



Preliminary Roost Assessment for Bats & Birds

Location: Well Street Mill, Leek Staffordshire

Author: Matthew James Haydock

Date: January 2018

Notice to Readers

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The results of the survey and assessment work undertaken by Absolute Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

Absolute Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

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Executive Summary

Absolute Ecology LLP was commissioned to undertake a Preliminary Roost Assessment for the bat roost potential at a site known as, Well Street Mill, Leek, Staffordshire, Grid reference: SJ 98912 56426. This report has been prepared with due consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012), BS 42020, and the Bat Conservation Trust Best Practice 2016.

The proposed works do not involve loss of any bat foraging habitat; therefore, no habitat mitigation measures are required, although the planting of wildlife-attracting plants around the site would serve to enhance the site for bats in future.

The redundant mill was considered to have moderate potential to support roosting bats due to bat roosting opportunities that were evident during the survey particularly, between the roofing tiles and plaster board/felt, and some crevices within the brick work which, could not be competently investigated therefore the inspection cannot confidently rule out roosting bats.

it is therefore recommended further surveys are required in order to confirm likely absence.

1. A bat activity surveys to be conducted in the form of a single dusk emergence and a single re-entry, these should be carried out between May to September.
2. Bird Enhancements should be put in place (please See 5.2 Mitigation Measures).

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Appendix 1 Pre-Survey Data Search

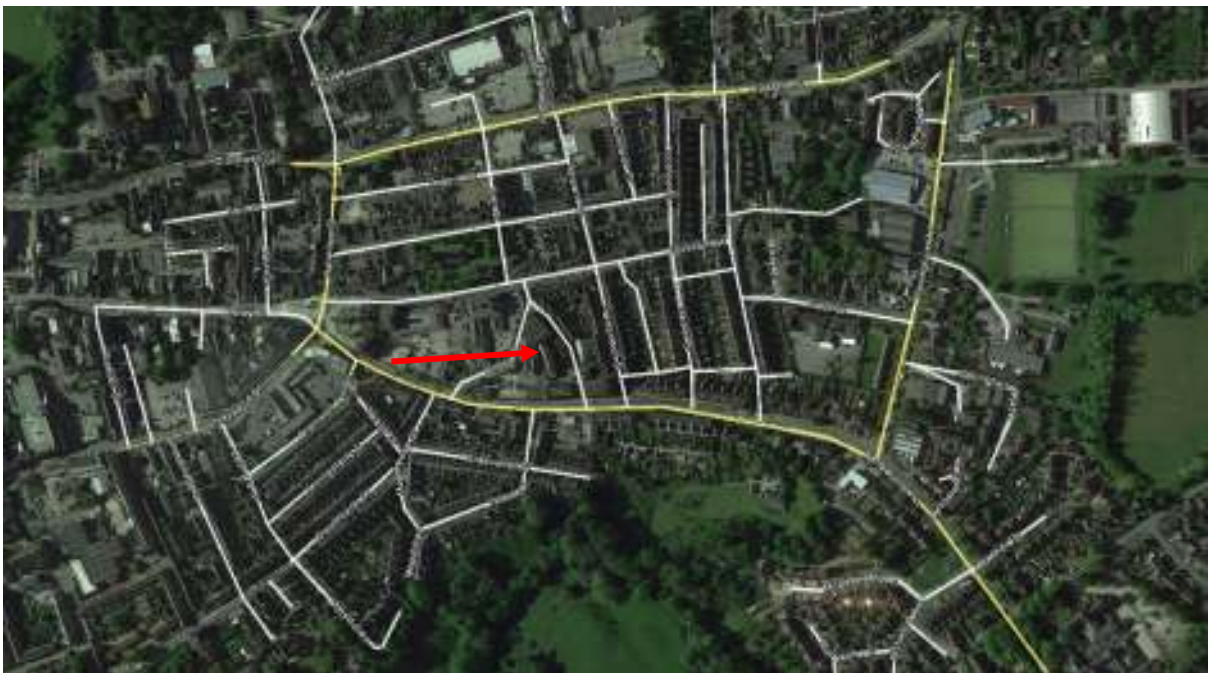
1. Introduction

1.1. Site Description

Absolute Ecology LLP was commissioned to undertake a Preliminary Roost Assessment for the bat roost potential at a site known as Well Street Mill, Leek, Staffordshire, Grid reference: SJ 98912 56426.

