

BAT ACTIVITY SURVEYS AT GWERN-Y-TO, WORTHENBURY, WREXHAM

2015



RACHEL HACKING ECOLOGY

52 Church Lane, Marple, Stockport, Cheshire SK6 7AW

Tel: 0161 427 3548 Mob: 07734 296424

mail@rachelhackingecology.co.uk

www.rachelhackingecology.co.uk

1.0 INTRODUCTION

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2015 by Matthews & Goodman LLP to undertake bat activity surveys at Gwern-y-to, Worthenbury, Wrexham. The site is the subject of a full planning application for the demolition of a cottage on the site and the construction of a detached dwelling. A barn will be converted as part of the proposals and a new access track into the site will be constructed.
- 1.2 Gwern-y-to is located off Frog Lane, between Worthenbury, Wrexham and Shocklach, Cheshire (O.S. grid reference: SJ430469). The site comprises of a detached two-storey dwelling, a two-storey barn and a dilapidated (roofless) barn. The land around the buildings is overgrown vegetation including patches of dense scrub.
- 1.3 A daytime bat survey was undertaken in 2014 (see *Daytime Bat Survey at Gwern-y-to, Worthenbury, Wrexham 2014 - Rachel Hacking Ecology Limited*). The survey report concluded that both the detached dwelling and the barn supported bat droppings and feeding remains within the upper floors. Recommendations were made to undertake bat activity surveys, to determine if bats are using the site to roost within.
- 1.4 All bat species are European Protected Species under the Conservation (Natural Habitats etc.) Regulations 1994, updated and consolidated by the Conservation of Habitats and Species Regulations 2010. They are also fully protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000, the Natural Environment and Rural Communities Act 2006. It is illegal to disturb or damage a bat roost whether or not there are bats present.

2.0 METHODOLOGY

- 2.1 Three bat activity surveys were undertaken at Gwern-y-to (2 x dusk emergence surveys and 1 x dawn re-entry survey), in accordance with the Bat Conservation Trust Bat Surveys Good Practice Guidelines (2012).
- 2.2 For each activity survey, four surveyors monitored the detached dwelling and the barn on site, to ensure complete coverage of these buildings for any emerging or re-entering bats.
- 2.3 The emergence surveys began 30 minutes before dusk and continued for 60 minutes after dusk. The re-entry survey began 90 minutes before dawn and continued until sunrise. The surveyors used Anabat bat detectors to record the echolocations of emerging bats.

Timing and Personnel

- 2.4 The two dusk emergence surveys were undertaken on 7th May 2015 and 3rd June 2015. The dawn re-entry survey was undertaken on 11th June 2015. May and June are optimum months within which to carry out bat activity surveys.
- 2.5 The surveys were undertaken by Rachel Hacking (Principal Ecologist), Andy Harmer, Joel Hacking, Sam Harmer, Mike Thompson and Rachel Blount. The surveyors have many years of experience in bat surveys and mitigation and are fully trained.

3.0 RESULTS

3.1 Figure 1 shows the locations of the bat surveyors during the surveys.

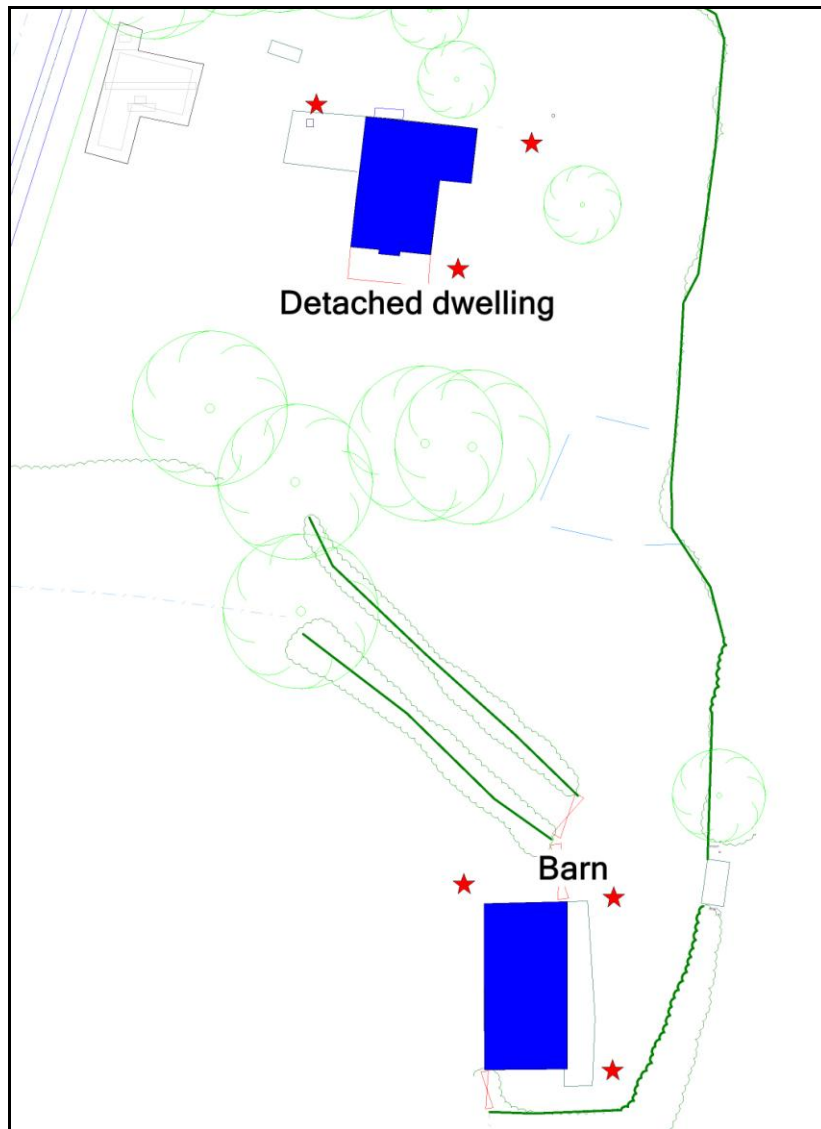


Figure 1 showing the locations of the surveyors at Gwern-y-to (red stars)

3.2 No bats were observed emerging or re-entering the detached dwelling or the barn during the surveys. Bat activity was recorded in the locality during the two dusk surveys and this is detailed below. No bat activity was recorded during the dawn survey.

7th May 2015

- 3.3 Table 1 details the bat activity observed on the site.

	Table 1. Bat activity and timings during the survey on 7/05/15
1.	Common Pipistrelle foraging around the dwelling at 21.20
2.	2 x Common Pipistrelle foraging around the dwelling at 21.22
3.	Soprano Pipistrelle foraging around dwelling and over barn at 21.27
4.	Noctule recorded and heard at 21.32
5.	Common Pipistrelle foraging over whole site at 21.38
6.	Common & Soprano Pipistrelle foraging over dwelling and barn at 21.46
7.	Common & Soprano Pipistrelle foraging over dwelling and barn up to 22.04 when survey ended

- 3.4 Table 2 gives the weather conditions during the survey.

Table 2. Weather conditions during the survey 7/05/15	
Sunset:	20.48
Temperature (low):	10°C
Beaufort Scale:	0
Weather:	Dry, overcast, calm

3rd June 2015

- 3.5 Table 3 details the bat activity observed on the site.

	Table 3. Bat activity and timings during the survey on 3/06/15
1.	Soprano Pipistrelle foraging over barn at 21.48
2.	Soprano Pipistrelle foraging around dwelling at 21.49
3.	Common & Soprano Pipistrelle foraging over barn and dwelling at 21.53
4.	Common & Soprano Pipistrelle foraging over dwelling and barn up to 22.40 when survey ended

- 3.6 Table 4 gives the weather conditions during the survey.

Table 4. Weather conditions during the survey 3/06/15	
Sunset:	21.28
Temperature (low):	12°C
Beaufort Scale:	1
Weather:	Dry, overcast, slight breeze

11th June 2015

- 3.7 Table 5 gives the weather conditions during the survey.

Table 5. Weather conditions during the survey 11/06/15	
Sunrise:	04.40
Temperature (low):	8°C
Beaufort Scale:	0
Weather:	Dry, clear, calm

4.0 SUMMARY AND RECOMMENDATIONS

- 4.1 The bat activity surveys undertaken at Gwern-y-to show that no bats are currently roosting within the site. No bats were observed to be entering or emerging from the detached dwelling or the barn.
- 4.2 All of the surveys were undertaken during optimum weather conditions with no impediment to any of the visits.
- 4.3 It is the opinion of the author of this report that demolition and conversion can proceed without the need for bat mitigation. However, if the development works are delayed by longer than two years from the date of this survey, a further bat survey will be required to update the findings.
- 4.4 It should be noted that bat absence is very difficult to prove definitively due to their mobility and size, and single or small numbers of bats are able to roost in extremely small spaces, such as between roofing tiles. Therefore it is recommended that all removal of roof slates and ridge tiles is to be undertaken with care, with the features lifted instead of dragged where possible.
- 4.5 **If during development works a bat (or an accumulation of bat droppings) is discovered at any time, work is to temporarily cease whilst an experienced bat ecologist is contacted for guidance and assistance.** This can be Rachel Hacking Ecology (0161 427 3548), any licensed bat worker, or the Bat Conservation Trust (BCT) helpline (0845 1300 228).
- 4.6 A general recommendation for any development, would be to erect bat boxes onto any new dwelling, to increase the roosting opportunities for bats in the locality.
- 4.7 Bats are using the site as foraging habitat. It is recommended that the boundaries of the site are retained or enhanced. Bats prefer linear landscape features to forage and commute along.

REFERENCES

Hundt, L. 2012. *Bat Surveys: Good Practice Guidelines, 2nd Edition*. Bat Conservation Trust.

Mitchell-Jones, A. J. 2004. *Bat Mitigation Guidelines*. English Nature.