Bat survey and Bird Assessment

at Greenacres, Rhosddu Rd., Wrexham

Demolition of building

January 2024



Produced by Wildbanks Conservation

www.wildbanksconservation.com

REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

Report Version	Date	Completed by:	Approved by:
Draft	23/01/2024	Tanya Cobb	Mick Smith

The information we have prepared is true and we confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Wildbanks Conservation Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Wildbanks Conservation Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

CONTENTS

1.0 INTRODUCTION 4
2.0 SITE DESCRIPTION 4
3.0 METHODOLOGY 5
4.0 SURVEY RESULTS 6
5.0 DISCUSSION AND RECOMMENDATIONS 17
6.0 MITIGATION AND ENHANCEMENT MEASURES 18
7.0 LEGISLATION 20
8.0 REFERENCES AND INFORMATION SOURCES 21

1.0 INTRODUCTION

1.1 Background

1.1.1 Wildbanks Conservation was commissioned by Wrexham County Borough Council (WCBC) to undertake a Preliminary Roost Assessment (PRA) of Greenacres, Rhosddu Rd, Rhosddu, Wrexham LL11 2NE (Approximate OS Grid Ref. SJ 33230 51082).

1.1.2 The PRA was required to establish the presence or potential presence of roosting bats at Greenacres, Rhosddu Road (the Site), identify potential constraints to the proposal and outline the requirement for further surveys and/or mitigation measures where relevant. If bat/s or their roost/place of rest/shelter is identified and subsequently affected by the work then a European Protected Species Development Licence, issued by Natural Resources Wales (NRW) would be required to proceed with the development.

1.1.3 The existing building was also investigated and assessed for its suitability to provide nesting opportunities for birds and recent or historic signs of nesting birds.

1.1.4 A previous Bat Survey and Bird Assessment (2020 Bat Report) was undertaken on the recently demolished, adjacent Cunliffe House, by Marches Ecology/Wildbanks Conservation in June 2020 (Marches Ecology, 2020). The surveys and assessments took place to support the demolition application and the building was demolished in 2022. This 2020 Bat Report has been referred to with reference to trees on the Site that were surveyed as part of the bat roost potential surveys, and mitigation that took place for the demolition of Cunliffe House.

1.2 The Proposal

1.2.1 It is proposed to demolish the Greenacres building. No further details regarding future disposal of the site have been provided. It is anticipated that the site may be developed to provide residential housing at some point.

2.0 SITE DESCRIPTION

2.1 Survey Area

2.1.1 The Site is located off Rhosddu Road, approximately 1.0 km north of Wrexham town centre. The immediate habitat is dominated by areas of residential and commercial development with associated infrastructure, sporadic green spaces and play areas. Occasional trees are also present in the vicinity of the survey site. This immediate habitat surrounding the site is considered to be of low value to bats.

2.2.2 The wider landscape incorporates expanses of continuous development in the form of the wider towns and villages surrounding Wrexham City Centre, interspersed with areas of woodland and farmland. The habitat in the wider landscape is considered to be of low-moderate potential value for bats.

2.2.3 The location of Greenacres and the immediate surrounding habitat is shown on the aerial photograph below (Figure 1).



Figure 1: The Site is shown by the red line. Approximate only. Base Image © Google 2024.

2.2 Statutory and Non-Statutory Designated Sites

2.2.1 There are no statutory designated sites within 1km of the Site.

3.0 METHODOLOGY

3.1 Preliminary Roost Assessment

3.1.1 The building was assessed for any signs of bats; with the aid of binoculars and borescope, features such as small gaps under barge/soffit/fascia boards, raised or missing roof/ridge tiles or gaps at gable ends, which have the potential for use as access points, were sought. Evidence that bats actively used these potential access points would include staining within the gaps, or bat droppings or urine staining under gaps; a note being made wherever these were present. The presence of cobwebs and / or general detritus within and around potential access points was used as an indicator that bats had not recently used the area to access the building. Photographic evidence was taken where necessary.