The land at Well Street Mill is primarily hard standing with little vegetation on site.

Figure 1: Showing the Mill location indicated by red arrow



1.2. Proposed Works

It is intended that the client will redevelop the building to create, apartments.

1.3. Best Practice Guidance

The scope of this appraisal has been determined in line with the proportional approach to ecological survey, assessment and subsequent recommendations for avoidance and mitigation of impacts, which is encouraged in the emerging 'BS 42020: Biodiversity – Code of practice for planning and development'. This report has been prepared with due consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012)¹, the emerging BS 42020 and the Bat Conservation Trust Best Practice 2016.

1.4. Aims of the Survey

1.3.1 The aims of the Preliminary Roost Assessment is to provide an ecological evaluation of the following species within the proposed application area:

Bats
<ul style="list-style-type: none"> • Probability of bats and their roost sites being present at the proposed re/development site.
<ul style="list-style-type: none"> • To assess the roost status.
<ul style="list-style-type: none"> • To assess suitable food resources and habitat requirements.
<ul style="list-style-type: none"> • If a roost site is found, to provide an impact assessment.

Table 1. Aims of survey in relation to bats.

1.3.2 A bat roost is interpreted as ‘any structure or place, which any wild bat uses for shelter or protection’. Bats tend to show a high fidelity to roosts. Subsequently, legal opinion regards a roost to be protected whether or not the bats are present at the time. There are many types of roost used by temperate bats during their annual cycle: Any structures found having evidence of bats will be further evaluated to assess which of the following roost categories may be present onsite (if any):

Status	Description
Maternity / Nursery Roost	<i>used by breeding bats, where pups are born and raised to independence (Anecdotal evidence may support this prospect despite sub-optimal survey period).</i>
Hibernation Site	<i>where bats may be found during the winter. (This is assessed within the context of this report).</i>
Daytime Summer Roost	<i>used by males and/or non-breeding females (Seasonal limitations prevent robust analysis of this).</i>
Night Roost	<i>where bats rest between feeding bouts during the night but are rarely present during the day.</i>
Feeding Roost	<i>where bats temporarily utilize feeding perches and stations to eat an item of prey.</i>
Transitional (or Swarming) Site	<i>where bats may be present during the spring or autumn (This can not be assessed within the context of this report).</i>

Table 2. Bat roost status definitions

Birds
<ul style="list-style-type: none"> • Establish if birds are using the site.
<ul style="list-style-type: none"> • Locate nest sites, if present.
<ul style="list-style-type: none"> • Assess what types of activities were shown within the redevelopment site.
<ul style="list-style-type: none"> • Assess suitable food resources and habitat requirements.

- | |
|---|
| <ul style="list-style-type: none"> • Provide an impact assessment, if nests are found. |
|---|

Table 3. Aims of survey in relation to birds.

Barn Owl (<i>Tyto alba</i>)
<ul style="list-style-type: none"> • Establish presence onsite.
<ul style="list-style-type: none"> • Establish potential nest sites (PNS).
<ul style="list-style-type: none"> • Locate any active roost sites (ARS).
<ul style="list-style-type: none"> • Locate any temporary roost sites (TRS)
<ul style="list-style-type: none"> • Assess potential feeding and dispersal habitats (PFH)
<ul style="list-style-type: none"> • Provide an impact assessment, should barn owl(s) be present

Table 4. Aims of survey in relation to Barn Owl.

1.3.2 Assessment also considers potential effects on valued ecological receptors (VERs) and zones of influence (Zoi) during pre and post development, both onsite and off- site. The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. Should a likely significance of negative impacts be identified, further surveys, mitigation and enhancement measures will then be determined accordingly; to prevent, offset or reduce the degree of impact that may occur should development commence.

1.3.3 Should bats be present or evidence of bats identified onsite or that constraints are identified during the Preliminary Roost Assessment, then further survey would be required, if bat are identified then a European Protected Species (EPS) development license issued by Natural England (NE) may be required prior to any works taking place. If required, further presence/absence survey should be undertaken, and a mitigation strategy be implemented with Natural England and the Local Planning Authority. Should no further surveying effort be considered, then the report will include full justification and evaluation.

