



ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE



PRELIMINARY BAT ROOST ASSESSMENT

TY LLWYD

Project name: Ty Llwyd, High Street, Glyn Ceiriog, LL20 7EH

Grid Reference: SJ20303812

Date: 18/04/2023

Prepared by: Phillipa Stirling MSc ACIEEM

Checked by: William Prestwood BSc Director

Requested by: Forge Property Consultants

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the extension of Ty Llwyd. This will require the demolition of a 1970's extension and small stone store.

1.2 SCOPE OF SURVEY

Arbor Vitae were commissioned by Forge Property Consultants to undertake a Preliminary Bat Roost Assessment (PBRA) to establish the potential of the buildings to be used by roosting bats.

- Bats and their roosting sites are legally protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981.

The survey was also designed to assess the presence of any breeding birds using the buildings.

- All wild nesting birds, their nests and eggs are legally protected under The Wildlife and Countryside Act 1981.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

Ty Llwyd is located at the north-west edge of Glyn Ceiriog, between Pandy and Llangollen. The town sits in a small valley with wooded sides and the River Dee running through the centre.

2.2 BUILDING DESCRIPTION

The main house on site is a large detached dwelling with a slate roof. The eaves are boxed in with timber soffit and fascia detailing. The current planning application will not alter the roof of the existing house.

At the west elevation there is a small single storey lean-to extension which was built in the 1970's. The structure is likely blockwork which has been rendered externally at all elevations. There are no internal loft spaces or cavities present. The eaves have been finished with timber fascia boards and the roof covering is fibre cement sheet with lagging inserted between them and internal ceilings.

West of the extension is a small stone store with a footprint of approximately 8m². The store is single storey with a half pitched and corrugated tin roof. The rear wall of the store is part of a stone retaining wall which runs along the boundary and ties into a stone barn on the site. The majority of the wall's mortar is intact with some small areas missing, creating superficial gaps.

The eaves of the store are fitted with timber fascia and are further boarded internally. There is a small window at the south facing side where the wall forms a small parapet. There are no cavities or voids present in the store. The internal walls have been partly rendered forming a solid wall.

The house, small extension and stone store are all surrounded by existing concrete and large paving slabs. There is a two storey stone barn located at the north end of the property which has a corrugated tin roof and open window and door apertures. This barn was not part of the survey work.

Land to the west of the site provides broadleaved woodland, linking to ancient woodland sites at the south-west. Other surrounding features include residential properties to the north and east with small areas of grazing land and gardens.

3 SURVEY METHODOLOGY

3.1 DESKTOP STUDY

An initial desk study was composed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, Data Map Wales and NBN Atlas.

3.2 PRELIMINARY BAT ROOST ASSESSMENT

One visit was made to survey the property on 17/04/2023.

The objective of the survey was to find and record any signs of use by bats, for example:

- Droppings, sometimes in concentrations below roost sites,
- Feeding signs such as butterfly and moth wings,
- Staining of timber, brickwork around access points.

The general structure of the building was assessed for its potential to provide bats with roosting opportunities.

The surrounding landscape and links to other nearby habitats were also taken into consideration during the assessment.

3.3 BREEDING BIRDS

The building was assessed for its potential to provide birds with nest sites, and to record any existing evidence of previous nesting.

3.4 PERSONNEL

The survey was carried out by Phillipa Stirling MSc ACIEEM: Ecologist. Natural Resources Wales bat licence number: S091037-1.

3.5 CONSTRAINTS

There were no constraints to the survey being carried out successfully.

4 SURVEY RESULTS

4.1 DESKTOP STUDY

Name	Designation	Distance
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River Dee and Bala Lake	SSSI	0.3km
Chwarel Wynne Slate Mine	Ancient Semi-Natural Woodland	0.15km
Nant Lafar	Ancient Semi-Natural Woodland Plantation on Ancient Woodland Restored Ancient Woodland	0.6km
Search included: SSSI, SAC, SPA, Ramsar, AONB, LNR and NNR.		

Species	Protection	Distance
Common pipistrelle Daubenton's Natterer's Lesser horseshoe	The Conservation of Habitats and Species 2017 Wildlife and Countryside Act 1981	0.3-1km

4.2 PRELIMINARY BAT ROOST ASSESSMENT

From a ground level inspection, the main house on site appears to be in good condition e.g. the stonework is pointed and the timber eaves detailing is in good repair. Given that the current plans will have no impact upon the roof over the main house, no further survey work was necessary.

