

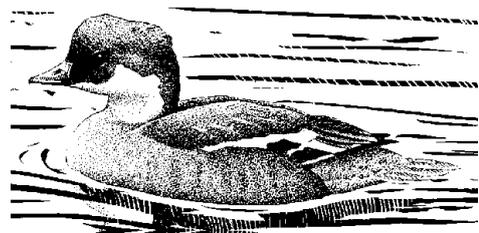
Bat Survey to
31 Chapel Hill
Linthwaite
West Yorkshire
HD7 5NJ

13th March 2023

Updated on 22nd August 2023 to include activity survey results



John Gardner
Wildlife Photographer | Bat Ecologist
32 Nostell Lane, Ryhill, Wakefield,
West Yorkshire WF4 2DJ.
01924 229800 mobile 07887 627005
www.wildscenes.com
e: john@wildscenes.com



1. Summary

- 1.1 A bat scoping survey has been carried out to the former Methodists' chapel in Linthwaite to determine if the building is being used or has potential to be used by roosting bats. The survey is required as part of a planning application and was undertaken outside the optimal time for bat occupancy and therefore aimed to establish the *likelihood* of bats using the building. The application seeks to convert the building into residential apartments.
- 1.2 The building is a large former Methodist chapel constructed from local stone with blue slate to the roof which does not appear to have slipped or missing tiles. Internally, the roof space is large and open with a window in the east gable and a Velux window on the north slope. There were no scattered droppings or discarded prey remains on the wooden floor or the stored goods. The roof membrane goes over the ridge section and forms a seal and there is no light ingress. There was no evidence to suggest bats have used the roof. Externally, the walls are sound and without structural gaps and there are no decorative wooden features such as soffits or fascia. The gutters sit on stone corbels and do not offer roosting sites that could be seen from ground level. The west gable is carved stone with large capping stones to the verge and offer no obvious roosting sites. The east gable is difficult to inspect from ground level due to the height but appears to be a dry verge that might have some minor gaps where mortar has failed.
- 1.3 The building is three storeys in height and the east and north elevations are difficult to inspect but there appears to be little potential for bats to roost in this building and there are many other buildings close by which offer greater roosting potential. It is thought unlikely that the building is used by bats and is assessed as being of 'low' roosting potential.
- 1.4 The building is not considered essential to species survival, but a single activity survey undertaken during the optimal period would confirm the absence of bats. Therefore, at least one emergence or dawn return survey should be carried out by a suitably qualified ecologist during the period May to September.

Addendum – bat activity survey results 09/08/2023

A single activity survey was undertaken to the chapel on 9th August 2023 during optimal conditions. Two experienced surveyors, located on opposite corners of the chapel, carried out the survey from 60mins prior to sunset until 90mins after sunset. The results indicate that bats are not using the chapel as a roost but do forage around the building. Common pipistrelles were observed flying into the site from an easterly direction and hunted around the rear of the chapel in the wooded area. Implementing permanent external roosting features on the chapel would increase the site's potential to support roosting bats. Survey results are documented in section 8.2 and sections 9, 10, 11 and 12 have been updated to reflect the additional survey effort.

Taking into account the results of the survey, the building is still regarded as not being essential to species survival and no further survey work is required.

2. Introduction

- 2.1 A bat scoping survey was carried out 31 Chapel Hill, Linthwaite, Huddersfield HD7 5NJ (NGR SE095139) to determine whether bats have or are using the building as a roost site. The site was also checked for the presence of nesting birds.
- 2.2 The current proposal seeks planning permission to convert the former chapel into residential apartments.
- 2.3 The survey took place at a time considered to be outside the optimal period for bat occupancy but still aimed to establish the following:
- The likelihood of bats using the building by undertaking a scoping survey.
 - Identify any potential roosting features (PRFs).
 - Determine if activity surveys are required.
 - Provide an impact assessment of the development on bats.
 - Define mitigation proposals where required.
 - Assess the requirement for a protected species licence.
 - Assess the building for use by nesting birds.

3. Methodology

- 3.1 The site was surveyed in accordance with BCT best practice guidelines and surveyor experience by John Gardner, a surveyor with 42yrs field experience in searching for bats and is registered to use the Class Survey Licence WML CL20 (Level 4). The licence number is 2015-15656-CLS-CLS.
- 3.2 The interior and exterior of the building was inspected during daylight using torches and binoculars. All normal signs of bats were looked for including bats, dead baby bats, bat droppings, prey remains, scratching and staining of entry and exit holes.
- 3.3 The building was assessed for its degree of potential to support roosting bats including assessing the building design, construction, materials, and condition. This combined with an assessment of the location of the site and the surrounding habitat in terms of bat suitability allows an assessment to be made as to the potential of the building to support bats. Factors such as the proximity of good foraging areas (woodland, water bodies) and features that link the site to the wider surrounds such as linear features (hedgerows etc) were also considered.
- 3.4 This report sets out the findings of a daytime scoping carried out to the above site on Monday 6th March 2023. This report highlights the ecological constraints and opportunities associated with the proposed works and appraises the potential impacts. Appropriate actions to ensure the protection of bats are identified and mitigation measures detailed where appropriate.

4. Survey constraints

- 4.1 There were no constraints to the survey.

5. Site Description

5.1 The site consists of a large stone former Methodist Chapel which is three storeys in height and has a slate roof. It is located in an urban area with only average quality foraging close by the site is connected to the wider landscape by a series of linear features, Experience suggests that bat activity in this area is likely to be unremarkable.

Figure 1. Site location plan



Figure 2 Aerial view of the site, surrounds and specific buildings surveyed.

6. Desk Study

The building is assessed as being of low bat roost potential and requires further survey work which will determine the bat activity in this area. It is highly unlikely that any bat records exist relating directly to this site and records for this area are usually sparse in general. Furthermore, the zone of impact does not extend beyond the site footprint and, therefore, will have no impact on bat roosts within this area. Therefore, no data searches have been undertaken at this time but may be requested at the time of the activity survey.

7. Activity surveys

7.1 No activity surveys were carried out due to the time of year.

8. Survey results

8.1 Scoping survey

The building is a three-storey former Methodist chapel constructed from local stone. The blue slate roof does not appear to have missing or slipped tiles and seems to be sound with all ridges present. The west gable has large capping stones which have a sound lead flashing to the rear and do not appear to offer any potential roosting sites. The east gable has a dry verge which is very difficult to assess from ground level as it is not possible to get far enough back and it is also obscured by trees when viewed from further back. However, the verge appears reasonably sound but there are sections of failed verge mortar. Internally, the roof is lined with a breathable membrane which is sound. The timbers are all modern replacements apart from the large roof trusses and it appears that the roof has previously been in a poor state of repair but has been replaced and repaired in recent times. Some of the larger trusses are shifting and have cracks in the joints but these did not show evidence of use by bats. The membrane covers the ridge section and there is no light ingress save for that from a window in the east gable apex and a Velux window on the north slope of the roof. The attic is floored and has stored goods which would make evidence of bats easily spotted. However, there were no scattered droppings, no accumulations at the gable walls and no discarded prey remains. It seems unlikely that the roof has been used by ridge dwelling species.

The walls are stone and are sound without structural cracks or gaps. The west gable has large, detailed capping stones forming an overhanging cover of the wall and seem unlikely to have any bat roost potential. There are no fascia or soffits on any of the elevations and the east gable has only a dry verge which is reasonably sound. There appears to be a very limited number and diversity of potential roosting features, but the height of the building makes it very difficult to view the wall tops and the east gable. Because of this fact, a single activity survey should be carried out during the appropriate survey period to determine the presence or absence of bats.

8.2 Activity survey

A single activity survey was conducted on 9th August 2023 by two experienced surveyors using both heterodyne and an RTE detector. The survey took place in optimal conditions with temperatures around 14°C and high, partial cloud cover and no breeze. Insect activity was regarded as high. The survey commenced 60 minutes prior to sunset until 90 minutes after sunset with sunset recorded at 21:15.

No bats were observed emerging from the chapel, but bats were on the wing just 20 minutes after sunset indicating local emergence. Common pipistrelle bats were observed flying into the survey site from a southerly direction along Black Rock Drive. At least four pipistrelles flew in from this direction over a period of 10 minutes indicating the roost is in that direction. The bats

proceeded to forage around the garden on the south and east of the chapel and small numbers of bats were recorded here throughout the survey.



Figure 3 Bat activity and flight patterns

9. Interpretation and analysis

The proposed conversion of this building is highly unlikely to have any impact on bats as the style and construction of the building offers a very limited number and diversity of roosting sites. There was no evidence to suggest bats have used the roof space and the roof does appear to have been repaired or recovered in recent years as it has new rafters and a breathable membrane beneath the blue slates. An activity survey conducted during optimal conditions did not record bats emerging from the building though they were observed foraging around the chapel throughout the survey. The bats were observed flying into the site from the direction of Black Rock Drive suggesting that the roost is somewhere in that direction. As bats were feeding throughout the survey at the chapel, limiting tree clearance to the minimal required should be considered. Adding permanent roosting features to the chapel would be very beneficial and could result in an uptake by bats, particularly males requiring a satellite roost.

Although bats of a local provenance are present in the area, numbers appeared to be unremarkable and limited to the commoner species. Bats are not considered to be using the chapel.

10. Impact assessment

The building has been assessed as being of low roosting potential and following a summer activity survey, bats were found not to be using the building. Conversion of the chapel is unlikely to have any impact on the local bat population. There will likely be no loss of existing roost sites or habitat and no fragmentation of habitat caused by the development.

11. Compensation and mitigation

The building has been assessed as being of low interest to bats and, consequently, there is no requirement for a European Protected Species Mitigation Licence (EPSML). The single activity survey established that bats are not using the building but are present in the area and do forage around the site and use the site for commuting to other feeding areas. Given that bats are using the site, permanent roosting features should be included in the final scheme.

- Inclusion of at least three Schwegler 1FTH summer roosting boxes should be added to the south elevation of the chapel and placed high up at the eaves. These can be added before roofing scaffold is dismantled.
- At least one Schwegler bat winter roost 1WQ should be added to the north elevation high up at the eaves. This will provide insulated winter roosting opportunities for bats.

Timings

- As bats are not using the chapel for roosting, there are no timings to the works. The permanent roosting features, however, must be in situ prior to occupation of the dwelling and remain in perpetuity.

12. Conclusion

The survey concluded that the building offers low roost potential, and it is unlikely that bats are using this building. The scoping survey concluded the building has low roost potential and the subsequent activity survey confirmed that bats are present in the area but are not roosting in the building. Common pipistrelles were seen foraging around the survey site and therefore, inclusion of permanent roosting features (both summer and winter) have been specified. Inclusion of these roosting features will enhance the site for bats.

Appendix 1 Supporting Photographs

