

**YSGOL GYMRAEG BRO DUR
YSTALYFERA****BAT & PROTECTED spp SURVEY****June 2021****1 survey at the request of-**

Lucy James, Senior Quantity Surveyor, Andrew Scott Ltd.

2 proposed works

Phase 3, Stage 2 demolition:
Demolition of i) canteen block & ii) music/drama block, Ystalyfera School.

3 site: name/grid ref

YG Bro Dur (Ysgol Gyfrun Ystalyfera site) Glan yr Afon Rd, Ystalyfera SA9 2JJ
SN770088

4 nature & date of survey

07th June 2021- assessment of bat-use *via* external search
07th June 2021- roost-emergence/activity watch/survey
08th June 2021- roost-emergence/activity watch/survey
22nd June 2021- roost-emergence/activity watch/survey.
28th June 2021- assessment of bat-use *via* external & internal search.

5 objectives-

- to assess the likelihood of any bat (or other protected species) use of the building
- to identify any constraints consequent upon the discovery of bats (or other protected species) in the building.

6 surveyors

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Rob Colley: scientific/conservation bat licence 1999-, SO89480/1
Rob Taylor: scientific/conservation licence, 1995-
Len Moran: named agent, SO89480/1
Jen Colley: Glam Bat Gp, 2002-.

7 ecology & legal status**7.1** Different bat species have different life-cycle strategies but, in general, each requires the following features:

- hibernation roost sites, where stable winter temperatures allow a period of winter torpor (e.g. underground sites such as caves and mines, or crevices and hollows in mature standing trees)

- nursery roost sites, where females gather in the spring/early summer to give birth and rear their single offspring (e.g. roof spaces, crevices and hollows in mature standing trees)
 - roost sites for individual, or small congregations of, males during spring-autumn (e.g. roof spaces, or crevices and hollows in mature standing trees)
 - an insect-productive (usually ecologically diverse) feeding environment
- additionally, there is a poorly understood need for social-gathering sites at certain times of the year (e.g. the autumn mating season) for some, or all, species.

Most, if not all, British bat species are believed to be in decline; main threats to bat populations can be summarised as:

- the loss of invertebrate-rich foraging areas (eg. woodland, hedgerows, ponds)
- the loss of nursery and hibernation roosts (eg. caves and mines, roof spaces, large standing trees)
- the effects of toxic chemicals (eg. timber preservatives in roof-space roosts, agricultural insecticides which reduce prey species).

- 7.2 All British bats, and their roosts (occupied or not) are protected by i)) **The Conservation of Habitats and Species Regulations 2010** (the “Habitats Regs”): this legislation implements the EC Habitats and Species Directive in the UK, and ii) the **Wildlife and Countryside Act** (as amended by the **Countryside and Rights of Way Act 2000**) Schedule 5.

Developments which compromise the protection afforded to a European Protected Species require **Natural Resources Wales licence** (Habitats Regs). The granting of licence will be conditional on i) an agreed “works methodology”, designed to minimise impact on the bat(s), ii) agreed “mitigation”, to ensure the provision of alternative roost potential at/near the development. Where planning permission is sought, the LPA will need to know, at application stage, what methodology/mitigation is being proposed: this is to i) avoid changes in planning designs, post pp, ii) ensure that LPAs comply with reg 3(4) of the Habitat Regs, and iii) allow the Statutory Nature Conservation Organisation (NRW)) to properly advise the LPA.

These protections can be summarised as prohibiting- taking, killing or injuring a bat; damaging or destroying a roost (occupied or not); obstructing access to a roost; disturbing in-roost bats.

The Natural Environment & Rural Communities Act 2006/**Environment (Wales) Act 2016** requires all public authorities/bodies to have regard for the conservation of biodiversity- eg. when considering planning applications. **Section 6 (EWA)** requires LAs to ensure that development i) causes no significant loss of habitats or populations of species, locally or nationally and ii) provides a net benefit for biodiversity. There is a particular requirement to address those species and habitats listed by the **UK Biodiversity Action Plan**, in pursuance of which the Welsh Gov’t have listed Common and Soprano pipistrelles, Noctule, Brown long eared, Greater and Lesser Horseshoe, Barbastelle and Bechstein bats at Section 42 (NERC)/ **section 7 (EWA)**: Species of Principal Importance for Conservation of Biological Diversity. Implementation of these responsibilities varies across authorities but, typically, some LPAs ask for “bat accommodation” as a routine req’t, and some require survey data to be passed to a Local Records Office.

8 methods

Survey methodologies are implemented as appropriate, based on experienced surveyors' assessment of the features at each site and with reference to the advice in ***Bat Surveys: Good practice guidelines*** (Bat Conservation Trust, 2007/2012/14) & ***Bat Workers' Manual 3rd ed.*** (JNCC 2004).

building assessment:

Internal/external daytime survey of the building was made, searching for possible bat (or other protected species) entry/exit and roosting points, incidental evidence (principally faeces) of bat use of the buildings and direct evidence of roosting bats.

emergence watch: At three dates, over the period during which bats can be expected to leave their roosts, direct observation was made of the building exteriors to monitor any bat movement in or out; heterodyne, frequency-division bat detectors were used to assist species detection/identification.)

DNA genotyping: **n/a** (When surveyors are unsure of the origin of any bat faeces found, these are submitted to Dr Robin G Allaby, University of Warwick, for species ID *via* genotyping.)

overnight (dusk-dawn) remote data recording: **n/a** (At sites where initial investigation suggests that it is appropriate, Anabat detector-recorder equipment is left *in-situ* to indicate species identification and patterns-of-use at the site.)

methodology/mitigation: Methodology/mitigation measures, where appropriate, are based on the surveyor's experience of similar situations, with reference to ***Bat Mitigation Guidelines*** (English Nature, 2004) & ***Bat Workers' Manual 3rd ed.*** (JNCC 2004).

9 results

9.1 site location, adjacent habitat:



The site is at the south-eastern edge of Ystalyfera village. There is housing to the north and west and amenity-grass playing fields to the south (& over-river to-east), giving suitable habitat for generalist/opportunist (pipistrelle) bat species; the Twrch riparian tree-corridor, immediately over-road to the east, gives good foraging habitat for light-intolerant woodland specialists, with an increased potential for day roosting by such species at buildings facing the Glanyrafon Rd/s-e corner of the wider school campus.

A pipistrelle multi-animal day roost is (2009) reported at a residential centre <100m to-south on Glan yr Afon Road; single-animal pipistrelle day roosting was (2009) reported at a (subsequently replaced) east-side school building; 2014 activity survey recorded a near-dusk west-east passage of Common pipistrelles *P. pipistrellus* that suggested a to-west nursery roost.

A pipistrelle pup was "picked up ... from Ysgol Gyfun Ystalyfera sports hall" in June 2018. Subsequent (July 2018) survey found irregular multi-animal use of this building, with a multi-animal roost being observed at to-north housing; the roost building was removed under EPS Licence (to NPTCBC), with mitigation incorporated into other campus buildings.



2021 survey effort was directed to two in-use buildings at the north-west of the school campus, both scheduled for demolition/removal: the canteen-block stands towards the centre of the campus, whilst the music/drama block is at the campus north west perimeter, over-lane from the Twrch riparian tree corridor.

- 9.2 general description; bat access points; potential bat-roost opportunity; evidence of bat presence:
annotation refers to sketch plan/photo's, below

Canteen block:

The flat roofed, single-storey, Canteen Block consists of four contiguous blocks, internally/externally interconnected by slightly lower roofed link corridors: the north

west section has a slightly higher roof than the other three sections; a shelter roof with open sides extends from the east-centre to-east.

End (north & south) walls are largely brick; all longwalls are largely glass & panelling, with some full height brickwork; windows/doors/panels are intact, and all walls are sealed against any possibility of intra-masonry bat-access: all walltops have tight sealed fascias/soffits.

Slab roofs all have well-sealed bit. felt coverings,

No evidence of bat use was found and no potential roost opportunity was seen.



Performing arts block:

The music/drama block comprises: an original (?), nw-se aligned, masonry walled building (A) under a ridged/gabled roof; contiguous, later (?), largely brickwalled extensions to the north-west (B) and south (D), each with lower, hip gabled roofs; a flat roofed single storey, brick & glazing walled, front/south section (C) between B and D; a small lean-to (E) at the east end of A.

