



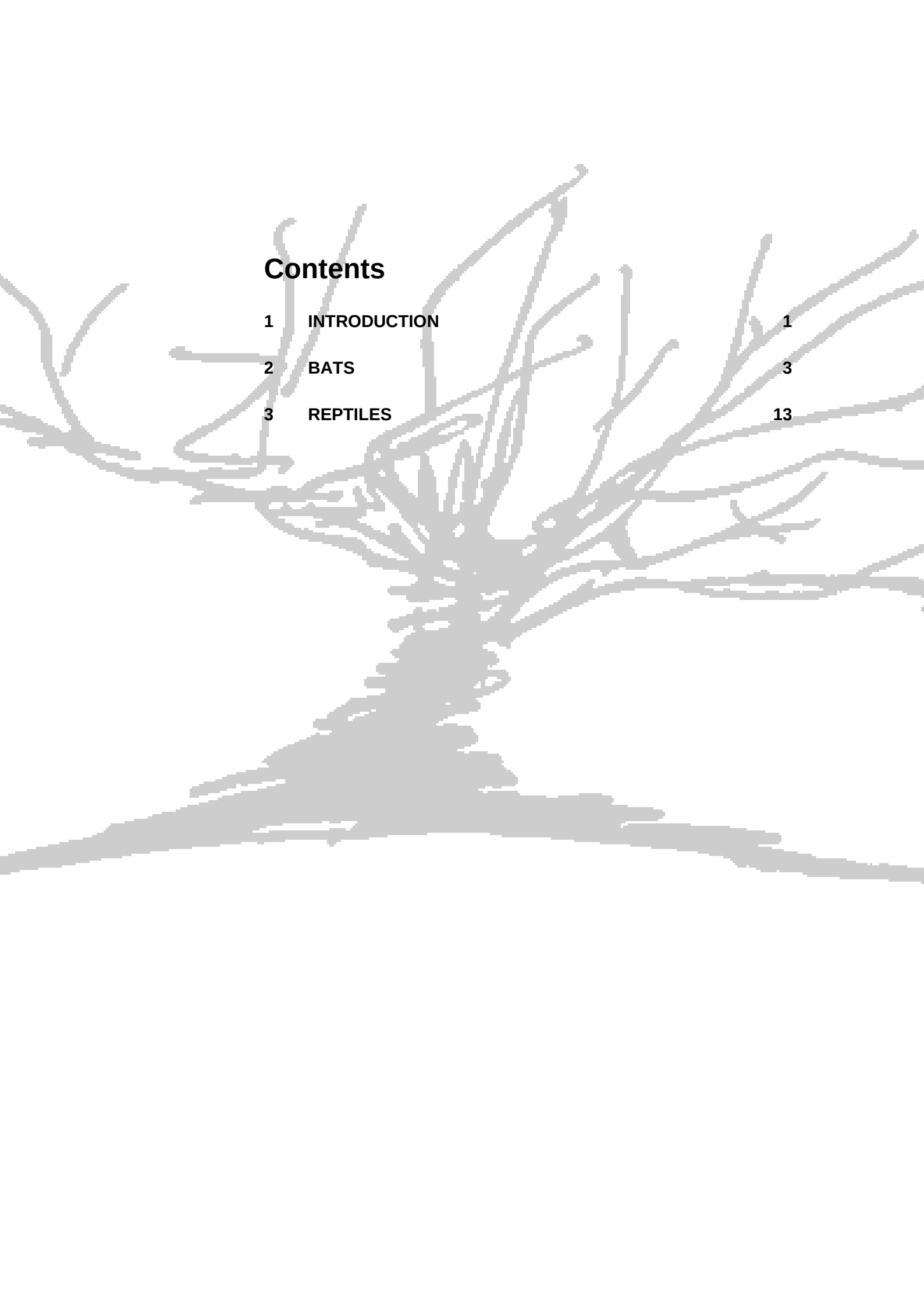
PROTECTED SPP REPORT

BRYNTAF GARAGE

For:

JTPlanning

Project: BRYNTAF GARAGE		
Project Number	J022	
Title	PROTETED SPP REPORT	
Document Number	J022- Eco Report-V1.3	
Client	JT Planning	
Issue Date	13/08/21	
Prepared by:	David Price	13/08/21
This report has been prepared by Sylvan Ecology, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk. Copyright belongs to Sylvan Ecology.		