The 1970's extension provides no potential roosting features which bats would use and no evidence of bats was found in association with the structure. Dense cobwebs were recorded on the underside of the timber fascia boards where they are not flush with the elevations and there are no cavities or voids which bats could gain entry to. This structure provides 'negligible' potential as a roosting site.

The small stone store similarly does not provide any suitable roosting opportunities for bat species and no evidence of bats was found during the inspection. The stonework is mostly pointed and where it isn't, only superficial crevices exist. All of these were inspected during the survey and no evidence to suggest that bats have ever used them was found. Conditions inside the stone store during the day time are light due to a single pane window at the south elevation. The tin roof covering offers no potential roosting features and the eaves are blocked with timber fascia and battens. The stone store also provides 'negligible' potential as a bat roost.

The two storey barn on site was not surveyed as the proposals will have no impact upon this feature.

4.3 BREEDING BIRDS

No evidence of past or current nesting was found during the site survey.

5 EVALUATION OF RESULTS AND IMPACT

5.1 BATS

The structures on site to be demolished provide 'negligible' potential as a bat roost and there is no evidence to suggest that bats are using them.

The proposed works will have no impact upon bat species or their roosting sites nor any indirect impacts. The roof over the main house will not be impacted by the plans nor any other structures on the site.

No further survey work is needed and therefore a European Protected Species Development Licence will **not** be needed for works to proceed.

Given the proximity of the plans to broadleaved woodland, a Wildlife Sensitive Lighting Plan will be required for the site.

5.2 BREEDING BIRDS

The buildings to be demolished do not appear to provide any suitable nesting sites for breeding birds and therefore works are unlikely to have any impact. Precautionary measures will be adopted.

6 MITIGATION AND ENHANCEMENT

6.1 BATS

The proposed development will have no direct impact on bat species but given the proximity of the site to broadleaved woodland, the following measures will be incorporated into plans for the site:

- Woodland and key habitat features including mature trees on the site will not be illuminated in order to retain dark movement corridors for nocturnal wildlife.
- Any exterior security or decorative lights to be installed on the development site will be less than 3 m from the ground and fitted with hoods to direct the

light below the horizontal plane, at an angle of less than seventy degrees from vertical, and shall not be fixed to, or directed at, bat boxes or gables or eaves.

- Security lighting will be set on motion sensors with short timers (<1 minute) and will be LED with a passive infrared trigger.
- External lights will be hooded and directed toward the ground to reduce upward light spill.
- A warm white spectrum will be adopted throughout the scheme to reduce blue light component (<2700Kelvin).
- Internal luminaires will be recessed where installed in proximity to windows to reduce glare and light spill. LED luminaires will be used internally where possible due to their sharp cut-off, lower intensity, and dimming capability.
- Luminaires will always be mounted horizontally with an upward light ratio of 0%.

6.2 BREEDING BIRDS

Before work begins to demolish the buildings on site a thorough internal inspection will be carried out to check for any signs of nesting. If any evidence of breeding birds is found, the nest will be protected until the young have fledged.

6.3 ENHANCEMENT

In order to provide opportunities for protected species on site, the following is recommended:

- Two general purpose Woodcrete bat boxes will be installed into a nearby mature tree. These will be positioned at least 3m from the ground and face south west.

7 SUMMARY

Planning permission will be sought for the extension of Ty Llwyd. This will require the demolition of a 1970's extension and small stone store.

Arbor Vitae were commissioned by Forge Property Consultants to undertake a Preliminary Bat Roost Assessment (PBRA) to establish the potential of the buildings to be used by roosting bats. The survey was also designed to assess the presence of any breeding birds using the buildings.

The structures on site to be demolished provide 'negligible' potential as a bat roost and there is no evidence to suggest that bats are using them.

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8 REFERENCES

Bat Conservation Trust (2018) Bats and artificial lighting in the UK. *Bats and the Built Environment series*, Guidance Note 08/18. Institution of Lighting Professionals.

Collins, J. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.

Mitchell-Jones, T., 2004. Bat mitigation guidelines. External Relations Team, English Nature.

FIGURE 1 LOCATION. 1:50,000



FIGURE 2 AERIAL PHOTOGRAPH



APPENDIX 1 PHOTOGRAPHS



1970's lean to



Stone store



1970's lean to eaves



Stone store interior



Stone retaining wall



Hardstanding