

| Bat Activity Survey Report | |
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| For: | Cleveland Build |
| Site | Development at 22 West Street, West Butterwick, Scunthorpe, DN17 3LA |
| Report Date: | 20 th July 2022 |
| Report Reference: | SQ-588 |



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2015-12213-CLS-CLS



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| Client: | Cleveland Build |
| Site Name: | Development at 22 West Street, West Butterwick, Scunthorpe, DN17 3LA |
| Grid Reference: | SE 83229 05879 |
| Report: | Bat Activity Report |
| Date of survey: | 28 th June and 13 th July 2022 |
| Surveyed by: | Natasha Estrada BSc (hons), MRes, MCIEEM Natural England Bat Licence: 2015-12213-CLS-CLS Samuel Toon BSc(hons), Gradcieem Natural England Bat Licence: 2018- 35446-CLS-CLS |

| Issue: | Revision: | Stage: | Date: | Prepared by: | Approved by: |
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| 1 | - | Draft for review | 15 th July 2022 | Joanne Toller BSc(hons), Estrada Ecology Ltd | Natasha Estrada BSc(hons), MRes, MCIEEM, Estrada Ecology Ltd |
| 2 | n/a | FINAL | 20 th July 2022 | Joanne Toller BSc(hons), Estrada Ecology Ltd | Natasha Estrada BSc(hons), MRes, MCIEEM, Estrada Ecology Ltd |



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The contents of this report have been produced with due consideration of current best practice guidance, and in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct and guidelines, as outlined in Collins 2016.

This report should not be submitted as part of a planning application without any accompanying species-specific reports which may have been recommended herein.

Data within this report is valid for a maximum of eighteen months from the date of the survey. After this period, an updated site visit will be required to determine a new ecological baseline.

Whilst every effort has been taken to ensure the accuracy of this report and its contents, in view of potential ecological constraints to development or the likely presence or absence of species, it must only be viewed as a snapshot in time and, therefore, not be viewed as definitive. Due to external factors, such as seasonality, weather etc, having the potential to affect survey results, no liability can be assumed for omissions or changes that may, or may not occur, after the date this report was produced.

Summary

Estrada Ecology Ltd was commissioned to conduct two bat activity surveys on 22 West Street, West Butterwick, Scunthorpe, DN17 3LA.

A Preliminary Bat Roost Assessment was undertaken by Estrada Ecology Ltd on 9th May 2022 (*Report Ref: SQ-549, dated 12th May 2022*), which recorded the building within the site as having no field sign evidence to confirm use by bats but moderate roost suitability.

As a result, two bat activity surveys, both of which were conducted as dusk emergence surveys to confirm presence / likely absence of bat use of the building within the site. During the activity surveys, no bats of any species were recorded emerging from or re-entering the building. A very low level of bat activity was recorded over the duration of the survey period isolated to the northern boundary.



The results of the bat activity surveys confirm the building is unlikely to be used by bats for roosting or as a place of shelter and no formal mitigation is proposed. It is deemed that a Protected Species Mitigation Licence (formerly European Protected Species Mitigation Licence) will not be required to facilitate the works.

Findings and recommendations

Bats and roosts

Two dusk bat activity surveys, following BCT Survey Guidelines 2016, were undertaken following suitable weather conditions, as outlined herein.

During both dusk surveys, no bats of any species were recorded emerging from or re-entering any structure within the site. A low level of bat activity was recorded over the survey period isolated to common pipistrelle (*Pipistrellus pipistrellus*) bat contacts, largely foraging along the line of conifers to the north of the property.

Based on field sign evidence, the building is deemed unlikely to support bats for roosting or shelter. No impacts are predicted on bats, their roosts or places of shelter via the proposed works. Standard precautionary measures are outlined herein.

Hibernating bats

Crevice-dwelling bats, such as pipistrelle species, use structures for shelter and protection in winter when they hibernate. During hibernation, bats need roosts that are cool and remain at a constant temperature. They are difficult to detect in hibernation, in well-concealed crevices, and leave no obvious signs of their presence. The building was assessed for its potential to support features which bats could utilise for hibernation. The building recorded limited potential for hibernacula use predominantly due to the lack of a features capable of supporting a suitable stable thermal gradient.

Breeding birds

No evidence of breeding birds was recorded at the time of survey within or upon any structure. No impacts are predicted on breeding birds at this juncture.