Contents

1 INTRODUCTION

2 BATS

3 REPTILES

1

3

13



EXECUTIVE SUMMARY

ECOLOGICAL LAND DESIGNATION	
There are no statutory designated sites within 2km of the site. There is a non-statutory designated site the West of Aberfan SINC approximately 40m west of site; no adverse impacts are foreseen on this SINC as a result of the proposed development.	
HABITATS	
The application site is considered to be of low ecological value. The habitat on site with the highest ecological value is the scrub.	
PROTECTED SPECIES	
BATS	Potential low impact – commoner bat species commuting on site boundary - impacts to be negated through mitigation
REPTILES	No impact – No evidence of reptiles on site
CONCLUSION	
Providing the recommended mitigation measures are adopted, relevant legislation will not be contravened and ecological issues will not preclude the development.	



1 INTRODUCTION

Background

- 1.1 Sylvan Ecology were commissioned to carry out protected species surveys at Bryntaf Garage, Aberfan, Merthyr Tydfil. The proposal is for a residential development, on a site currently comprising of approximately 0.7 acres of semi improved grassland, dense scrub and hard standing. The site boundary to the west is a large, old quarry, cliff face.

Report Structure

- 1.2 The scope of the work to be undertaken was determined on the basis of a background data check and the results of a Phase 1 habitat survey undertaken by Sylvan Ecology.
- 1.3 Based on the results, the following Phase 2 surveys were commissioned:
- Reptile survey; and
 - Bat emergence survey
- 1.4 For further information on species selection, please review document: *Phase 1 habitat survey, Bryntaf Garage.*

LEGISLATION PERTAINING TO PROTECTED SPECIES

- 1.5 All species of British bat are European Protected Species protected under *The Conservation of Habitats, & Species Regulations (amendment) (EU exit) 2019*. All UK native reptiles are legally protected under section 9(1) and 9(5) of the *Wildlife and Countryside Act 1981* (as amended), but their habitat is not protected. However, disturbing or destroying their habitat while they are present may lead to an offence.
- 1.6 The sum total of this protection makes it an offence to:
- kill or injure any of these species;
 - capture (take) these species;
 - disturb these species;
 - damage or destroy a breeding site or resting place or recklessly or intentionally damage a place used for shelter and protection by these species;
 - obstruct access to a place used for shelter; and
 - Keep, transport, sell or exchange, offer for sale or advertise these species for sale.



Planning Policy

- 1.7 Paragraph 6.3.7 of Technical Advice Note 5: Nature Conservation and Planning (TAN5) states that your Authority should not grant planning permission without having satisfied itself that the proposed development either would not impact adversely on any bats on the site or that, in its opinion, all three conditions for the eventual grant of a licence are likely to be satisfied.

Ecological Context

- 1.8 The site is located east of the A470, on the southwestern boundary of Aberfan. All associated land for the development (herein referred to as the site) is located at:

- central OS grid reference: SO 31830 14752
- nearest post code: NP7 8BB

- 1.9 The site comprises of 0.7 acres of semi-improved grassland, dense scrub and hard standing. The immediate surrounding area is predominantly residential to the north, south, and east; the site boundary to the west is a large, old quarry, cliff face, with a woodland above it. The greater surrounding area includes sections of woodland (some of which could be ancient) and a relatively intact network of hedgerows. The surrounding landscape has good potential for roosting, foraging and commuting bats.

Aims of Study

- 1.10 The aims and objectives of these surveys were to:
- Determine the presence or likely absence of protected species;
 - To provide an estimate on populations where appropriate;
 - To assess the ecological constraints that potential presence may pose to the development and the provision of general information on mitigation techniques for species.



