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PROTECTED SPECIES SURVEY

STABLE COTTAGE

OVERTON, WREXHAM

NORTH WALES

FOR

12th January 2024

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1. INTRODUCTION

A preliminary protected species survey (bats and nesting birds) was undertaken on the 9th January 2024. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (Natural Resource Wales S091412 & Natural England licenses) following a request by the current owners of the property. The survey was requested to satisfy planning requirements in respect of any protected species issues for an outbuilding located at Stable Cottage, Overton, Wrexham, North Wales, LL13 0LJ. A planning consent is being sought to convert a former stable block into a dwelling for the applicants parents.

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 farmhouse, a detached bungalow, the single storey stable to be converted, another small stable, a large metal barn and a small shelter shed. The property is located in a rural location surrounded by open countryside and improved fields.

The detached building has been constructed from solid brick walls (no cavity space in the brickwork) supporting a metal frame roof covered with corrugated asbestos sheeting.

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

6. METHODOLOGY

The buildings were subjected to an internal and external survey on the 9th January 2024, the weather conditions were dry and clear. As much of the building as possible was searched (health and safety and access permitting) using an LED 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, no droppings were apparent and there were no signs of feeding, staining, marking etc. The internal roof area is completely open with all areas being visible. Nothing was found on any of the cobwebs, the floor or any of the stored materials.

Externally, the asbestos roof sheets are all intact and secure with no holes or gaps in the roof, there are some clear panels which illuminate the interior. The eaves around the base of the sheets are sealed as shown in the photos below.

The brick walls are all intact and secure with no gaps or missing sections of brickwork, the walls are solid with no cavity space. There is a small toilet at one end, nothing was found in this section, the rest of the building is open stalls with windows and a side corridor.

Overall, there does not appear to be any evidence of use by bats and nothing that would appear to cause any issues with the current proposals. The overall potential for the building to support roosting bats is negligible due to a lack of roof voids, lack of roof insulation, level of internal light (from windows and clear roof panels) and no dark space or cavities.

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 works 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 construction phase.

- **All roof coverings should be carefully removed by hand to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**
- **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 unlikely 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 alterations to the 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 retained or created. The following features should be included to improve and try to encourage bats to use any suitable areas of the building post construction.

Pictures of the examples are shown in Appendix 3.

- A Vivara Pro Beaumaris bat box will be secured to the side, south-west facing elevation wall as shown below.



- All external lighting for the building will be of a low luminance and directional towards the ground (lighting type example shown below). There will be no high-level illumination or halogen lighting which will discourage bats and there will be no external lighting on the south-west elevation near where the bat box will be located. All external lighting will include a motion sensor and a one-minute timer to avoid them being left on continually.
- A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component. Lights should feature peak wave lengths higher than 550nm to avoid the component of light most disturbing to bats. This will be achieved by using LED light bulbs.
- Any external lighting should be on a short timer with a cowling to prevent any up-lighting or light spread.



Cowl type fitting Wall
lights - Dusk to Dawn
Motion Sensor Outdoor
Lights

Motion sensor to be set at
1 minute timing,

Fitted with 9 watts LED
bulbs.

9. NESTING BIRDS

At the time of the survey there was evidence of around six old swallow nests and the remains of an old blackbird/thrush nest.

A Vivara Pro Woodstone sparrow nest box will be secured to the wall on the side, north-east facing elevation as shown below.



Ten Schwegler or NHBS (or similar product) swallow nest cups will be secured to the upper roof beams within the large adjacent barn shown below. An additional four swallow cups will also be secured to the roof timbers in the small shed at the rear also shown below.

Large barn - 1



Small shed - 2



Works to convert the stable building should only be undertaken between October and February inclusive. The reason for this is to avoid any potential nest disturbance during the breeding season.

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).