2. Methods

2.1. Summary of Survey Methods

All bat species resident in the UK have been recorded using trees, buildings and built structures, e.g. bridges, at some time during the year (Bat Conservation Trust, 2016 3rd edition). The buildings were inspected externally and internally, where access was available, for signs of bat activity. These typically include bat presence, droppings, feeding remains, urine stains and grease marks. Notes were made on the following in accordance with the guidelines published by the BCT (2016 3rd edition) for the surveying of buildings and built structures:

- Type and age of building
- Type of construction
- Presence of potential roost features, e.g. hanging tiles, raised tiles, roof voids
- Information or evidence of work having been undertaken that could affect use of the structure by bats
- Amount and location of evidence of bats such as presence of live or dead bats, droppings, grease marks, urine stains, characteristic smell of bats.

In the absence of any evidence, trees and structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience. For example, a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential. Conversely, a pre-20th-century or early 20th-century building with many features suitable for use by bats close to good foraging habitat would have high potential.

Survey methodology also utilized a number of passive monitoring techniques including an infra-red night-vision camera (XLT Bushnell Trophy Cam™: USA) to qualitatively record any evidence of bat activity inside the building during surveying periods. Further equipment included a NVMT-12x24 night vision scope (Yukon: USA), a SeeSnake 2 video endoscope, a GPS eTrex Venture HC, a hand net and a CB2 Clubman Deluxe high-power lamp with filter.

2.2. Pre-Survey Data Search

Ecological data searches supplied by Staffordshire Ecological Records (SER) were acquired to establish whether any notable protected bat species have been recorded within a 2-km radius of the proposed development area. Furthermore, a desktop study of the area using online resources

was undertaken independently to corroborate the current overview of the site and its importance in the landscape. A number of electronic sources were consulted, including www.magic.gov.uk, www.naturalengland.org.uk and Google Earth.

2.3. Surveyor Information

Surveyor 1

Matthew Haydock – HND, ND, MCIEEM, Natural England Bat Survey Class Licence Registration Number: 2015-12430-CLS-CLS Survey Level 2 (CL18). Matthew is an ecologist with four years' experience of environmental consultancy work. He holds a HND in Environmental Management with distinction. Matthew is an experienced bat surveyor with competency in activity surveys, dawn and dusk bat roost assessments, daytime surveys for bat field signs, assessments of trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required. Matthew holds a Natural England and Countryside Council for Wales licence, since 1997, to disturb bats for the purposes of science and education or conservation and has held Development Licences to permit development works affecting bats. Matthew has been an active bat group worker with the Staffordshire Bat Group since 1997, conducting various surveys throughout Staffordshire and Derbyshire. He also works alongside the Bat Conservation Trust with various projects such as the National Bat Monitoring Project, and is now a corporate member of the Bat Conservation.

2.4 Field Surveys

2.4.1. Habitat Survey

The land itself was primarily hard standing with little in the way of flora, the site also provided no wildlife corridor such as hedgerows and tree lines.

2.4.2. Roost Surveys

Equipment used to aid the survey included low and high-powered torches, ladders, binoculars and an endoscope.

Equipment used to aid the survey included low- and high-powered torches, ladders, binoculars and an endoscope. A preliminary bat and bird roost assessment of the building was undertaken on 10th January 2018. Such scoping exercises can be undertaken throughout the year. Other than when assessing trees, environmental factors such as the weather do not have an impact upon the overall assessment survey results (see Table 5).

Table 5. Annual survey optimality for bats

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Inspection of hibernation roosts – semi-optimal survey period			Limited activity – sub-optimal for surveys	Summer roost emergence & re-entry surveys – optimal survey period					Limited activity – sub-optimal survey period	Inspection of hibernation roosts – semi-optimal survey period	
Internal roost surveys are possible/trees are best surveyed during winter											

The survey focused predominantly on the mill which is to be converted, the building on site was assessed during a less than optimal survey period, The inspection incorporated a visual assessment with the use of binoculars, torch, endoscope and ladders in full daylight to ascertain the following:

The internal & external inspection incorporated visual assessment with the use of torch, endoscope and ladders to undertake the following:

- To locate any potential roost/nest sites
- To listen for any bats and birds
- To examine floors, walls and structural elements for anecdotal evidence, i.e. droppings, urine stains, corpses and feeding remains.

