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ECOLOGICAL CONSULTANTS



Kirkstones Barn

Garrison Road, Birch Vale

Daytime Bat Inspection

Issue record

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1. INTRODUCTION

This report has been prepared by Peak Ecology Ltd on behalf of Andrew Cudworth. It provides details of a daytime bat survey undertaken on Kirkstones Barn. The Barn is located to the South of Kirkstones Bungalow adjacent to Garrison Road off Hayfield Road (A6015)(National Grid reference SK 014 865).

It is currently proposed to convert the Barn into a domestic dwelling house, for the purposes of the land owner, or to rent as a holiday let. The local authority has addressed the requirement for bat and other protected species surveys on the barn to ascertain the possible implications and affects these works could have on the local bat population.

The object of this survey was to establish whether the building is used by bats and/or nesting birds and if necessary, to recommend further work in order to advise mitigation measures.

All bat species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are protected by Parts 4(b), 4(c) and 5 of Section 9 of that Act. All bat species are also European Protected Species under the Conservation of Habitats and Species Regulations 2010.

In net effect, it is a legal offence to:

- Deliberately capture, injure or kill bats;
- Intentionally or recklessly disturb bats;
- Intentionally or recklessly damage, destroy or obscure access to a breeding site or resting place*
- Possess, control, transport, sell or exchange a bat or any part of a bat, unless acquired legally.

*Because bats use roosts at different times of year, and often return to the same roosts annually, it is a legal opinion that a roost is protected whether bats are in occupancy at the time or not.

The Wildlife and Countryside Act 1981 (as amended) makes it a legal offence to:

- Intentionally kill, injure, or take any wild bird;
- Damage, destroy or take the nest of any wild bird;
- Take or destroy the egg/s of any wild bird
- Intentionally or recklessly disturb any species listed on Schedule 1 of the act (e.g. Barn Owl) whilst on or building a nest; in or near a nest with eggs;
- Disturb the dependent young of a Schedule 1 bird.

2. METHODOLOGY

2.1. Building Inspection

The building inspection was carried out by Jessica Eades (Natural England Bat Licence No. 20120409) and David Chatterton following accepted standard methodologies set out by the Bat Conservation Trust (2012), on the 18th June 2012.

An external and internal inspection of the barn was carried out to identify potential access points suitable for bats and any evidence of bats. High powered torches, ladders, an endoscope and binoculars were available for use where appropriate.

Also noted from the external and internal building inspection was the presence of birds or evidence of nesting.

Photos were taken of both external and internal features of the building to document findings and are included in the report.

Buildings subject to daytime bat surveys are classified as having low, medium or high potential to support roosting bats. Evaluation of potential is necessarily subjective and relies on professional judgment. Any building given a medium or high potential should be subject to more detailed assessment. The following gives a guide to how this evaluation was implemented:

- Low potential – Buildings that have limited features suitable for roosting and/or limited potential access points. There is no physical evidence of bats using the building and it is unlikely that they are doing so.

- Medium potential – Buildings that have some features and potential access points that look suitable for use by roosting bats. Limited or ambiguous physical evidence *may* have been seen. It is possible that bats may be using the building.

- High potential – Buildings with many or better quality features and potential access points that appear suitable for use by roosting bats. Physical evidence may have been seen. It is highly possible or probable that bats may be using the building.

2.2. Survey Limitations

Due to vegetation overgrowth it was not possible to directly access and survey the southern-facing wall; however, a full inspection of the wall was undertaken internally. Additionally, due to a steep bank leading down to a stream on the western side of the barn, the wall was visually surveyed from the north-western corner.

The barn was accessed internally during the survey, yet due to it being used for storage there was limited mobility. The mezzanine level was surveyed from the top of ladders and not directly accessed due to the volume of stored belongings, but at least 90% of the area was scrutinised for

potential. It was considered that a sufficient area of the mezzanine level was surveyed to make a full assessment of the bat roost potential of the barn.

3. RESULTS

3.1. Building Description

The barn is a free standing building south of Kirkstones bungalow with approximate dimensions – 6m wide x 6m deep x 4.5m high / 6m high (at the apex). It is a stone built structure with slate tile roofing and ridge tiles. Plastic guttering runs down both the eastern and western sides of the building running into a downpipe. An original metal downpipe was present on the western side of the barn as opposed to a plastic downpipe as on the north side of the barn. The guttering is flush to the associated wood fascia boards.



Fig.1 – North and East faces of Kirkstones Barn.

The building is structurally sound with no holes or gaps present in-between the brickwork or pointing. It contains two windows, one in the eastern wall and one in the southern wall at mezzanine level, which are both well sealed, having no gaps or holes where the window ties into the wall. The north face has a double door, with the right door being a split (stable) door. The door surround is sealed and intact. When shut, the doors do have a small gap towards the base which may allow bats potential access to the building; however this was thought to be unlikely, due to an increased predation risk given the proximity to the ground.



Fig.2 – East face of Kirkstones Barn.

No evidence of bats was seen on any

part of the building during the external inspection.

The external surfaces of the building were all structurally sound with no holes or gaps in-between the stonework. There was some cracking and loss of pointing on the north-western corner; however this was minimal and did not provide access to any potential cavities.

The only potential access points were the noticeable gaps behind the wooden fascia, with the attached guttering. Although there were gaps behind the fascia board the majority were laden with cob-webs, evidence that they had not been accessed or utilised recently.

It was recorded that there was dislodged tiles on the western side of the apex roof; however, it was impossible to ascertain the extent of dislodged tiles from the surveyor vantage point on the ground. From the internal survey there were only a few small gaps between the tiles, therefore the slate roof is generally intact.



Fig.3 – Gaps behind fascia board on eastern wall.

Internally, the barn is open with a mezzanine hayloft spanning the southern half of the structure. The hayloft could potentially have previously covered the north-western corner of the barn due to the presence of cross-beam post holes within the wall providing access to the rubble filled cavity. The walls are rubble-filled and part skimmed with what appears to be a lime mortar plaster. The hayloft beams were slightly bowed and showed slight signs of decay in the eastern wall cavities. The barn has electricity and lighting; however the lights were not on during the survey.

The ridge beam and trusses are fairly cob-webbed especially at the gable ends and eaves, and there is evidence of damp, although this is minimal. The roof itself is direct to the slate tile with no sealed void. No evidence of bats was seen during the internal inspection of the building.

Although the barn would make a favourable bat roost there was no evidence of such use. There were no visible droppings, stains or feeding remains found in the barn, with the stored belongings covered with dust and the beams and eaves heavy with cob-webs. The few holes that are present are filled with cobwebs and are rubble filled and do not provide access to outside. The northern wall did have two large holes, however neither of these had any evidence of bat presence.

3.2. Nesting Birds

There was no evidence of any past or present bird nests or bird activity in or around the barn.

3.3. Surrounding Habitat

The barn is situated approximately 30m north of Hayfield Road, the A6015, being accessed by Garrison road on the eastern side. To the north is Kirkstones bungalow, and the south a residential garden and housing. The western side is a steep bank leading down to a stream, which also runs along a grazing pasture.



Fig.4 – North and west faces of barn. West face with steep bank running into stream.

4. DISCUSSION AND RECOMMENDATIONS

4.1. Bats

As no evidence of bats was seen during the inspection, the building is considered to be of low potential for roosting bats, and although the surrounding area comprises of ideal habitat for bats – the stream, grazing pasture, wooded area to the north all providing good connectivity and foraging opportunities, the building itself does not seem to currently house roosting bats.

It is therefore considered that work may proceed without any implications with regards to bats. It should be noted, that due to the favourable surrounding habitat should a significant time elapse before work commences on the building its roosting potential may improve, as the barn may deteriorate in condition over future years.

In the extremely unlikely event that a bat is found, work should stop and an ecologist should be contacted immediately.

4.2. Nesting Birds

There is no evidence to suggest that birds have, or are, nesting in or around the barn at present.

All birds are protected from harm and/or damage to their nests during breeding, with the breeding season typically running from March – August (inclusive). If works are to commence within the

breeding bird season, then an initial inspection of the barn should be conducted prior to works commencing to ensure no birds are nesting. If any active bird nests are found during this inspection, these must remain unaffected until all chicks have fledged. This includes ensuring there is continual access for adult birds into the building, until the chicks have fledged.

4.3. General Mitigation Recommendations

If bats are found during any work, work should stop immediately and a licensed bat ecologist should be consulted.

If breeding birds are encountered during any work, work should stop in that area and only continued when breeding has ceased and young have left the nest.

5. ASSESSMENT AND CONCLUSIONS

5.1. Potential Impacts

5.1.1 Bat Roosts

Impacts to bats are considered unlikely given the lack of evidence and the overall good condition of the building. No further survey work is therefore recommended.

5.1.2 Bat Foraging and Commuting Habitat

There is no predicted impact on foraging or commuting habitat.

5.1.3 Birds

Currently there are no active nests, nor was there seen to be any past nesting activity. However, if birds begin to nest within the building in the future, workers must ensure there are no impacts on their nests until all chicks have fledged.

5.2. Conclusions

The building is considered unlikely to be used by roosting bats, although workers should always work with care and be vigilant to the potential presence of protected species. Care must be taken to ensure there are no effects to birds during nesting.

REFERENCES

Bat Conservation Trust (2007) *Bat surveys – Good Practice Guidelines.* Bat Conservation Trust.

Mitchell-Jones A. J. (2004) *Bat Mitigation Guidelines* English Nature.

Mitchell-Jones A. J. and McLeish A. P. (2004) *Bat Workers' Manual 3rd Edition* JNCC.