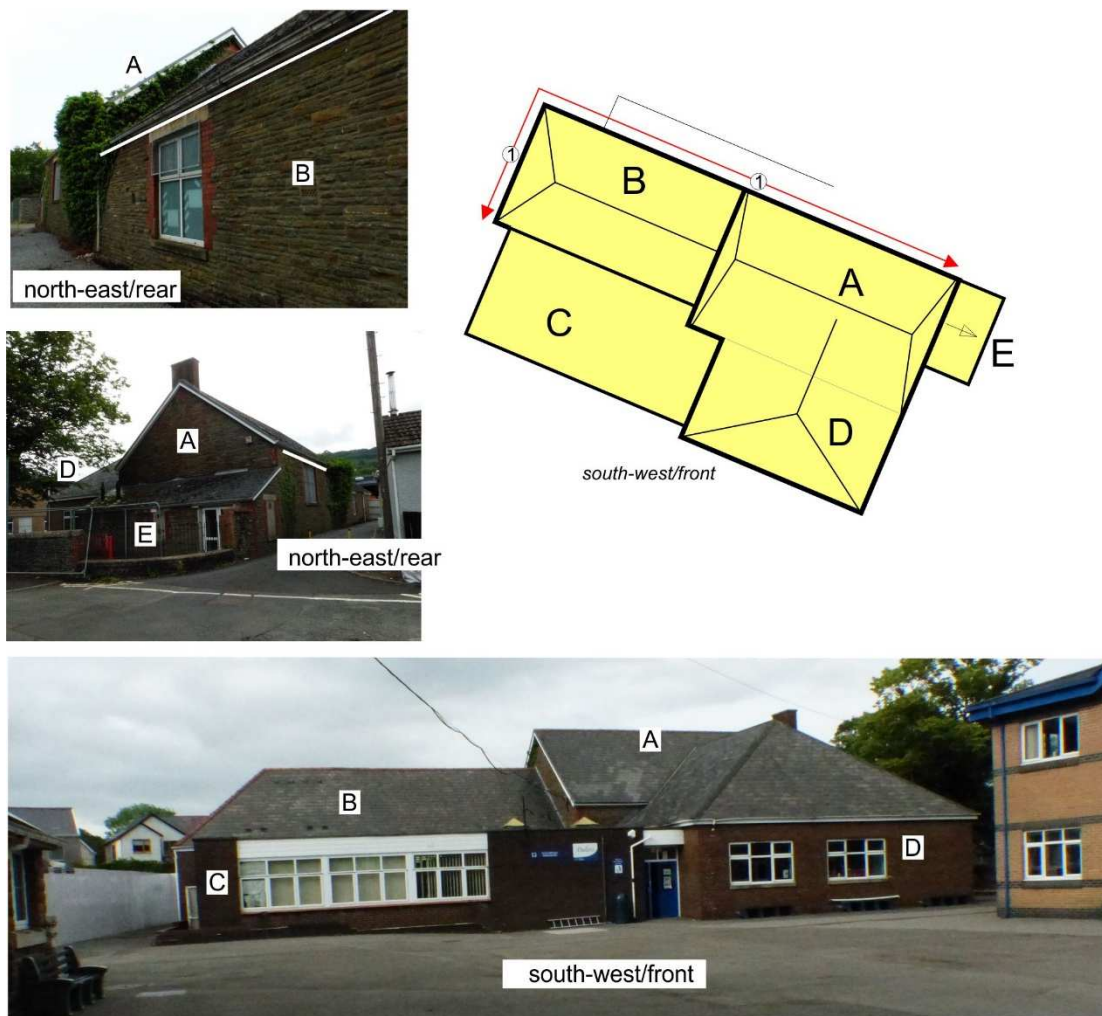
All walls are in good repair, with no intra-masonry bat-access opportunity; all doors/windows are intact and there is no fly-in bat-access opportunity.

There are potentially bat-accessible gaps behind the north longwall (wooden) fascia at A-B and the north-west gable of B (uPVC) fascia; gaps behind barge boards at the east gable of A appear to be too large/open for (likely) bat use; all other (uPVC soffits/fascias) walltops are tight sealed.

Slate roofs at A, B & D are in good repair, with no (visible) bat-access opportunity; the slab roof at C has no bat-roost opportunity.

Internally, there is no bat interest at the in-use classrooms. Above the high ceilinged area A, the roof void has an old/original attic floor close to the ridge with no through-

access; below this, a hipped attic space above the ceiling (ie. below the topmost void) has panel-linings at the under-roof, tight jointed timbers and no insulation at the wooden floor: no evidence of bat use was found here. Areas B and D each have single space attics at their roof voids; both have (modern) timber trusses, bituminised felt sarking and no floor insulation: no evidence of bat use was found at either. There is no bat-accessible roof void below the flat slab roof of C.



No potential bat interest was identified at the low/single storey lean-to E.

No evidence of bat-use was found at any area, internally or externally.