2 BATS

METHODOLOGY

Building survey

- 2.1 The site was subject to an internal and external inspection for evidence of bats in June 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.
- 2.2 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.
- 2.3 Where possible, cavities, cracks and crevices were thoroughly inspected for bat evidence using an endoscope.
- 2.4 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.
- 2.5 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.

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

Emergence survey

2.7 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 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 four surveyors were used enabling all aspects of the buildings to be observed. Surveys were led by licenced bat ecologist David Price, and assisted by Richard Jenkins, Dr Todd Lewis and Gareth Price. Survey equipment included two *Batbox Griffin* time expansion bat recorders and two *Elekon Batlogger M*. Where applicable bat echolocation calls were analysed using *Batscan* and *Batexplorer* software.

RESULTS

Building Description

2.8 The application site consists of two workshops, and a storeroom, with a small lean to office room. The external walls are partially rendered



breezeblocks; the roofs are corrugated steel and plastic which are partially lined probably asbestos boards. The small lean to office has a clay tile roof, there is no accessible loft space. The breezeblock/rendered walls allow no opportunities for crevice dwelling bats. The roof is in good condition and allows negligible access to the building.

- 2.9 The edges of the steel roofs have small bargeboards that have some potential to be accessed by bats.

Photographic evidence of findings.

Photo 1: Shows an overview of the buildings.





Photo 2: Shows part of the southern aspect of the workshop, the orange circles highlight some roosting potential beneath the edge of the corrugated steel roof. The red circle highlights a gap along the top of the steel shutter.



Photo 3: Shows the internal structure of workshop 1. If bats were able to access the workshop, there would be potential roosting between the rafters and the interior wall. The space was inspected with torch and binoculars, it was found to be heavily cobwebbed, no evidence of bats was found. No evidence of bats was found within this space.

