

Report Title	Proposed Demolition of Redwither Business Centre, Abbey Road, Wrexham Industrial Estate, Wrexham – Bat Emergence Survey
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Quality Assurance

Survey/ Assessment Work Schedule		
Survey/Assessment Type	Surveyors/ Author	Date
Dusk Emergence Survey	Lucy Boyett, Sophie Johnson, Mandy Cartwright	27/05/2021

Review Schedule				
Issue	Date	Author	Reviewed by	Approved by
1.0	23/06/2021	Lucy Boyett	Keymar Wake	Tom Knight

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EXECUTIVE SUMMARY

Site	Redwither Business Centre, Abbey Road, Wrexham, LL13 9XR.
Grid Reference	SJ 3843 5034
Surveyors	Lucy Boyett, Sophie Johnson & Mandy Cartwright.
Proposed work	The Redwither Business Centre building is proposed to be demolished. Trees within the site are to be retained and unaffected by the proposed works.
Type of survey	Dusk emergence survey.
Results of survey	During the Preliminary Roost Assessment (PRA) no bats or evidence of bats was recorded but a small number of Potential Roost Features (PRFs) were identified in the building. No bats were seen to emerge from the building during the emergence survey.
Survey conclusions	The building is not currently used by bats for roosting and no further surveys are required.
RAMs & Enhancement recommendations	Reasonable Avoidance Measures (RAMs) detailed in <i>Section 6</i> of Marches Ecology (2020) must be implemented prior to, and during, the proposed works. The RAMs include the installation of temporary protective fencing around the trees to the north of the building and the use of bat-friendly lighting during/ after the demolition works. Recommendations for compensation measures are proposed. It is advised that a small number of bat-boxes are erected on the trees to the north of the building.

1.0 INTRODUCTION

- 1.1.1 Enfys Ecology Limited was commissioned by Marches Ecology to carry out a dusk emergence survey of Redwither Business Centre, Wrexham Industrial Estate. This survey was commissioned following a Preliminary Ecological Appraisal (PEA) (Marches Ecology, 2020a) and a Preliminary Roost Assessment (PRA) in November 2020 (Marches Ecology, 2020).
- 1.1.2 The proposed works are for the current building to be demolished; trees on site are to be retained and will not be affected by the proposed works. The survey was required to determine whether the proposed works would affect bats.
- 1.1.3 The PRA identified a small number of Potential Roost Features (PRF) within the building and found the surrounding habitat to be of low suitability for commuting/ foraging bats (Marches Ecology, 2020). In accordance with the Good Practice Guidelines (Collins, J., 2016), the building was considered to be of low suitability for roosting bats. Therefore, at least one emergence survey was recommended during May to August (inclusive), prior to any works to the building.
- 1.1.4 Following this recommendation, a dusk emergence survey was undertaken on 27th May 2021 and the results are presented in this report. This report is valid for a period of 12 months from this date in accordance with best practice¹.
- 1.1.5 This report does not incorporate the results of the PRA survey. It should be read in conjunction with Marches Ecology (2020 & 2020a).
- 1.1.6 All British bats (and roost sites) are protected under the *Wildlife and Countryside Act (WCA) 1981* (as amended). In addition, all bats are classified as European Protected Species by *The Conservation of Habitats and Species Regulations 2017* (as amended). Under this legislation, it is an offence to kill, injure or disturb a bat, or to destroy any place used as a shelter by bats.

¹ CIEEM (April 2019). *Advice Note: On the Lifespan of Ecological Reports and Surveys*. CIEEM, Winchester.

2.0 METHODOLOGY

2.1 Dusk Emergence Survey

- 2.1.1 The dusk emergence survey was undertaken on 27th May 2021, which is within the peak bat survey months of May to August (inclusive).
- 2.1.2 During the emergence survey, the building was monitored by surveyors Lucy Boyett (accredited on NRW licence S087351-1), Sophie Johnson and Mandy Cartwright, who focused on the PRFs identified during the PRA. Records were taken of any bats observed emerging from the building, and of any other bat activity taking place in the area during the survey. The surveyors used Batbox Duet and Anabat Scout detectors, which record any bat calls for further analysis.
- 2.1.3 The survey began approximately 30 minutes before sunset and continued for approximately 90 minutes after sunset.

2.2 Limitations

- 2.2.1 Bats are highly mobile animals and it is possible that they may move into a building after the survey has been completed. Therefore, absence of bats cannot be absolutely guaranteed.

3.0 SURVEY RESULTS

3.1.1 Table 3.1, provides the timings and weather conditions during the survey.

Table 3.1: Survey details and weather conditions on 27th May 2021

Sunset:	21:22 hrs	Start of Survey:	20:52 hrs	End of Survey:	22:52 hrs
Weather Conditions:	Dry, light breeze and 50% cloud cover. 16°C at start of survey.				

3.1.2 No bats were observed emerging from the building at any stage during the emergence survey.

3.1.3 The first bat recorded was a Common Pipistrelle (*Pipistrellus pipistrellus*) at 21:47 hrs which commuted from east to west. A Soprano Pipistrelle (*Pipistrellus pygmaeus*) was seen commuting at 22:01 hrs and subsequently a Common Pipistrelle was recorded foraging along the west side of the building and around the trees to the north of the building from 22:41 to 22:51 hrs. No other species of bat or other bat activity was recorded within the area during the survey.

4.0 DISCUSSION AND EVALUATION

- 4.1.1 The PRA assessed the building as being of low suitability for roosting bats (Collins, J., 2016). No bats or evidence of bats was recorded during the PRA and no bats were seen to emerge from the building during the emergence survey. A low level of activity was recorded on the site; commuting and foraging by both Soprano and Common Pipistrelles. The emergence survey confirmed that the building is not currently used by bats for roosting.
- 4.1.2 Under the Good Practice Guidelines (Collins, J., 2016), low suitability is defined as “*A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats*” (Collins, J., 2016). The demolition of Redwither Business Centre can therefore be carried out at any time of year, and without any further bat surveys or licence being required.

5.0 RECOMMENDATIONS

5.1 Reasonable Avoidance Measures

- 5.1.1 As bats were not found to be using the building a licence will not be required for the proposed works. The demolition works can be carried out at any time of year (subject to nesting bird and other protected species restrictions), but as a low level of bat activity has been recorded on the site the potential for bats to use the building as an occasional roost in small numbers cannot be discounted. In order to protect bats in the unlikely event that any are present; and to avoid disturbance to bats during the works; Reasonable Avoidance Measures (RAMs) should be followed at all times during all works.
- 5.1.2 If bats, or any evidence of bats, are encountered at any point during any works; all works must immediately stop and a licenced ecologist must be called. A licence will then be required from Natural Resources Wales before works can continue.
- 5.1.3 The RAMs detailed in Marches Ecology (2020) must also be implemented prior to, and during, the proposed works. The RAMs include the installation of temporary protective fencing around the trees to the north of the building and the use of bat-friendly lighting during/ after the demolition works.
- 5.1.4 The building provides features that could be used by nesting birds. All works should ideally take place outside the bird nesting period (March to August inclusive). Marches Ecology (2020a) provides further information on pre-work checks for nesting birds should it be necessary to undertake the demolition during the bird nesting period.

5.2 Compensation Measures

- 5.2.1 The existing building does contain a small number of PRFs that could potentially be used by roosting bats. To offset the loss of these PRFs three bat-boxes will be erected on the trees to the north of the building (subject to any required consent). The bat-boxes should be installed at least 4 m above the ground, where they are sheltered from strong winds but exposed to the sun for part of the day (usually south, south-east or south-west facing). The use of woodcrete or woodstone boxes is recommended, as they last longer with limited maintenance requirements. Ideally the bat-boxes should be installed by a suitably qualified ecologist.
- 5.2.2 The bat-boxes must subsequently be checked by a licensed bat worker.

6.0 LEGISLATION

6.1 Bats

The *Wildlife and Countryside Act (WCA) 1981* (as amended) forms the key legislation protecting habitats and species in the UK. All UK bat species are fully protected under the 1981 Act through inclusion on *Schedule 5*. All bats are also listed under *Schedule 2* of the *Conservation of Habitats and Species Regulations (2017)*. In combination, this legislation makes it an offence to:

- Deliberately or recklessly take, injure or kill a bat;
- Deliberately or recklessly damage or destroy a place or structure used by bats for shelter or protection;
- Deliberately or recklessly obstruct access to a bat roost; or
- Deliberately or recklessly disturb bats while occupying a roost.

Bat roosts are protected under these laws whether the animals are present at the time of survey or not. Under both laws the Welsh Government and D.E.F.R.A. are empowered to issue licences to carry out work to bat roosts for reasons of overriding public interest. It is not illegal to tend to a disabled bat pending recovery.

6.2 Birds

Under the *Wildlife and Countryside Act, 1981* (as amended) and the *Countryside and Rights of Way, 2000*, all wild birds, their nests and eggs are protected during the breeding season (typically March to August inclusive). This makes it an offence to:

- Intentionally kill, injure or take any wild bird.
- Take, damage or destroy the nest of a wild bird included in Schedule ZA1.
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built.
- Take or destroy an egg of any wild bird.

7.0 REFERENCES AND INFORMATION SOURCES

Bat Conservation Trust (2018). *Bats and artificial lighting in the UK - bats and the built environment series*. www.bats.org.uk

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines, (3rd Edition)*. Bat Conservation Trust, London.

Marches Ecology (2020). *Proposed Demolition of Redwither Business Centre, Abbey Road, Wrexham Industrial Estate, Wrexham – Preliminary Roost Assessment*. Produced on behalf of Wrexham County Borough Council.

Marches Ecology (2020a). *Proposed Demolition of Redwither Business Centre, Abbey Road, Wrexham Industrial Estate, Wrexham – Preliminary Ecological Appraisal*. Produced on behalf of Wrexham County Borough Council.

Stone, E.L. (2013). *Bats and lighting: Overview of current evidence and mitigation guidance*.