



Bat & Bird Survey Report

Marchwiel Village Hall

Ref: 1354B

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1.0 INTRODUCTION

- 1.1 J W Ecological Ltd were commissioned in May 2013 to undertake a bat and bird scoping survey of the Marchwiell Village Hall, Marchwiell, Wrexham (SJ 35666 47771). See site location plan D/JWE/1354/001 (Appendix 1).
- 1.2 The aims of the survey were to:
- Identify any evidence of bat usage.
 - Assess bat roost potential.
 - Identify any evidence of past or present bird nesting activity.
 - Assess the likely impact of the loss of the structures on local bat and bird populations.

2.0 SITE LOCATION AND DESCRIPTION

- 2.1 The site is located to the south of Piercy Avenue, Marchwiell
- 2.2 The site comprises a detached village hall building. The original building is of brick construction and has a pitched clay tile roof (see photograph 1, Appendix 2). Flat-roofed single-storey brick extensions with felt roofs are located on the northern, eastern and western sides of the building (see photograph 2, Appendix 2). A small additional section with a pitched clay tile roof is located on the southern side of the building (see photograph 3, Appendix 2).
- 2.3 The main hall building has a hanging tile ceiling and a large loft space which could not be accessed or survey (see photograph 4, Appendix 2). A second small loft space is located in the pitched roof section on the southern side of the building. This loft was accessible. The interior of the roof of this part of the building is torched.
- 2.4 The site is bordered by residential properties to the north and west and by a churchyard to the east.



3.0 DESKTOP STUDY

- 3.1 Ecological data and records of protected species were requested/gathered from the following sources (Table 1):

Table 1: Desktop Study Sources

Consultee/Source of Information	Information Supplied
Nature on the map	Statutorily designated nature conservation sites within 1 kilometre of the survey area.
NBN Gateway	Bat records within 1 kilometre of the proposed development site.

Protected Sites

- 3.2 No statutorily designated nature conservation sites are located within 1 kilometre of the survey area.

Bat Records

- 3.3 A record of a Pipistrelle bat roost exists within 1 kilometre of the survey area.



4.0 LEGISLATIVE AND PLANNING CONTEXT

4.1 This is a brief summary of the ecological planning and legislative context in Wales. This is general advice only and does not relate specifically to the site being assessed. Specific advice is provided in Section 6.0.

4.2 Bats

All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended). Under the legislation it is an offence to:

- intentionally kill, injure or handle a bat;
- to possess a bat (whether live or dead)
- disturb a roosting bat;
- sell or offer a bat for sale without a licence;
- damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

The potential fine for each offence is £5,000. If more than one bat is involved, the fine is £5,000 per bat. An offender can also be imprisoned for up to six months.

Where bats are found to occur on a development site, and there is considered to be a reasonable possibility that a roost may be damaged or destroyed or that bats using a roost will be disturbed, a licence must be obtained from Natural Resources Wales.

4.3 Birds

All wild birds are protected by law under the Wildlife and Countryside Act 1981 (as amended) making it illegal to:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is being built or in use;
- Take or destroy the eggs of any wild birds;
- Possess or control (eg for exhibition or sale) any wild bird or egg unless legally obtained.

Operations that will impact on areas or structures that may be used by nesting birds must be conducted, where possible, between September and February (ie outside of the nesting season). This includes:

- Clearance of scrub and trees;
- Mowing or strimming of areas likely to be used by ground-nesting species;
- Building demolition or maintenance.

Where it is not possible to undertake works outside of the nesting season checks for nesting birds should be made immediately prior to the start on site by a suitably experienced person. Where nests are found an exclusion area should be established around the nest in order to ensure that birds are not disturbed.



5.0 BAT SURVEY

Methods

- 5.1 A daytime bat scoping survey of the building was undertaken by Joe Whittick BSc (Hons.) MCIEEM on the 12th June 2013. Joe Whittick is an experienced bat surveyor and holds a CCW scientific bat license.
- 5.2 The building was inspected on the interior and exterior for evidence of past or present use by bats and its suitability as a bat roost including:
- droppings
 - feeding remains (e.g. moth and butterfly wings)
 - potential roosting sites
 - potential entrance points
 - discolouration around entrance points
 - absence of cobwebs in potential roosting points
- 5.3 A high powered torch (1,000,000 candles) and an endoscope (ProVision 300) were used to aid in the survey. No access was available to the main loft space of the hall.
- 5.4 A dusk bat emergence survey of the hall building was undertaken by Joe Whittick and an experienced assistant on the evening of the 3rd July 2013. Surveyors were equipped with Duet bat detectors recording to MP3. Conditions for the survey were fair – 16°C, 1/8 octas cloud cover, light breeze and dry. Sunset was at 21.35 and the survey commenced at 21.15 and continued until 23.30.
- 5.5 A dawn bat re-entry survey of the hall building was undertaken by Joe Whittick and an experienced assistant on the morning of the 10th July 2013. Surveyors were equipped with Duet bat detectors recording to MP3. Conditions for the survey were fair – 14°C, 1/8 octas cloud cover, light breeze and dry. Sunrise was at 05.00 and the survey commenced at 03.30 and continued until 05.20.



Results

Building construction and suitability for bats

- 5.6 The hall building, particularly the pitched roof over the original section of the building, is in a poor state of repair. There are a number of slipped and missing roof tiles which could give access for bats into the roof area or allow small numbers of bats to roost beneath the roof tiles themselves. Potential access points and roosting sites for bats were also identified in the form of gaps along the eaves of the original part of the building.
- 5.7 The flat-roofed sections of the building offer limited roosting opportunities for bats. The flat felt roofs do not offer suitable entrance points or roosting sites for bats and the timber fascias of these parts of the building are generally tight to the walls.
- 5.8 Overall, the hall building was assessed as having MODERATE potential as a roosting site for bats (BCT, 2012).

Evidence of bats

- 5.9 No evidence of past or present bat roosting activity was identified on the interior or exterior of the hall building during the daytime survey.

Habitats

- 5.10 The churchyard area to the east of the site has good suitability as a foraging area for bat species.

Dusk/dawn bat surveys

- 5.11 During the dusk emergence survey two Soprano Pipistrelle bats were recorded emerging from the western side of the main hall building. The bats emerged from underneath the eaves at 22.04 and 22.09. Small number of both Soprano and Common Pipistrelle bats were also recorded foraging adjacent to the building and in the cemetery to the east of the site during the course of the dusk survey.
- 5.12 During the dawn re-entry survey two Soprano Pipistrelle bats were recorded returning to roost at the eaves on the eastern side of the main hall building. The bats returned to the building at 04.37 and 04.46.

Birds

- 5.13 An active sparrow nest was identified at the eaves on the eastern side of the building. Potential exists for birds to nest in other parts of the building, particularly along the eaves of the main pitched roofed section of the hall.



6.0 CONCLUSIONS AND RECOMMENDATIONS

Bats

- 6.1 No evidence of roosting bats was identified during the daytime bat survey of the building. Access was not however available to the main loft space of the building. The building is in a generally poor state of repair and was classed as having MODERATE potential as a roosting site for bats.
- 6.2 During the dusk/dawn at surveys a small (maximum of two) summer roost of Soprano Pipistrelle bats was recorded using the hall building. The bats are entering the building at the eaves on the eastern side of the building and are likely to be roosting on top of the wall or in the wall cavity.
- 6.3 As bats have been recorded roosting on site a European Protected Species (EPS) license will be required for works to the hall building. The license will need to include mitigation/compensation measures to ensure that no bats are harmed by the proposals and that bats can continue to roost on or near the site. Outline mitigation proposals are provided in Appendix 3.

Birds

- 6.4 An active sparrow nest was identified at the eaves on the eastern side of the building. If possible, works to the hall building should commence outside of the bird nesting season in order to minimise impacts on nesting birds (the nesting season runs from March to August inclusive). Where this cannot be achieved, the building should be checked for active nests by a suitably experienced person immediately prior to the start on site. If any active nests are identified then works in the area of the nest should be delayed until nesting is complete and young birds have fledged (as confirmed by an ecologist).

7.0 REFERENCE

Mitchell-Jones, A.J, & McLeish, A.P. Ed. 2004. *Bat Workers Manual*

English Nature 2004. *Bat Mitigation Guidelines*.

Bat Conservation Trust. 2012. *Bat Surveys – Good Practice Guidelines (Version 2)*

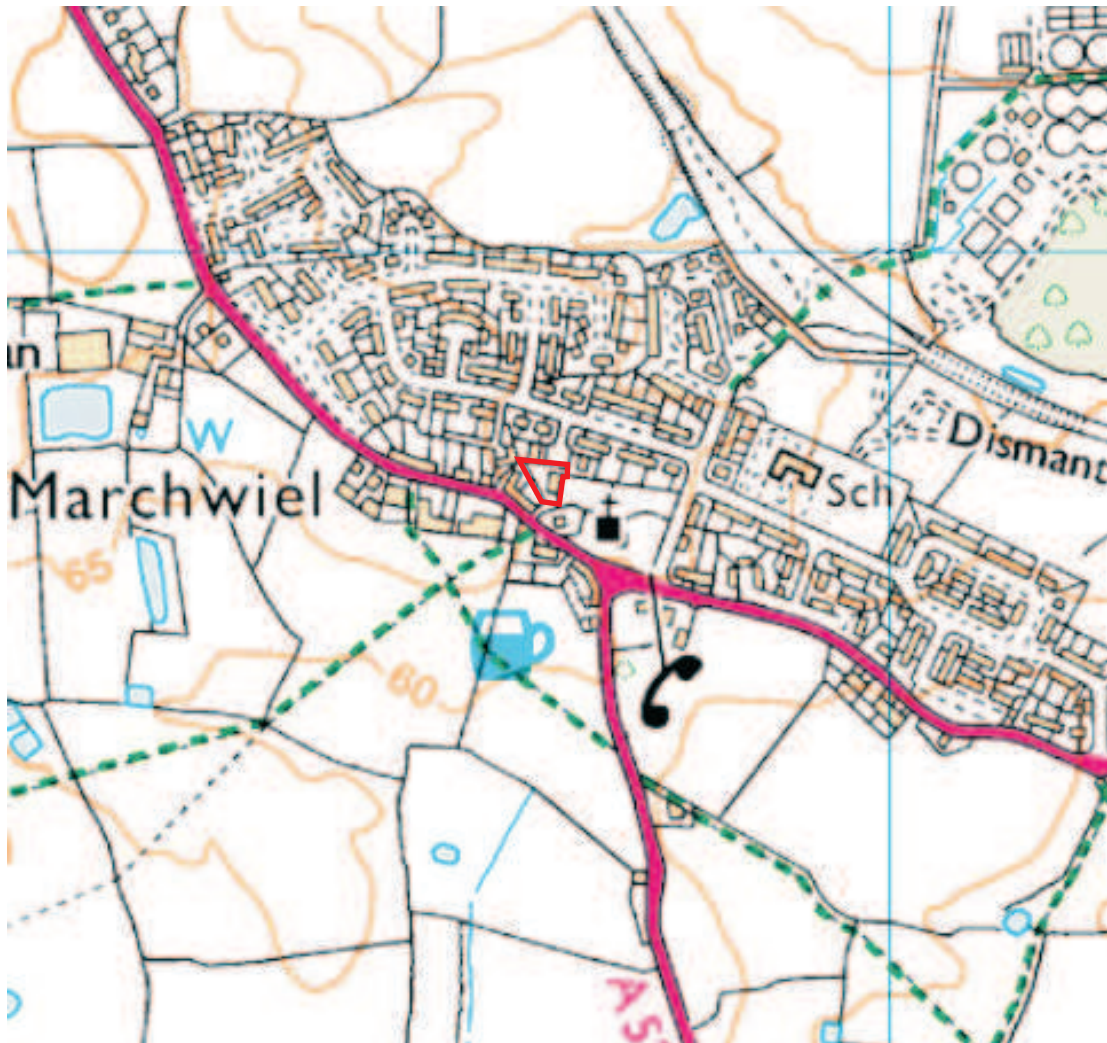


APPENDIX 1

Drawings:

D/JWE/1354/001 – Site Location Plan





 = Site Location



J W ECOLOGICAL LTD

TITLE: Site Location Plan

SITE: Marchwiel Village Hall

NGR: SJ 35666 47771

DRAWING NUMBER: D/JWE/1354/001

APPENDIX 2

Photographs





Photograph 1 – Marchwiel Village Hall



Photograph 2 – Flat-roofed extension



Photograph 3 – Rear of building



Photograph 4 – Interior of main hall



APPENDIX 3

Bat Mitigation Proposals



BAT MITIGATION PROPOSALS

Marchwiel Village Hall

Ref: 1354

SURVEY SUMMARY AND LICENSING

A small summer roost of Soprano Pipistrelle bats has been recorded roosting in the Marchwiel Village Hall building

All roosts and resting sites of bat species are protected under the Habitats Regulations 2010 and a license must be obtained from Natural Resources Wales in order to disturb or destroy the roosting site in the hall.

The license will need to include mitigation/compensation measures for bats. Mitigation proposals are outlined below, these will be subject to agreement by Natural Resources Wales.

IMPACT ASSESSMENT

Given the number and species of bat recorded the roost is assessed as having low importance locally and low importance regionally and nationally.

The level of impact of the proposals is considered to be low at the local level and low at the regional and national levels.

The potential impacts of the proposals are thought to be as follows:

- Short-term impacts – Disturbance
Short term impacts as a result of the proposals are thought to include noise and vibration during the construction works and a general increase in activity on site. Scaffolding will be erected on the building and works will take place within the existing roof void. If these works were undertaken at a vulnerable time of year without the implementation of mitigation measures there is a risk of disturbance and potentially direct harm to bats.
- Long-term impacts – Roost Modification
Bat entrance points could be blocked as a result of roof repair works. Given the number and species of bat recorded on site this is thought to have a low impact on bats locally, regionally and nationally.
- Long-term impacts – Roost Loss
The roosting areas in the hall could be lost as a result of the proposed works. Given the number and species of bat recorded on site this is thought to have a low impact on bats locally, regionally and nationally.
- Long-term impacts – Fragmentation and Isolation
No significant loss of trees or hedgerows will take place as a result of the proposals. Fragmentation impacts are thought to be low.
- Post-development interference impacts
There will not be a significant change in human activity levels on site as result of the proposals.



The scale of impact of the proposals is thought to be as follows:

<u>IMPACT</u>	<u>SCALE</u>								
	<u>Local</u>			<u>Regional</u>			<u>National</u>		
	<u>Low</u>	<u>Med</u>	<u>High</u>	<u>Low</u>	<u>Med</u>	<u>High</u>	<u>Low</u>	<u>Med</u>	<u>High</u>
Disturbance	✓			✓			✓		
Roost modification	✓			✓			✓		
Roost loss	✓			✓			✓		
Fragmentation and isolation	✓			✓			✓		
Post-development interference	✓			✓			✓		

MITIGATION/COMPENSATION

The main impacts of the proposals are:

- The risk of bats being killed or injured if they are present on site when works takes place.
- Disturbance of roosting bats.
- The existing roosting sites being lost or significantly modified as a result of the proposed works.

Timing

Given that only small numbers of a relatively common species of bat have been recorded, timing restrictions on the works to the hall are not thought to be necessary (Bat Mitigation Guidelines, 2004).

Capture and Exclusion

Before commencing works the contractor will be inducted by the licensed bat ecologist to make them aware of the possible presence of bats, their legal protection and the contents of the method statement. The Method Statement and license documents will be kept on site at all times. The building will be inspected by the licensed bat worker immediately prior to the start on site.

Works to the roofs of the hall will be undertaken by hand under the supervision of a licensed bat ecologist. Roofing/ridge tiles will be lifted vertically to avoid crushing any bats that may be underneath. Tiles will be checked on the underside for bats before stacking. Following removal of the roofs the tops of the walls of the building and any wall cavity will be searched for bats.

If any bats are found during works to the roof these will be taken by hand by the licensed bat ecologist. Bats will be immediately transferred to a newly erected bat box (see "New Roosting Provision" below)

If a bat is found at any other time during the works all works will cease immediately and the licensed bat worker will be contacted for further guidance. Builders and contractors are prohibited for handling bats.



New Roosting Provision

Two Schwegeler 1FF bat boxes will be installed on site (see Figure 1 below). These boxes are to be erected prior to the start of works to the hall building. The boxes will be installed directly below the eaves on the eastern side of the hall building and will act as a receptor site for any bats found during the removal of the roof of the building and as long term new roosting provision for bats.

Figure 1 – Location of proposed bat boxes



• = Proposed 1FF bat box

Post-Development Site Safeguard

Any future works required in or around the new bat boxes may require a licence and should be supervised by a licensed bat ecologist. Maintenance of the new roosting provision should be minimal and will form part of the general upkeep of the building.

MONITORING

The site will be inspected by the licensed bat ecologist before, during and immediately after development work is completed.

No population monitoring is proposed in subsequent years given the small numbers and species of bat recorded roosting on site.

