

**DAYTIME BAT SURVEY &
ECOLOGICAL SCOPING SURVEY AT
LAND OFF BROOK STREET,
BROWN LEES, KNYPERSLEY,
STAFFORDSHIRE**

JULY 2017



RACHEL HACKING ECOLOGY

Bowden Hall, Bowden Lane, Marple, Stockport, Cheshire. SK6 6ND
Tel: 0161 465 8971

mail@rachelhackingecology.co.uk

www.rachelhackingecology.co.uk

CONTENTS

INTRODUCTION

2

METHODOLOGY

3

RESULTS – DAYTIME BAT SURVEY

4

RESULTS – ECOLOGICAL SCOPING SURVEY

11

SUMMARY AND RECOMMENDATION

14

REFERENCES

15

1.0 INTRODUCTION

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2017 by Chicubes, via Knights, to undertake a daytime bat survey & ecological scoping survey of a series of warehouses on land off Brook Street, Brown Lees, Knypersley, Stoke-on-Trent. The site will be the subject of a planning application for the demolition of the existing buildings and the construction of residential buildings in its place.
- 1.2 The site is located off Brook Street in Brown Lees, Knypersley, Stoke-on-Trent, Staffordshire (O.S. grid reference: SJ8746156263 – see Figure 1). The development site comprises of an area of hardstanding with two warehouse units, six sheds and a stable block. Two fields also exist which are bordered by hedgerows, and fences. The site is currently in use for car repairs and animal housing production.
- 1.3 The site lies on the outskirts of Brown Lees village, with residential development to the east and south of the site. Agricultural land lies to the north and west. The surrounding area offers good commuting and foraging opportunities for bats.
- 1.4 Biodiversity is a material consideration to the planning process and consideration must be given to protected species. The proposed works to the structures at Brook Street will be destructive and therefore consideration should be given to roosting bats and other protected and notable species, which could potentially utilise the site.
- 1.5 All bat species are protected under the Conservation of Habitats and Species Regulations 2010, the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000, the Natural Environment and Rural Communities Act 2006 and the Environmental Damage Regulations 2009. It is illegal to disturb or damage a bat roost.

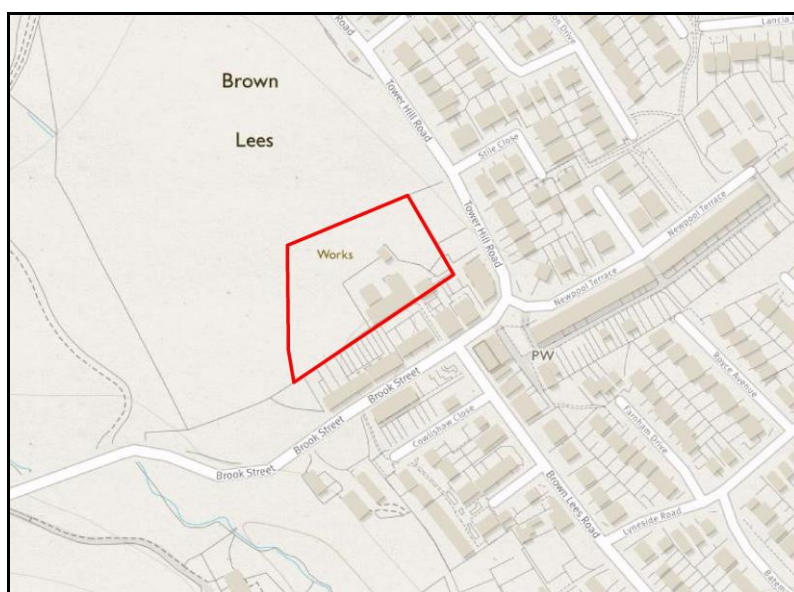


Figure 1 showing the site location edged in red

2.0 METHODOLOGY

- 2.1 A daytime bat survey of the garages at Brook Street, Brown Lees was undertaken to search for, and to assess the potential for, a bat roost to be present within the structures.
- 2.2 An external survey was carried out, which included, for example, looking for gaps between any soffit boards and walls, gaps between window frames and the walls, and looking for bat droppings on the walls and window ledges.
- 2.3 The garages were also searched internally for evidence of a bat roost, which included looking for the following signs:
- live or dead bats
 - bat droppings
 - bat entry/exit points
 - bat urine staining
 - grease marks on any timbers
 - feeding remains such as insect wings
 - areas clear of cobwebs.
- 2.4 A pair of close-focussing binoculars, a high-powered torch and an endoscope were used (where required) to search for evidence of bats externally and internally.
- 2.5 In addition to the bat survey, an ecological scoping survey was also carried out, to search for evidence of protected species within the site and to assess the habitats for their potential to support protected species. A search for invasive species of plant, such as Japanese Knotweed, was also undertaken.

