

08 March 2021

Catherine O'Toole
Senior Planner
Pegasus Group

Dear Catherine,

Preliminary Roost Assessment – Store Building at the Boat Inn, Bashford Bridge Lane, Staffordshire, ST13 7EQ

I am writing to provide you with a short, written report of my survey findings at the above site on 4 March 2021. The site is centred on Ordnance Survey grid reference SJ 981520. I am a licensed bat surveyor (Natural England licence: 2020-50481-CLS-CLS). I used the following equipment during the survey: telescopic ladder, high-powered torch with red filter, binoculars and collecting pots for droppings.

Access to the entire site was made available and no significant survey limitations were encountered. Weather conditions on the date of survey were mild (11°C), dry and still.

I understand the development proposals are for the demolition of the store building at Boat Inn. Focus Environmental Consultants have had access to the following plans provided by the client: '15285 – Boat Inn, Leek – Planning – Elevations revA', '15285 – Boat Inn, Leek – Planning – Site Plan revA'.

Legislation:

Bats are a European Protected Species (EPS), and are listed in Annex IV of the EC Habitats Directive 1992, which affords strict protection to bats and their roosts. Actions and activities that are prohibited are:

- deliberate capture, injury or killing of a bat;
- deliberate disturbance of a bat and in particular disturbance which is likely to; impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young, or
 - to hibernate or migrate; or

- to affect significantly the local distribution of abundance of the species to which they belong.
- damage or destruction of a breeding site or resting place (even unoccupied); and
- possessing, controlling, transporting, selling or exchanging, or offering for sale or exchange, any bat or any part of a bat or anything derived from one.

Results:

Area / Feature	Observations
Store building at Boat Inn	<u>External Description:</u> The store building at the Boat Inn is a single-storey, detached building located directly adjacent to the Caldon Canal. The property has mortared stone walls with a pitched, interlocking clay tile roof. Half of the building is fitted out with a kitchen and used as a café while the half closest to the canal is used for storage. Although the stone forming the walls of the building is single skinned it is over 60cm thick in width and estimated to be at least 150 years old (client communication). Brickwork around the building is in a declining state, especially on the north and east elevations. Many gaps are present with missing mortar between stones, as well as gaps from missing and cracked stones. On the east elevation large cracks run down through the stone creating a substantial crevice which leads deep into the stone wall (Plate 7). Although some of these crevices were inspected and provided no signs of bat roosting activity, due to the store building being located on a bank directly adjacent to the canal any cracks above 1.5m could not be inspected and are simultaneously the most likely to contain roosting bats. On the northern elevation, the brickwork is slightly less cracked. However, some major gaps lie towards the eastern gable-end which are very suitable for crevice-dwelling bats (Plate 6). Again, these could not be fully inspected due to the steep slope and height of the crevice but are deemed as highly likely to support roosting bats. On the south and west elevations, the stone is in a slightly better condition with some ivy cladding on the southern gable end. Two potential crevices were identified which were inspected thoroughly from a ladder with one having bird nesting material inside and the other showing

	no signs of bat roosting activity. On the western elevation most cracks within the stone were minor with no bat roosting potential. However, the cracks were larger nearer to the wall top and a handful of cracks suitable for roosting bats were recorded on this elevation. One in-tact window is present on the southern elevation, as well as two windows boarded up with wooden panels. While the in-tact window provides no potential for roosting bats, the boarding around the other two does have some minor gaps either side which could be suitable for crevice-dwelling bat species. These were fully inspected, and no signs of roosting bat activity were identified. Additionally, one window is present on the eastern elevation of the building, facing the canal. Although this has been boarded up the boarding is peeling away from the frame, allowing bats direct access inside the building. One chimney stack is present towards the northern end of the building, the brickwork is in good condition and although some of the lead flashing is lifted, it provides no crevices suitable for roosting bats. No signs of roosting bats were recorded in association with the chimney stack. No soffit boards are present at the property meaning that there are some gaps between the wall top and the tiles leading into the building on both the east and west elevations. On the north and south elevations some of the mortar sealing the gap between the tiles and the wall top is missing leaving significant gaps suitable for both crevice-dwelling bats and void-dwelling bats accessing the inside of the building. Furthermore, on the northern elevation there are some gaps between the wooden beams holding up the lean-to and the walls of the building which are suitable for roosting bats. These were fully inspected, and no signs of bat roosting activity was recorded. The slope tiles are significantly warped, leaving many gaps under tiles suitable for roosting bats – especially on the eastern side of the building which directly faces the canal. The ridge is also warped with lifted ridge tiles and missing verge mortar allowing bats access inside the store building.
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A mature oak tree (Tree 1) is present next to the building and the canal. Although the pruning wounds on the tree appear to have healed over, crevices may still be present around the edges which cannot be seen from ground level. Due to the presence of potential roosting features within the tree as well as its prime location alongside the water, this tree has been assessed as having a 'low' potential for roosting bats (with reference to Collins, 2019). Therefore, if this tree were to be removed or subject to significant arboricultural works then a precautionary approach, outlined below, should be followed.



Plate 1: Showing a typical view of the store building at the Boat Inn. Photograph looking West.



Plate 2: Showing a typical view of the store building at the Boat Inn. Photograph looking north-east.



Plate 3: Showing a typical view of the store building at Boat Inn.
Photograph looking south-east.



Plate 4: Photograph showing the lifted and warped slope and ridge tiles on the store building, Boat Inn.



Plate 5: Photograph showing the gaps between the tiles and the wall top on the southern gable end.



Plate 6: Photograph showing the large cracks within the brickwork on the north-east gable end.



Plate 7: Photograph showing the large crack on the eastern elevation of the building.



Plate 8: Photograph showing the mature oak tree along the eastern elevation of the building. Photograph facing north-west.



Plate 9: Photograph showing the depth of one of the cracks present on the eastern elevation.

Internal Description

The store building at the Boat Inn is split into multiple sections internally. The eastern side of the building is dilapidated inside and used for storage, with the south-east section having a stone floor and being open to the ridge with bitumen-lining under the tiles. This area is approximately 10m to the pitch. The north-east section is not open to the ridge and has a ceiling c. 2.5m in height. This area is more of a cellar, with a boarded window on the east elevation. The western area of the building, as well as the second-floor section of the northern area has been repurposed as a kitchen for a café. This area has a ceiling with an enclosed loft void where access was not available on the date of the survey.

The south-east section of the building is dark inside and accessed through a side door at the property. Internally, a breezeblock dividing wall is present just west of the ridge board which forms the kitchen wall on the other side. The room is open to the ridge (c. 10m high) which appears to be covered in a thick layer of cobwebs from ground level. Ivy is encroaching into the building from between the tiles and the wall top and many cracks and crevices are present within the internal brickwork which could provide roosting potential for crevice-dwelling bats. Some of these cracks were inspected from a ladder and no signs of bat roosting activity were found although multiple birds' nests were located within the cracks.

	Due to the small nature of the space and large number of cracks not all the cracks could be inspected. Additionally, the floor is covered in a thick layer of dust and debris meaning the search for signs of bats (e.g. droppings) was inhibited. The tiles are underlined with bitumastic-type lining which although appears old and fraying in places is mainly in good condition and tight beneath the tiles. Lots of entrances into the building are present between the tiles and wall top, within cracks in the brickwork and underneath lifted slope and ridge tiles. Towards the far end of the eastern section is an enclosed cellar-type room, with wooden boarding acting as a ceiling and wooden beam running from the ceiling to the floor. This area is very dark and cobwebbed with big cracks and crevices within the internal brickwork on all elevations. Some of these cracks were inspected with no signs of bat roosting activity found. However, due to the rugged nature of the floor and walls bat droppings could have easily been missed. An old window is present on the eastern elevation which has been boarded up with black wooden boarding. This boarding is coming away at the corners creating a gap where bats could enter the room or roost in between. The enclosed loft void above the southern section of the building could not be inspected as the loft hatch is currently sealed, with no access inside. It is expected that due to the multiple lifted slope tiles as well as gaps between the wall top and tiles seen externally that this area could be used by void-dwelling bats.
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Plate 10: Photograph showing the eastern section of the store building. Photograph facing north.



Plate 11: Photograph showing some of the cracks internally on the eastern elevation, including one containing bird nesting material.

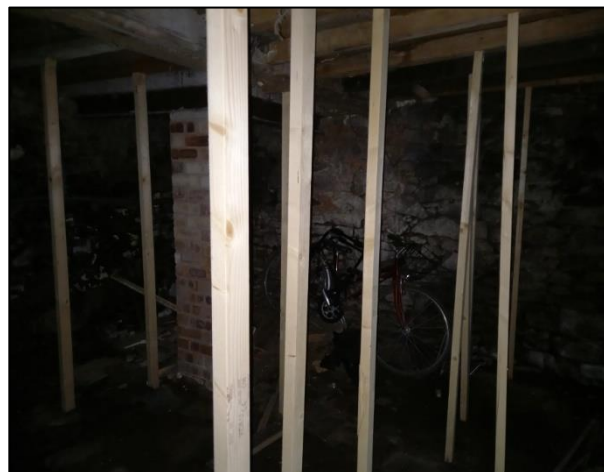


Plate 12: Photograph showing the far end of the eastern elevation with wooden ceiling and boards. Photograph facing north-west.



Plate 13: Photograph showing the light coming through the boarded window. Photograph facing north-east.



Plate 14: Photograph showing a typical view of the internal stone walls within the northern-most section of the building.

Foraging / Commuting Habitat Potential			
High quality semi-natural habitats	Within immediate vicinity (<250m)	Within wider landscape (<2km)	Comments
Broadleaved/mixed woodland Waterbodies Tree lines/stands Mature hedgerows	☒ ☒ ☒ ☒	☒ ☒ ☒ ☒	The store building at the Boat Inn is located directly next to the Caldon Canal and only 10m west from the River Churnet. Pockets of deciduous woodland are located directly south and west of the building providing optimal roosting, commuting, and foraging habitat for a wide range of bat species.
General Landscape Character	Rural		
Negative Characters		Positive Characters	
Highly urbanised environment ☐ Night lighting (significant) ☐ Isolated from high-value habitat ☐ Modern building construction ☐ Human disturbance (significant) ☐ High exposure (altitude, prevailing winds) ☐ Nearby buildings modern or isolated ☐		Rural environment ☒ Absence of night lighting ☒ Good connectivity to high-value habitat ☒ Building construction suitable for bats ☒ Absence/Minimal human disturbance ☐ Low exposure (altitude, prevailing winds) ☐ Cluster of suitable old buildings ☒	
Other ☐ specify		Other ☐ specify	
Conclusion: (Collins 2016)	High - Continuous, high-quality habitat that is well connected to wider landscape, that is likely to be used regularly by commuting/foraging bats.		

Conclusion:

Conclusion – Building Suitability for Bats (see Collins 2016)	
Store building at the Boat Inn	Moderate - A structure with one or more potential roost sites that could be used by bats on a regular basis.

The store building at the Boat Inn has multiple features suitable for roosting bats – both void-dwelling (e.g. brown long-eared) and crevice-dwelling species (e.g. common and soprano pipistrelle). The gaps under slope and ridge tiles, as well as between the tiles and the wall top provide good access into the building for void-dwelling bats. Additionally, the old stone walls in declining condition provide numerous of cracks and crevices suitable for crevice-dwelling bats. Although no signs of bat roosting activity were recorded, the rugged nature of the floor means these could easily have been hidden and therefore missed. Furthermore, the recent pruning of ivy from around the building means bat droppings could have been displaced during the works. The location of the store building directly adjacent to the canal, close to the River Churnet and surrounded by deciduous woodland and mature trees makes it prime habitat for a wide range of bat species. Multiple bats have been recorded foraging and commuting over

the canal and around the pub buildings (client communication). Therefore, the store building at the Boat Inn is considered to have 'moderate' potential for roosting bats (with reference to Collins, 2016). Therefore, further specialist bat surveys will be required in order to confirm the presence/absence of roosting bats within the building.

Recommendations:

The following recommendations are made to ensure compliance with wildlife legislation, government guidance and best practice.

1. The survey evidence to date indicates that the Store Building at Boat Inn has **Moderate potential** to support roosting bats.