9.3 emergence watch:

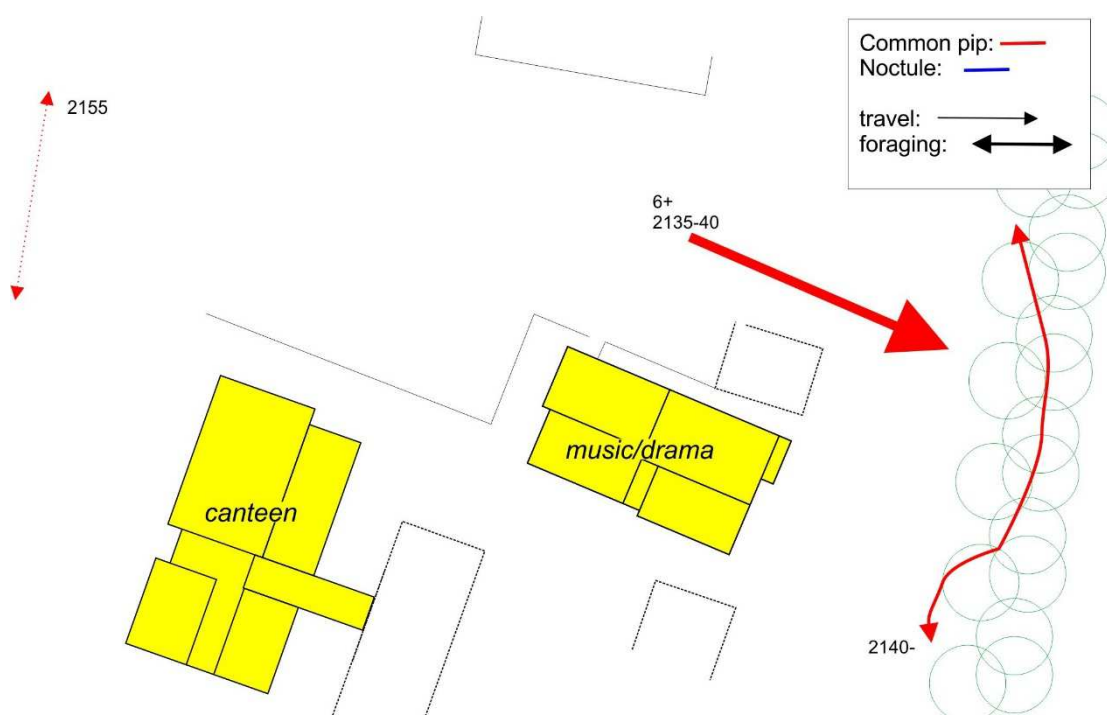
On three dates, over the dusk + 1hr period during which bats can be expected to leave their day roosts, observers were positioned to allow detection of any bat movement from, to, or past the buildings.

Common pipistrelle and Noctule *Nyctalus noctula* bats were seen/heard at/near to the site.

9.3.1 07th June 2021
 2115-2245
 start temp. 15°C
 no cloud
 no wind

Observers were perimeter-positioned to determine any around-site bat movement.

Common pip: a west-east movement of 6+ animals was noted beyond the north of the campus, 2135-40, and foraging was seen/heard at the to-east riparian corridor, 2140 end; x1 animal was intermittently seen/heard beyond the large, new build, block to-west, 2155-.



No bats emerged from, or entered, the survey buildings.

