

Brooks Ecological
Grounded advice

Bat Roost Suitability Assessment

Elsecar Heritage Centre

Barnsley Metropolitan Borough Council

Report Reference: ER-5592-01

21/06/2021

Report Title:	Bat Roost Suitability Assessment Elsecar Heritage Centre
Report Reference:	ER-5592-01
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Summary Statement

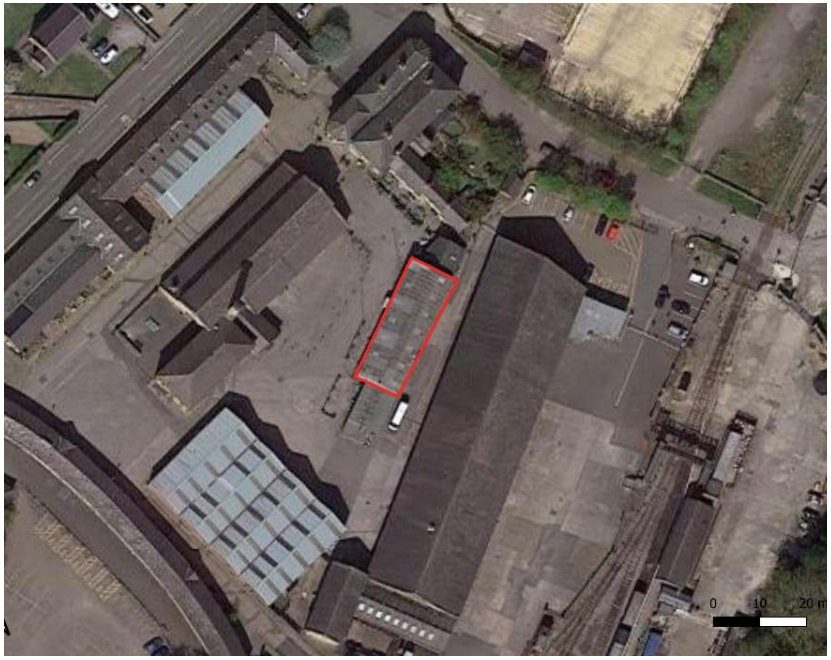
Buildings 15B-15G (as defined within this report) are assessed as providing low bat roost suitability.

In line with guidance, a single nocturnal survey is recommended to confirm the status of roosting within this building. This can be carried out during May – August 2021.

Introduction

1. Brooks Ecological was commissioned by Barnsley Metropolitan Borough Council to carry out a bat roost suitability assessment at Elsecar Heritage Centre (grid reference SK 3858 9990).
2. The application site, 'the Site', comprises a linear building, currently used for commercial purposes.
3. Proposals are to replace the existing asbestos sheet roofing with slate tiles to become more in keeping with the building`s surroundings.

Figure 1 The Site boundary (red line).



Method

4. A thorough daytime inspection of the site was made in June 2021 to look for evidence of bats and assess suitability for roosting. Evidence of bats may take the form of droppings, feeding remains, live bats, dead bats, stains on masonry or timber from the oils in bats' fur and claw marks made by bats regularly roosting in the same location.
5. Bat roosting potential of the building was classified according to the following criteria set out in Table 1, taken from the Bat Conservation Trust Good Practice Guidelines (2016).

Table 1 Bat Roosting Suitability of Buildings and Trees.

Suitability	Criteria
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/or suitable surrounding habitat to be used on a regular basis or by a larger number of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only - the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protections, conditions and surrounding habitats.

6. Surveys were directed by Christopher Shaw BSc (Hons) MCIEEM. Chris has over 10 years' experience of carrying out bat surveys in a professional capacity and is registered to use the Class Survey Licence WML CL18 (Bat Survey Level 2) and Bat Mitigation Class Licence WML CL21 Annex B.

Box 1 *Bat roosts*

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

Transitional roosts

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.

Box 2 *Legal background*

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Habitats Regulations 2010 which means that it is important for detailed and well-designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

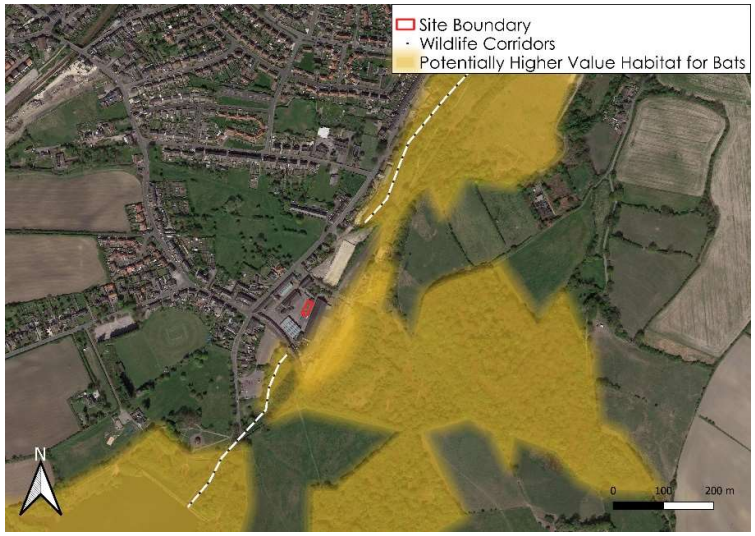
Site Context

7. The Site is located within Elsecar Heritage Centre, on the eastern edge of Hoyland, approximately 8km south of Barnsley.

8. The subject building is surrounded by hardstanding and buildings of a similar age and construction. The wider landscape comprises a mix of farmland and woodland, with more urban areas to the north and west of the Site.

