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PROTECTED SPECIES SURVEY

BRYN RHUG FARM

THE WERBOL, WREXHAM

NORTH WALES

FOR

T R Design Services

18th August 2010

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Contents

- 1. Introduction**
- 2. Bat biology**
- 3. Legislation**
- 4. Aims**
- 5. Study area**
- 6. Methodology**
- 7. Results**
- 8. Conclusions, Recommendations & Mitigation for Bats**
- 9. Nesting birds**
- 10. References**

Appendix 1 – Site location plan

Appendix 2 – Site photos

Appendix 3 – Mitigation diagrams

1. INTRODUCTION

A preliminary bat and bird survey was undertaken on the 17th August 2010. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (CCW & Natural England licenses) following a request by T R Design Services. The survey was requested to satisfy planning requirements in respect of any protected species issues for the farm house located at Bryn Rhug, The Wern, near Wrexham, North Wales, LL11 5DD. A planning consent is being sought to permit the demolition of the existing property.

2. BAT BIOLOGY

There are now 17 species of bat in the UK, many of which can be found within this part of Wales. Each bat gives birth just once a year, early in summer, the females tending to gather together in a communal roost to give birth and bring up their young. This is the time when they are most likely to use buildings. By the end of the summer the roosts are often vacated for other more suitable hibernation sites such as caves, mines or trees. Hibernation sites are usually characterised by stable temperatures with a high level of humidity. When temperatures fall and food becomes scarce they hibernate and live off body fat stored during the autumn. During mild winters bats can still often be seen on an evening flying and looking for food. Bats use a variety of different structures for the purposes of roosting, these can include mature trees, caves, mines, buildings (old and new), bridges and tunnels.

Bats will generally cause no harm to buildings or the people that occupy the buildings. They can be very discreet and are often not noticed because of their preference to occupy tiny spaces, cracks and crevices in roof voids. Some species such as the brown long eared bat will utilise open loft areas for flying and moving around in. They will roost on bare exposed timber beams, typically beneath the ridge beam. The droppings produced are harmless (largely made up of insect fragments) and do not carry any disease although a very large roost can sometimes produce large quantities of droppings.

3. LEGISLATION

All of our species of domestic bat are protected under both UK and European legislation. In the UK they are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994. The Habitats Directive has recently been superseded by The Conservation of Habitats and Species Regulations 2010 which came into force on the 1st April 2010

To summarise it is illegal not only to intentionally kill, injure or take any bat but also too recklessly or intentionally damage, destroy or obstruct access to any place that a bat uses for shelter or protection, or to disturb a bat while it is occupying such a place. A roost is protected whether or not bats are present at the time. The reason for this is that bats have a tendency to remain loyal to certain roost sites, often over a long period of time.

The presence of a species protected under European or UK legislation is a material consideration when a planning authority is considering a development proposal which, if carried out would be likely to result in disturbance or harm to the species or its habitat. Section 74 (2) of the CroW Act 2000 (now updated by Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 requires the publication of lists of habitats and species that are of principal importance for the purpose of conserving biological diversity. The list is regularly changed and updated and many bat species appear on it. NERC consolidates the requirements of the CroW Act in placing duties upon government agencies, including local authorities, to ensure the conservation of Biodiversity.

4. AIMS

The aims of the survey were:

1. To describe any evidence of protected species in the study area.
2. To assess the impact of demolishing the building
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of the detached farmhouse with several outbuildings and sheds. The surrounding habitat includes areas of improved grassland, hedgerows, areas of broadleaved woodland and mature trees. The property is situated in an elevated and relatively exposed position.

The house is constructed in a traditional manner adopting load bearing stone walls, supporting a pitched timber framed roof which is slated (no underfelt). A flat roof extension has been added to the rear elevation and the walls have been rendered.

The site plan is shown in Appendix 1 and the photos are shown in Appendix 2.

6. METHODOLOGY

The building was subjected to an internal and external survey on the 17th August 2010; the weather conditions were mild and clear. As much of the building as possible was searched (health and safety and access permitting) using a Cluson rechargeable lamp, a Seesnake endoscope and a Petzl head torch (paying particular attention to the roof areas/loft space, walls and any gaps in the stonework). A search was made for bat droppings, staining, odour, old skeletons and feeding signs (such as wing casings etc). The roof area was inspected internally via the loft hatch and the external roof areas were inspected using binoculars. Other evidence such as bird's nests and other signs of nesting birds was also looked for both internally and externally.