3. Results

3.1. Pre-Survey Data Search

3.1.1. Designated Sites

Lady Dale is approximately 250 metres to the south which is a mixed grassland, woodland and wetland habitat with Billington Wood 667 metres to the south of the mill

3.1.2. Protected Species.

Seven British bat species are currently given UK BAP (2007) Priority Species Status: Eleven of the seventeen resident UK bat species occur in Staffordshire. Staffordshire Ecological Records show three UK BAP species being recorded within 2km of the proposed application area.

UKBAP	Common name	Species	2 Km
<input checked="" type="checkbox"/>	Brown long-eared bat	<i>Plecotus auritus</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Barbastelle bat	<i>Barbastella barbastellus</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Bechstein's bat	<i>Myotis bechsteinii</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Noctule	<i>Nyctalus noctula</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	<input checked="" type="checkbox"/>

UKBAP	Common name	Species	2 Km
<input checked="" type="checkbox"/>	Natterer's bat	<i>Myotis Nattereri</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Daubenton's bat	<i>Myotis daubentonii</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Whiskered/ brandt bat	<i>Myotis mystacinus/brandtii</i>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	<input checked="" type="checkbox"/>

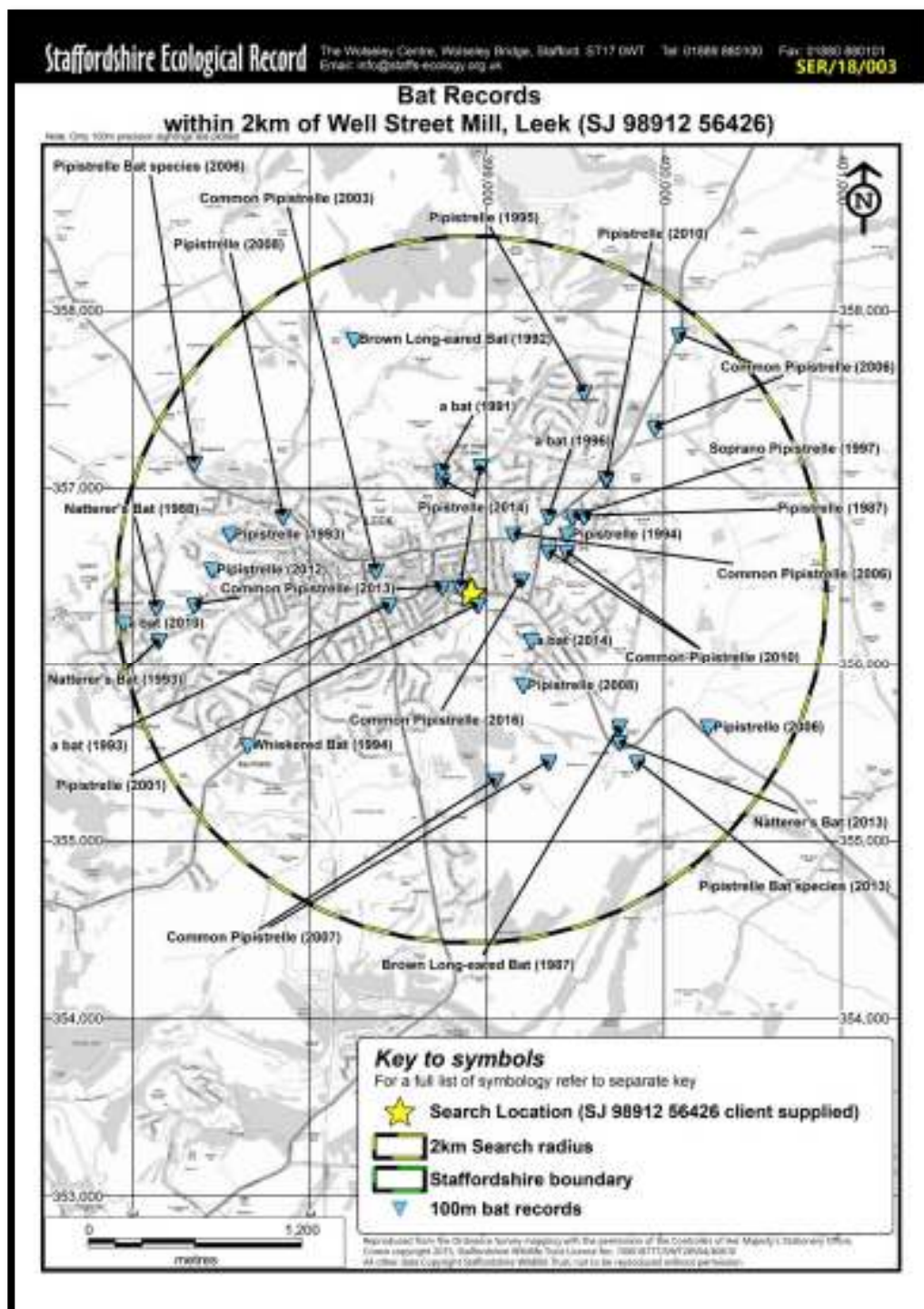


Figure 2: Showing Records of Known Bat Activity such a roost location.

Non UKBAP Bat species recorded within Staffordshire.

Staffordshire Ecological Records show no records of Barn Owl within a 2km radius of the application area.

3.2. Field Surveys

3.2.1. Habitat Description

The mill is a large three storeys with ground floor, which brick structured building with pitched and clad in tiles with a hard-standing car park. The mill is situated close to the town of leek. The area around the mill consists of residential and commercial properties

3.2.2. Roost Surveys

Building	Description	Evidence found or potential for bats
B1 External	<p>The redundant mill is a rectangle building at the front of mill Street with three floors and ground floor. The mill is constructed with brick, with some sections of sandstone, which was found to be in good condition with little or no cracks or crevices suitable for bats. The roofing of the building consists of a hipped roof with two gable ends which are aligned north to south with approx. measurement of 23 meters' length and 8 meters' width. The roofing tiles were possible investigated by ground observation using binoculars to identify raised or dislodged tiles, it was found that roofing showed a number of raised tiles which could possibly provide access points for bats to enter the interior of the building.</p> <p>All the door and window were tightly fitted preventing any potential access.</p>	<p>No evidence of bats found, although access for inspection is limited due to the structure of the roof. The building is assessed to have moderate potential for roosting bats.</p>
