004	Pipistrelle	1
SE408027	'BARNSLEY MBC'	Wombwell Bypass	21/07/2000	Common Pipistrelle	1
SE406030	'BARNSLEY MBC'	Park Hill Brickworks	12/07/2010	Common Pipistrelle	2 feeding
SE406030	'BARNSLEY MBC'	Park Hill Brickworks	17/08/2010	Common Pipistrelle	2 feeding
SE405030	Park Hill Brick Pits LWS		05/07/2013	Common Pipistrelle	
SE405030	Park Hill Brick Pits		05/07/2013	Common Pipistrelle	feeding over lake
SE406030	'BARNSLEY MBC'	Park Hill Brickworks	12/07/2010	Soprano Pipistrelle	several feeding
SE406030	'BARNSLEY MBC'	Park Hill Brickworks	17/08/2010	Soprano Pipistrelle	several feeding
SE405030	Park Hill Brick Pits		05/07/2013	Soprano Pipistrelle	feeding over lake
	Park Hill Brick Pits				



Air Quality Index



References: 3845076-10066085 ld: 1430686