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1 Introduction and Site Description

- 1.1 Estrada Ecology Ltd was commissioned to conduct bat activity surveys 22 West Street, West Butterwick, Scunthorpe, DN17 3LA (hereby referred to as the 'site')
- 1.2 The site is located within West Butterwick, a village within North Lincolnshire approximately 8 Kms southwest of Scunthorpe town centre. The central OS grid reference is recorded as SE 83229 05879.
- 1.3 The site comprises of a detached residential dwelling, gravel driveway, hardstanding, attached garage and garden. The site habitats comprise introduced shrubs, amenity grassland, tall ruderals, sparse ephemeral/short perennial vegetation, and a single species hedgerow.
- 1.4 Outside the curtilage of the site, the land use is dominated by residential dwellings within the village of West Butterwick. Beyond the village lies the river Trent, 375 meters to the east and is dominated by arable farmland in the wider setting. The M180 motorway lies 1.5km to the north.
- 1.5 A Preliminary Bat Roost Assessment was conducted by Estrada Ecology Ltd on 9th May 2022 (*Report Ref: SQ-549, dated 12th May 2022*), which recorded the building within the site as having moderate potential for supporting roosting bats and further survey effort was recommended to ascertain presence/ likely absence of bat use.
- 1.6 Bat activity surveys were undertaken by Estrada Ecology Ltd during the bat activity season 2022 to ascertain presence / likely absence.



Figure 1: The site in its wider setting (shown with red keyline).



Google Earth

2 Protected Species Legislation

- 2.1 All species of bat and their breeding sites or resting places (roosts) are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended).
- 2.2 The Regulations prohibit: the deliberate killing, injuring or taking of bats; the deliberate disturbance of any bat species, in such a way as to be significantly likely to affect:
 - their ability of to survive, hibernate, migrate, breed, or rear or nurture their young, or the local distribution or abundance of that species.
 - damage or destruction of a breeding site or resting place (roost); and
 - the possession or transport of bats or any other part thereof.
- 2.3 Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion in Schedule 5. Under the Act, they are protected from:

- intentional or reckless disturbance (at any level); obstruction of access to any place of shelter, breeding or rest; selling, bartering or exchange of these species, or parts of.

2.4 Seven British bat species are listed as Species of Principle Importance (SPI) under the Natural Environment and Rural Communities (NERC) Act 2006. These are: barbastelle (*Barbastella barbastellus*); Bechstein's (*Myotis bechsteinii*); noctule (*Nyctalus noctula*); soprano pipistrelle (*Pipistrellus pygmaeus*); brown long-eared (*Plecotus auritus*); greater horseshoe (*Rhinolophus ferrumequinum*); and lesser horseshoe (*Rhinolophus hipposideros*).

2.5 Under the National Planning Policy Framework 2019, the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible, or adequately mitigated / compensated for, and that opportunities for ecological enhancement should be sought.

2.6 Under certain circumstances, a licence may be granted by Natural England to permit activities that would otherwise constitute an offence. In relation to development, a scheme must have full planning permission before a licence application can be made.

3 Survey Objectives

3.1 The objective of these surveys was to establish how bats were using the site for roosting, or as a place of shelter; and, to identify to species level, determine the population size and nature of the roost within the property on site.

3.2 This report presents the findings of bat activity surveys undertaken in June and July 2022 and aims to:

- Outline any potential impacts of the proposed development on bats, as a result of the findings of the desk study and field surveys.
- Provide recommendations for mitigation and / or compensation measures to ensure any impacts on bat activity is avoided or minimised where applicable.
- Provide recommendations for enhancing the site for bat activity where possible; and



- Provide recommendations for mitigation and / or compensation measures to ensure any impacts on breeding bird species is avoided or minimised.

4 Survey Methodology

4.1 Desktop study

- 4.1.1 Bat records from Greater Lincolnshire Nature Partnership (GLNP) were commissioned for a 2km radius from grid.
- 4.1.2 Further inspection, using colour 1: 25,000 OS base maps (www.ordnancesurvey.co.uk), MAGIC (www.magic.defra.gov.uk) and aerial photographs from Google Earth (www.maps.google.co.uk), was also undertaken to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

4.2 Initial inspection survey

- 4.2.1 An initial inspection survey of the site was undertaken in May 2022 and recorded the building within the site as containing no field sign evidence synonymous with bats but a moderate level of roost suitability when assessed by licenced and experienced bat ecologist Natasha Estrada BSc (hons), MRes, MCIEEM Natural England Bat Licence: 2015-12213-CLS-CLS.

4.3 Bat activity surveys

- 4.3.1 The first dusk bat activity survey was undertaken on the evening of the 28th June 2022 using guidance from Collins, J., Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists, Good Practice Guidelines, 3rd Edition, 2016 and Interim guidance note (Bat Conservation Trust; May 2022).
- 4.3.2 The second dusk emergence survey was undertaken on the evening of 13th July 2022 using guidance from Collins, J., Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists, Good Practice Guidelines, 3rd Edition, 2016 and Interim guidance note (Bat Conservation Trust; May 2022).



- 4.3.3 Prior to the start of the activity surveys an external examination, where accessible, was undertaken of all cavities, holes, cracks and fissures in timber and brickwork (where applicable), using an Explorer Premium Image Recording telescopic borescope, Seek Compact Pro Thermal Imaging Camera and close-focusing binoculars.
- 4.3.4 These features were further examined for bat field signs to identify bats in situ, potential roost sites and access points and any signs of occupation such as: scratch marks; droppings; smudge marks; discarded moth wings; and urine staining etc. Full access to the western aspect of the building was available and recorded no additional potential roost features to those recorded during the preliminary roost assessment survey.
- 4.3.5 The number of surveys on the building is determined by its potential to support bats; any field sign evidence gathered during the initial inspection survey in May 2022 and any subsequent activity recorded during activity surveys.
- 4.3.6 Both dusk emergence surveys commenced thirty minutes prior to sunset and continued for one hour twenty minutes after sunset.
- 4.3.7 An Anabat Walkabout, Echo Meter Touch 2 Pros paired with Batbox Duet bat detectors were used to aid identification of the species. Nightfox Red HD Night vision goggles and XB5 850nm IR flashlights were used in combination with mounted Seek Compact Pro thermal imaging cameras to aid survey effort and provide a visual after dark.



Figure 2: Location of surveyors over the survey periods.



Google Earth

4.4 Timings

4.4.1 The activity surveys were conducted during suitable weather conditions as outlined in Table 1.

Table 1: Environmental conditions throughout the survey period.

| Date | Sunset / Sunrise | Start time | End time | Weather conditions |
|----------------|------------------|------------|----------|--|
| 28th June 2022 | 21:36 | 21:16 | 22:56 | Temp 17°C, Humidity 64%, No precipitation, wind speed 13kph S |
| 13th July 2022 | 21:27 | 21:07 | 22:46 | Temp 21°C, Humidity 72%, No precipitation, wind speed 4kph NNW |

4.5 Personnel

4.5.1 The bat activity surveys were led by bat ecologist Natasha Estrada BSc (Hons), MRes, MCIEEM Natural England Bat Licence: 2015-12213-CLS-CLS assisted by Sam Toon BSc (hons) GradCIEEM (Natural England Bat Survey Class Licence 2018-35446-CLS-CLS); a qualifying member of

CIEEM, ecologist Joanne Toller BSc(hons) and Emma Taylorson BSc(hons) experienced in bat survey work, to maximise effort and results.

- 4.5.2 Natasha is an experienced bat worker and has been licensed for approximately sixteen years. She has held multiple mitigation licences in respect of Common Pipistrelle, Natterer's (*Myotis nattereri*), Noctule (*Nyctalus noctula*) and brown long eared (*Plecotus auritus*) bats.

5 Survey Findings

5.1 Desktop study

- 5.1.1 A biological data records search was requested from Greater Lincolnshire Nature Partnership (GLNP) for a 2km radius from the central grid reference.
- 5.1.2 The records are comprised of five common pipistrelle (*Pipistrellus pipistrellus*) records; one soprano pipistrelle (*Pipistrellus pygmaeus*) records; one Daubenton's, (*Myotis daubentonii*) record; one brown long-eared bat (*Plecotus auritus*) and two records for unidentified species of bat. A total of ten records were returned for this search area.
- 5.1.3 The majority of records returned were from activity surveys conducted by Lincolnshire Bat Group, and for common pipistrelle, using green corridors and urban green space for commuting and foraging within the wider search radius.
- 5.1.4 Two bat roosts were returned: one unidentified bat species (2011) and one common pipistrelle (2013) roosts, 1.9km and 2.9km respectively to the south of the survey site.
- 5.1.4 Consultation with Magic Map returned no European Protected Species Mitigation Licences (EPSML) granted within a 2km radius from the central site grid reference.

5.2 Initial inspection survey

- 5.2.1 Prior to the start of the activity surveys, a visual inspection of the buildings was undertaken, where accessible.
- 5.2.2 No field sign evidence synonymous with use of the building by bats was recorded at the time of survey.