B1 Internal	<p>The internal inspection identified a single roof void which has been petitioned of creating two roof void spaces both were found to be dark and clean with a approx. 2 meters from the floor to the roof and the length of each void 11.5-meter approx. which provided potential pre-flight emergence opportunities, the voids did show some potential crevices</p>	<p>No evidence of bats found, although access for inspection is limited due to the structure of the roof e.g. roofing felt. The building is assessed to have moderate potential for roosting bats.</p>

	<p>for bats these were inspected were possible,</p> <p>The roofing was of rafters and purling with the roof voids being internal roofing felt which prevented a full inspection, the roof ridges were moderately covered in cobwebs and dust. The inspection also looked at the floors and wall for bat activity no evidence was found though due to some repair work disturbance has occurred which may have removed evidence of bats.</p>	
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Plate 1: Showing external view of B1 outlined red



Plate 2:
Showing
internal view
of roof void.



Plate 3: Showing potential roosting opportunity within the brick work

Building	Description	Evidence found or potential for bats
<p>B2 External</p>	<p>Immediately adjacent to B1 which also interlinks redundant mill is also a rectangle building at the front of mill. Building B2 is constructed with brick, with some sections of sandstone coping stones, which was found to be in good condition with little or no cracks or crevices suitable for bats. The roofing of the building consists of a slanted hipped roof with two gable ends which are aligned north to south with approx. measurement of 20 meters' length and 8 meters' width. The roofing tiles were investigated by ground observation using binoculars to identify raised or dislodged tiles, and B1 side stairs also provided a close visual of the tiles, it was found that roofing showed a number of raised tiles which could possibly provide access points for bats to enter the interior of the building also some areas of the building had drop down tiles again also showing potential crevices for bats.</p> <p>All the door and window were tightly fitted preventing any potential access.</p>	<p>No evidence of bats found, although access for inspection is limited due to the structure of the roof. The building is assessed to have moderate potential for roosting bats.</p>
<p>B1 Internal</p>	<p>The interior did have a roof void, but this has been converted, showing false ceiling, which bats could harbour behind and sky lights were also noticeable, though the floors and walls were still inspected, and no evidence of bats were identified. No further inspection was made due to the constraint identified.</p>	<p>No evidence of bats found, although access for inspection is limited due to the structure of the roof e.g. false ceiling. The building is assessed to have moderate potential for roosting bats.</p>



Plate 4: Showing building B2



Plate 5: Showing drop down tiles which potential could provide crevices for bats to climb under.



Plate 6: Showing potential access points with regards to raised tiles.



Plate 7: Showing false ceiling within B2 preventing a full inspection.

Building	Description	Evidence found or potential for bats
B3 External	<p>Attached to the ground floor of the mill (B1) is a modern building which is made up of brick which was found to be of fairly good condition, the roofing which is tiled was of a hipped design the roofing was inspected from ground level and use of ladders it was found that some of the tiles were raised or dislodged but also some flashing area was also raised both providing potential access for bats.</p> <p>The soffit area also showed some crevasses that bats could use as potential egress points for emergence and re-entry if present but also showed potential for nesting birds too.</p>	<p>No evidence of bats found, although access for inspection is limited due to the structure of the roof. The building is assessed to have moderate potential for roosting bats.</p>
B3 Internal	<p>The interior did have a roof void, but this has been converted, showing false ceiling, which bats could harbour behind and sky lights were also noticeable, though the floors and walls were still inspected, and no evidence of bats were identified. No further inspection was made due to the constraint identified.</p>	<p>No evidence of bats found, although access for inspection is limited due to the structure of the roof e.g. false ceiling. The building is assessed to have moderate potential for roosting bats.</p>



Plate 8: Showing building B3



Plate 8; Showing raised, missing tiles and raised flashing potential bat and bird access.



Plate 9: Showing internal roof void which shows boarded ceiling preventing full inspection.

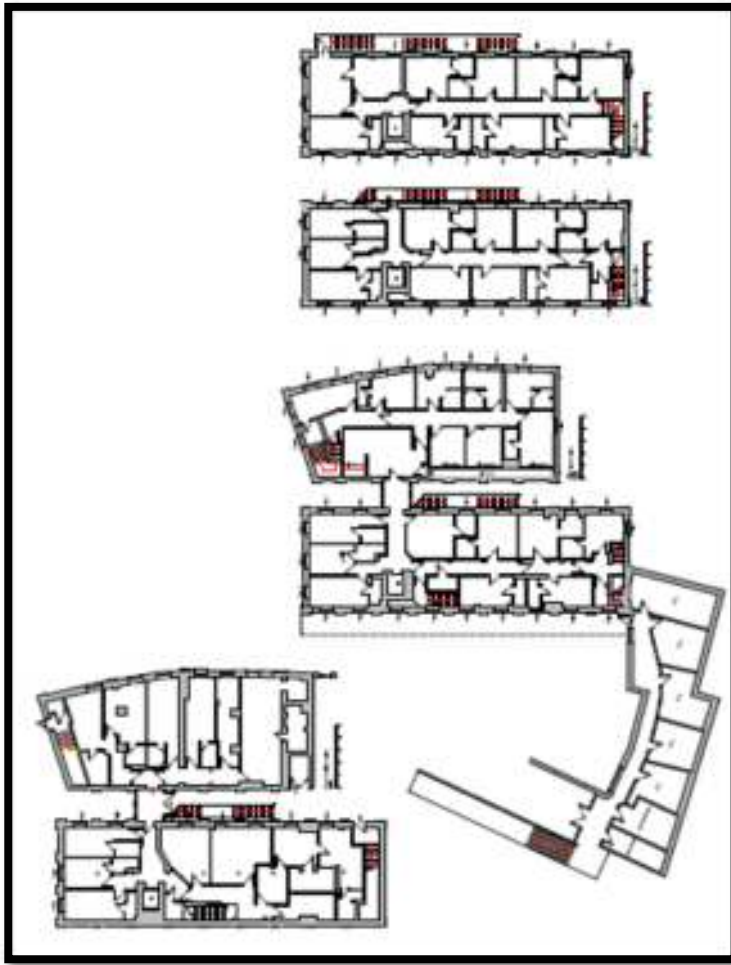


Figure 3: Showing the existing mill layout

4. Assessment

4.1. Constraints on Survey Information

The Inspection was conducted during the season when most bats are in hibernation, so no emergence or dawn activity surveys was conducted. Some areas of the building could not be inspected such as, between the roofing tiles and boarding, roofing felt and some of the brick work which provided deep cavities.