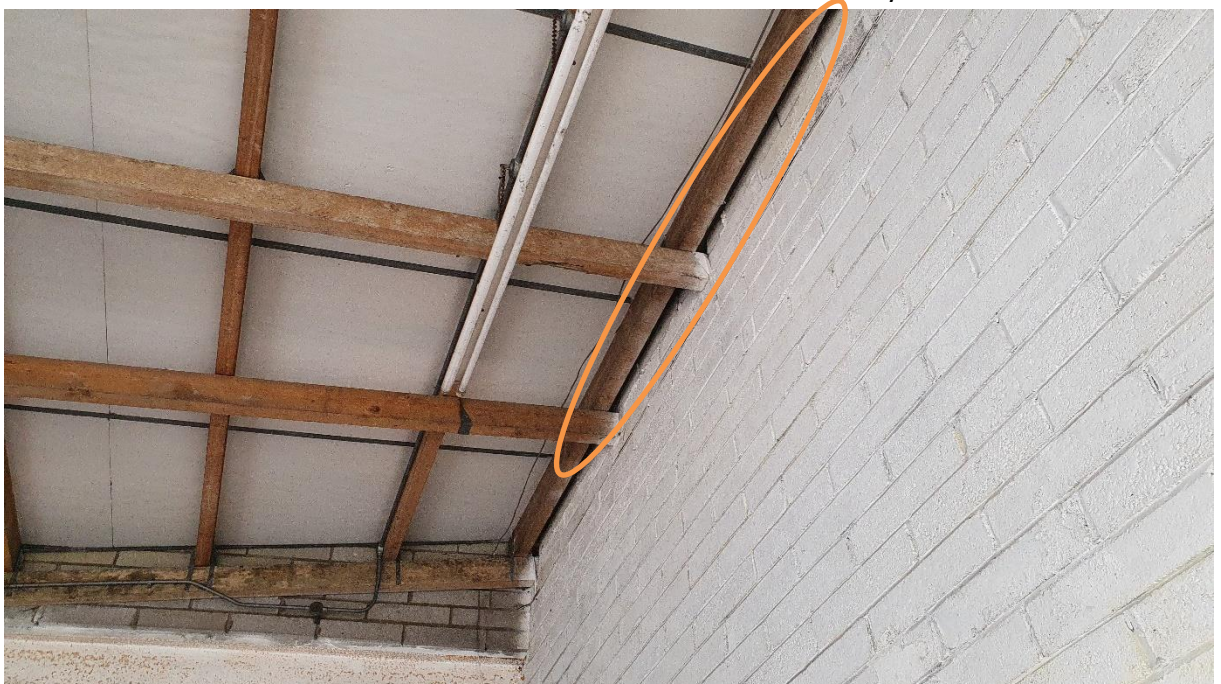




Photo 4: Shows the internal structure of workshop 2. The roof is partially lined with (likely) asbestos boards. The area is very light and busy during the day, making roosting suboptimal. No evidence of bats was found within this space.



Photo 5: Shows the internal structure of the storeroom. The roof is partially lined with (likely) asbestos boards. The area is very light and busy during the day, making roosting suboptimal. No evidence of bats was found within this space.





Photo 6: The old quarry face with woodland above. There is water percolating through many gabs in the quarry fac and large parts of it are partially vegetated. As a result the quarry face is considered to have low potential for roosting bats.



Photo 7: There is a small lean-to storage room along the western aspect. The mortar along the joint is severely damaged and part of the building has pulled away from the wall. Light is clearly visible on the other side of the crack. The crack offers limited roosting potential for crevice dwelling bats. The space between the two walls was simple to inspect, it was heavily cobwebbed and no bats or evidence of bats was found.





Photo 8: There is a small wooden bargeboard around the small lean to, the potential roosting feature is shallow and heavily cobwebbed with no evidence of bats. There is low potential for bats to access to space beneath barge boards.



Bat Potential of Building

2.10 The lack of access points, the lack of internal activity, and the lack of any bat evidence; suggests the building and quarry face are not being used as a bat roost. However, the possibility exists that bats could access the space along the edge of the corrugated roof, or over a gap in the shutter doors, as a result, the building has been designated as having moderate suitability for bats.

2.11 As the building has a moderate suitability for bats it was deemed appropriate that two emergence surveys should be undertaken to see if bats are using the building.

Emergence Survey Results

2.12 Two dusk/dawn surveys were conducted on the building. No bats were observed exiting or entering the building.

*Table 1: Emergence results*

Date	Survey Times	Sunset Sunrise	Conditions	Results
28 th June 2021	20:45 22:45	Dusk: 21:02	Warm 18°C, fine, no rain or wind. Insects flying.	No bats were observed exiting or entering the building. Activity was restricted to the woodland above the quarry face.
25 rd July 2021	04:10 06:00	Dawn: 05:46	Warm 17°C, fine, no rain or wind. Insects flying	No bats were observed entering or exiting the building. Activity was restricted to the woodland above the quarry face.

Site activity

2.13

Activity on site was relatively low (5-10 individual per night) and restricted to the trees along the top of the quarry walls. Species diversity of bats observed was low and restricted to common and soprano pipistrelles. Noctules were also recorded on site, however they were not observed. The noctules were observed about 15min after sunset, so the roost is likely not in the immediate area.



INTERPRETATION AND RECOMMENDATIONS

Conclusion

- 2.14 The results of the building inspection and detector surveys show no evidence of bats using the building as a roost.
- 2.15 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.
- 2.16 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.

Enhancement

- 2.17 The future development of the site also offers an opportunity to enhance the site's ecological value by the addition of ecological enhancement features. As an ecological enhancement feature, a bat box will be incorporated into the site. The final design will be decided upon in consultation with the architect of the project.

Bats and lighting

- 2.18 To limit any potential impacts from lighting, the following mitigation will be implemented.

External

- 2.19 Blue-white short wavelength lights can have a significant impact on the invertebrate prey of bats by mimicking daylight and will not be used.
- 2.20 The design attempts to minimise the amount of light spillage into woodland boundary habitat and the trees, via the use of baffles and hoods. Shields and baffles will be used to direct lighting away from sensitive areas. These will also ensure the light beam angle will be ideally less than 70° above the horizontal, preferably nearer to 45°¹ There will be a full horizontal cut off with no light more than 90° above the horizontal.

¹ Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance



- 2.21 The dark areas will be created to ensure there is no break in the existing habitat of suitable foraging areas.
- 2.22 No uplighters i.e. up lighting trees, buildings and vegetation will not be incorporated.
- 2.23 *Internal*
Light spill from windows can greatly increases ambient light levels in an area. To reduce the ambient light from windows, all new buildings should be constructed with recessed lighting rather than pendant. The downward facing, recessed lights have significantly less light spill than pendant lights.



3 REPTILES

SURVEY METHODOLOGY

- 3.1 The methodology for the survey was based on the guidelines provided by Natural England² and Froglife³. Though the NE guidance was subsequently withdrawn, the survey effort is in line with that of the Froglife guidance.
- 3.2 Two methods of surveying were used. Firstly, artificial refugia were placed at potential basking areas throughout the site. Artificial reptile refugia was deployed across the site in June 2021. The artificial reptile refugia were a combination of sections of folded roofing-felt and corrugated roofing felt; also, there was corrugated steel sheets already on site.
- 3.3 The refugia provide an opportunity for reptiles to bask without exposing them to increased predation pressure. They were positioned within the survey area in locations considered most likely to support.
- 3.4 During each visit, each refugia was inspected for any reptiles basking on the upper side, then lifted and checked for sheltering animals before being carefully replaced. A different route was taken each time to ensure that there is no bias due to time of survey.
- 3.5 The second survey method involved transect searches across suitable habitats within the site. This ensured that all areas were represented in the survey, and that the survey was not biased towards those reptiles more likely to use refugia. Transect searches involve walking slowly around the site, visually searching potential basking areas and marking the locations of any reptiles observed on a map.
- 3.6 Surveys were carried out during optimum temperature and weather conditions (intermittent or hazy sunshine, with mild temperatures between 9°C and 20°C and low winds).

RESULTS

- 3.7 Seven site visits were undertaken, between late-June and late July. The survey visits were conducted during the optimum time of year to identify

² Natural England, Reptile Mitigation Guidelines (Technical Information Note No. 102), September 2011

³ Froglife (1999) Reptile survey. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.



reptile presence and the weather conditions during the surveys visits were good.

Table 2: Reptile survey results

Visit	Date	Refugia Results	Trans' Results	Temp	Weather
1	22/06/21	0	0	12°C	
2	28/06/21	0	0	15°C	Cool morning
3	30/06/21	0	0	12°C	
4	03/07/21	0	0	12°C	Cool morning
5	10/07/21	0	0	16°C	
6	18/07/21	0	0	18°C	Rain previous night
7	25/07/21	0	0	18°C	

INTERPRETATION AND EVALUATION

Constraints

- 3.8 The survey visits were conducted during the optimum time of year to identify reptile presence and the weather conditions during the surveys visits were suitable. The small area of grassland and scrub to the north are on top of a cliff and was inaccessible for surveying.

Survey Efficiency

- 3.9 Even though the survey did not extend beyond seven visits it is thought that the results provide adequate information to estimate the population size class of the species present, owing to the consistency of the results. Additionally, the standard survey guidance assumes a refugia density of 10 units per hectare. The survey effort amounted to ten times the density of refugia compared to standard guidance.

Summary of impacts at the site level

- 3.10 The results of the reptile survey show no evidence of reptiles using the site.
- 3.11 Given the results of the survey, it is considered that the redevelopment of the site is unlikely to result in any impacts on herptiles and it is considered that an herptile specific mitigation will not be required.

APPENDIX A: Survey Maps



Tel: 07897558390

www.SylvanEcology.com

E-mail:
david.price@SylvanEcology.com

LEGEND

-  Reptile refugia
-  Surveyor location
-  Pip 45: Activity
-  Pip 55: Activity

ECOLOGY SURVEY MAP

Bryntaf Garage

Date: Aug 2021

Drawn by: D.P.
© Google Earth Data

Scale:

Drawing N°: v1.1



Ecology & Arboriculture

www.SylvanEcology.com