7. RESULTS

No evidence of bats was found anywhere inside or outside of the house. No droppings were apparent on any of the cobwebbed areas in the loft and there were no signs of feeding perches. The external walls are fully rendered and do not support any gaps which could be used by bats.

The serious cobweb infestation within the loft space would act as a deterrent to roosting bats. The cobwebs would also have the advantage of catching any droppings left by bats. In this situation any droppings would remain for a long period of time enabling any evidence of previous roosts by bats to be identified. The general absence of soffits and fascia boxes will further reduce the roosting potential of this building because these features can often provide a refuge for certain species of crevice dwelling bat.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No evidence suggesting bat use has been found during this survey and for the reasons suggested is thought unlikely and no further survey work is required. It therefore appears that there are no apparent issues relating to the proposed demolition in respect of bats at the present time. As outlined above it is often difficult to inspect every crevice or hidden section in a building (due to access or health and safety issues). In addition bats tend to be nomadic, which reduces the chances of finding bats on one or even several visits. This situation arises frequently when carrying out this type of survey. However, the survey has been completed to a good standard and it is not anticipated that any problems will occur. Carrying out the survey also puts in place demonstrable safeguards regarding the avoidance of illegal activities.

As a general note, most buildings offer potential for over-wintering and seasonal occupancy for individual bats. This use can be sporadic during the season and actual presence through emergence surveys cannot be fully confirmed. It is therefore recommended that the following precautionary recommendations should be undertaken as good working practice during the conversion phase.

- ☐ The roof tiles should be removed by hand to ensure that no torpid or hibernating bats are injured during the proposed works.
- ☐ Door and window frames should be removed with care to ensure that no torpid or hibernating bats are injured during the proposed works.
- ☐ Structural members, lintel bearings, purlins or wall plates should be removed with care to ensure that no torpid or hibernating bats are injured during the proposed works.
- ☐ In the event that bats were found during the conversion then all work should cease and CCW (Mold office) and/or a licensed bat worker should be contacted for further advice.

The construction of a new building offers the opportunity to create some bat friendly features. *Pipistrelle* sp. and other crevice dwellers such as *Myotis* bats will readily take to new and/or converted buildings as long as suitable access points and features are created.

If required the following could be included in the new property to try and encourage bats.

- ☐ Use of traditional bitumen roofing felt rather than plastic membrane which bats have difficulty gripping onto.
- ☐ Install two or three of the ridge tiles using option A or B in the attached example to allow bats access to the spaces below the tiles.
- ☐ Consider including a few purpose made bat bricks in the external wall (made by Ibstock).
- ☐ If possible leave a few gaps between the top of the walls and the roof; 15C 20mm high and at least 100mm long. If soffit boards are used cut slits to allow access to the internal box sections. (gaps are good for swifts as well)
- ☐ Ensure all timber treatment is undertaken using chemicals shown to be safe for bats.
- ☐ Ensure any external lighting is low level and directional towards the ground.

9. ☐ ESTIMATING BIRDS

☐ No evidence of nesting birds was found anywhere within or outside of the house.

All breeding birds are protected under Section 1(1) and 1(2) of the Wildlife and Countryside Act 1981, as amended. This makes it an offence to damage, disturb, or obstruct access to nests during the bird breeding season (generally March to August).

Care should be taken if undertaking any works during the bird nesting season to avoid any disturbance. If a nest was found (or in the course of being made) then all work should cease until the young have fledged.

10. REFERENCES

BCT 2007 *Bat Survey Guidelines* London UK

English Nature 2002 *Bats in roofs: a guide for surveyors* English Nature Peterborough UK

Joint Nature Conservation Committee 2004 *Bat Workers Manual* JNCC Peterborough

Mitchell-Jones A J 2004 *Bat Mitigation Guidelines* English Nature Peterborough UK

Appendix 1 – Site location plan



Appendix 2 – Site photos

1. East elevation



2. South elevation



3. North elevation



4. West elevation



5. Tight fitting barge boards



Appendix 3 – Bat mitigation