3.1.2 The building inspection was carried out on 17 January 2024 by Jack Halpin, Wildbanks Conservation (7 years' experience bat surveying, Accredited Agent on Mick Smith NRW bat license S092489/1), and assisted by Tanya Cobb, Wildbanks Conservation. Where deemed necessary Potential Roost Feature (PRF) assessments were carried out following best practice guidelines, and the building was categorised into negligible, low, moderate or high potential to host roosting bats (Collins, 2023).

3.1.3 All trees on Site were also assessed for their potential roost features, in line with current guidelines (Collins, 2023).

3.2 Nesting Bird Assessment

3.2.1 The building and immediately surrounding habitat were assessed for its potential to support nesting birds. The exterior elevations of the building were inspected for historic and current signs of nesting bird, particularly historic nests.

3.3 Limitations

3.3.1 There were no significant limitations to the assessment. All areas of the building could be accessed; however, the assessment was carried out in January, which is outside the main activity season for bats (May to August). As such any signs of bat activity from the previous year's bat season may have been washed away by weather. There are no limitations to finding and identifying PRF's,

3.3.2 The ability to assess bird nesting potential increased due to the survey taking place in January, as there was no leaf cover on any scrub and/or tree. This led to clearly seeing built nests within.

4.0 SURVEY RESULTS

4.1 Building Descriptions

4.1.1 The Site comprises predominantly a single storey brick building with partial shiplap PVC cladding and flat felt roof. One section of the building is two storey. The building is currently recently unused but previously used as offices.

4.1.2 The offices within the building are not accessible by bats, no potential access points were observed, therefore, an internal inspection was not carried out. A boiler room with external door was present and this was inspected for bat roost potential. The remaining internal offices will not be considered further within this report.

4.1.3 The building is situated within a hard-standing carpark, with occasional mature tree, buddleia/bramble scrub and amenity grass verges. To the southeast, a L-shaped, walled planter surrounded by a small number of paths and amenity grassland, is now overgrown with bramble. To the northeast, a walled planter with single immature Horse chestnut (*Aesculus hippocastanum)* and overgrown bramble scrub with bird nesting potential.