9.3.2 08th June 2021
 2120-2300
 start temp. 16°C
 100% cloud
 no wind

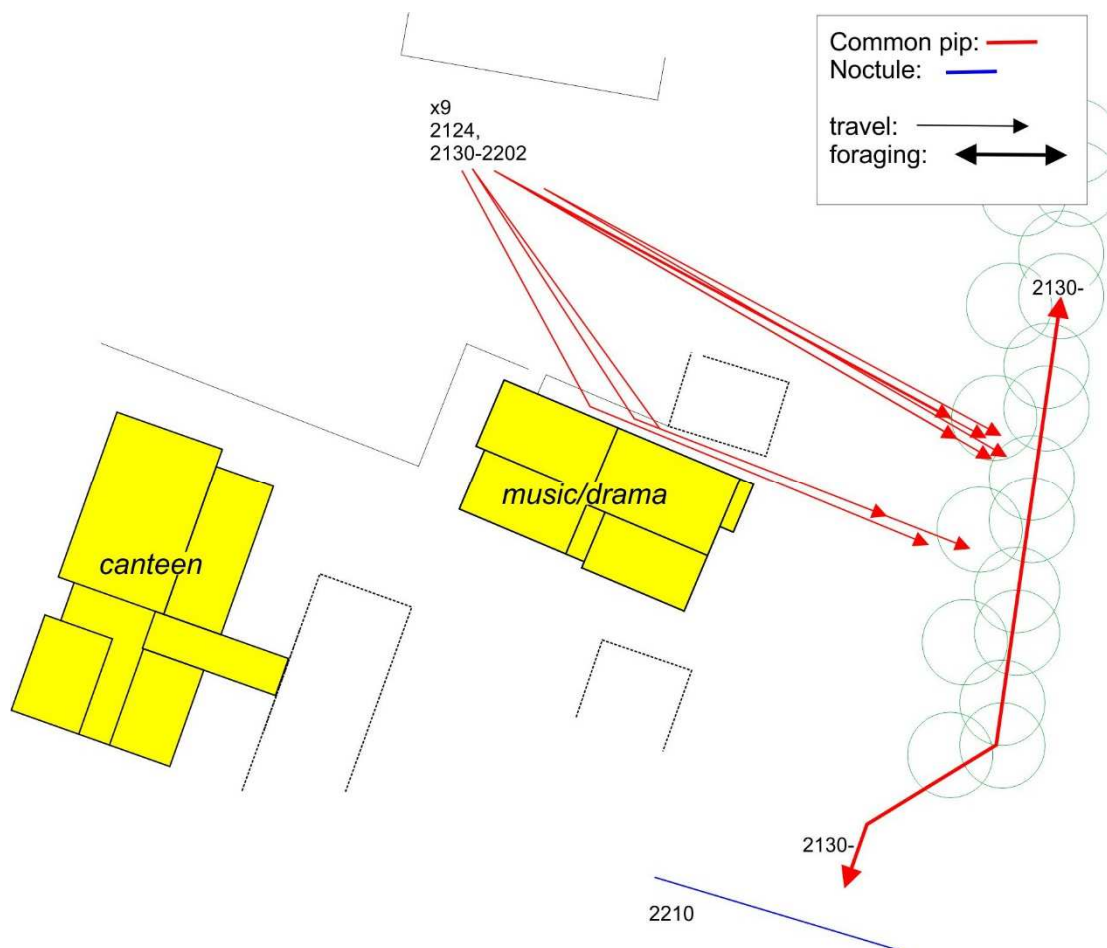
Observers were positioned to give full sight of all of the Performing Arts block and full sight of any movement at/around the Canteen Block.

Common pip: x9 animals crossed the north-of-campus, flying from the north/north-east direction of beyond site housing to the river corridor- three of these passed

between A-B and the north-of-campus bungalow, 2124-2202. Foraging animals were present at the river corridor and (occasionally) at the lane to-east of the school, 2130-end.

Noctule: a single (high) pass was heard at the south of the campus, 2210.

No bats emerged from, or entered, the survey buildings.



9.3.3 22nd June 2021
2120-2245
start temp. 14°C
30% cloud
no wind

Common pip: x16 animals crossed the north-of-campus, flying from the north/north-east direction of beyond site housing to the river corridor- four of these passed between A-B and the north-of-campus bungalow but most were high/above the bungalow roof, 2141-2206. Two-three foraging animals were present at the river corridor, 2142-end.

No bats emerged from, or entered, the survey buildings.



- 9.4 There is no owl use of the buildings; no other bird-nesting use was seen (active House martin nests were noted at off-survey to-south school buildings).
- 9.5 overnight (dusk-dawn) remote data recording: n/a
- 9.6 DNA genotyping: n/a
- 9.7 other-season bat use- assessment: no "likely" winter bat roost sites were identified.

10 other protected spp/ecology

The proposed demolition works do not impact beyond the current building footprints and their surrounding metalled yards/hardstanding.

11 summary/assessment

- 11.1 No bat use of the buildings was found at this survey; no evidence of use (eg. at other time-of-year) was found; no "likely" potential roost sites were identified.

The direction, and timing, of bat movements seen at the survey dates suggests multi-animal roosting at housing beyond-site, to the north/north-east: this suggestion is consistent with the 2018 survey's speculation of maternity-colony roosting at this housing.

No bat-related constraint to the proposed demolition of the two buildings is identified by this survey.

11.2 No other ecology/protected species interest is identified at the proposed works.

Rob Colley
June 2021