BAT SURVEY DETAILS BURNTWOOD HALL FARM

BRIERLEY S72-9HB

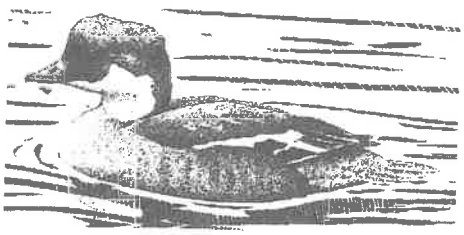
MR. BILL ADDEY.

* note - at the request of BMBC purpose made bat boxes were provided + positioned to their specification + still remain unused*

Bat Survey to
Burntwood Hall Farm
Brierley Common

Barnsley
S72 9HB

John Gardner ARPS
Wildlife Photographer
Wildlife Advice, Surveys, Lectures
32 Nostell Lane, Ryhills Wakefield,West Yorkshire
WF4 2DJ.
01226 724283 mobile 07887 627005
www.wildscenes.com
e: john@wildscenes.com



1. Summary

1.1 A winter bat scoping survey to barns at Burntwood Hall farm, Brierley Common was commissioned to establish the likelihood of the building being used by roosting bats ahead of proposed development works.

1.2 The survey was undertaken at a time of year which is outside the optimal season for bat occupancy and, therefore, aimed to establish the *likelihood* of bats using the building by looking for evidence in the form of droppings, scattered prey remains and noting potentially suitable roosting cavities as well as assessing the likely impact of the work on bats. Winter surveys are not always able to establish categorically whether bats are present or absence but the style of building combined with surveyor experience are a good indication of the likelihood of bats being present.

1.3 The site comprises a range of barns in the farmyard that are constructed from stone with cement fibre or Marley roof tiles. The buildings have undergone extensive renovation and remedial works including completely reroofing the units. The site is located in a rural area and is within very easy reach of excellent foraging habitat and some other residential dwellings. The current proposal includes converting the barns to residential.

1.4 The walls of the barns have been extensively repointed and the dry verges sealed. The original stone roofing tiles have been replaced with a thin cement fibre tile or Marley tile that has a tight interlocking pattern and does not have any gaps. There are no facia boards or soffits and internally, there was no evidence of bats in the form of droppings or scattered prey remains. Because the buildings have undergone extensive renovation, they are categorised as being of *low to negligible* importance to bats and it is considered that bats are not using the building.

1.5 There are no statutory constraints to the redevelopment of the site from the presence of a bat roost. No further activity surveys are required but mitigation has been prescribed.

2. Introduction

2.1 A daylight bat scoping survey was undertaken to barns at Burntwood Hall Farm, Brierley Common, Barnsley S72 9HB (NGR SE428090) in accordance with the Planning Authority's request, to determine whether bats have or are using the property as a roost site.

2.2 The current proposal is convert the barns into residential dwellings.

2.3 The survey took place at a time considered sub-optimal for bat occupancy, therefore, the survey aimed to establish the following

- the likelihood of bats using the building by undertaking a scoping survey
- identify any potential roosting areas
- 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 buildings were surveyed in accordance with best practice guidelines by John Gardner, a surveyor with over 30yrs fields experience in searching for bats (licence number 2015-15656-CLS-CLS).

3.2 The exterior of the buildings were 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 buildings were assessed for their 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 buildings 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 combined daytime and return survey carried out to the above property on Friday 3rd March 2017 and 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 None

5. Site Description

5.1 The site consists of a large, two storey barn (with no first floor internally) and a range of barns comprising a two storey section and a single storey section attached to a residential dwelling. The barns are all joined by a large section of corrugated sheeting to form a large open storage area to the rear of the main barn. Surrounding the barns are mature trees, large, fairly featurless, gardens and other buildings including Burntwood Hall residential home. There are good linear features connecting the site to nearby woodland, including the extensive Howell Wood and therefore, foraging is regarded as excellent.

Figure 1. Site location plan

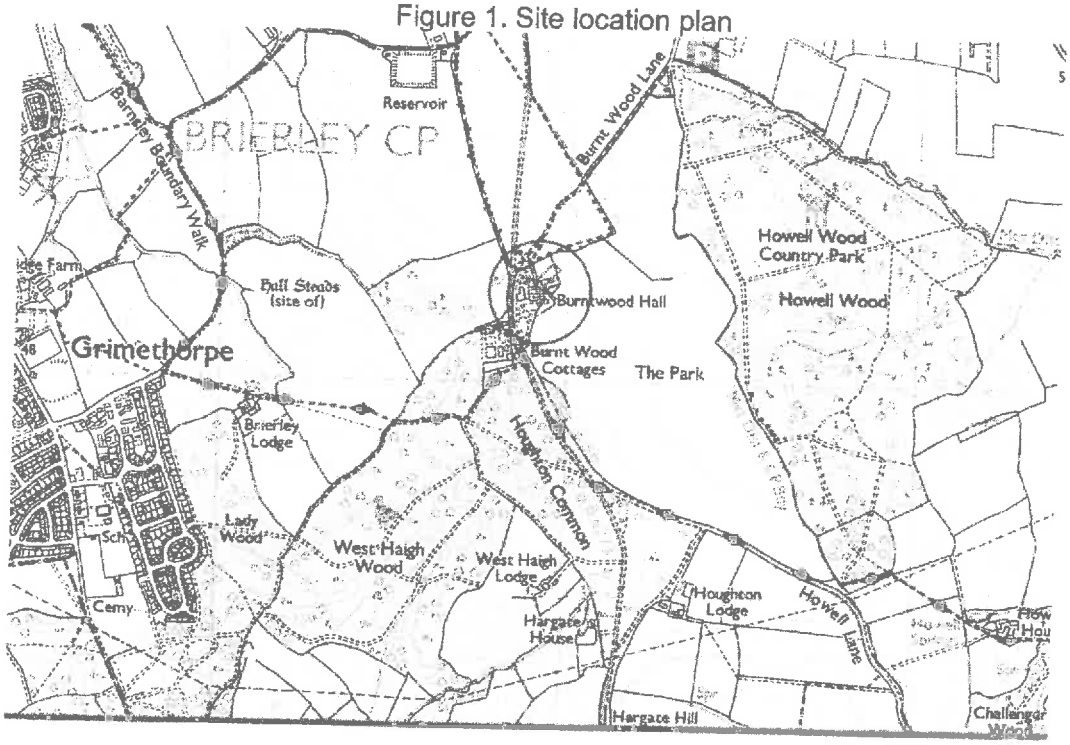


Figure 2 Aerial view of the site, surrounds and buildings surveyed

6. Desk Study

No desk study was undertaken as the building has little value to bats and it is highly unlikely that there will be any records relating directly to the site.

7. Activity surveys

7.1 No activity surveys were undertaken as the survey was conducted outside the optimal season for bat occupancy.

8. Survey results

8.1 The daylight survey

The property is located in a rural area and is close to excellent foraging areas with roosting opportunities in nearby dwellings and the local bat population is known to be a healthy one. With this in mind, the building was searched carefully for any potential roosting opportunities and any evidence of use by bats.

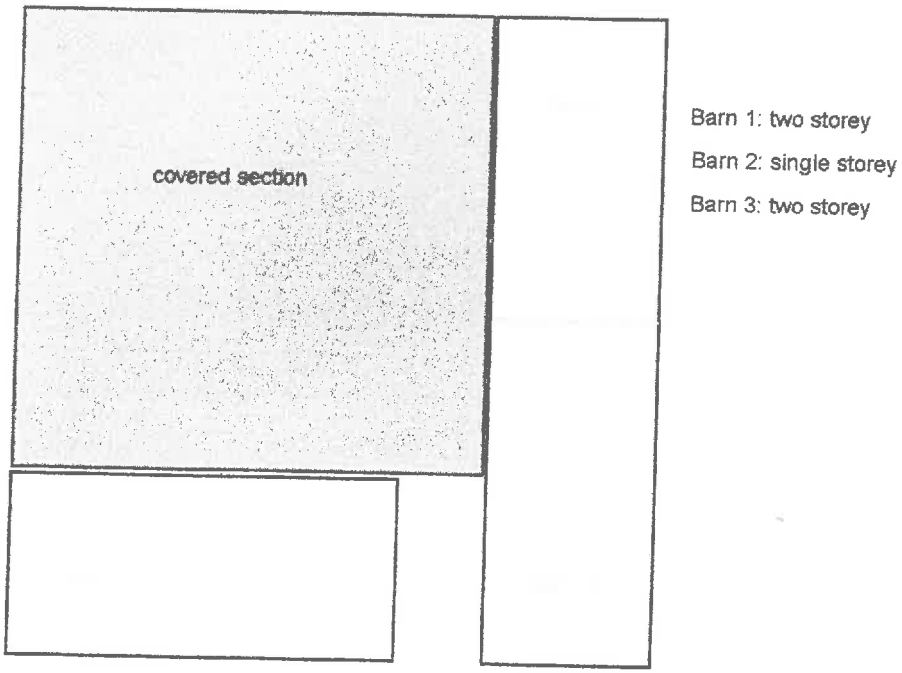


Figure 1: Layout of the site

Barn 1: This barn is a two storey building adjoining an existing residential dwelling. The walls are stone and are very well pointed and do not have gaps or cavities. All walls have been extensively repointed and all verges sealed and the single gable has stone capping which appears well bedded. The roof is sound and has been modified and recovered at some stage and the original York stone tiles have been replaced with a thin, cement fibre tile. Internally, the roof is unlined and the tile structure can be easily seen to be a criss-crossed diamond effect that has no gaps or cavities the would enable bats to roost or entre the barn via the roof. The ridges appear sound and have a heavy build-up of dust webs and dirt and do not show signs of bats. The floor in this section is very clean and inspection did not reveal any droppings or scattered prey remains. There are some stored good that have clearly not been moved in a good while and these did not show any signs of droppings. Both internal walls were inspected for

droppings that may have adhered to the stonework but none were found. There did not appear to be any evidence of bats using this section of the barn and the building is considered to be of **negligible** interest to bats.

Barn 2: A single storey extension to barn 1 and again, the building has been extensively renovated and repointed resulting in no external cracks or cavities that may be of interest to bats. The roof has also been replaced with Marley tiles and does not have cavities. The ridges are sound apart from one small section that has some pointing missing and the single gable wall has sound heavy stone capping. Internally the roof is lined with traditional hessian and bitumen felt which is sound and has no light ingress. The ridges show a big build-up of cobwebs and do not show signs of bats using the ridges. There was no evidence internally of bats using the building with no droppings to be found on the stored goods. There are no facia or soffits that would offer potential roosting sites and the dry verge is sound. Overall, the building is considered to be of **low-negligible** interest to bats.

Barn 3: This is a large two storey stone barn which is one big open space internally having no first floor. The roof has been replaced with a Marley tile which has a tight interlocking pattern and has no access gaps. Internal inspection shows the roof to be lined with traditional felt and in a good condition with no light ingress from the ridges. Although the ridge section is clean internally, there was no evidence to suggest use by bats. There were no droppings adhered to the internal gable walls and no droppings on the large wheat drying device installed inside the barn. The barn has several windows and is therefore subject to a good deal of daylight which would discourage the use by some species of void dwelling bats. All walls have been extensively repointed both internally and externally and all dry verges are sound and very well cemented. There are no facia or soffits that would allow access to the wall tops and internally, the walls tops have all been heavily cemented to the underside of the roof tiles so it is unlikely there are suitable areas for bats. All windows and doors are wooden but well sealed into the openings. The building is considered to be of **low-negligible** roost potential.

The two ranges of barns are connected by a large covered area at the rear which has a roof of cement fibre sheeting on top of a steel roofing frame. This roof is considered to be totally unsuited to use by bats.

9. Discussion and analysis

9.1 The scoping survey results suggest the buildings have negligible or very low roost potential due to the very heavily pointed walls, Marley roof tiles and sound windows and doors. The buildings have very sound verges and the tightly interlocking tiles prevent access beneath roofing tiles. There was no evidence of bats to be found internally and, despite the clean and often swept interiors, there are some stored goods and machinery that would have revealed bat droppings had they been present. There is no doubt that the site is located in an excellent area for bats and that the local population will be a healthy one. Had the barns been in their original state with stone roof tiles and large internal timbers, it is likely that bats would have been found. In their current, highly maintained state, it is less likely that bats will find potential roost sites. There is one section of the roof of barn 2 that has some minor gaps to the ridge tiles and therefore, despite there being a low risk of bats being present, the ridge tiles should be stripped carefully by hand while making a thorough search for bats.

There is no evidence to suggest that bats have used the buildings and their roost potential is very low. There are some dwellings nearby that still have stone roofs and original features and these may offer greater roost potential than the survey site. Howell Woods is known to have a good population of bats of several species and some of these, such as noctule bats, will be roosting in the trees.

There was no evidence of barn owls being present in any of the buildings and no nesting swallows

10. Impact assessment

It is considered that the proposed conversion of the barns is unlikely to have any effect on the local bat population and will not likely to destroy or damage nursery roosts. There will not be any major loss of foraging and there will be no fragmentation of habitat. There is currently only limited roost potential in the building and therefore, by including a permanent roosting feature in the proposed new dwellings, the site could have far more appeal to bats than at present.

11. Mitigation measures

Although it is thought unlikely that bats are present on the site, the following precautions and mitigation should be adopted.

- All contractors to be made aware of the possible presence of bats when removing ridge tiles
- All ridge tiles should be stripped by hand and left off the building for a period of 24hrs
- A Schwegler 1F bat box should be erected on one of the other barns in the yard opposite the proposed development area *before* building works commence on the site. This bat house should be sited at least 3m above ground and be mounted on a south or west facing wall.

The above measures can be conditioned into any planning permission that may be granted.