4.1.4 Six mature trees were found on Site from 6m to 40m from the building; three of which have at least one PRF.

4.1.5. See Figure 2 below for building layout, location of mature trees and potential bird nesting habitat.

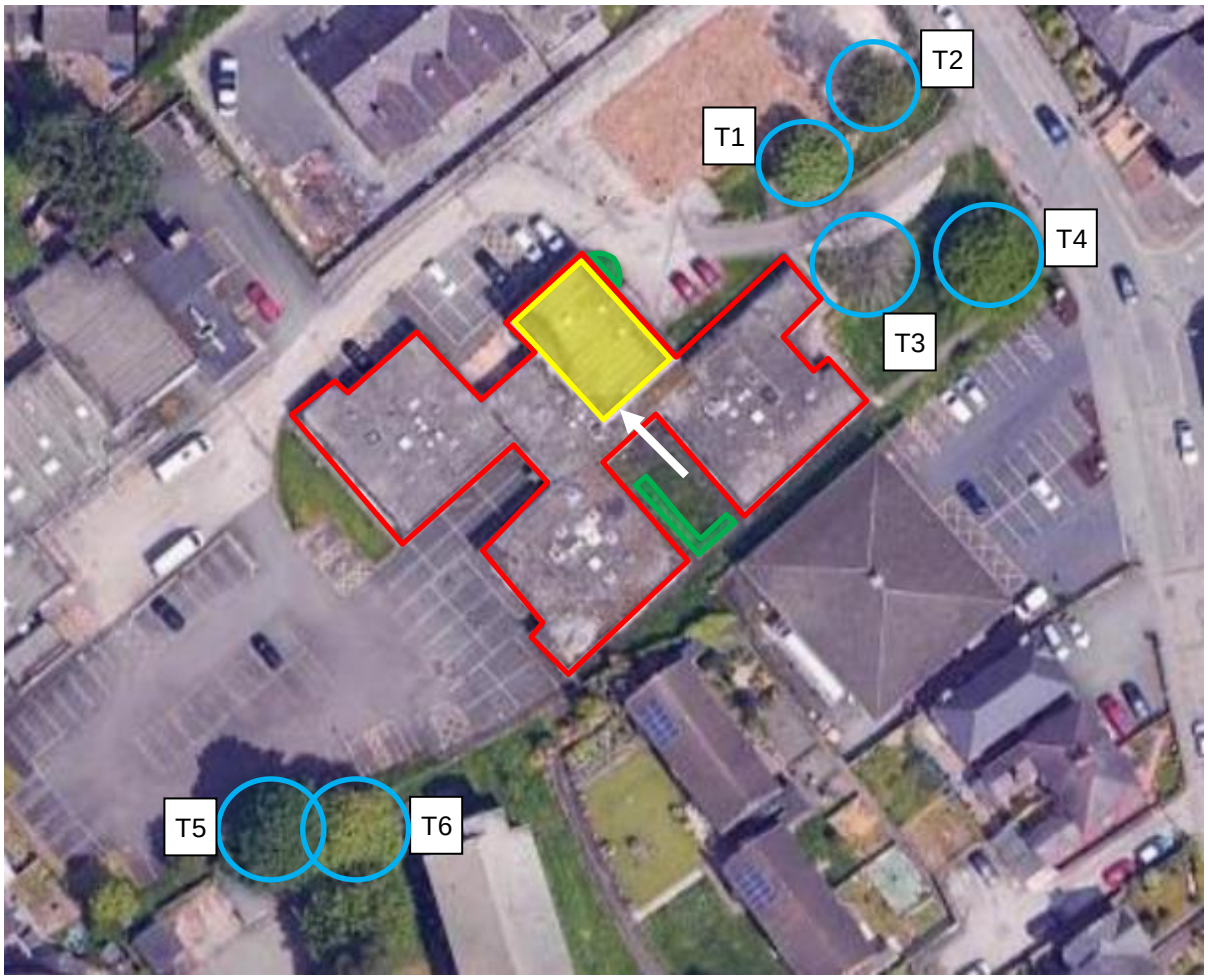


Figure 2: Building layout outlined in red. Two-storey portion of building outlined and coloured yellow. Access to boiler room via external door indicated with a white arrow. Mature trees on Site circled blue and labelled T1-T6. Walled planters circled and coloured green.. Base Image © Google 2024.

4.1.6 The external and internal descriptions of the building are detailed in *Table 1*.

Table 1 – Building Descriptions

External Description	External Photo	Internal Description	Internal Photo
The building is a brick built and partially PVC clad office building. Majority of the building is single storey except for a 15m x 10m block to the north, which is two storeys. The walls are very well sealed and in good condition. The flat roof is roofing felt with lead flashing connected directly to the PVC cladding. Upon the second storey, the flat roof is felt fastened to wooden battens. All doors and windows are PVC and well-sealed into the brick walls.	 Northeast elevation  Northwest elevation  Southwest elevation	No loft space is present. A boiler room is located on the second floor, accessible by an external door to the single storey roof. The boiler room is made of breezeblock walls and open timber roof structure with visible insulation. All walls, ceiling and single door were well sealed and in good condition. The door was made of solid wood and externally PVC clad, except for two small louvre sections, that were sealed with mesh. The remaining internals of the building are not accessible to bats so were not inspected further.	 Boiler room located on second floor.

	  Southeast elavation		

4.2 Potential Roost Assessment Results

4.2.1 No evidence of bat use was found within the building during the assessment of the Site. Evidence would have included, live bats, droppings, staining or feeding remains.

4.2.2 The building is very well maintained and sealed to bats and birds. The walls are partially clad with well-sealed and maintained PVC cladding, providing no roosting opportunities behind it. The windows and doors also provide no cracks or gaps around them, suitable for hosting roosting bats or providing potential access into the brick wall cavity. The flat roof is in very good condition, with no raised or broken roofing felt. Any gaps between the lead flashing and PVC cladding were superficial and did not lead to a cavity big enough to host roosting bats.