4.2. Constraints on Equipment Used

No Constraints Identified.

4.3. Potential Impacts of Development

4.3.1. Designated Sites

Given the physical distance to the wildlife sites coupled with the site being within a town setting it is unlikely that any re/development would have any impact on the identified habitats.

4.3.2. Roosts

The inspection of Well Street mill (B1, B2 & B3) showed potential roosting opportunities within the building particularly within the roof voids.

4.3.3. Foraging and Commuting Habitat

The site provided limiting linear features such as hedgerows, tree lines or further wildlife corridors there for the impact on foraging and commuting is regarded low.

4.4. Legislation and Policy Guidance

Unlike many smaller mammals, bats have low fecundity with a long and complex life cycle, which is played out over a large spatial landscape. Bats show a strong fidelity to different types of roosts throughout their annual cycle i.e. hibernacula, maternity, bachelor, satellite roosts and feeding perches. Linear features within the landscape such as hedgerows and tree lines are often used by bats for commuting, predator avoidance and foraging. Bats are highly social animals and loss of a single habitat alone can have a serious impact on populations. The status of many bat populations is tentative, being based on relatively few records and are highly susceptible to habitat loss and fragmentation. As such bats are given protected consideration within the following legislation and policy guidelines:

Policy guidelines

PAS 2010	The published 'PAS 2010' 'Planning to halt the loss of biodiversity' which is the government's new policy aimed at all authorities and developers involved in the planning process in the UK to halt biodiversity decline by 2010 and deliver net biodiversity gains as part of the green infrastructure provisions.
National Planning Policy Framework, Section 11:	The recently published framework in 2012, replaces the previous Planning Policy Statement 9. Section 11: Conserving and enhancing the natural environment, reaffirms the Governments commitment to maintaining green belt protections and preventing urban sprawl, retains the protection of designated sites and preserves wildlife, aims to improve the quality of the natural environment, and halt declines in species and habitats, protects and enhances biodiversity and promotes wildlife corridors.
Article 10 of the EC Habitats Directive:	The published Article requires government to develop features such as 'stepping stones' on the landscape, such as clusters of ponds, tracts of rough grassland or scrubland and vegetated railway line embankments.
Wildlife and Countryside Act 1981:	All species of bat are fully protected under the Wildlife and Countryside Act 1981, the European Conservation (Natural Habitats etc.) Regulations 1994, and the Countryside and Rights of Way Act 2000. This legislation makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.
Conservation of Habitats and Species Regulations (2010)	The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is an offence to possess, sell or offer, or transport for sale any European species of bat or any part derived from such a species. These Regulations also remove the 'incidental result defence'. In other words, it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity. Natural England can grant European Protected Species (EPS) licences in respect of development to permit activities that would otherwise be unlawful.

<p>Natural Environment and Rural Communities Act (2006)</p>	<p>Under Section 40 of the Natural Environment and Rural Communities Act (2006), public bodies, including Local and Regional Planning Authorities, have a duty to 'have regard' to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England. This is known as The England Biodiversity List, all of which make up the UK BAP Priority Species. Regional Planning Bodies and Local Planning Authorities will use it to identify the species that should be afforded priority to maintain, restore and enhance species and habitats.</p>
<p>Bird legislation</p>	<p>Most resident nesting birds are protected under the Wildlife and Countryside Act 1981, which protects birds, nests, eggs and nestling's. Some rarer species, such as barn owls, are afforded extra protection.</p>

Please note: If bat species are present at the site, the purpose of this report will only summarize the potential requirements for a bat mitigation package or project. A separate mitigation report or project will include the necessary compensation measures to maintain the conservation status of a European Protected Species.

5. Recommendations and Mitigation

5.1. Further Surveys

Given the inspection constraints that were identified within buildings B1, B2 & B3, it is recommended that further surveys on Wall Street Mill should be conducted in the form of single dusk emergence and a single dawn re-entry surveys to be undertaken in accordance with the Bat Conservation Trust guidelines (BCT, 2016) 3rd Edition, the surveys should be conducted between May and September with a month between each survey.