5.3 Bat activity surveys

- 5.3.1 During the dusk survey, no bats of any species were recorded emerging from or re-entering any structure within the site. A very low level of bat activity was recorded over the survey period isolated to three common pipistrelle bat contacts. These contacts were from bats commuting across the site, briefly foraging and exiting the boundary towards the south. These were recorded at 22:06, 22:08, and 22:13 consecutively. No further contacts were recorded.
- 5.3.2 During the second dusk emergence survey, no bats of any species were recorded entering the property. A peak count of ten common pipistrelle contacts were recorded over the duration of the survey period. All contacts displayed foraging and commuting behaviours along a tree line and adjacent garden to the north of the site.
- 5.3.3 No bats of any species were recorded emerging from, or re-entering, any structure within the curtilage of the site during any of the surveys.
- 5.3.4 No evidence of breeding birds was recorded over the survey period, within or upon any structure.

5.4 Commuting route assessment

- 5.4.1 Bats are known to utilise linear features as commuting lines to foraging grounds and between roosts. Under current proposals, no encroachment on habitat suitable for use by bats is predicted and thus no impacts.
- 5.4.2 No major commuting lines or foraging grounds were recorded during the survey period.
- 5.4.3 Field sign evidence over the survey period infers the immediate area supports low level of bats/ bat activity.

6 Survey and Site Assessment

- 6.1 No bats of any species were recorded emerging from or re-entering the building over the survey periods.
- 6.2 Low numbers of common pipistrelle bat contacts from non-emerging individuals were recorded over the duration of the two dusk surveys,



inferring the site and immediate landscape does not support large numbers of bats.

- 6.3 Under current proposals, the building within the curtilage of the site is planned to be demolished and the site redeveloped into residential dwellings. Based on the lack of bat activity over the survey period, the lack of emerging or re-entry behaviour by bats and the absence of field sign evidence, no formal mitigation is recommended, and bats are deemed unlikely to be using the building for roosting or as a place of shelter. It is recommended that a suitable lighting scheme to reduce splay on the row of conifers in the north is implemented due to the activity recorded in this area.
- 6.4 No evidence of breeding birds was recorded at the time of the surveys.

7 Ecological Constraints

- 7.1 Due to the variable properties of bat echolocation calls and the format of frequency division recordings, it is not always possible to identify a series of echolocation calls down to species level.
- 7.2 In most cases, it is usually possible to identify to genus level which is suitable to allow potential affects to be assessed and appropriate mitigation designed.

8 Interpretation and Evaluation

- 8.1 The building is confirmed as being unlikely to be used by bats for roosting or as a place of shelter.
- 8.2 No field sign evidence to suggest use by bats was recorded over the survey period and bat activity throughout the duration of the surveys was deemed to be very low being limited solely to low numbers of common pipistrelle contacts.
- 8.3 Common pipistrelles are known to move between non-breeding roosts during the activity season for a host of reasons. However, it would be expected that surveys undertaken during the optimum period of June and July 2022 would reveal a greater level of activity from the species, if the site were to be used regularly by larger numbers.



9 Assessment of Potential Impacts

9.1 Impacts on bats and their roosts

- 9.1.1 The results of the bat activity survey confirms that the building is unlikely to be used by bats for roosting or as a place of shelter.
- 9.1.2 The activity survey results recorded no evidence to suggest use of the survey site as a major commuting route or foraging ground.

9.2 Impacts on breeding birds

- 9.2.1 No evidence of breeding birds was recorded at the time of the initial Preliminary Roost Assessment or during the dusk surveys.
- 9.2.2 It is understood that works are due to commence outside the breeding bird season. However, should timings change and nests or activity to suggest birds are breeding or attempting to breed in the building or vegetation within the plot be recorded, then all works should cease, and a suitably qualified ecologist consulted.
- 9.2.3 A suitable buffer zone, as advised by a suitably qualified ecologist, should be installed in order to protect the nest and prevent disturbance.

10 Conclusions and Recommendations

- 10.1 The result of the bat activity survey confirms the building is unlikely to be used by bats for roosting or as a place of shelter.
- 10.2 No formal mitigation is proposed, and it is deemed that a Protected Species Mitigation Licence (formerly European Protected Species Mitigation Licence) will not be required to facilitate the works.
- 10.3 A suitable lighting scheme is recommended to avoid artificial light splay from encroaching over the line of trees to the north of the site, which recorded a low level of foraging activity.
- 10.4 As with all buildings, there is a residual possibility of low numbers/ single bats opportunistically using a building post survey. In this



instance, the likelihood is deemed low. However, should bats or field sign evidence to indicate use of the structures by bats be recorded during the onset of works, then all works should cease, and a suitably qualified ecologist consulted.



References

Collins, J (2016). Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists, Good Practice Guidelines 3rd Edition.