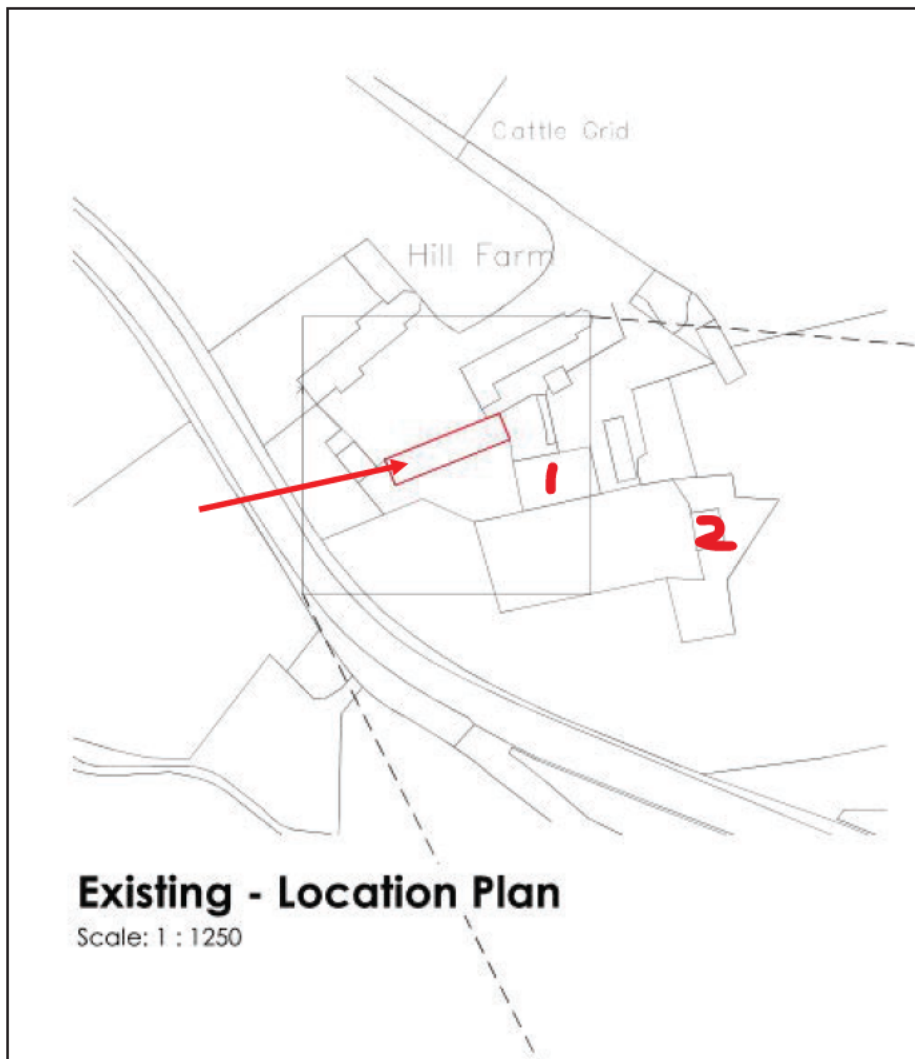
10. REFERENCES

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

Appendix 1 – Site location



Appendix 2 – Site Photos

End elevation



Rear elevation



Rear elevation



Front elevation



Asbestos sheet roof



Asbestos end capping



Corrugated asbestos roof



Interior is open and light



Open roof inside



Old nest evidence



Open and exposed asbestos sheet roof



Open and light interior



Ridge area



Open roof all well lit



Steel frame roof supports



Eaves are sealed inside



Old swallow nest



Open and light roof



Sealed eaves



Sealed eaves



Sealed eaves



Adjacent barn which swallows can use



Side view of the adjacent barn



Rear view



Interior of the adjacent barn



Open access through the upper slits



Barn owl box in the adjacent barn used by crows



Another small open shed that swallows can use



Roof of the above shed



Location of adjacent barn in relation to the building due to be converted



Appendix 3 – Mitigation

Vivara Pro Beaumaris “midi” bat box



Vivara Pro house sparrow nest box



NHBS swallow nest cups