Personnel and Timing

- 2.6 Rosie Fisher and Kate Reed (Ecologists) carried out the daytime bat survey on the 26th July 2017. Both surveyors are experienced and fully trained in protected species surveys. The weather on the day of the survey was warm and dry.

Survey constraints

- 2.7 Daytime bat surveys and scoping surveys can be undertaken at any time of year. All of the building was accessible internally and externally. There were negligible constraints to the survey.

3.0 RESULTS

DAYTIME BAT SURVEY

MAIN WORKSHOP

External Survey

- 3.1 The main workshop is a single-storey brick-built warehouse with a flat roof (see Photograph 1 and the front cover of this report). It has been extended to the northern elevation. The external brickwork is in good condition, with no missing bricks or damaged mortar. The wooden windows and doors are in good condition. These are flush with the brickwork, heavily cobwebbed and do not provide potential bat access points into the building or a suitable bat roosting cavity. The roof of the building is constructed of corrugated metal panels and roofing felt. The roof appears to be in good condition, although the view was limited. The edges of the roof are well-sealed, particularly on the corrugated pitched roof which has been sealed with mortar beneath the eaves, preventing any bat access opportunities.



Photograph 1 showing the brick built workshop

- 3.2 Wooden cladding exists on the upper part of the walls. The panels are in good condition, with only minimal areas of damage (see Photograph 2). No suitable bat roosting cavities were found behind any of the panels and they do not provide access into the internal space. The gap between the wooden panels and the brickwork has been sealed with wooden blocks.



Photograph 2 showing wooden cladding and minor damage

- 3.3 A bargeboard exists on the rear of the property and this is in poor condition (see Photograph 3). The bargeboard is flush with the brickwork. There is a chimney with wooden cladding on the exterior and this was weather damaged. No suitable bat roosting cavities were found behind the damaged panels or bargeboard and no access to the internal space was found. There are two metal shutters on the rear of the property. These are in good condition and flush with the brickwork.



Photograph 3 showing the bargeboard and chimney

Internal Survey

- 3.4 The internal space of the workshop is well-lit with a series of large well-sealed skylights. The metal support beams are in good condition and do not create any bat roosting opportunities. The room is open to the ceiling and there is no loft void (see Photograph 4). The ceiling is flush to the flat roof. The internal walls have been plastered and painted and are in good condition with no suitable bat roosting cavities.



Photograph 4 showing the main work space

- 3.5 A small section of the interior roof is visible in a storage room at the rear of the property. The roof is very cobwebbed and dusty (see Photograph 5). There is also an office space, a kitchen and toilet space. No evidence of bat activity could be found within any rooms in the main work shop.



Photograph 5 showing the internal roof and cobwebs

CAR REPAIR WORKSHOP

External Survey

- 3.6 The car repair workshop is constructed entirely from corrugated metal panels, with a pitched roof (see Photograph 6). The panels are all in good condition with no areas of damage. There are gaps along the ridge and edges of the roof as the corrugated sheets do not lie flush. However, it is unlikely these spaces would be used by bats as they have poor thermal qualities. The building is otherwise well-sealed.



Photograph 6 showing the car repair workshop

Internal Survey

- 3.7 The internal space is well-lit with a series of large well-sealed skylights. The roof has been lined with thin sheets of plastic, these are flush with the roofing material and do not offer any bat roosting opportunities. The internal walls similarly have been lined with wooden boards and these are in good condition and do not provide any suitable bat roosting cavities. The metal support beams are in good condition and do not create any roosting opportunities. The room is open to the ceiling and there is no loft void (see Photograph 7). No suitable bat roosting habitat, or evidence of bat activity was found within the car repair workshop.



Photograph 7 showing the internal space of the car garage

SHEDS

External Survey

- 3.8 There are six sheds on the site (see Photograph 8). These are all constructed from wood with asbestos cement and wooden roofs. The sheds are all reasonably well-sealed although there are access points for bats into some of the sheds. A sparse covering of Ivy *Hedera helix* has started to grow over one of the sheds. The Ivy does not provide suitable bat roosting habitat. Where wooden window frames exist, these are well-sealed.



Photograph 8 showing two of the sheds on site

Internal Survey

- 3.9 The internal spaces of all the sheds were accessible and are used for storage, or are disused (see Photograph 9). They are all draughty and dusty internally, and there is ivy growing internally in one shed. No suitable crevices for roosting bats were found within the sheds. No evidence of bat activity was found within the sheds.



Photograph 9 showing the internal space of one shed

STABLE BLOCK

External Survey

- 3.10 The stable block is constructed of wood with a corrugated sheet metal roof. It is currently in use. The external wooden panels are in good condition and flush with each other. The wooden stable doors are open and provide a potential access point for bats (see Photograph 10). The corrugated sheet metal roof is also in good condition with all of the panels complete and flush with each other.