No works should be undertaken which damage, block or otherwise alter the structure or risk disturbing, killing or injuring bats until additional survey work has been completed (see below).

2. Due to the strict protection afforded to bats and their roosts, further survey work will be required to satisfactorily confirm presence/absence of roosting bats at the Store Building at Boat Inn and if present, the species, level of activity and roost characterisation. Surveys should include a minimum of two dusk emergence or dawn return surveys completed by at least three experienced bat surveyors. Further surveys may be required if the results of the initial surveys are ambiguous. The surveys should be completed during May-September, with at least one of the surveys undertaken during the optimal bat survey season (May-August), and should be spaced a minimum of two weeks apart.
3. Where removal is required, the oak tree (Tree 1) adjacent to the building must be soft felled (e.g. cutting the tree in sections, and gently lowering the sections to the ground). The cut sections should be examined immediately prior to removal. If cavities are evident in the trunk or elsewhere, it is important that these are brought down intact (rather than sawn through).
4. Where required to facilitate permitted development, removal of any potential bird nesting habitat should be undertaken outside the bird nesting season (March – August

inclusive) or otherwise under the direct supervision of a suitably qualified ecologist who will be able to identify nesting birds and advise of appropriate safe working distances.

5. This report is valid for 12 months. Should any development commence after this time has elapsed an update survey will be required to determine the status of the site during the intervening period.

I trust the above information is clear and satisfactory to requirements. Please do not hesitate to contact me should you require any additional information or clarification.

Kind regards

Lucy Moorhouse
Assistant Ecologist

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QUALIFICATIONS & EXPERIENCE

Focus Environmental Consultants® has the expertise to provide sure-fire environmental solutions to a wide range of projects. The company ethos forges the highest standards of professional scientific practice with a best value approach for our clients. Our core area of expertise is in the production of specialist environmental reports and advice to support planning applications. Our comprehensive services include Preliminary Ecological Appraisals (PEA), Ecological Impact Assessment (EclA), Habitat Regulations Assessment (HRA) and fulfilling protected species surveys, licensing and mitigation requirements. Focus Environmental Consultants is a CIEEM Registered Practice, with all ecological staff being members of this professional body. Our flexible approach, range of skills and broad project experience from major infrastructure contracts to small private developments allows us to adapt to your individual requirements. As well as offering a full suite of ecological services, Focus Environmental Consultants can provide expert arboricultural advice and reports and is building an enviable reputation for innovative habitat creation and management solutions. Focus Environmental Consultants is situated in Worcestershire, providing a convenient and central UK location.

Lucy Moorhouse BSc (Hons)

Lucy joined Focus Environmental Consultants in 2020 as an Assistant Ecologist to support the ecology team with protected species surveys, translocations and supervision. Prior to joining the company, Lucy has worked as a seasonal surveyor for multiple small ecological consultancies in the north-west. Lucy holds a BSc (Hons) degree in Wildlife and Practical Conservation from the University of Salford. Her ecological experience includes assisting with Preliminary Ecological Appraisals and surveying for notable and European Protected Species including bats and great crested newts. Lucy holds a Natural England bat class survey licence and is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

This report has been checked for quality and content by:

Fern Fellowes-Day BSc (Hons) MSc MCIEEM MRSB

Fern has over sixteen years of professional experience in the ecological consultancy field. She holds BSc (Hons) in Zoology from the University of Wales, Aberystwyth and MSc in Habitat Creation and Management from Staffordshire University. Fern has considerable experience in conducting Preliminary Ecological Appraisals and Ecological Impact Assessments (EclA). Fern's particular expertise is with protected species surveys, she has extensive knowledge in dealing with the badgers, with practical experience in artificial sett design and creation and has held numerous Natural England licences to close or disturb badger setts. In addition, Fern holds survey licences for great crested newts, bats and white-clawed crayfish. Fern has held Natural England Mitigation (development) licences for great crested newts (including being a Registered Consultant for the new Great Crested Newt Low Impact Class Licence) and Conservation licences for white-clawed crayfish. She is particularly experienced in dealing with newt issues affecting the quarrying, mineral extraction and landfill industry.