Johnstown Infants School, Johnstown
Wrexham County Council

Bat and Bird Survey Report

15th May 2024

Produced by Wildbanks Conservation

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

Report Version	Date	Completed by:	Checked by:	Approved by:
Draft	15/05/24	Tanya Cobb		M. Smith
Amended				
Amended				

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

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1.0 INTRODUCTION

1.1 Wildbanks Conservation were commissioned to undertake a Preliminary Roost Assessment of the empty Johnstown Infants School. This report has been prepared on behalf of Wrexham County Council and provides the results an external and internal Visual Assessment undertaken on the 14th May 2024. The building in question comprises a detached brick building, used as a school up till September 2023. (Figure 1).

1.2 The building is proposed to be refurbished internally so that it can be a school again. Proposed works include removing and replacing existing roof coverings and roof insulation and replacing flooring, windows and doors. The footprint of the building will not change.

1.3 The building is located within a school grounds consisting of school playing field, green spaces, playgrounds and carpark. The school is situated within the residential area of Johnstown, Wrexham. The building and school grounds are from this point referred to as the 'Site'.



Figure 1: An aerial view of the Site. (Google maps, 2024)

2.0 SURVEY METHODOLOGY

Desk Top Study

2.1 A desk top study was undertaken, including review of the Magic.gov website and other online resources.

2.2 Building Visual Assessment

Bats

2.2.1 The exterior of all aspects of the building were visually assessed for potential roost features (PRFs), potential access points and evidence of bat activity on 14th May 2024. With the aid of binoculars and endoscopes, features such as gaps in brickwork, 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 roosts/access points, were sought. Evidence that bats actively used these PRFs/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 PRFs was used as an indicator that bats had not recently used the area to access the building. Following the external assessment, an internal assessment of the building was undertaken, searching for the same evidence. Both the ground floor and first floor were searched.

2.2.2 *Birds*

The building was assessed for nesting birds at the same time as the bat visual assessment of the building on 14th May 2024. All cracks, gaps and potential nesting areas were checked for the presence of nests/nesting material/live birds, and 10 minutes was spent listening for any noise of nestlings whilst inside the building.

Great Crested Newts

2.2.3 During the survey it was noted that a small pond exists within the school grounds. Full consideration and impact assessment on the pond has not been carried out within this Report. Recommendations for further consideration has been provided in Section 5.

2.2.4 The waterbody on Site was assessed for potential to support great crested newts using the Habitat Suitability Index (HSI) (Oldham et al, 2000). When waterbody related factors are inputted into the HSI, a number between 0 & 1 is outputted, which relates directly to a scale of suitability for GCN. Values close to 0 indicate unsuitable habitat, 1 represents optimal habitat. The HSI for the great crested newt incorporates ten suitability indices, all of which are factors known to affect this species.

2.3 Limitations

There were no significant limitations to the assessment. All areas of the building could be accessed except an externally accessed boiler room. The assessment was carried out within the main activity season for bats (May to August) and birds (March to September). As such any signs of bat or bird activity would be visible. There are no limitations to finding and identifying PRF's.

3.0 RESULTS

3.1 Desk Top Study

3.1.1 One statutory designated site exists within 1km of the Site; Stryt Las a'r Hafod/Johnstown Newt Sites (SSSI/SAC), designated for significant Great Crested Newt populations. Stryt Las a'r Hafod is a number of smaller separate sites that in combination make up the SAC (Figure 2) around Johnstown. Habitat consists of waterbodies with known GCN populations and excellent terrestrial habitat. The Site is outside of the SAC boundaries but located centrally within the separate sites.

3.1.2 A railway line separates the Stryt Las SSSI from the housing estate that the Site is located within. This railway line is considered a boundary to commuting GCN.

