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To whom it may concern,

Results of Bat Survey at Folds Barn, Folds Lane, Fernilee. Nr. Whaley Bridge.

Introduction

Kingdom Ecology have carried out a bat survey at Folds Barn, Folds Lane, Fernilee. Nr. Whaley Bridge (National Grid Reference SK 016 789), as part of a proposed planning application to convert the building to a dwelling. The building is a former barn and is currently used as a garage. The location of the building is shown on Figure 1.

An assessment of the property was undertaken on the 11th August 2010 and comprised of an internal and external inspection of the building and an evening emergence survey.

Surveys were lead by Richard Roe (BSc, MSc, MIEEM, CEnv, Licensed bat worker (Natural England licence number 20091922). Richard has extensive experience of undertaking bat roost surveys as both a professional bat consultant with over nine years experience and as a volunteer bat conservation officer for Natural England.

Legislation

All species of bat and their roosts are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); the Conservation of Habitats and Species Regulations 2010 and by the Countryside and Rights of Way Act 2000.The EC Habitats Directive places a legal requirement on all Member States of the EC to protect specified species and habitats through their own domestic legislation. Five species are also listed on Annex II that requires the designation of Special Areas of Conservation (SAC) to ensure that the species is maintained at a "favourable conservation status". Bats receive further protection through inclusion in the Bern and Bonn Conventions.

Collectively, the above legislation makes it an offence to:

- intentionally or recklessly kill, injure or capture (take) bats;
- recklessly disturb bats (whether in a roost or not);
- damage, destroy or obstruct access to bat roosts;
- possess or transport a bat or any part of a bat, unless acquired legally; or
- sell barter or exchange bats or parts of bats.

Methods

Bat Survey

The survey was based upon methodologies prescribed in English Nature's Bat Mitigation Guidelines (Mitchell-Jones 2004), the Joint Nature Conservation Committee's Bat Worker's Manual (Mitchell-Jones & McLeish 2004) and the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (BCT 2007).

Daytime Bat Inspection

An inspection of the interior and exterior of the building was undertaken during daylight conditions using binoculars, endoscope and a high powered torch to both search for actual evidence indicative of bat use and to identify any features which could potentially be used by roosting bats.

In addition to searching for evidence of an actual bat roost the survey also aimed to assess the suitability of the building to support bats and consequently the likelihood of a bat roost being present but with no obvious field signs.

Survey assessed the building's roost suitability by examining structural features and the surrounding habitat. Structural features that will influence the suitability of a building to support roosting bats include the presence of a roof void; access points into a building including gaps beneath barge boards, gaps under lead flashing, gaps within masonry, loose tiles etc, complexity and size of any roof void, daytime light levels in roof void etc.

Important habitat features surrounding the structure which could influence roost potential include: whether the structure is in a semi-rural or parkland location, proximity to a significant linear feature (e.g. watercourse, mature hedgerow, wooded lane) or an area of woodland etc.

Taking account of these architectural and habitat features, the building was assigned a level of roost suitability based upon professional judgement.

Dusk Emergence Survey

A dusk emergence surveys was undertaken on the 15th August 2010. The surveyor was equipped with a heterodyne and time expansion bat detector and stationed themselves outside of the south eastern corner of the barn from fifteen minutes before sunset (sunset recorded at 2033) until an hour and a half after sunset. All bat species and bat behaviour were recorded.

Results

Description

The study site comprises of a semi-detached, two storey, gable ended, pitched roofed barn located in the village of Fernilee.

The barn has a large set of double doors on its west face and has been previously used as a garage.

The surrounding land uses comprise of buildings associated with the village of Fernilee and improved, sheep-grazed pasture land with occasional scattered trees. The surrounding land uses are considered to offer 'moderate' quality bat foraging habitat.

Photographs showing the exterior and interior of the barn and a location plan for the site are given in the appendix.

Daytime Inspection

The barn is stone built with a pitched, gable ended slate roof. It measures approximately 9m x 5m in size and is considered to be of 18th-19th century origin.

Externally, the stone work is considered to be well pointed with no obvious crevices offering roosting potential. The join between the roof and the stonework is also well sealed with no obvious crevices along either the eaves or at the gable end.

The roof is in relatively good condition with no loose tiles or gaps identified on the north facing pitch or along the ridge. However three loose tiles were noted on the south facing pitch which could potentially provide an access point for bats.

Internally, the barn comprises of a large single room on the ground floor and a large single room on the upper floor linked by a staircase. Both rooms measure approximately 9m x 5m. The internal walls of the barn have been white washed and consequently there are no internal potential roosting crevices. Both the ground floor and the first floor are brightly lit by windows on the north and south faces of the barn.

The upper floor of the barn has no loft space and consequently the roofing beams are exposed. Beams were found to be heavily cobwebbed indicating it to be very unlikely that they supported a bat roost. Internally, the roof is lined with polystyrene sheeting. It was therefore considered possible that bats could roost between the outer roofing slates and the internal polystyrene sheeting.

