

Clwydian Ecology

Arosfa, Rhes y Cae, Holywell, Flintshire, CH8 8JG

T: 01352 780787 M: 07891 802 653

www.clwydianecology.co.uk

PROTECTED SPECIES SURVEY

CHAPEL, HILL STREET

PEN Y CAE, WREXHAM

NORTH WALES

FOR

Eryl Roberts Construction

8th October 2014

David Bennett MSc MCIEEM

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1. INTRODUCTION

A preliminary bat and bird survey was undertaken on the 1st October 2014. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (CCW & Natural England licenses) following a request by the current owner of the property. The survey was requested to satisfy planning requirements in respect of any protected species issues for a disused chapel at Hill Street, Pen y Cae, Wrexham, North Wales. A planning consent is being sought to permit the conversion of the chapel into residential accommodation.

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 converting the building.
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of a the chapel with attached school room, a car park area at the front and scrub/tree areas to the sides and rear. The chapel is set within an established residential area in the centre of Pen y cae.

The chapel is constructed in a traditional manner with brick walls supporting a pitched and timber framed roof covered with slate. There is no under-felt although the original lime under-cloak is still intact. A single ceiling hatch in the school room provides access to the voids above the school room and also the main chapel.

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 1st October 2014, the weather conditions were mild, dry 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 (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 evidence of bats was found anywhere inside or outside of the building. No recent droppings were apparent on the floor, roof and wall areas. A few very old droppings (probably 20-30 years old or more) were found at the southern end of the main chapel roof void. These were covered in dense layers of dust and cobwebs and had clearly been there a long time. The roof timbers are original but they do not support any features which could be used by bats such as mortice joints or peg holes.

Externally there are no boxed soffits which can sometimes be used by certain species of crevice dwelling bat. The brick walls are in a good condition with no cracks, gaps in the walls etc. The eaves and the gable ends are well sealed with no access onto the wall plates. The two louvre panels visible in the photos below are both rendered on the inside.

There is a ventilation box in the centre of the main roof void which has lost its top lead capping (only recently it seems due to no damp or decay), the remaining ventilation boxes are intact. The windows in the gable ends are all sealed and covered with mesh internally.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No evidence suggesting a bat roost 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 conversion 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.

- **No re-roofing is required but in case of any issues the roof tiles should be carefully removed 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 event that bats were found during the conversion then all work should cease and Natural Resource Wales (Buckley office) and/or a licensed bat worker should be contacted for further advice.
- This report is considered to be valid for one year. If the works are not undertaken within this period then it may be advisable to carry out a further inspection.

The conversion of 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 created

To secure biodiversity enhancement in accordance with Welsh Assembly Government guidance TAN 5 it is recommended that the following features be included to try and encourage bats to use the converted building.

Pictures of the examples are shown in Appendix 3.

- The roof will be left as it is with the traditional lime under-cloak exposed within the school room and main chapel.
- All Velux windows will be installed with timber tunnel ducts to ensure the main roof voids are left intact and dark.
- Include two “Slateline” bat access tiles to the west facing roof pitch of the large roof above the main chapel (available from Summit supplies of Welshpool). These will provide direct access into the main roof void above the chapel.
- Install one Slateline bat access tile to the west facing roof pitch of the smaller roof section above the school room. This will provide direct access into the roof void.
- Install a Schwegler 1FR bat box onto the west facing side wall. It should be fixed at least 5 metres above the ground and should be away from any direct shade. It can be built flush into the wall or fixed against the brickwork.
- A single Schwegler 2FR bat box will be built into the front gable wall approximately 1 metre down from the ridge (above the window). The rear panel of the box will be knocked out. A timber frame box 30cm x 30cm and 15cm deep will be constructed at the rear to provide a warm and dark enclosed roosting area for crevice dwelling bat species.
- Ensure all timber used for construction (and existing timbers) are treated using chemicals shown to be safe for bats.

- **Ensure any external lighting is low level and directional towards the ground.**

9. NESTING BIRDS

No recent evidence of nesting birds was found anywhere inside or outside of the chapel. Two very old skeletons were found in the main roof void but these were very old and covered in dense layers of dust. With the lead capping being missing from the central ventilator duct there is some potential for birds to gain access to the roof void. It may be advisable to replace the capping before during the winter months before the nesting 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 August/September).

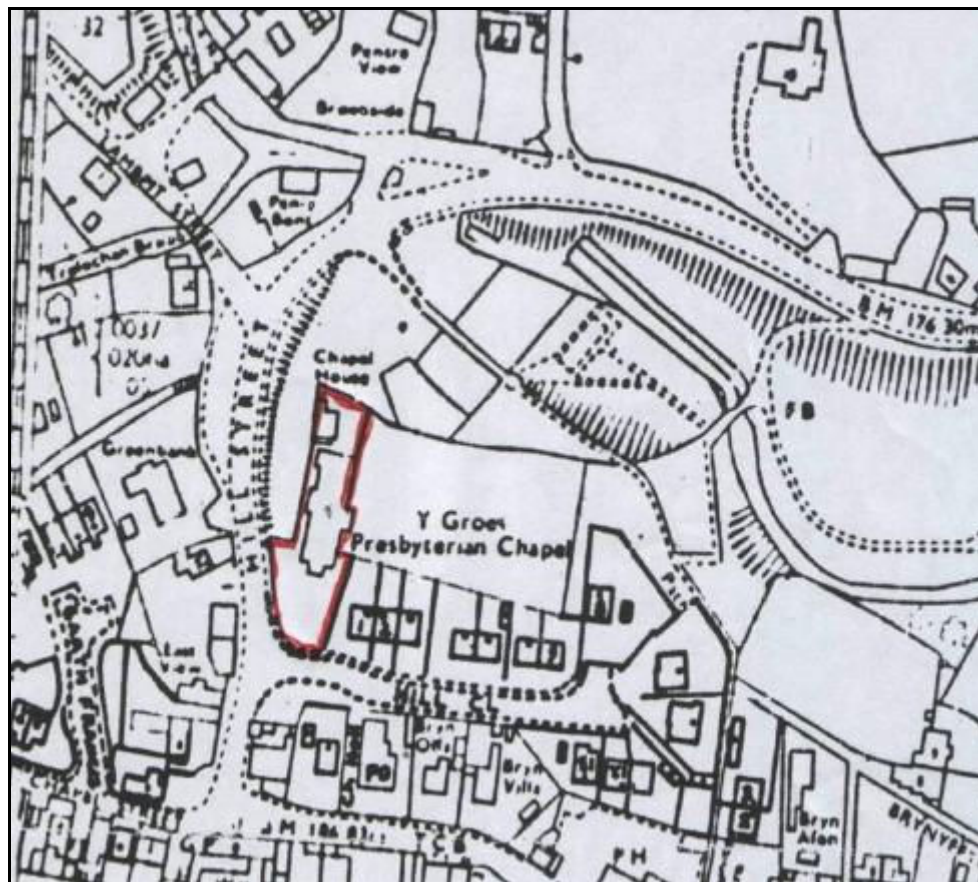
10. REFERENCES

BCT 2007 *Bat Survey Guidelines* London 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 plan



Appendix 2 – Site Photos

1. Front elevation and main entrance



2. East elevation



3. East elevation – the louvre entrance is rendered and sealed



4. Window is sealed and meshed



5. Gable ends are all well sealed



6. Roof tiles are all flat and intact, eaves are sealed



7. Louvre entrance is rendered inside



8. School room at the rear



9. Window is sealed and meshed



10. West elevation

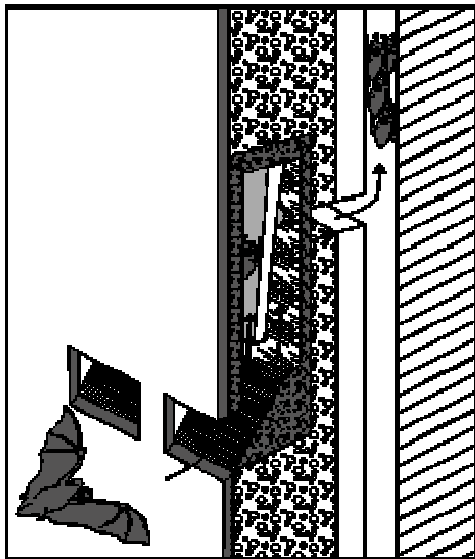
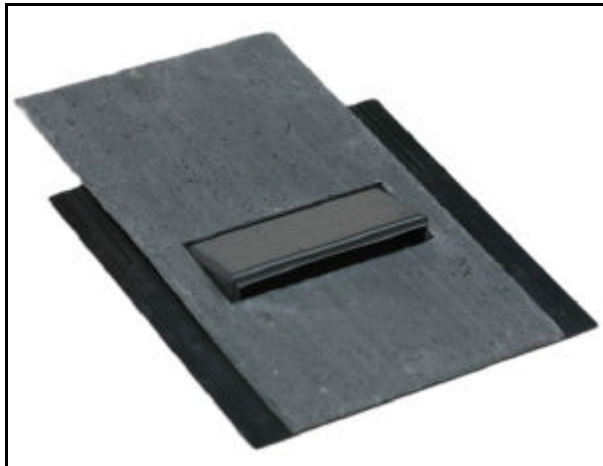


11. Roof and eaves are all well sealed apart from the missing cap on the central duct



Appendix 3 – Bat mitigation

Slateline bat access tile



Schwegler 1FR bat box which will have a timber box at the rear because there is not a cavity wall