3.1.3 No local, non-statutory designated sites exist within 1km of the Site.

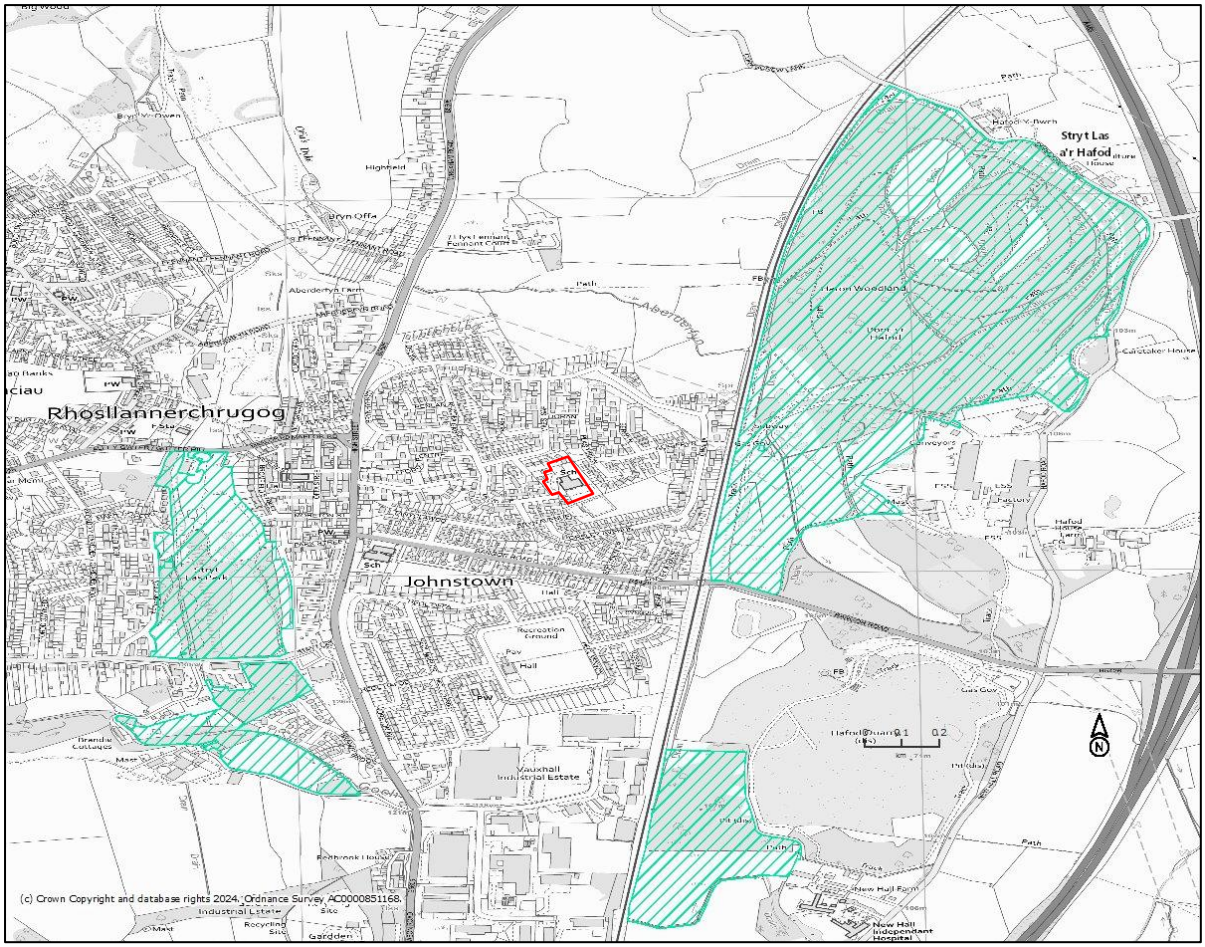


Figure 2: Map of the extent of Stryt Las a'r Hafod/Johnstown Newt Sites SSSI/SAC coloured green and the Site outlined red. (Magic.gov, 2024)

3.1.4 Wider habitat around the Site consists of housing estate to the East, North and West with associated buildings, hardstanding, roads and gardens. To the South is the Johnstown Bowling Club and a playing field. The Eastern and southern perimeter of the Site consists of hedges, fences and metal railings with some trees. The northern and western perimeters are of fences (Plate 11-12)

3.2 Building Visual Assessment

Bats

3.2.1 The building is a single storey brick building with white shiplap PVC cladding in places and a flat felt roof (Plates 1-10). The building is in good condition with no potential roost features (PRFs) for crevice dwelling or void dwelling bats. The building has **negligible potential** for roosting bats.