Photograph 10 showing the stable

Internal Survey

- 3.11 The interior of the stables is dusty and heavily cobwebbed, with Ivy establishing in one stall (see Photograph 11). The internal wooden panels are in good condition and flush with each other. The wooden support beams are in good condition, and provide no suitable bat roosting features. No evidence of bat activity was found within the stables.



Photograph 11 showing the internal space of the stable

ECOLOGICAL SCOPING SURVEY

- 3.12 The buildings on site are surrounded by hardstanding.
- 3.13 Two paddocks of grazed species-poor grassland exist on the wider site (see Photograph 12). The grassland is dominated by Perennial Rye-Grass *Lolium perenne*, Yorkshire Fog *Holcus lanatus* and Meadow grasses *Poa* sp. There are also a small number of common herbs within the grassland including Broad-leaved Dock *Rumex obtusifolius*, Stinging Nettle *Urtica dioica* and Common Ragwort *Senecio jacobaea*. Ruderal vegetation has developed beneath the hedgerows and in parts of the grassland which are not grazed. This is dominated by Stinging Nettle, Broad-leaved Dock and Bramble *Rubus fruticosus* agg.



Photograph 12 showing the grassland on site

- 3.14 Species-poor hedgerows exist on the site boundary. They are mature and dominated by Hawthorn *Crataegus monogyna* with small amounts of Elder *Sambucus nigra* and Ivy *Hedera helix*. Scattered trees exist on site (see Photograph 13). They are all semi-mature Silver Birch *Betula pendula* trees.



Photograph 13 showing some of the trees on site

- 3.15 No evidence of protected species was located within the site. No Badger *Meles meles* sett is present on site and no evidence of Badger activity was found.
- 3.16 No waterbodies exist on site and no waterbodies could be located within 250 metres of the site. A small drainage ditch exists to the west of the site, which is shallow and fast-flowing and therefore, is not suitable habitat for Great Crested Newt. The site supports limited suitable terrestrial habitat for Great Crested Newt, within the hedgerow and tall ruderal vegetation. However, given the lack of breeding habitat in the locality, Great Crested Newt is not considered to be a constraint on development and is reasonable unlikely to occur on the site.
- 3.17 The trees were inspected from the ground and were found to not support suitable bat roosting features, such as cavities or limb damage. The trees have the potential to support nesting birds.
- 3.18 No statutory or non-statutory protected site exists on the site or immediately adjacent to the site. The nearest statutory protected site is Roe Park Woods Site of Special Scientific Interest (SSSI), which lies 2.5km away. The SSSI is protected for its woodland habitat. A large area of farmland and residential properties lie between the proposed development site and the designated site. The proposed development is unlikely to have a negative impact on the protected site at this distance.

4.0 SUMMARY AND RECOMMENDATIONS

- 4.1 No evidence of bat activity was located at the structures off Brook Street, Brown Lees, Staffordshire. The main buildings on site are generally in good condition and well maintained, with some areas of the buildings showing water damage. The sheds and stables are less well maintained. Internally the main workshops are well-sealed, bright, cold and dusty. The sheds and stable are heavily cobwebbed and dusty and cold. No roof voids exist within any of the buildings. No suitable bat roosting habitat was found within any of the buildings on site. Given the survey findings, it is considered that the buildings offer **negligible bat roost suitability**.
- 4.2 The trees on site are all semi-mature and do not support potential bat roosting features.
- 4.3 No evidence of other protected species was found on the site, and therefore no specific protected species or habitat mitigation is required. The trees, hedgerows and stables do offer bird nesting habitat. All bird species are protected whilst at the nest under The Wildlife & Countryside Act 1981 (as amended), therefore, it is recommended that any work to the trees takes place outside of the bird nesting season (the nesting season is generally March to August) or a bird nest check be undertaken prior to work commencing.
- 4.4 It is the opinion of the author of this report that the development can proceed without the need for further survey work (e.g. bat activity surveys) or bat mitigation due to the negligible potential of the structures to support bats. However, if the work is delayed by longer than two years from the date of this survey, a further bat survey will be required to update the findings.
- 4.5 It should be noted that bat absence is very difficult to prove definitively due to their mobility and size, and single or small numbers of bats are able to roost in extremely small spaces, such as in gaps between panels. Demolition should be undertaken with care.
- 4.6 **If during development works a bat (or an accumulation of bat droppings) is discovered at any time, work is to temporarily cease whilst an experienced bat ecologist is contacted for guidance and assistance.** This can be Rachel Hacking Ecology (0161 465 8971) who undertook the initial survey, any licensed bat worker, or the Bat Conservation Trust (BCT) helpline (0845 1300 228).

REFERENCES

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

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature.