

THE TYRER PARTNERSHIP



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Elm Cottage, Bowling Bank, Is y Coed

Inspection and Assessment in Relation to Bats & Breeding Birds

Prepared for:

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Table of Contents

1. Introduction and Reasons for Survey.....	
2. Protected Species.....	
3. Survey Methodology.....	
4. Constraints.....	
5. Bats & Barn owls in Wrexham Area.....	
6. Results.....	
7. Conclusions & Implications.....	
8. Recommendations.....	
Appendix I Site photographs	
Appendix II Bird nesting/bat roost suggestions	

1.0 Introduction & Reason for Survey

- 1.1 As part of proposed Planning Application at Elm Cottage, Is y coed an inspection and assessment was undertaken in relation to bats and breeding birds. The aim of the survey was to ascertain if potential existed for either species and if evidence of use was present. Should evidence of bats be located then a scheme for the protection of them and their roosts would need to be implemented which could involve the requirement for a Welsh Assembly Protected Species Licence to be in place where bats or their roosts would be affected.
- 1.2 It is understood that the existing farm house and adjoining barn are to be demolished and new residential dwelling constructed at the site to provide residential accommodation. Mrs J Roberts the site owner and Applicant commissioned the inspection and assessment.
- 1.3 The optimum time to investigate buildings for evidence of a bat roost is May – August, however that is not to say they cannot be inspected and assessed outside of that time and frequently the results can be conclusive which can save time and expense for Planning Applicants but it should be borne in mind that equally the inspection can be inconclusive. If potential was found to be medium - high or the results of the survey were inconclusive then recommendations would indicate the requirement for nocturnal observations to be undertaken at the site during the breeding season of bats. (May – August)

2.0 Protected Species

- 2.1 Guidance is contained in Planning Policy Wales Technical Advice Note: 5: Nature Conservation and Planning 2009 on the consideration that should be given to Protected Species where they may be affected by development. Furthermore TAN 5 PPS9 paragraph 3.4.2 states the Local planning authorities may adopt Supplementary Planning Guidance to provide more detailed, locally relevant guidance for:

Ways in which the planning system can deliver Local Biodiversity Action Plans objectives and the targets of Habitat and Species Action Plans.

- 2.2 All British bats and their roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed under Annex IV of the Habitats Directive as in need of protection. When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of regulation 6 of the Habitats Directive, and therefore has a statutory duty under regulation 3(4) to have due regard to the requirements of the Habitats Regulation in the exercise of its functions. Therefore the Directive's provisions are clearly relevant in reaching planning decisions and these should be made in a manner which takes them fully into account.

2.3 Use of Buildings by Bats

- a) Summer breeding roost.
- b) Hibernation.
- c) Transitional or temporary roost.

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

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- 2.4 All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected under the Wildlife & Countryside Act 1981 (as amended). Birds listed on Schedule 1 e.g. Barn Owls are afforded a greater level of protection. Where nesting birds are present then work should be timed outside of the nesting season (March – August) so as to avoid disturbance and subsequently committing an offence.
- 2.5 Barn owls (*Tyto alba*) are a specially protected as a Schedule 1 Part 1 species under the 1981 Wildlife & Countryside Act (as amended), which gives protection to barn owls at all times. The main points in relation to nest sites are: "It is offence to intentionally or recklessly disturb them at or near a nest containing eggs or young. Intentionally damage or destroy a barn owl nest whilst in use or being prepared for use. It is also an offence to intentionally or recklessly disturb dependant young of a wild barn owl."
- 2.6 Within buildings adaption to artificial nest boxes occurs given that suitable habitat exists within feeding range and linear features such as hedgerow, ditches or watercourses are present as links to other areas, which allows the expansion of young barn owls looking for territories. The boxes can serve both as a breeding site and as a place for general roosting or shelter.
- 2.7 Barn owls are essentially a bird of the open countryside, particularly where rough grassland exists, which supports their main prey by way of small mammals and successful breeding is heavily dependant upon 1) a secluded nest site and 2) a plentiful supply of prey being available. It is possible that loss of an occupied nest site can have an adverse affect even if other alternative sites were made available. Thus where possible it is always preferable to retain an occupied site and not take the approach of providing an alternative in a different location.

3.0 Survey Methodology

- 3.1 The survey was conducted on 17th March 2010 by Mr S Irwin who is an experienced bat ecologist and ornithologist and holds a current Countryside Councils for Wales Scientific & Education Bat licence. All buildings that are the subject of the Planning Application were inspected for potential places that may be of value to bats and if evidence of use was present. A loft space is absent within the building therefore the search for evidence of use, which mainly includes droppings or remains of prey items, was confined to the ground and upper floor. Exterior elevations were investigated, with the aid of close focusing binoculars, for places that are frequently used by bats as roosts or as access into roost chambers.
- 3.2 At the time of the survey bats will not have entered their breeding season but are within their hibernation period. If evidence of use was found to be absent the results, conclusions and recommendations are based upon surveyor experience and knowledge of bat ecology.
- 3.3 During the survey the surrounding habitat was assessed in relation to bats as very often roost selection is closely correlated with the surrounding habitat.
- 3.4 The inspection for barn owls was conducted in tandem with the investigation for bats when barn owls will not have reached their main breeding season but, it is always possible for early clutches to be present outside of their main breeding season. Interior surfaces were inspected by torchlight for signs of barn owls, which would include pellets, discarded feathers or typical splashes of white faeces on or around roosting places such as beams.

4.0 Constraints

- 4.1 The survey was conducted outside of the breeding season of both bats and barn owls and as a result the presence of bat droppings, on external elevations, which may have been deposited during the summer months, tends to be more unlikely due to the effects of wind and rain. However, in relation to assessing the level of bat roost potential a full and unrestricted investigation of the buildings was achievable. Evidence of barn owl use is usually obvious thus no there were no significant constraints during the survey.

5.0 Bats & Barn Owls in Wrexham area

- 5.1 *The status of the barn owl in Wrexham County Borough has not been researched. There is probably a minimum of 20 pairs, but numbers may be considerably higher as this owl can be easily overlooked.* (Source: Wrexham Biodiversity Action Plan - Barn Owl. (2004))The status of barn owls in Wrexham CB is mirrored throughout most of the UK and they are constantly under threat from loss of habitat and nesting opportunities. However, nest box schemes for barn owls are/have been taking place with North East Wales to encourage an increase in the population.
- 5.2 Up to nine bat species have been regularly recorded in Wrexham County most of which use built structures, notably occupied residential properties, for roosting. The most frequently encountered species is the Pipistrelle bat (*Pipistrellus*) and its abundant status in Wrexham is reflected throughout the UK.

6.0 Results

- 6.1 The buildings for which the survey was undertaken consist of the main house and several outbuildings. Elm Cottage is located in a rural setting approximately 6 kilometres due east of Wrexham; due to its internal run down and damp condition is unoccupied and redundant its original purpose as residential dwelling. The immediate and surrounding habitat is represented by hedgerow, sporadic trees and open grazing pasture with a degree of rough grassland but woodland is absent. The general habitat can be considered as being of moderate value for most bat species although it is highly probable that at a minimum the Pipistrelle bat (*Pipistrellus*) will be in the area. Where valuable habitat is present close to buildings, then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa. The pastures with rough grassland will support small mammals, which represent the main prey items for barn owls should they be present in the locality.
- 6.2 The Cottage is two storeys and internally is in poor condition due to a lack of maintenance and unoccupancy; it is of brick construction with a pitched concrete tiled roof and all walls are cement rendered, which effectively has sealed all areas around the eaves and soffits, which in turn will significantly reduce access opportunities for bats. Similarly the tight fitting concrete roof and ridge tiles also prevent bat ingress. During the interior investigation it was found that a loft space is absent thus there is no potential for loft dwelling bats such as Brown Long Eared (*Plecotus auritus*) or Lesser Horseshoe. (*Rhinolophus hipposideros*) The ceilings are boarded to the rafters and on occasions crevice dwelling bats can occupy the space between the tiles and the ceiling boards; however at Elm Cottage there is no access for bats to this space.
- 6.4 All outbuildings are of no value to bats and no evidence was found that would indicate use as a 'feeding station' by species such as Brown Long Eared. Throughout the search of the Cottage no recent or historic evidence of any bat species was found and roost potential is deemed to be absent.

- 6.7 Although the habitat is suitable for barn owls, nesting opportunities are absent within all buildings and no evidence was found that would suggest recent or historic use for any purpose. It was noted that historic evidence of House martin (*Delichon urbica*) was present on one gable elevation and a nest building House sparrow (*Passer domesticus*) which is listed as a Red data species, is also present at the same elevation.

7.0 Conclusions & Implications

- 7.1 Bat roost potential for crevice and loft dwelling bats is absent at the Cottage, all of the outbuildings and no evidence of historic use was found, therefore there are no apparent implications in relation to bats and the demolition of the property proceeding. It can also be concluded that the demolition of the buildings would not result in the loss of bat roost potential.
- 7.2 Signs of barn owls or nesting opportunities are non-existent thus there are no implications in relation to this species and the demolition of the buildings proceeding.
- 7.3 Evidence of nesting House sparrow and House Martin are evident, both are afforded protection under the Wildlife and Countryside Act 1981 (as amended) whilst nest building or they or dependant young are occupying a nest. It is therefore clear that there are timing implications to the work schedule.

8.0 Recommendations

- 8.1 The outbuildings should be demolished with immediate effect to prevent nesting birds, such as swallow taking up occupancy, although on the day of the survey there were no historic signs of use. If they cannot be immediately demolished all openings should be closed to prevent ingress before demolition.
- 8.2 Monitoring of the House sparrow nest will be required to establish when the young have fledged but it should be noted that they usually have several broods during the breeding season and the work would need to be carefully timed between broods. However it is more than probable that House martins will return to nest unless measures can be put into place to stop them nesting but it should be done no later than mid April but netting should not be used as birds could be come entangled. One method that may work is to fix long 'streamers' along the nesting gable elevation.
- 8.3 When working at buildings contractors should adopt a standard awareness of the possible presence of undetected singular or small numbers of bats which often use buildings at anytime of the year. If bats are found or suspected of being present at anytime during work then, as a legal requirement work should cease and further advice sought from a bat consultant.
- 8.4 It will be of conservation value and meet the objectives of the Wrexham County Biodiversity Action Plan if provision for bats, barn owls and House sparrow are provided at the site and suggestions for this purpose are contained in Appendix II

Stan Irwin: Countryside Council for Wales Scientific/Education and Conservation Licensed.
Natural England Licensed to disturb and observe Barn Owls.

Appendix I – Site Photographs



Elm Cottage & Immediate Habitat



Outbuildings



Elm Cottage: House sparrow & House martin

Appendix II

Roost/nesting opportunities



Bat Roost 1FQ order no. 00 760/5

Locate on south east
or south west
elevation

This is the ideal bat box for all types of bats that inhabit buildings. The bats may use it for roosting, to form a colony or to shelter their young.

Inside it has two main areas which can be viewed at any time by removing the front panel (see figure 1). The hole at the bottom provides the entrance and allows droppings to fall out. The box requires no maintenance or cleaning.

Bats search for and inhabit spaces which suit their own particular habits and requirements; their differing preferences have been carefully reflected in the design of this product. For example, the outside of the front panel has been roughened to enable the animals to land and hang on to it securely (see figure 2), and access is via a step-like access to ensure that even inexperienced young bats quickly become accustomed to it.

Inside there are rough pieces of wood incorporated into the back of the box which are good insulators and are used

by the bats as perches, and the inside front has a special porous coating which helps to maintain the ideal temperature inside the box. The internal layout means that there are three different areas from which bats can hang and which offer different degrees of brightness and temperature. There are also non-slip areas, gaps ranging from 1.5 to 3.5 cm in width, and places to hide (see figure 2).

Material:

The box is made in a special weather-resistant, air-permeable and rot-proof SCHWEGLER wood-concrete. Because this material is so long-lasting, and because the design of the box prevents water entering (see figure 3), the box will help bats for decades.

The front panel is painted during manufacture; if you wish to match an existing colour, it can be painted with an air-permeable wall paint. Note that the rear has been left untreated to provide better contact with the mortar if it is installed within the rendering on an

outside wall. All metal parts with which the animals come into contact are made from rustproof material.

Installation:

Using the four screws and plugs provided (see figure 1), the box can be easily attached to most types of external brick, timber or concrete walls (see figures 3 and 4). It will also attract bats if it is placed inside a roof space or inside historic buildings. When it is fixed to timber we recommend that the gaps between the wall and the box are sealed with silicone to prevent moisture being trapped.

Installation height:

Position 3 metres or higher above the ground in a place where there is clear flight path for bats entering and leaving the box.

External Dimensions:

Height: 60 cm
Width: 35 cm
Depth: 9 cm.



Front view



Underside

Access into cavity wall for crevice dwelling bats by purpose made bat brick or use typical house brick and adapt. Gap to be 15 -20 mm deep x 75mm wide; take off all rough edges after cutting the brick & ensure full access into cavity wall



Barn owl box locate on tree with open flight path next to rough pasture.
It can also be mounted on a pole, e.g. redundant telegraph pole



Triple nest box for House sparrows, locate on buildings