3.2.2 The external brickwork and roofing felt of the building are well maintained and very well sealed to bats and birds. Timber sits flush to the top of the wall plate and the roofing felt is wrapped around this timber and overhangs adjoining a wooden baton creating no gap

or crevise. The full circumference of the building is sealed in this fashion and no gaps exist. In some areas, the external wooden baton sits away from the brick wall slightly, but the gap is not deep enough to support roosting bats or provide access to a roost within the building. The walls are partially clad with well-sealed and maintained PVC cladding, providing no roosting opportunities behind them. The windows and doors present also do not provide 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.

3.2.3 The internal of the building is not accessible by bats, no potential access points were observed externally to allow access internally. The internal of the building has a suspended ceiling. A 50cm high roof space exists for utilities, before a steel roof frame, sheet metal and insulation roof structure under the roofing felt. One block of the building, built at a different time, has wooden boards and timber struts supporting the roofing felt, instead of steel frames and sheet metal. As bats do not have access to this roof space, and the unsuitable sheet metal surface provides no potential roosting features, the roof space and internal rooms were not investigated further.

3.2.4 A boiler room with external door access was present and this was inspected for bat roost potential. The boiler room was accessible via louvre door. There was no mesh covering the louvre gaps, however, looking inside, the room was plastered and painted, with no gaps or broken brickwork to support roosting bats. No work is proposed within the boiler room.

Birds

3.2.4 No evidence of nesting or roosting birds was found on or inside the building as it is well sealed and the roof flat and would mean any nests present are exposed and vulnerable to predation.

3.2.5 *Great Crested Newts*

Due to the presence of a pond within the grounds of the school, and its proximity to Stryt Las a'r Hafod SSSI/SAC, the presence of GCN on Site is possible and should be considered further with regards the development..

3.2.6 The pond is located 30m to the south of the school building, separated by a portion of tarmac, long grass (formerly playing field and hedge. The pond is approximately 20m^2 in size and completely vegetated over with Flag Iris (*Iris pseudacorus*); no standing water is

present (plate 10). The pond is enclosed by a mature hedge on three sides: south, east and north, and house and garden fence to the west. A pond dipping platform is present.

3.2.7 The results of the HSI are as follows:

Table 1: HSI results

HSI score	Habitat Suitability Rating
0.62	Average

4.0 DISCUSSION AND RECOMMENDATIONS

4.1 This Site has been subject to a bat Preliminary Roost Assessment, nesting bird assessment and HSI of a small pond within the grounds on the 14th of May 2024 carried out by Mick Smith (NRW bat licence number: S092489/1; NRW GCN licence number: S091662/1). No evidence of bats or birds using the building were identified during the assessment.

4.2 The habitat immediately surrounding the Site is predominantly residential properties with small areas of parks, gardens and school grounds providing some green spaces that could be utilised by foraging bats. The wider habitat beyond the residential properties provides good foraging habitat within Stryt Las a'r Hafod SSSI/SAC. Overall, the habitat surrounding the Site is considered of low-moderate potential value for bats.

4.3 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.

4.4 The building does not show signs of nesting birds. Birds were identified using the mature hedge to the northeast of the building, however, due to its distance from the building, and that the proposed works are to take place within the current footprint of the building, it considered likely that nesting birds will not be disturbed during the works.

4.5 The presence of a pond on Site in conjunction with nearby Stryt Las a'r Hafod SSSI/SAC, designated for GCN populations and habitat, suggests that the presence of GCN can not be ruled out and as such further consideration for GCN should be given.. The HSI results indicate that the pond is of 'average' quality for GCN. It is unknown the extent / if any

works will take place to the 'green spaces' surrounding the school at this time. As such it is not possible to carry out an impact assessment on the works to GCN.

4.7 Recommendations

Bats

4.7.1 The building has been categorised as having negligible bat roosting potential. As such no further survey work is recommended for bats and the works can proceed without further consideration to bats. There are no limitations to timings of works in relation to bats.

Compensatory habitat

4.7.3 No PRF's have been identified within the building. In order to enhance the Site for wildlife in future, it is recommended that two bat boxes; Schwegler 2F Universal Bat Box, or similar, are installed on the mature Scots pine (*Pinus sylvestris*) tree within the hedge-line on the eastern Site boundary (grid ref. 330493 346223).

4.8 Recommendations

Birds

4.8.1 The disturbance and/or destruction of bird nests is prohibited under the Wildlife and Countryside Act 1981 (as amended). No nesting birds were found using the building and no features found that could be used by nesting birds therefore the works can be carried out at any time of year.

4.8.2 If works are to proceed within 5m of a boundary hedge and within the bird nesting season (March to September inclusive) then the hedge should be checked for nesting birds by a suitable ecologist and a cordon created should a nest be found until the young have fledged.

Compensatory habitat

4.8.3 Birds were only seen using the hedge and not the building for nesting. Therefore, to improve the Site further, it is recommended that four nest boxes be installed within the cluster of trees to the south of the building (grid ref. 330476 346211), at a height of 2-4m to as not be accessible by children. Suitable boxes include, or similar:

- 2 x 25mm entrance hole boxes
- 2 x 30mm entrance hole boxes

4.9 Recommendations

GCN

4.9.1 Due to the proximity of the Site within the area of Stryt Las a'r Hafod/Johnstown Newt Sites SSSI/SAC and that the HSI result of the pond was 'Average', it can not be ruled out that GCN are not present within the site. As such it is recommended that further consideration is given to GCN and an impact assessment carried out which could result in further surveys being required or that a Reasonable Avoidance Method Statement (RAMS) be created and followed by contractors to minimise potential disturbance, injury or death to GCN. The proposed RAMS may include the below and should be adhered to before and during construction works.

4.9.2 RAMS

- A suitable qualified ecologist will be appointed to oversee the works.
- Prior to the commencement of works a toolbox talk will be provided to onsite personal by a NRW licensed ecologist. The talk will include information regarding the protection of species, habitats, legal implications, their responsibilities and what to do if a protected species is encountered.
- Renovation works and vehicle access should not extend past the building and tarmac footprint within the Site, therefore, not encroaching the grass grounds providing a disturbance buffer to the pond. If this is not possible, works will proceed with utmost caution with a licensed ecologist or Accredited Agent on site.
- If works are to take place within the grass or hedges of the Site then the areas will be searched by licensed ecologist following standard 2 stage cutting protocols.
- No works to features that provide hibernation potential will take place between December and March (inclusive) or when temperatures are forecast to drop to below 5C over night for 3 consecutive nights.
- If GCN are found during works, works must stop immediately, and the licensed ecologist will be contacted, and advice sought: Wildbanks Conservation; 01691 623505.

Compensatory habitat

4.9.3 It is recommended that the Site be further improved for GCN by clearing 80% of the Flag iris vegetation from the pond, either by hand or using an excavator, to provide open water and space for other, more suitable, egg-laying vegetation to grow. The dipping platform could also be replaced to allow the school to utilise this resource.

5.0 EXECUTIVE SUMMARY

5.1 The building is well maintained and in good condition, offering no potential roost features for bats or potential nest sites for birds. The building is classified as having negligible potential for bats and birds during the visual assessment on 14th May 2024.

5.2 A HSI was performed on the pond on Site and it was 'Average', and due to the Site's proximity to GCN designated SSSI/SAC Stryt Las a'r Hafod, it is recommended that further consideration is given to the impact on GCN through the development including an Impact Assessment.

5.3 It is recommended that two bat boxes and four bird boxes are installed on Site, and the pond is cleared of 80% of the vegetation, to enhance the Site for bats, birds and GCN, respectively.

6.0 LEGISLATION

6.1 All bat species are protected in the UK under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The species is also protected under Annex II of the Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (the EC Habitats Directive). This has been transposed into UK law by the Conservation of Habitats and Species Regulations 2010 (as amended) in England and Wales. Bats are referred to as European Protected Species (EPS).

6.2 It is an offence to deliberately capture, injure or kill a bat; intentionally or recklessly disturb in a way that would affect their local distribution or abundance, or affect their ability to survive, or breed. It is also an offence to damage or destroy a bat roost and to possess, advertise, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.

6.3 If work is proposed that would affect an EPS, then a licence will be required. Natural Resources Wales (NRW), in exercise of the powers conferred under regulation 53(1) and 56(3) (a) of the Conservation of Habitats and Species Regulations 2010, may issue licences for the following purposes:

- Preserving 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;
- Preventing the spread of disease; or
- Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other form of property or to fisheries; to allow people to carry out activities which would otherwise be illegal.

6.4 Before issuing a licence under the Habitats Regulations, the licensing authority must be satisfied that "there is no satisfactory alternative" to the work as proposed and, that the proposed actions "will not be detrimental to the maintenance of the population of the species at a favourable conservation status (FCS)".

6.5 To ensure these requirements are met, the licensing authority must have enough information to complete an assessment of the application. This includes sufficient survey data so that the roost and how it is used by bats is understood and impacts upon the roost are appropriately assessed so that mitigation and/or compensation can be designed

into the proposed development that will ensure the bat population can be incorporated and maintained in the long term.

6.6 Seven bat species are UK BAP Priority Species. These are as follows:

- Barbastelle *Barbastella barbastellus*
- Bechstein's *Myotis bechsteinii*
- Brown long-eared *Plecotus auritus*
- Greater horseshoe *Rhinolophus ferrumequinum*
- Lesser horseshoe *Rhinolophus hipposideros*
- Common noctule *Nyctalus noctula*
- Soprano pipistrelle *Pipistrellus pygmaeus*

6.7 Under the NERC Act, local authorities (and other public bodies) have a duty to conserve biodiversity the local authority must take the protection of the priority habitat into consideration when it is making a planning decision.

6.8 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 under Part 1 (Section 1) of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

i. Intentionally kill, injure or take any wild bird;
ii. Take, damage or destroy the nest of any wild bird while it is in use or being built;
iii. Take, damage or destroy the egg of any wild bird; and
iv. To have in one's possession, or control, any wild bird (dead or alive) or egg or any part of a wild bird or egg.

6.9 Further legal protection is afforded to those wild bird species listed on Schedule 1, which prohibits the intentional or reckless disturbance to a bird while it is nest building, or at a nest containing eggs or young, or to recklessly disturb the dependent young of such a bird.

6.10 Great Crested Newts are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and Schedule 2 of the Conservation (Natural Habitats etc) Regulations 1994 (Regulation 38). Because of their rarity they are also protected under Annexes IIa and IVa of the Habitats and Species Directive and under the Berne Convention.

6.11 It is illegal to intentionally capture or kill great crested newts; intentionally injure or recklessly disturb GCN including places used for shelter or protection. It is also an

offence to damage or destroy a breeding site or resting place; intentionally or recklessly damage, destroy, or obstruct access to a place used for shelter or protection and to possess, advertise control, transport, sell, exchange or offer for sale/exchange any live or dead great crested newt or any part of one.

7.0 REFERENCES

- Bat Conservation Trust. (2010) *Common pipistrelle*. Bat Conservation Trust, London.
- Collins, J (ed.). 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)*. The Bat Conservation Trust. London.
- Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough
- Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus).* Herpetological Journal 10(4), 143-155.

A1 APPENDIX – SITE PHOTOGRAPHS



Plate 1: The eastern aspect of the building.



Plate 2: The western aspect of the building.



Plate 3: The northern aspect of the building.



Plate 4: Well-sealed timber, baton, roofing felt structure (outlined red) with no gaps onto the wall plate or inside the building. Well-maintained and sealed brickwork and cladding with no gaps or holes (outlined blue).



Plate 5: Roof structure showing timber sitting atop wall plate (cladding), with wooden baton fixed externally and the roofing felt wrapped over the timber and baton. The baton sits away from the wall in some places creating a gap (outline red), but the gap does not lead into the wall and is too shallow to support roosting bats.



Plate 6: View of the roof with no raised roofing felt or gaps under any flashing.



Plate 7: View into the roof space showing internal structure of the roof with steel frames and metal sheeting. Atop this is a layer of insulation then roofing felt.



Plate 8: View inside boiler room via louvre door. Gaps in slats large enough for bats to access, but no potential roosting features inside room.



Plate 9: Internal structure of the building with plastered and painted walls and suspended ceiling.



Plate 10: Pond with pond dipping platform.



Plate 11: Area of long grass to the North West of site



Plate 12: Area of long grass to the West of the site

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