

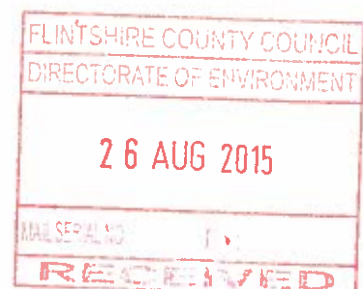
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## Bat Emergence and Activity Surveys

Report Prepared on behalf of The Eureka Project Limited  
For the site of The Bryn Awel Hotel, Mold, Flintshire, CH7 1BL  
25<sup>th</sup> August 2015



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# Bat Presence/Likely-absence Survey

## TECHNICAL APPENDIX

### Background to Survey

The client, The Eureka Project Limited has commissioned Arbtech Consulting Ltd. to undertake an emergence and activity survey to confirm presence/likely-absence<sup>1</sup> of bats at the Bryn Awel Hotel, Mold, Flintshire, CH7 1BL. The proposed plans involve demolishing the hotel buildings and building houses in their place. A proposed site plan is included in Appendix 1.

The Survey builds upon a Preliminary Roost Assessment undertaken by Arbtech Consulting Ltd on 14<sup>th</sup> August 2015, which identified building B1 as supporting negligible potential for roosting bats, and recommended one emergence survey be undertaken on building B2.

### Summary of Conclusions and Recommendations

An emergence and activity survey has been conducted on building B2 (see Site Plan in Appendix 2), in accordance with industry standard best practice guidelines (Hundt, 2012).

It has been assessed that there is a likely-absence of roosting bats and bat roosts within the structure. No further evaluation is considered necessary. A planning decision can be made on the basis that there is negligible risk to bats or bat roosts.

### Summary of Potential Impacts, Mitigation, and Biodiversity Enhancements

| Potential impact/loss?  | Potential mitigation required* | Potential ecological gain?   |
|---|--------------------------------|--|
| No loss of roost - there is a likely-absence of bats in both buildings. | None required.                 | Bat box can be installed on a retained tree to the rear of B2. Biodiversity enhancements of the developed site should include planting native plants, shrubs and tree species within the landscaping scheme. See recommendations for full details. |

<sup>1</sup> It is not currently scientifically possible to prove an absence so an assessed absence is usually referred to as a "likely-absence".

## **1.0 The Company and Contact Information**

Established in 2005, Arbtech Consulting Limited provides arboricultural and ecological consultancy services in respect to planning and development, throughout the UK.

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## **2.0 The Lead Surveyor**

The lead surveyor and principal author of this report is Amy Campion BSc (Hons).

### **2.1 Other Surveyors**

Ben Stanley.

## **3.0 Bat Licences**

The lead surveyor is an accredited agent with Natural England for the undertaking of this type of survey under Christopher Formaggia. Licence details will be made available on request to [cf@arbtech.co.uk](mailto:cf@arbtech.co.uk).

## **4.0 The Client**

The client is The Eureka Project Limited.

## **5.0 The Site of Proposed Development**

The client is preparing a planning application to demolish the hotel and build houses in its place. The proposed site plan is include in Appendix 1.

## **6.0 The Survey Brief**

The client has commissioned Arbtech Consulting Ltd to undertake a bat emergence and activity survey in line with recommendations made following the preliminary roost assessment (PRA) undertaken in August 2015. The emergence and activity survey aimed to confirm presence/likely-absence of bats roosting in building B2, in accordance with best practice methodology (Hundt, 2012).

## **7.0 Limitations**

This survey can only ever provide a limited 'snap-shot' of the potential habitat and wildlife value of the structure(s) at the times of the surveys.

## **8.0 Data Searches**

A data search was undertaken of the site and surrounding 2km to inform the PRA (Arbtech, August 2015); please refer to this report for desk study results.

## **9.0 Date(s) of the Survey**

14<sup>th</sup> August 2015 (evening).

## **10.0 Seasonality**

This type of assessment can be conducted during the period May to September inclusive, with the optimal season for surveying maternity colonies limited to mid-May to August inclusive (Hundt, 2012). Exceptionally, owing to favourable weather conditions it may be possible to extend the survey window but this will need the prior agreement of the regulatory bodies.

## 11.0 Legislation

**Table 1: Summary of Pertinent Legislation and Planning Policy Relevant to the Protection of Bats in Wales**

This table is adapted from Table 2.1 and Section 2.5 of the Bat Surveys—Good Practice Guidelines (Hundt, 2012).

| Location of Roost | Transposing EC Habitats Directive   | Other Relevant Legislation  | Planning Policy                  |
|-------------------|---|---|----------------------------------|
| Wales             | Conservation of Habitats and Species Regulations 2010.<br>The Conservation of Habitats and Species (Amendment) Regulations 2012 | Wildlife and Countryside Act 1981 as amended.<br>Countrywide and Rights of Way Act 2000.<br>Natural Environment and Rural Communities Act 2006. | Technical Advice Note (“TAN”) 5. |

Cumulatively, this legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats, whether at roost or not.
- Damage, destroy or obstruct access to bat roosts.

A bat roost is generally interpreted to mean any structure or place, which any wild bat uses for shelter or protection.

## 12.0 Summary of Previous Survey Findings

Table 2: PRA Summary

| Roost       | Habitat Value  | Are bat emergence surveys required?   |
|-------------|--|---|
| Building B1 | Negligible.  | No further surveys required.  |
| Building B2 | Low.<br>Three features to the rear of the building including a hole in the wooden porch entrance, missing mortar on the fascia board and a gap on the north east corner. | Further surveys required:<br>1 further dusk emergence surveys should be undertaken.<br>2 surveyors are required to provide coverage of the isolated features at the rear of the building. |

## 13.0 The Emergence and Activity Survey Methodology

The survey involved observation of all elevations the structure(s) by suitably experienced bat surveyors. The surveyors utilised broadband bat detectors to assist with the bat recordings.

The aims of the survey were:

- To find or record the emergence of bats from the building B2, and if present:
- To determine presence/likely-absence of bats and identify species i.e. the species present in a given area.
- To determine the density of bat activity both spatially and temporally i.e. to help estimate bat populations.
- To determine the type of activity, most usually foraging (e.g. by feeding buzzes), commuting (e.g. by high directional pass rates) and mating (e.g. by mating social calls).
- To find roosts by tracking back bat flight paths or observing dawn flight activity at roosts.

If bats, evidence of their recent activity or the emergence of bats from a roost are found during the survey, this report will make recommendations for further survey work and/or design mitigation, where this is consistent with national guidelines and assessed appropriate by the surveyor in the context of the proposal.

#### 14.0 Dates of the Bat Emergence Survey

**Table 3: Survey Dates, Times and Weather Records**

| Date       | Survey | Time: from/to | Weather: Start   | Weather: Finish  |
|------------|--------|---------------|--|--|
| 14/08/2015 | Dusk   | 20:13-22:13   | Temp: 16 °C<br>Humidity: 69%<br>Cloudy: 80%<br>Wind: 2/8<br>Rain: None | Temp: 13 °C<br>Humidity: 60%<br>Cloudy: 80%<br>Wind: 2/8<br>Rain: None |



## 15.0 Survey Results

The Survey Plan in Appendix 2 shows the position of the surveyors and provides an illustration of bat activity

Table 4: Buildings shown on the site plan at Appendix 2, and photographs are included in Appendix 3.

| Surveyors:<br>A: Amy Campion<br>B: Ben Stanley |   |                 |  |
|--|---|-----------------|--|
| Surveyor Initials                              | Suspected Roost Identified on sketch plan at Appendix 1 | Dates and Times | Records of Significant Bat Activity  |
| 14/08/2015<br>Sunset 20:43                     |   |                 |  |
| A  | B2  | 20:41-21:45     | Unidentified pipistrelle (not echolocating) flew east to west over B1 at 20:41.<br>Common pipistrelle <i>Pipistrellus pipistrellus</i> flew south to west in between B1 & B2 at 20:55.<br>Common pipistrelle flew over B1 (west to south east) at 21:06.<br>Common pipistrelles heard but not seen from 21:32-21:45. |
| B  | B2  |                 | Common pipistrelles heard but not seen from 20:55-21:34.   |

Bat activity maps and surveyor locations are found at Appendix 2.



## 16.0 Conclusions and Recommendations

It is recommended that measures are implemented as part of the proposals to enhance the biodiversity value of the site post development. This can include native and strategic landscape planting to link the site and surrounding landscape, incorporation of artificial bat roosts (e.g. roosting tiles and bricks, bat boxes), or habitat creation for invertebrates.

**Table 5: Buildings, Groups or Trees referred to by number and in accordance with the sketch plan at Appendix 2.**

| Suspected roost<br>Identified on sketch plan at Appendix 2 | Was the roost confirmed?                           | Will the development affect the roost?   | Roost significance<br>Graded per Natural England Guidance   | What recommendations and mitigation are appropriate?  | Is a European Protected Species Licence necessary?                     |
|--|--|--|---|---|--|
| B2   | Unconfirmed<br><input checked="" type="checkbox"/> | No because likely-absence of bats in B2. | N/A <input checked="" type="checkbox"/><br>Low <input type="checkbox"/><br>Moderate <input type="checkbox"/><br>High <input type="checkbox"/> | <p>Mitchel-Jones (2004) defines the conservation value of bat habitats and roosts and makes proposals for mitigation that are appropriate to: the species of bat(s); the population using the roost; and the roost's status e.g. maternity, pre-breeding summer roost, <i>hibernacula</i>, etc.</p> <p>Bats are confirmed as likely absent in both buildings B1 and B2 on the site.</p> <p>Although the full suite of surveys have been undertaken in accordance with best practice guidance, as a precautionary measure it is recommended that roof tiles are removed by hand, and under the supervision of an ecologist, to the rear of B2, prior to demolition. This is taking into account the limitations described in both bat reports for this site, the surrounding landscape, and the desk study results.</p> <p>If, in the unlikely event a bat is found during works, then works should stop immediately and await further instructions from a suitably qualified ecologist.</p> | Yes <input type="checkbox"/><br>No <input checked="" type="checkbox"/> |

## 18.0 Bibliography

- Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust ISBN-13: 9781872745985  
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- Batbox (2011). The Batbox Duet: ultrasonic bat detectors [online]. Available at: <http://www.batbox.com/duet.html> [Accessed 01 January 2011].
- Mitchell-Jones, A. J. (2004), Bat Mitigation Guidelines. English Nature.
- Office of the Deputy Prime Minister (2005). Circular 06/2005: Biodiversity and Geological Conservation. Para.99  
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/147570.pdf>

## 19.0 Document Production and Approval

| Status | Issue | Author/Reviewer                    | Date       |
|--------|-------|------------------------------------|------------|
| Draft  | 1     | Amy Campion BSc (Hons)             | 19/08/2015 |
| Draft  | 2     | Jo Gregory BA (Hons) MSc GRADCIEEM | 20/08/2015 |
| FINAL  | 1     | Julie Powell                       | 25/08/2015 |
|        |       |                                    |            |

## 20.0 Limitations

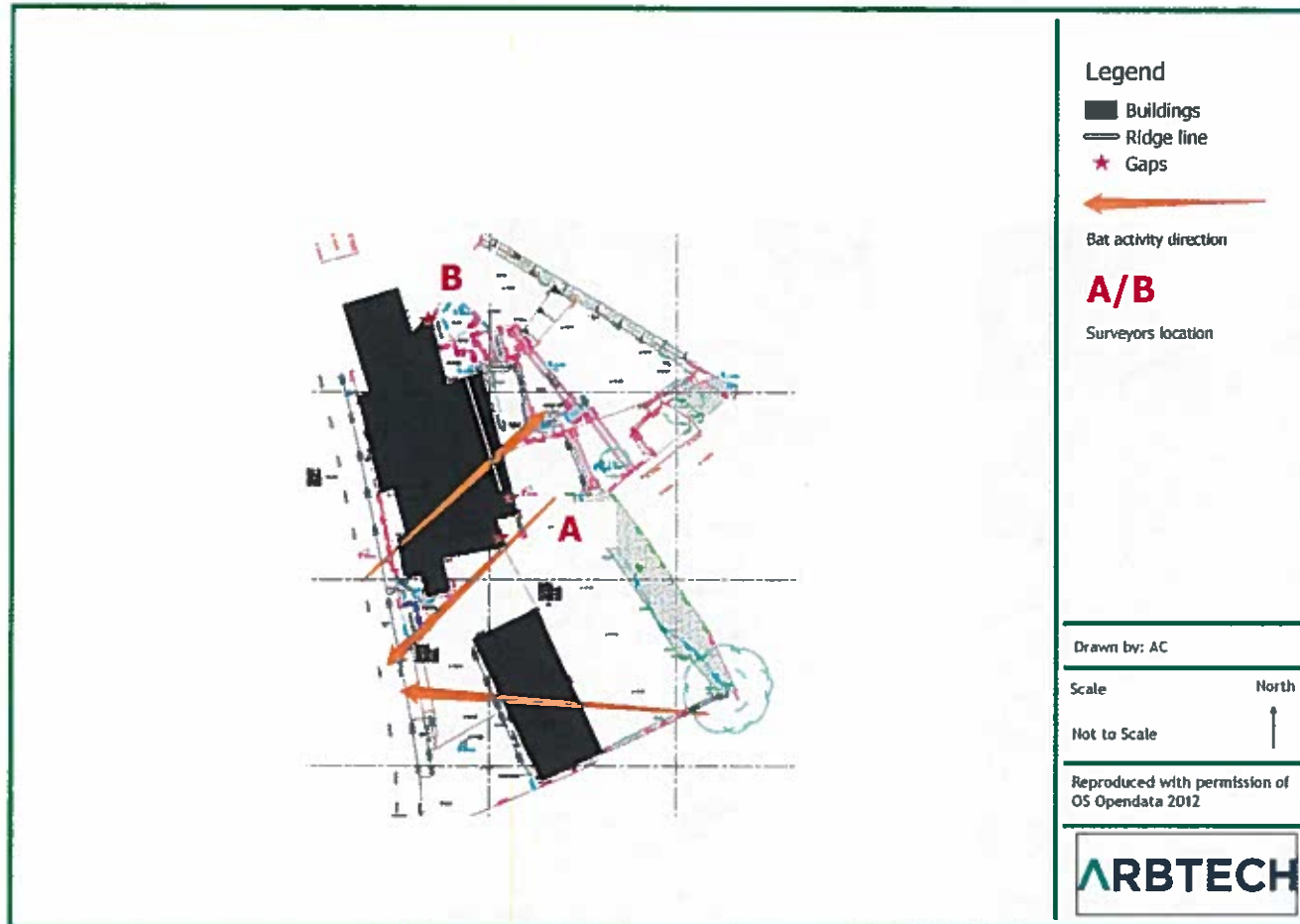
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## Appendix 1: Proposed Site Plan

## Appendix 2: Survey Plan



**Appendix 3: Photos of Building B2**



**Figure 1: Surveyor A's view**



**Figure 2: Surveyor B's view**