4.2.3 The boiler room was well sealed and insulated making the room very warm and hold a stable enough temperature to host roosting bats. However, no access for bats was present. When the door was closed and a surveyor placed inside, there was no light entering the room through gaps around the door or walls. The door was made of solid wood and externally PVC clad, except for two small louvre sections that were sealed with mesh from the inside allowing no access for bats.

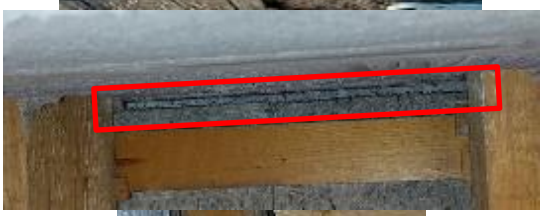
4.2.4 Three of the six mature trees on Site have potential roost features. The two Horse Chestnut trees, identified during the 2020 Bat Report (T1 and T2), had, at the time, rot-holes at 2.5 m height (T1) and 3.5 m height (T2) but from ground level the extent of the rot-holes could not be ascertained. During the site inspection on 17 January 2024, these rot-holes are still present, and two bat boxes have been installed onto T2 as mitigation for the demolition of the adjacent property.

4.2.5 Table 2 below provides details of the building and likely locations of PRF's within the building and PRF's within the trees.

Table 2 – Potential Roost Features

Building	
Feature Description	**Example Photos**
Joins between PVC cladding and brick walls were mostly well-sealed and intact. Few gaps were present where PVC cladding had lifted from brickwork, but all gaps were two narrow to offer bat access and too shallow to provide suitable shelter for bat roosting.	

Building	
Feature Description	**Example Photos**
	
Few holes in the PVC cladding were present from breaks in the PVC or where two PVC pieces had moved apart. All holes were checked with borescope and ruled out as potential roost features due to their narrow size and the gap only as deep as the cladding. Due to the PVC material, the temperature inside the cladding would fluctuate too severely to by suitable for bat roosting.	
The windows and doors are well-sealed with no gaps. The photo right shows an intact, thick line of sealant between the PVC cladding and window frame. A potential roost feature was identified where a brick had broken away from the corner of a window (photo right). However, upon inspection with borescope, the gap was not deeper than one brick and had no access into the wall cavity. This was ruled out of having potential to host roosting bats.	 

Building	
Feature Description	**Example Photos**
The felt roof is in good condition with no raised or broken areas. A gap between the lead flashing and PVC cladding was identified but ruled out as a potential roost feature due to no access to any roof cavity and the hole being too shallow to maintain constant temperature.	 
The boiler room wall and ceiling were well sealed and insulated. The room was very warm and had a stable enough temperature to host roosting bats, however, when the door was closed and a surveyor placed inside, there was no light entering the room through gaps around the door or walls. The door was made of solid wood and externally PVC clad, except for two small louvre sections (pictured top right) that were sealed with mesh. No access for bats was present. No evidence of bats was found in the room, such as droppings or feeding remains. All gaps in ceiling (middle right) and between timber and breezeblocks (bottom right) were very shallow and unsuitable for crevice dwelling species.	  

Trees	
Feature Description	**Photos**
T1: Semi-mature pollarded Horse Chestnut located 12m to the north the building. Rot-holes present within the ends of previously cut branches. Tree is now behind Heras fencing and could not be inspected further.	
T2: Semi-mature Horse Chestnut located 22m to the north the building. Rot-hole present within trunk. Tree is now behind Heras fencing and could not be inspected further. Two bat boxes now present 4 metres up trunk (bottom right).	 

Trees	
Feature Description	**Photos**
T3: Ornamental cherry (*Prunus sp)*. 6m to the east of the building. Tree in good condition with no holes or cracks that provide PRF's.	
T4: Lime sp. (*Turdus sp.*) 18m east of the building. Tree in good condition with no holes or cracks that provide PRF's.	
T5: Sycamore (*Acer pseudoplatanus*) 37m southwest of the building. Tree in good condition with no holes or cracks that provide PRF's.	

