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PROTECTED SPECIES SURVEY

BRON OFFA

BRACKEN COURT

COEDPOETH, WREXHAM

FOR

Mr D Coffin

8th February 2022

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1. INTRODUCTION

A preliminary protected species survey (bats and nesting birds) was undertaken on the 7th February 2022. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (Natural Resource Wales & Natural England licenses). The survey was requested to satisfy planning requirements in respect of any protected species issues for an outbuilding located at Bryn Offa, Bracken Court, Coedpoeth, Wrexham, North Wales. The current proposals involve the conversion of an outbuilding into residential accommodation (the garages will remain as existing).

2. BAT BIOLOGY

There are now 17 species of bat (breeding) 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 been superseded by The Conservation of Habitats and Species Regulations 2017.

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 tend 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. The Environment (Wales) Act 2016 (Section 6) Biodiversity and resilience of ecosystems duty states that “A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions”.

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 carrying out the proposed works.
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of the detached house with a detached garage/coach house type building at the side together with areas of garden and lawn. The property is situated in an established residential location with a road frontage and street lighting.

The outbuilding has been constructed from stone with a pitched and timber framed roof covered with slate. There are two garages in the lower section which will be retained with the rest of the building being converted.

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 8th February 2022, the weather conditions were clear and dry. As much of the building as possible was searched (health and safety and access permitting) using a Cluson rechargeable lamp, a Seesnake endoscope (paying particular attention to the roof sections, ledges and any gaps or cavities). A search was made for bat droppings, staining, odour, old skeletons and feeding signs (such as wing casings etc). Other evidence such as bird's nests and other signs of nesting birds was also looked for both internally and externally.

7. RESULTS

No visible evidence of bats was found anywhere in or around the structure of the building, no droppings, feeding remains, staining, marking etc. There are two upper rooms both of which are open to the ridge. One has been partly insulated with Kingspan while the other room has been plaster-boarded with insulation placed in the cavity space.

The roof slates are all intact and secure on both elevations with no missing sections, gaps or raised areas, the ridge tiles are all intact. The roof slates of the garage are all intact and secure with no gaps or holes, the mortar at the sides on the edge is intact with no gaps.

The gable end by the entrance gate (left when looking from the front) is well sealed with no gaps in the wall or on the edge just below the slates. The other gable end by the house (right from the front) has an overhang and there are two small rips in the roof felt providing access into the cavity space.

On the front elevation there are some gaps behind the front fascia board although upon close inspection there does not appear to be any access to the wall plate because expanding foam has been used all the way along to seal any gaps. On the rear elevation there are a couple of gaps (shown in the photos) behind the board that do appear to offer access to the top of the wall and possibly the inner roof structure.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No visible evidence of bats has been found but there are some features which could be used by bats, in particular the gaps on the rear elevation behind the fascia board, the rips in the felt on the side elevation and less likely the space behind the front fascia board.

Therefore, to assess any use of the building it will be necessary to undertake a single evening emergence/activity survey when bats are active between May and August. At least two surveyors equipped with ultrasonic detectors will be required to ensure the side and rear elevations can be covered.

The results of the survey will indicate if bats are using the building, this will then direct any suitable mitigation. If bats are found to be roosting within the building, then as well as a suitable mitigation scheme a license will also be required from Natural Resource Wales before works can begin.

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 (which may change depending on the results of the additional survey) should be undertaken as good working practice during the construction phase.

- All slates should be carefully removed by hand to ensure that no roosting, torpid or hibernating bats are injured during the proposed works (no reroofing is currently required so this is unlikely).
- Door and window frames should be removed with care to ensure that no roosting, 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 roosting, torpid or hibernating bats are injured during the proposed works.
- In the event that bats were found during the construction process then all work should cease and Natural Resource Wales Species Officer 0300 065 3000 and/or a licensed bat worker should be contacted for further advice.

The Section 6 duty of the Wales Environment Act requires that public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems. Features should be included within the overall design to try and attract species of bat to use the building. These should include (and may change depending on the results of the additional survey):

Pictures of the examples are shown in Appendix 3.

- Inclusion of a “Beaumaris” or similar bat box (available from Wildcare) on the south (side by the entrance) elevation just below the ridge point.
- The more traditional F1 type bitumised roof felts (BS 747) will be used due to issues with the more modern breather type membranes (already felted so this should be fine as existing).
- Soffit boards (due to be replaced) will be set off the from the wall by a minimum of 25 mm to allow access to the top of the wall by bats and small birds.
- Gable end fascia boards will be set back (using battens) from the wall to permit access to the wall top.
- Traditional ridge tiles will be used where possible, these can be bedded on the ridge line with lime mortars, but not edge pointed. Second or third quality tiles, due to their greater thickness offer greater potential for bats to gain access to the inner roof structure, especially along the abutment of the top slates and the ridge tiles.

9. NESTING BIRDS

There was no visible evidence of nesting birds although there is some limited potential at the rear corner above the wall.

A woodstone sparrow nest box will be installed on the wall of the north facing side elevation (closest to the house) at least 3 metres above the ground to avoid predation by cats etc.

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 September).

10. REFERENCES

BCT 2016 Good Practice Guidelines 2nd Edition 2016 BCT

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

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

An aerial photograph of a residential neighborhood. A red arrow points to a specific location on a road. The road is labeled 'W. 1st St.' and 'W. 2nd St.' are also visible. The area contains many houses, trees, and a large green field in the bottom left corner.



Appendix 2 – Site Photos

Front elevation



Side elevation



Side elevation



Rear elevation



Rear elevation – gap here



Side section of the garage is well sealed below the slate edge



Mortar below the gable is intact and secure with no gaps



Gable mortar is all intact



As above



Two tears in the roof felt leading into the box/inner roof structure



Fascia/soffit on the garage is sealed and grilled



Gap behind fascia board



Gap behind fascia on the rear/corner elevation



Fascia set back from the wall



Mortar below the slate edge is intact on the garage



Felt on the other side to the ripped section appears to be secure



Inside the roof area, partially insulated



Felted roof



Plaster boarded ceiling in the other room



Insulation under the plaster board fills the cavity



Appendix 3 – Examples of bat mitigation

Beaumaris bat boxes



Woodstone sparrow nest box