No bat droppings or other field signs indicative of bat use were found during either the internal or external search.

Evening Emergence Survey

Few potential roosting locations were identified during the daytime search. The only suitable locations were identified between roofing slates and the internal polystyrene boarding which could potentially be accessed by bats via gaps the three loose slates on the south face of the barn. Consequently a bat emergence survey was carried out.

Survey was carried out on the 15th August 2010 during warm, dry, still conditions. Survey focused on the three loose slates on the barn's south facing roof pitch. No

bats were recorded emerging from the barn. Occasional common pipistrelle were recorded foraging and commuting along Folds Lane. Bats arrived from the east of the study site.

Assessment of Roosting Potential

The building is considered to offer a **low** bat roosting potential with potential roosting locations limited to gaps between roofing slates and the internal polystyrene boarding, these can be accessed by bats via gaps below loose slate tiling on the south face of the barn. No field signs indicative of roosting bats were found during the internal or external inspections and no bats were identified emerging from the barn.

Conclusions and Recommendations

Field survey found no evidence indicative of roosting bats. Furthermore the building is considered to only offer a **low** potential to support roosting bats.

It is considered highly unlikely that identified potential roosting locations could support a significant bat roost (such as a maternity colony) however they could offer occasional roosting habitat to individual or small numbers of non-breeding bats.

Potential roosting locations are restricted to locations close to loose tiles on the barn's southern roof pitch. As a precaution it is recommended that where works will affect the barn's roof, loose tiles are carefully removed by hand. In the event that a bat is encountered, works should immediately stop and a licensed bat worker should be contacted.

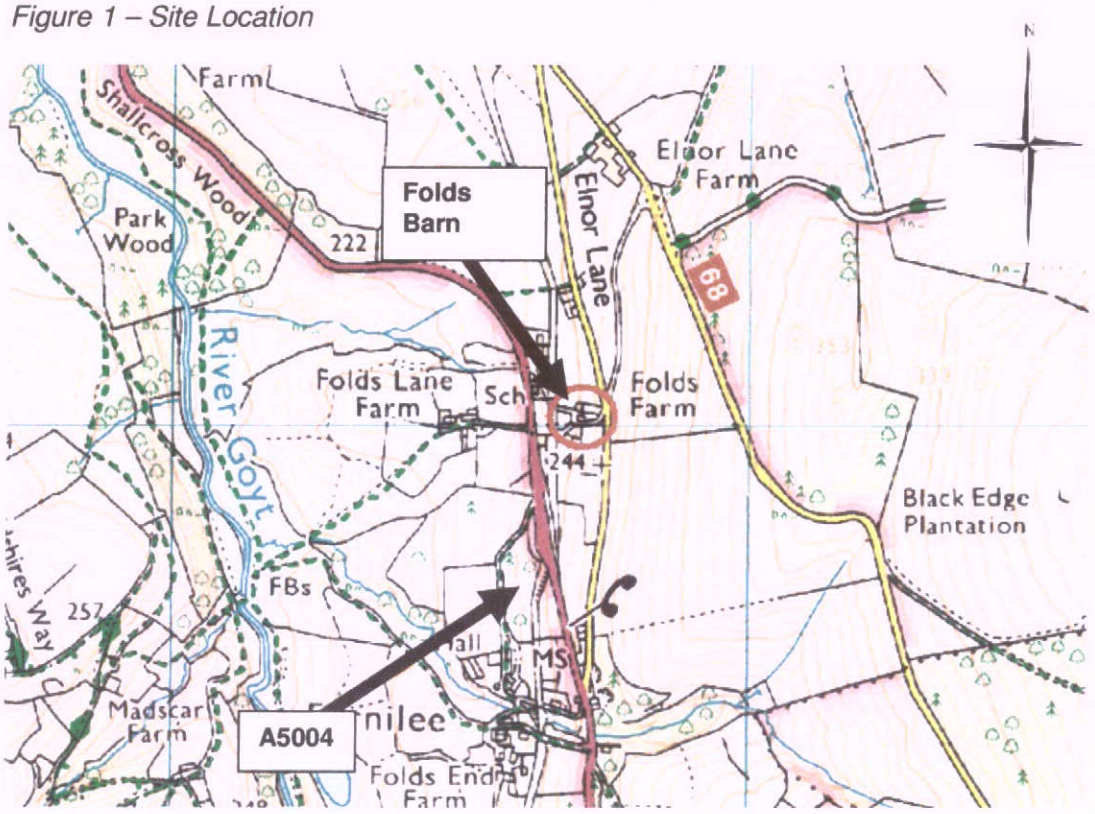
Yours sincerely,



Richard Roe
Principal Ecologist

Figures

Figure 1 – Site Location



Photograph 1 – View of South West Face of the Property



Photograph 2 - View of North East Face of building