Trees	
Feature Description	**Photos**
T6: Ash (*Fraxinus excelsior*) 32m southwest of the building. One large crack in branch with callus roll providing PRF on underside of branch (photo below). Depth of holes within callus roll could not be inspected from the ground but orientation of holes would not allow water ingress and provide shelter from the weather.	 

4.3 Nesting Bird Assessment

4.3.1 The building lacks any features that provide opportunities for birds to nest in/on, such as ledges or brick-work cavities. The flat roof was inspected for signs of gull nests, but none were found, possibly due to the roof being exposed to weather and predators and, therefore, unsuitable for nesting gulls.

4.3.2 Two historic nests were identified with the walled planter of bramble and scrub on the northeast aspect of the building (Table 3 below).

4.3.3 The adjacent trees (T1-T6) could also provide nesting places for birds.

Table 3 – Potential bird nesting habitat

Bird Nesting Habitat	
Feature Description	**Photos**
Walled planter to the northeast of the building with single immature Horse chestnut and overgrown bramble scrub. Historic nest shown circled red (photo bottom right). Pictured bottom right, the overgrown L-shaped, walled planter to the southeast of the building with potential to host nesting birds.	  

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 This Site has been subject to a bat Preliminary Roost Assessment on the 17th January 2024. No evidence of bats using the Site were identified during the assessment.

5.2 The habitat surrounding the Site is predominantly residential properties and businesses of Wrexham city centre with small areas of parks and school grounds providing some green spaces that could be utilised by foraging bats. Overall the habitat surrounding the Site is considered of low suitability for bats The wider habitat beyond the city centre includes continuous development with interspersed areas of woodland and pasture and is considered to be of low-moderate potential value for bats.

5.3 The building is very well sealed and maintained, the flat roof was in excellent condition and all windows, doors and cladding present did not have any suitable bat access points or potential features suitable for bats. Therefore, the building is considered to have **negligible potential for roosting bats.**

5.4 Six mature trees are present on Site; three of which have at least one potential roost feature. It is understood that these trees will not be directly affected during the proposed demolition. The PRF trees are located 12m (T1), 22m (T2) and 32m (T6) from the building. Due to their proximity to the building (above minimum 12m away), and unlikely potential for disturbance (of any bats that might be present) during the demolition and redevelopment of the Site, it is not recommended that further investigation is undertaken on these trees at this time.

5.5 The building does not show signs of nesting birds; however, evidence of nesting birds was identified within the bramble scrub outside the northeast of the building. All other scrub and trees on Site have potential to host nesting birds.

5.6 Recommendations; bats

5.6.1 All buildings have been categorised as having negligible bat roosting potential. As such no further survey work is recommended for bats and the works can proceed without Reasonable Avoidance Measures (RAMs).

5.6.2 As bats were not found to be using the buildings then **a European Protected species license will not be required** for the works. The demolition and clearance of the site can be carried out at any time of year (subject to nesting bird restrictions – *paragraph 5.7.1*).

5.6.3 A Tree Preservation Zone should be created around those trees with PRF's present in line with national guidance (British Standard 5837:2012). To ensure that the trees are protected in themselves and that the PRF's are not impacted.

5.6.4 Should the demolition of the building or future development works on Site impact trees T1, T2 or T6, i.e. through disturbance, undermining roots, felling, pruning, etc., then further investigatory work on the trees to determine the full extent of the rot/callus rolls and to confirm whether or not they provide roost suitability or bats/evidence of bats, would be required. Additional survey work may then also be required.

5.7 Recommendations; birds

5.7.1 The disturbance and/or destruction of bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). If demolition works commence during the nesting bird season (March-August inclusive), there is potential for nesting birds to be disturbed and nests to be destroyed during the process. To avoid impacts on nesting birds, a pre-works nesting bird check of the Site should be undertaken by a qualified ecologist prior to any works taking place. If nests are identified, the nests must remain intact and undisturbed until young have fledged.

6.0 MITIGATION AND ENHANCEMENT MEASURES

6.1 Bats

6.1.1 The details of the future disposal of the Site have not been provided, therefore, any bat mitigation installed on the Site now (e.g. within the existing trees) may be unsuitable for bat use in the future. In order to enhance the wider area for bats, we recommend installing four bat boxes, suitable for crevice dwelling bats, onto trees within other Wrexham County Borough Council owned land in the vicinity of the Site. Please refer to Table 4 below for potential box locations.

6.1.2 Bat box installation as per recommendations in Bat Mitigation Guidelines, 2016 and between 3-4m in height and positioned two per tree with clear flight path orientated between East and West.

- 2 x Vincent Wildlife Trust bat boxes
- 2 x Schweglar 2F bat box

6.2 Birds

6.2.1 To compensate for the loss of bird nesting habitat in the demolition and clearance of the Site, and to enhance the site for birds, we recommend new bird nesting opportunities be installed onto trees within other Wrexham County Borough Council owned land in the vicinity of the Site as above. A minimum of four boxes suitable for small birds will be erected.

- 2 x 1B Schweglar 26mm diameter entrance hole boxes or similar
- 2 x 1B Schweglar 32mm diameter entrance hole boxes or similar

6.3 Potential bat/bird box locations

6.3.1 Rhosddu Park is located approximately 110m south of the Site and is a grassed playing field with mature trees on its boundaries set within residential properties. Few other green spaces are present in the vicinity. Other sites could be considered in consultation with Wrexham Council.

Table 4 – Potential bat/bird box locations

Rhosddu Park: SJ33302 50916. Sycamore tree. 	Rhosddu Park: SJ33229 50858. Sycamore tree. 
Rhosddu Skatepark: SJ33536 51393. Mature Birch tree. 	Rhosddu Skatepark: SJ33519 51545. Pine tree. 

7.0 LEGISLATION

7.1 Bats

The *Wildlife and Countryside Act* (WCA) *1981* (as amended)[1] forms the key legislation protecting habitats and species in the UK. All UK bat species are fully protected under the 1981 Act through inclusion on *Schedule 5*. All bats are also listed under *Schedule 2* of the *Conservation of Habitats and Species Regulations (2017)*[2,3] which transcribes the EC Habitats Directive into UK law. In combination, this legislation makes it an offence to:

- Deliberately or recklessly take, injure or kill a bat;
- Deliberately or recklessly damage or destroy a place or structure used by bats for shelter or protection;
- Deliberately or recklessly obstruct access to a bat roost; or
- Deliberately or recklessly disturb bats while occupying a roost.

Bat roosts are protected under these laws whether the animals are present at the time of survey or not. Under both laws the English Government and D.E.F.R.A. are empowered to issue licences to carry out work to bat roosts for reasons of overriding public interest. It is not illegal to tend to a disabled bat pending recovery.

7.2 Birds

In addition, under the *Wildlife and Countryside Act, 1981* (as amended) and the *Countryside and Rights of Way, 2000*, all wild birds, their nests and eggs are protected during the breeding season (typically March to August inclusive). This makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Take, damage or destroy the nest of a wild bird included in Schedule ZA1;
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built;
- Take or destroy an egg of any wild bird.

[1] HMSO (1981). *The Wildlife and Countryside Act 1981*. HMSO, London.
[2] HMSO (2017). *The Conservation of Habitats and Species Regulations 2017*. HMSO, London.
[3] Updated by HMSO (2021). *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.* HMSO, London.

8.0 REFERENCES AND INFORMATION SOURCES

1. Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines, (4th Edition)*. Bat Conservation Trust, London.
2. Marches Ecology (2020). Proposed Demolition of Centre 67, 67 Rhosddu Road, Rhosddu, Wrexham, LL11 2NW – Bat Survey and Bird Assessment. Reference: C421/ 1.0.
3. British Standards 5837:2012: Trees in relation to design, demolition and construction. British Standards Institution.