ECOLOGY CONSULTING

Chirk Marina Boathouse, Chirk

Bat Emergence Survey Report

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1 Introduction

1.1 Terms of Reference

Ecology Consulting Ltd was commissioned by Axis PED Ltd to undertake bat emergence surveys of the former Chirk Marina Boathouse, located in the administrative boundary of Wrexham County Borough Council. Emergence surveys were recommended following a bat scoping survey undertaken in February 2026[1].

1.2 Development Description

The property is of brick construction with external rendering and has a multi-pitched slate roof, as shown in the photograph below. The property has been vacant for about 6 years following its closure as a restaurant/café in 2019 and it is proposed that the property will be demolished.



Plate 1: Overview of Chirk Marina Boathouse

1.3 Objectives

The objectives of the emergence surveys were to identify the presence of likely absence or roosting bats and, if present, identify the number and species of bats using the building, the roost type and location/s and provide an assessment of potential impacts from the proposed development works.

[1] Ecology Consulting Ltd (2026) Bat Scoping Report

2 Legislation

All species of bats recorded within the UK are protected from killing, injury and disturbance and their roosts protected from damage or destruction under the Conservation of Habitats and Species Regulations 2017 (as amended), as retained and amended following EU Exit. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licenced by Natural Resources Wales for certain purposes.

Several bat species recorded in Wales are also listed as Species of Principal Importance (SPI) for the purpose of maintaining and enhancing biodiversity under Section 7 of the Environment (Wales) Act 2016, including Bechstein's bat (*Myotis bechsteinii*), barbastelle (*Barbastella barbastellus*), brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), greater horseshoe bat (*Rhinolophus ferrumequinum*), lesser horseshoe bat (*Rhinolophus hipposideros*), noctule (*Nyctalus noctula*) and soprano pipistrelle (*Pipistrellus pygmaeus*).

3 Field survey methodology

3.1 Emergence Surveys

The bat emergence survey methodology was based on survey guidelines published in Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition) by the Bat Conservation Trust (2023)[2].

The surveys were undertaken as detailed in the table below.

Table 1: Survey Details

Survey No	Date	Sunset time	Start time	End time	Weather conditions
1	20 May 26	2111	2055	2241	15C (start) and 12C (end). Dry, partly cloudy, Beaufort 2
2	10 June 26	2136	2121	2251	15C (start) and 13C (end). Dry, partly cloudy, Beaufort 1
3	01 July 26	2141	2125	2311	17C (start) and 15C (end). Dry, 100% cloud, Beaufort 4

The surveys were conducted by experienced bat surveyors and led by a bat licenced surveyor (Lee Bagnall, NRW licence holder number S095304/1). Surveyor locations were chosen to provide full coverage of those features identified as offering most potential for use by bats. There were a total of five survey positions. Four were manned, whilst one was unmanned where a small additional area could not be covered fully from the manned positions but did not warrant a full manned position. Survey positions are shown on Figure 1. Equipment used at each of the survey positions is listed in the table below.

Table 2: Survey Positions & Equipment

Position	Manned/Unmanned	Camera	IR Lighting	Detector
1	Manned	Canon XA10	Nightfox Arc and XB5	EMT
2	Manned	Nightfox Whisker	Nightfox Arc and XB5	EMT
3	Manned	Nightfox Whisker	Nightfox Arc	EMT
4	Manned	Canon XA30	Nightfox Arc and XB5	EMT
5	Unmanned	Nightfox Whisker and Nova	Nightfox XB5	SM Mini Bat 2

3.2 Limitations

There was an SD card failure at the start of Survey 1 (Position 5) but this was noticed within 10 minutes of the start of survey and a replacement camera was deployed before sunset, therefore this is not considered to present a significant limitation.

Bats may use many different roost sites through the seasons, and dusk surveys undertaken during the breeding season of May to August are likely to be a 'snap-shot' of the overall picture. Surveys between May and mid-August should determine whether a maternity roost is present, as well as regularly used non-breeding summer roosts. However, these surveys may not identify presence of transitional or mating roosts which are typically used in late August and September and March/April or hibernation roosts which are used between October and March.

[2] Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London

4 Results

4.1 Bat Emergence Surveys

The bat emergence surveys confirmed the presence of a roosting bat within the building. A single soprano pipistrelle was recorded emerging from near the apex on the eastern facing gable end of the building on Survey 2. No bats were recorded emerging from or entering the building on Surveys 1 or 3. A copy of the footage review record is provided within Appendix A.

Further information is provided in the table below and the roost location is marked on Figure 1.

Table 3: Bat Emergence Survey Results

Survey	Description	Emergence location (bat circled where visible)
Survey 1	No bats were recorded emerging or entering the building	N/A
Survey 2	A single soprano pipistrelle bat was recorded emerging at 2155 from under lead flashing near the apex at the east facing gable end (Survey Position 2)	
Survey 3	No bats were recorded emerging or entering the building	N/A

During the surveys, general foraging and commuting bat activity was recorded for common and soprano pipistrelle, noctule, *Myotis species* and lesser horseshoe bats (Survey 1 only).

5 Conclusions & Recommendations

5.1 Summary of Findings

No evidence of a maternity roost was identified.

The bat emergence surveys identified a peak count of one soprano pipistrelle bat emerging from a roost within the building on Survey 2. As a single bat was recorded, on one occasion, it is assessed that the roost identified is a non-breeding day roost, used by an individual bat to shelter during the day.

5.2 Potential Impacts, Outline Mitigation and Compensation

A single bat was recorded emerging from the eastern gable end of the building which is scheduled to be demolished. Therefore, in the absence of mitigation measures, there is the potential for killing or injuring a bat, destruction of a roost site and disturbance of a bat in its place of shelter.

Due to the confirmed presence of a roosting bat within the building, once planning permission is granted, it will be necessary to obtain a licence from Natural Resources Wales (NRW) to allow works to proceed lawfully. Please note, surveys will need to be updated if the data is more than 12 - 18 months old at the time of applying for the licence. Works should be undertaken under NRW licence and in line with mitigation measures included within the licence application method statement which will include soft-stripping of suitable roost features by hand under the supervision of an NRW bat licenced ecologist.

To compensate for the loss of roosting habitat, alternative provision should be provided in the form of bat boxes. A minimum of three general purpose bat boxes should be mounted on mature trees which will be retained within the grounds of the building.

Figure 1 – Surveyor Positions and Roost Location



Suggested Surveyor Position for Emergence Sureys

Surveyor Viewshed for Emergence Surveys

Roost Location

Figure 1 - Potential Bat Roosting Features

Axis PED Ltd on behalf of Maesgwyn Estates

Produced by: LB, 05/02/2026

Rev01

Map data: Google, QuickMapServices ©2026

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Appendix A: Footage Review Record

Chirk Emergence Survey 1 (20 May) Review Record

Position ID	Surveyor	Camera used	Supplementary IR Lighting	Detector used	Footage Reviewed by	Date of Review	Method (manual, software etc)	Emergence/Re-entry?	Species	Number	Time	Location	Note	Any survey limitations?
1	HC	Canon XA10	Nightfox Arc and XB5Pro	EMT2 Pro	HC	21/05/2026	Manual	No	PPYG	4	Approx 2142 and 2201	Left corner and centre	4x potential re-Entry and emergence - reviewed and foraging only - no emergence	No
2	RC	Nightfox Whisker	Nightfox XB5	EMT 2	RC	21/05/2026	Manual	No	N/A	N/A	N/A	N/A	N/A	No
3	RE	Nightfox Whisker	Nightfox Arc	EMT2 Pro	RE	21/05/2026	manual	No	N/A	N/A	N/A	N/A	N/A	No
4	LB	Canon XA30	Nightfox Arc and XB5Pro	EMT2 Pro	LB	21/05/2026	NightArc software and spot manual checks	No	N/A	N/A	N/A	N/A	Possible emergence noted at 2143 was a bat flying over the roof south to north - no emergence	No
5	Unmanned	Nightfox Whisker and Nova	Nightfox XB5	SM Mini Bat 2	LB	21/05/2026	NightArc software and spot manual checks	No	N/A	N/A	N/A	N/A	N/A	First 10 minutes not recorded due to sd card malfunction

Chirk Emergence Survey 2 (10 June) Review Record

Position ID	Surveyor	Camera used	Supplementary IR Lighting	Detector used	Footage Reviewed by	Date of Review	Method (manual, software etc)	Emergence/Re-entry?	Species	Number	Time	Location	Note	Any survey limitations?
1	HC	Canon XA10	Nightfox Arc and XB5Pro	EMT2 Pro	HC	12/06/2026	Manual	No	N/A	N/A	N/A	N/A	N/A	No
2	RC	Nightfox Whisker	Nightfox XB5 Pro and Arc	EMT2 Pro	RC	11/06/2026	Manual	Yes Emergence	PIPPYG	1	21.54	Flashing on gable end at apex, right of chinmey	N/A	No
3	RE	Nightfox Whisker	Nightfox Arc	EMT2 Pro	RE	06/11/2026	Manual	No	N/A	N/A	N/A	N/A	N/A	No
4	LB	Canon XA30	Nightfox Arc and XB5Pro	EMT2 Pro	LB	11/06/2026	NightArc software and spot manual checks	No	N/A	N/A	N/A	N/A	N/A	No
5	Unmanned	Nightfox Nova	Nightfox XB5	SM Mini Bat 2	LB	11/06/2026	NightArc software and spot manual checks	No	N/A	N/A	N/A	N/A	N/A	No

Chirk Emergence Survey 3 (01 July) Review Record

Position ID	Surveyor	Camera used	Supplementary IR Lighting	Detector used	Footage Reviewed by	Date of Review	Method (manual, software etc)	Emergence/Re-entry?	Species	Number	Time	Location	Note	Any survey limitations?
1	HC	Canon XA10	Nightfox Arc and XB5Pro	EMT2 Pro	HC	08/07/2026	Manual	No	N/A	N/A	N/A	N/A	N/A	No
2	RC	Nightfox Whisker	Nightfox XB5 Pro & Arc	EMT 2	RC	21/05/2026	Manual	No	N/A	N/A	N/A	N/A	N/A	No
3	RE	Nightfox Whisker	Nightfox Arc	EMT2	RE	02/07/2026	Manual	No	N/A	N/A	N/A	N/A	N/A	No
4	LB	Canon XA30	Nightfox Arc	EMT2 Pro	LB	03/07/2026	NightArc software and spot manual checks	No	N/A	N/A	N/A	N/A	A couple of possible emergences as 2223 and 2237 but futher analysis showed foraging only	No
5	Unmanned	Nightfox Nova	Nightfox XB5 Pro	SM Mini bat 2	LB	03/07/2026	NightArc software and spot manual checks	No	N/A	N/A	N/A	N/A	N/A	No