5.2. Mitigation Measures

5.2.1. Proposed Biodiversity Enhancement



Bird Nests

Similar to bats, bird habitats, including nesting and roosting sites, are diminishing or have disappeared altogether due to changes in the landscape, environment and building techniques. Consequently, the provision of boxes for birds will provide supplemental nesting sites that are relatively safe from predators, close to feeding areas, and give essential winter protection for roosting birds. A range of designs are available to suit most species, including garden species, birds of prey and colonial nesting species, for trees and buildings. Colonial nesting species such as House Sparrows, which are currently facing a dramatic decline, suffer from a lack of suitable buildings in which to nest. Molded woodcrete boxes can be used to form a network of contiguous boxes favored by the species. Additionally, nesting baskets can be used to encourage birds of prey to areas where they have not previously nested. Health risks from breeding birds generally relate to Feral Pigeons/Starlings and require direct contact with nesting material, dried faeces,

etc. within confined spaces. Consequently, the public health risk relating to encouraging nesting birds on the redeveloped barn is considered to be negligible.

- The Sparrow terrace nest boxes and the 1B Schwegler nest boxes will be positioned on the existing mill.
- All the bird boxes will be positioned at least 4 metres high, or more.

Table 2 Bird box to be incorporated into the Mill

Bird Boxes	Type & Quantity	Information
	<p>2 x Sparrow Terrace</p>	<p>The Sparrow Terrace will attract Sparrows but also tits and redstarts.</p>
	<p>2 x 1B Schwegler nest boxes</p>	<p>The 1B nest box will attract a wide range of species</p>

6. Summary

The buildings are situated close to the town of leek. The area around the mill consists of residential and commercial properties the Mill provided potential access points for bat to gain access to the interior of the building through raised tiles.

During the daytime inspection for potential for bats and nesting birds, the inspection had various constraints with the daytime inspection such as inspecting crevices between the roofing tiles and plaster boarding, the investigation identified that the building provided moderate to potential to support bats by the amount of roosting opportunities therefore to conform to the existing laws and legislation and to follow best practice methodology, it is recommended that further surveys should be conducted to identify if the redevelopment of Well Street Mill will have any detrimental impact on European Protected Species in this case bats.

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Appendix 1 Pre-Survey Data Search

Myotis mystacinus	Whiskered Bat	mammal - bat	Barnfields Ind.Estate
Myotis nattereri	Natterer's Bat	mammal - bat	Westwood Park Drive
Myotis nattereri	Natterer's Bat	mammal - bat	Edgehill Road*
Myotis nattereri	Natterer's Bat	mammal - bat	Spinney off Edgehill Road
Myotis nattereri	Natterer's Bat	mammal - bat	drive, Lowe Hill
Pipistrellus	Pipistrelle Bat species	mammal - bat	Leek
Pipistrellus	Pipistrelle Bat species	mammal - bat	ST13 7LY
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	Westwood Road
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	Westwood Road
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	Bird in Hand Pub, Leek
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	hotel, Leek
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	hotel, Leek
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	Lights in Leek
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	Leek Cemetery
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	school
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	school, Leek
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	A53 Leek
Pipistrellus pipistrellus	Common Pipistrelle	mammal - bat	A53, nr. Solomon's Hollow
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Leek
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Hillswood Avenue*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Westwood Road
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Belle Vue*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Leek
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	London Street
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Milltown Way*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Deebank Avenue*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Deebank Avenue*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Buxton Road*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Deebank Avenue*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Buxton Road*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Buxton Road*
Pipistrellus pipistrellus s.l.	Pipistrelle	mammal - bat	Lowe Hill
Pipistrellus pygmaeus	Soprano Pipistrelle	mammal - bat	Buxton Road*
Plecotus auritus	Brown Long-eared Bat	mammal - bat	tunnel, Rudyard track, North Street
Plecotus auritus	Brown Long-eared Bat	mammal - bat	Abbey Farm
Plecotus auritus	Brown Long-eared Bat	mammal - bat	Leek Road
Plecotus auritus	Brown Long-eared Bat	mammal - bat	Lowe Hill

Preliminary Roost Assessment