9. The Site is linked to the wider landscape through several features, including the Elsecar Branch of the Dove and Dearne Canal, a railway line, a small beck which leads to Elsecar Reservoir and woodland.

Figure 2 Site context.



Records

10. The local records provider, in this case South Yorkshire Bat Group (SYBG), was asked to provide all records from within a 1km radius of the site. A total of 38 records were returned, with the majority relating to indeterminate bat species and only a single identified to species level (as daubenton's bat). Of these records, 23 relate to roosts, with 15 of these roosts being found within the Elsecar Heritage Centre complex, most recently from September 2020.

11. Details of the roosts within Elsecar Heritage Centre are all limited to the same six figure grid references (SK 385 998), shown in Table 2 below.

Table 2 List of bat roosts located within Elsecar Heritage Centre.

Date Recorded	Species	Roost Details
03/07/2018	Unknown	Single roosting bat in roof
03/07/2018	Unknown	Single roosting bat recorded in mortar gap
10/08/2018	Unknown	Three day roosts, all used by single bats, recorded from wall plate on south-west edge of Elsecar Heritage Centre
10/08/2018	Unknown	28 bats recorded roosting in culvert
07/09/2018	Daubenton's	11 bats caught emerging from culvert comprising nine males and two nulliparous females
10/10/2018	Unknown	Three day roosts, all used by single bats, recorded from wall plate on south-west edge of Elsecar Heritage Centre
18/11/2018	Unknown	Four bats roosting behind south-west facing fascia board
19/04/2019	Unknown	Three bats roosting behind fascia board
14/12/2019	Unknown	Six bats roosting behind south-west facing fascia board
02/09/2020	Unknown	Two bats roosting behind fascia board
14/03/2020	Unknown	Two bats roosting behind fascia board

National, regional and local Status

12. The application Site lies within the natural range of 10 species of bat. These are summarised in the table below, together with a note on each species national status, relative abundance and status within the 1km search area.

EPSM Licences

13. There are no licences returned within 1km of the Site.

Table 3 List of bat species known to occur in West Yorkshire, ordered in increasing level of significance to their national proportion.

Species	National Status	Within 1km radius	
		Recorded	Roosts known
Common pipistrelles *Pipistrellus pipistrellus*	Common and increasing	-	-
Soprano pipistrelle *P. pygmaeus*	Common and stable	-	-
Daubenton's *Myotis daubentonii*	Common and increasing	Yes	Yes
Brown long-eared *Plecotus auritus*	Common and stable	-	-
Natterer's *M. nattereri*	Common and increasing	-	-
Whiskered *M. mystacinus*	Uncommon but stable	-	-
Noctule *Nyctalus noctula*	Uncommon but stable	-	-
Brandt's *M. brandtii*	Uncommon but stable	-	-
Leisler's *Nyctalus leisleri*	Uncommon and trend unknown	-	-
Nathusius' Pipistrelle *P. nathusii*	Uncommon but stable	-	-

Survey Results

14. The survey encompassed a row of single-storey building units currently used for commercial purposes.

15. The building is of stone and mortar construction, with a gable roof constructed from asbestos sheeting. A small area of rendered stonework is present on the east side of the building at the wall top. The southern end of the building is constructed from breeze blocks, as opposed to the stonework elsewhere.

16. As the building is used daily by members of the public, it is in good condition with the stonework and pointing well maintained. No gaps were noted between the stones, or around the soffits and fascias.

Figure 3 General view of the building from west



Figure 4 General view of the building from south-east



17. The asbestos sheet roofing is also well maintained and well fitted, with no gaps noted between the sheets.
18. The roof is tightly fitted to the wall tops, with pointing at either end of the building in good condition with no gaps, and the fascias along the side of the building similarly maintained.
19. Minor damage to the wall head was noted on the south-east side of the building, with missing render and exposed brickwork creating crevices and allowing access into the wall.
20. Small gaps in the mortar are present at the northern end of the building, with may allow access below the roof sheeting.
21. Small lights are present along the western edge of the building. These are likely to discourage bats from roosting on this side of the building.

Figure 5 Crevices in the wall on the south-east side of the building.



Figure 6 View of the northern end of the building with mortar gaps.



Figure 7 View of lighting, well maintained stonework and tight fitted fascia.



Conclusion & Recommendations

22. Based on the features present and the number of roosts in close proximity to the building, the building is assessed as having low bat roost suitability and as such, further survey is recommended to ascertain the status of roosting here.

23. In line with best practice guidelines (Bat Conservation Trust, 2016), a single nocturnal survey (in the form of either one dusk emergence or one dawn re-entry) should be carried out at the building to establish if potential roost features are being used by bats.

24. This survey should be undertaken during the main active bat survey season (May to August).

25. If evidence of roosting bats is identified over the course of the further survey, a mitigation licence from Natural England may be required to derogate any offences in relation to disturbing bats or damaging or destroying roosts. Further survey may be required in support of a licence application. Natural England licences cannot be secured until planning permission is in place.

Nesting Birds

26. Nesting birds such as house sparrows and swallows may make use of the building as nesting sites. To prevent works impacting on nesting birds, any works should be undertaken outside of the breeding bird season, which is 1st March to 31st August inclusive.

27. Any works required during the breeding season should be preceded by a nesting bird survey to ensure that the law is not contravened through the destruction of nests and that any active nests are identified and adequately protected.

References

Bat Conservation Trust (2016) *Bat Surveys for Professional Ecologists – Good Practice Guidelines*

Conservation of Habitats and Species Regulations (2010 http://www.legislation.gov.uk/uksi/2010/490/contents/made

English Nature (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough.

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ODPM circular 06/05 (2005) *Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System* http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity