

Sylvan Ecology

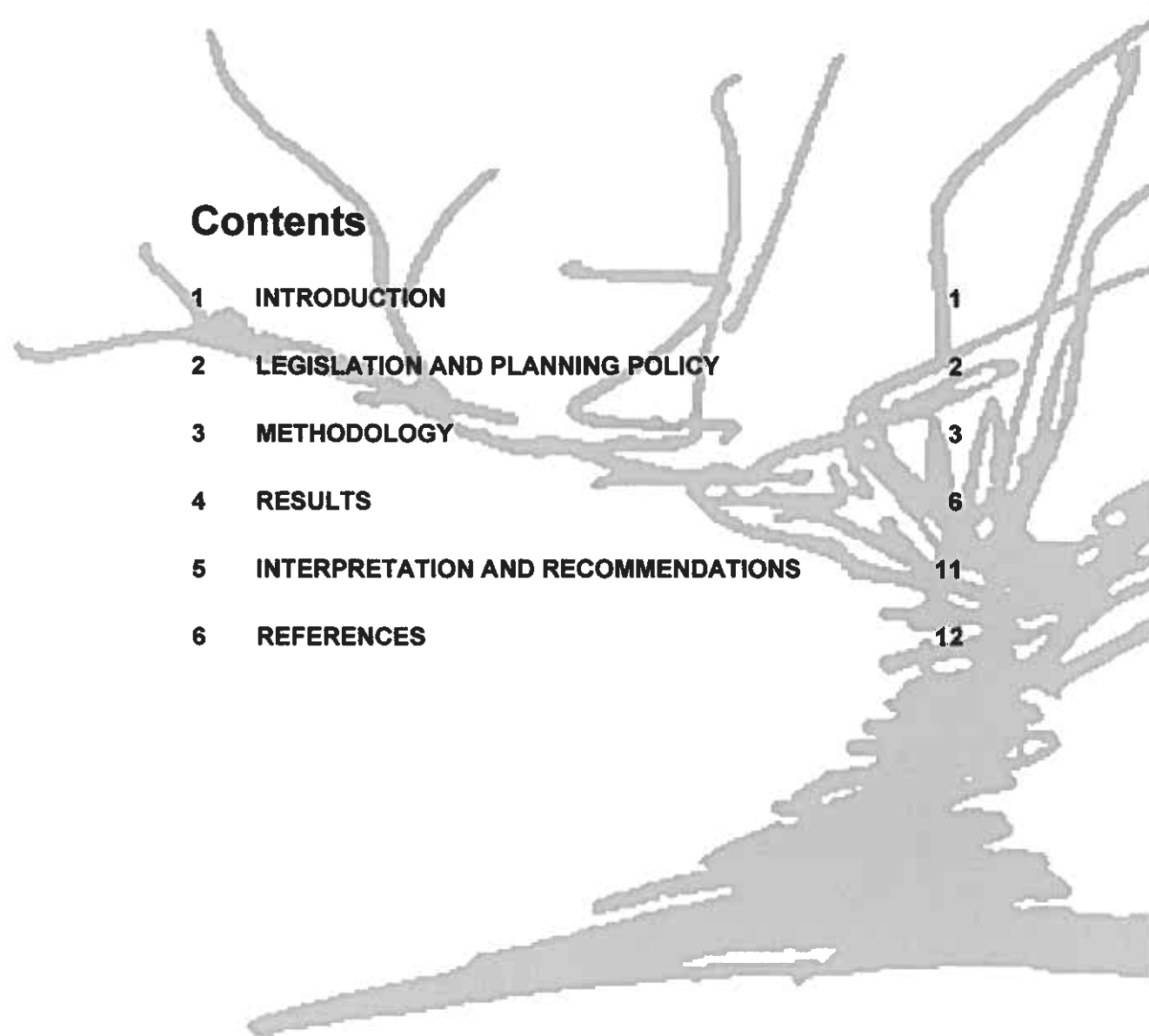
BAT SURVEY REPORT

HIGH STREET CHAPEL

CLIENT

PHILIP GRIFFITHS

Project: High Street Chapel		
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Title	Bat Survey Report	
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Client	PHILIP GRIFFITHS	
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Executive summary		
Site	The survey was carried out on a Chapel in Merthyr Tydfil. The greater surrounding landscape is predominantly commercial and residential, there are also some small sections of woodland (some of which could be ancient). The surrounding landscape has moderate potential for roosting, foraging, and commuting bats.	
Protected Spp (Bats)	An internal inspection and subsequent emergence survey were undertaken. <i>No evidence of bats was found – Negligible Impact</i>	
Conclusion	Given the results of the survey, it is considered that the redevelopment of the site is unlikely to result in any impacts on bats and it is considered that an EPS Licence will not be required.	



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1 INTRODUCTION

Background

- 1.1 Sylvan Ecology were commissioned to complete a Preliminary Roost Assessment, and where necessary, additional works to detail mitigation in relation to bats, for the proposed redevelopment at *High Street Chapel*.

Ecological Context

- 1.2 The proposal constitutes the redevelopment of a chapel located in the centre of Merthyr Tydfil. All associated land for the development (herein referred to as the site) is located at:
- central OS grid reference: SO 04897 05997
 - nearest post code: CF47 8DN

- 1.3 The surrounding area is predominantly commercial units. The River Taff lies approximately 130m to the west. The greater surrounding landscape is predominantly commercial and residential, there are also some small sections of woodland (some of which could be ancient). The surrounding landscape has moderate potential for roosting, foraging and commuting bats.

Aims of the study

- 1.4 The aims of the study are to:
- estimate the size and status of any existing bat roost;
 - determine the potential impact on any bat roosts from the proposed works; and
 - outline the mitigation strategy which will be required to minimise impact on bats within the site and to comply with any legal requirements.



2 LEGISLATION AND PLANNING POLICY

Legislation pertaining to bats

- 2.1 All species of British bat are European Protected Species protected under *The Conservation of Habitats and Species (Amendment) (Eu Exit) Regulations 2019*.
- 2.2 It is therefore an offence to:
- recklessly, intentionally, or deliberately kill, injure or capture (take) bats;
 - deliberately disturb bats (whether in a roost or not);
 - damage, destroy or obstruct access to bat roosts;
 - possess or transport a bat or any part of a bat, unless acquired legally; and
 - sell, barter or exchange bats, or parts of a bat.
- 2.3 Developments that compromise the protection afforded to bats or roosts under the provisions of the *Conservation of Habitats and Species (Amendment) (Eu Exit) Regulations 2019* will require a European Protected Species (EPS) licence from NRW. Three tests must be satisfied before this licence (to permit otherwise prohibited acts) can be issued:
- 2.4 Regulation 44(2)(e) states that licences may be granted to "*preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.*"
- 2.5 Regulation 44(3)(a) states that a licence may not be granted unless "*there is no satisfactory alternative*".
- 2.6 Regulation 44(3)(b) states that a licence cannot be issued unless the action proposed "*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*".



3 METHODOLOGY

Desk Study

3.1 Existing ecological and nature conservation data relevant to the site were collated from various sources:

- Information relating to bats within 2km of the site was provided by South East Wales Biodiversity Records Centre (SEWBReC);
- The Magic website (<http://www.magic.gov.uk/>) was reviewed to determine whether there are any internationally important statutory designated sites for nature conservation, and for other statutory designated sites for nature conservation, within 5km from site; and
- Google Earth was used to review aerial photographs of the site and surrounding area in order to better understand the setting and ecological context of the site.

Building survey

3.2 The site was subject to an internal and external inspection for evidence of bats on the 11th of Feb, 2021. Surveys were carried out in accordance with the standards set in *Bat Conservation Trust's Bat Surveys – Good Practice Guidelines (2016)*. The survey was conducted under optimal condition by a suitably experienced ecologist. The site was inspected by licenced bat worker David Price MCIEEM. Mr Price has 16 yrs. professional consultancy experience and has worked on a large variety of bat related projects throughout the UK.

3.3 Bright torches and ladders were used to search for bats and evidence of bats. The following signs were searched for:

- live bats;
- dead bats, as either complete or partial skeletons;
- insect remains (mainly wings & legs) below feeding perches;
- droppings;
- urine beneath roosting positions, or discolouring of entrance holes;
- scratch-marks on roofs & ceilings;
- grease or rub-marks on roofs or ceilings; and
- evidence of wear on potential access points.

3.4 Where possible, cavities, cracks and crevices were thoroughly inspected for bat evidence using an endoscope.

3.5 The buildings were assessed for bat suitability taking into account the



following general criteria:

- surrounding habitat;
- temperature regime;
- light levels;
- protection from the elements;
- construction detail;
- potential roosting locations; and
- potential bat-access points.

3.6

A description of the buildings was made, with particular attention to the factors listed above. Where possible voids, cracks and crevices were noted. Information including the type of building, number and size of potential bat-roosting locations and bat-access points allows it to be categorised according to a scheme published in Bat Conservation Trust's *Bat Surveys – Good Practice Guidelines* (2016) as follows:

- **High** - Buildings or structures with numerous or extensive locations that are suitable for roosting. Generally, they have sheltered roosting places, with a stable temperature regime, low light levels and suitable bat-access points. They could be suitable for maternity roosts or hibernation sites.
- **Moderate** - Buildings or structures with few or individual, small-sized areas that are suitable for roosting. They could be used by small numbers of bats for roosting and may be suitable for a maternity roost or a hibernation roost.
- **Low** - Buildings or structures that have limited potential roosting locations, are subject to wide temperature regimes, higher light levels and/or restricted bat-access points. They might be used as occasional, transient, or night roosts, by small numbers or individual bats, but are unsuitable for larger colonies.
- **Negligible** - Buildings or structures with no bat roosting potential that are unsuitable for roosting bats.

3.7

Evidence of bats and features of particular interest were noted and described in Section 4.

3.8

Emergence survey

Best practice survey guidelines published by the Bat Conservation Trust (2016) state that for buildings of moderate value to bats, the minimum visit frequency and timing is for two emergence/ dawn re-entry surveys; to be conducted between May - mid Oct. The surveys were to assess if the features identified during the initial survey were being used by



roosting bats. A total of three surveyors were used enabling all aspects of the buildings to be observed. Surveys were led by licenced bat ecologist David Price and assisted by Dr Todd Lewis. Survey equipment included a *Batbox Griffin* time expansion bat recorders and a *Elekon Batlogger M*. Where applicable bat echolocation calls were analysed using *Batscan* and *Batexplorer* software.



4 RESULTS

Desk Study - Species

- 4.1 Information relating to protected and notable species within 2km of the site was provided by *South East Wales Biodiversity Records Centre (SEWBRc)* who also provided information relating to statutory designated sites; LERC Reference: 0201-766. SEWBRc provided 97 records for at least eight species of bat within 2km of the site. These are common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Natterer's bat (*Myotis nattereri*), noctule (*Nyctalus noctule*), Daubenton's Bat (*Myotis daubentonii*), Lesser Horseshoe Bat (*Rhinolophus hipposideros*) and brown long-eared bat (*Plecotus auratus*). In addition, SEWBRc hold records for unidentified pipistrelle bats *Pipistrellus* spp, and unidentified bats Chiroptera.

- 4.2 The nearest record provided by SEWBRc falls 70m from site and is for an unidentified bat at Hollies Health Centre spp (dated 2003).

Building description

- 4.3 The church is a large building in the centre of Merthyr. The surveyed area has been separated into two separate parts *Section A* and *Section B*. *Section A* is a large church hall (C. 20m x 13m) with a suspended ceiling over a decorative coved ceiling, it has a gable pitched slate roof which is unlined. The external walls are rendered, and the windows are covered in fine wire mesh, offering no suitable roosting spots for crevice dwelling bats. There is extensive damage to the western aspect of the roof offering access into the loft space.
- 4.4 *Section B*, is a small (c. 6m x 13m) office area, it has a gable pitched slate roof, which is lined with breathable membrane and insulated with fibreglass between the tiles and the membrane. The external walls are rendered, and the windows are covered in fine wire mesh, offering no suitable roosting spots for crevice dwelling bats. There is a small seller beneath the building.



4.5

Photographic evidence of findings.

Photo 1: Overview of *Section A* of the building. The walls are rendered and have no potential for roosting bats. The photo below shows the windows covered in wire mesh.



4.6

Photo 2: Overview of *Section B* of the building. The walls are rendered and have no potential for roosting bats. The photo below shows the windows covered in wire mesh.





4.7

Photo 3: Access to the seller. The access door has holes along the top that could be used for access by roosting bats. No evidence of bats was found within the seller.



4.8

Photo 4: Shows the loft space above *Section B*, the space was heavily cobwebbed indicating a lack of internal activity. The roof is new and lined with breathable membrane and fibreglass insulation. No evidence of bats was found.





4.9

Plate 5: The western gable wall of *Section A* has significant external damage and there is access for bats throughout.



4.10

Photo 6: *Section A* loft space overview. The roof is unlined. No evidence of bat was found within the loft space, the loft was uncleaned and had clearly remained undisturbed for some time.



**Bat Potential of Building**

4.11 There are potential access points throughout the large loft space above *Section A*. The lack of any roofing felt makes all areas within the loft space accessible for inspection. Though the building has access points that could be used by bats, the lack of any evidence implies the area is not being used by roosting bats; as a result, *Section A* is considered of negligible interest for roosting bats.

4.12 Section B has recently had a new roof put on, the roof is lined with a breathable membrane and there appears to be insulation between the tiles and felt. The loft space and the roof are considered of negligible interest for roosting bats. Though the seller has potential access points in the door, the lack of any evidence implies the area is not being used by roosting bats; as a result, the seller has been designated as having negligible potential for bats.

Emergence Survey Results

4.13 Two emergence and or dawn re-entry surveys were conducted on the building. No bats were observed emerging from or entering the building.

Table 1: *Emergence results*

Date	Survey Times	Sunset Sunrise	Conditions	Results
20/07/2021	21:00 22:48	Dusk: 21:17	Warm 19°C, no rain or wind. Insects flying.	No bats emerged from or entered the building.
13/08/2021	04:20 06:15	Dawn: 05:57	Warm 16°C, no rain or wind. Insects flying.	No bats emerged from or entered the building.

Site activity

4.14 Activity on site was low and restricted to the carpark to the north. Two common pipistrelle bats were observed circling the carpark before flying west. All activity on site stopped 30min after sunset.



5 INTERPRETATION AND RECOMMENDATIONS

Bats

- 5.1 Given the results of the survey, it is considered that the redevelopment of the site is unlikely to result in any impacts on bats and it is considered that an EPS Licence will not be required. Based on the conclusion that bats are unlikely to be using the structures as a roost site, according to the "Bat Mitigation Guidelines" the impact on bats is likely to be negligible.
- 5.2 The site is considered generally unsuitable for hibernation, however little is known about pipistrelle hibernation roosts, so the fact that bats may hibernate in the structures cannot be discounted. Though no evidence of bats was found within the building, due to the transient nature of many species, it is recommended that contractors be made aware of the potential presence for bats in the area. Should a bat be found, advice should be sought from a suitable experienced ecologist.

Birds

- 5.3 It is recommended that, in order to avoid impacts to nesting birds and infringement of the Wildlife and Countryside Act 1981, any planned demolition or vegetation site clearance work should be undertaken outside of the nesting season. As a cautionary note, the nesting period may start before this and extend beyond it in many cases.
- 5.4 If demolition/conversion/vegetation clearance work has to be undertaken during the nesting season, a breeding bird survey will be required and must be carried out by a suitably qualified person. As a general rule, it should be assumed that birds will be nesting on/in the on-site buildings and boundary (introduced shrub) habitats during the core nesting period, unless a survey had shown this not to be the case. Any active nests identified should be protected until the young have fledged.

Ecological Enhancement

- 5.5 As biodiversity enhancement features, bat access tiles should be incorporated into the new development and breathable membranes should not be used.

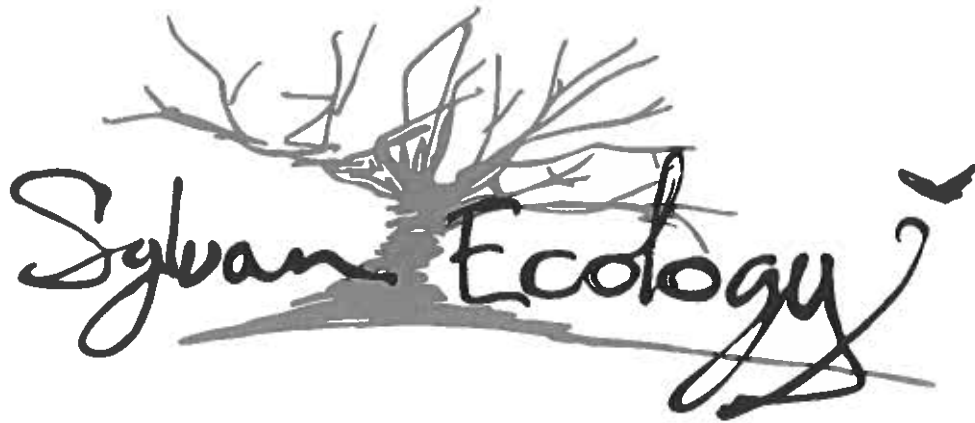


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