Ecological Impact Assessment at Tan y Ffordd, Ruthin Rd, Bwlchgwyn, Wrexham LL11 5UU, Grid Ref. SJ 2579 5339 On 3rd, 4th and 9th August and 5th September 2024

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1. Summary

The purpose of the report is to assess the potential ecological impacts of proposed work at Tan y Ffordd, Bwlchgwyn and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme involves the demolition of a house and outbuildings and the construction of a replacement dwelling.
Three buildings and adjacent land were examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use by bats and birds, of the exterior and interior of the buildings. Dusk emergence surveys were carried out on the house.
No bats were found to be roosting in the house and no evidence of use by bats or birds was found.

If any birds should gain access to the buildings and begin constructing nests during the development, then the work in that area must stop until the young have left the nests.
Bat and bird boxes are recommended to provide Net Biodiversity Benefit, as well as native shrub and wildflower planting.

If the recommended mitigation, compensation and enhancement measures are taken there should be minimal impact on the conservation status or danger of harm to any species and no net loss of roosting sites.

2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2) (Natural England) and S086005/1 (Natural Resources Wales);
Licensed great crested newt worker, registration number 2016-19947-CLS-CLS (NE) and S086057/1 (NRW)
This report was commissioned by Nick Roberts at the site address.
The site comprises a detached dwelling and outbuildings surrounded by hard standing and ruderal vegetation.
The proposed scheme involves the demolition of the buildings and the construction of a new dwelling.
The purpose of the report is to identify and address any significant ecological effects which are likely to occur as a result of the proposed work. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

3. Methodology

3.1. Scope of the Assessment

The report incorporates a bat roost and nesting bird assessment, while also searching for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:
The Conservation of Habitats and Species Regulations 2017 and listed in:
Schedule 2. European protected species of animals
Schedule 5. European protected species of plants
The protection of Badgers Act 1992
Protected species which might be associated with such a site include bats and birds.
Dusk emergence surveys were carried out in accordance with *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)* (Collins 2016) .

3.3. Field Survey

The buildings were examined to establish the presence of or evidence of use by protected species of animals. A risk assessment was made before entering. A visual inspection was carried out to assess the potential or actual use by bats and birds, of the exterior and interior of the buildings. They were searched systematically for any signs of bats, including droppings, rub marks and urine stains at entrances to roosts and insect remains, such as moth or butterfly wings. Crevices were checked where possible.
Powerful lamps (LED Lenser H14 and P7) were used for examination under eaves. Binoculars were used to examine parts which were not otherwise accessible. Photographs were taken of all areas and those of relevance are shown in the appendices.

The preliminary survey was carried out on 3rd August 2024 by Susan Worsfold.

Two sets of dusk emergence surveys were carried out on 4th and 9th August and 5th September 2024 by Susan Worsfold and Anne Thackwell, to cover all aspects of the building where potential roost features were identified.
These were done in accordance with *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)* (Collins 2016)
Frequency division detectors were used to record any bat sounds externally for later analysis on the computer. These were Peersonic RPA3.
The whole building was in view of the observers and infrared night vision aids (NVAs) were used alongside observers or to provide extra detail on areas of interest. These were Nightfox Red night vision goggles and Canon XA20 camcorder mounted on tripods, with Nightfox XB5 IR torches.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

Midlands Meres and Mosses phase 2 (Ramsar) 10 km east.

4.2 Habitats

Site: Rural, pastoral, village location. The building is surrounded by hard standing and ruderal vegetation on all sides.
House: In use as a dwelling. It is two storeys with a small loft. Walls were of stone with no cavity. Doors and windows were intact. The roof was of slate, pitched, partly lined with biyunastic hessian felt, with a timber frame. No verge boards or soffits.
Outbuilding 1: In use as storage. One storey. Stone and brick walls. Unlined, pitched asbestos or cement fibre roof.
Outbuilding 2: In use as storage. Open on three sides. Stainless steel roof and walls.
The house was assessed as having medium potential for use by bats due to the house being in a moderate state of repair, with a small loft and some potential roost features. Outbuildings 1 and 2 were assessed as having negligible roost potential due to lack of potential roost features. Nearby trees offered additional roosting and foraging potential.

4.3 Species and Species Groups

Birds
No evidence of use by birds was found.

Bats
There was no evidence of use by bats in the loft or exterior.
No bats were seen to emerge from the building.

5. Description of the Development

The proposed scheme involves the demolition of the house and outbuildings and the construction of a replacement dwelling.

6. Assessment of Effects and Mitigation Measures

Designated Sites:
It is not considered that the proposal will have any significant impact on any designated sites due to the small scale of the development and distance from the sites.
Habitats:
No priority habitat is affected by the proposal. No vegetation is to be lost.

Species:

Birds
If any birds should gain access to the building and begin constructing nests during the work, then work in that area must stop until the young have left the nests.

Bats
The proposed work will not lead to the loss of any roosting sites or access, nor disturbance to individuals.
The site is suitable for foraging and commuting bats. One species of bats was recorded externally.

Residual Effects
None anticipated.

7.
Compensation
N/A

8. Net Biodiversity Benefit

An integrated crevice dwelling bat box to be incorporated into a southern or south east or west facing wall. Further information is given in the bat box information pack available at https://www.bats.org.uk/our-work/buildings-planning-and-development/bat-boxes.
One integrated nest suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into a northern, north east or west facing wall.
Bat and bird boxes are available from NHBS and Wildcare as well as other suppliers.
Planting of native shrubs and wildflowers to take place in the garden, details to be finalised.

9. Ecological Constraints

None identified.

10. Monitoring

Not considered necessary.

11. Conclusions

No bats were seen to emerge from the building and no evidence of use of the building by bats or birds was found. If the recommended mitigation and enhancement measures are taken there will be a net gain in biodiversity and no net loss of roosting or nesting sites, nor any danger of harm to any species

12. Bibliography

Bat Conservation Trust available at: http://www.bats.org.uk

BCT and ILP Guidance Note 8 Bats and Artificial Lighting available at: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

Collins J. (Ed) (2016) *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: jncc.defra.gov.uk

Google Maps available at: https://maps.google.com/maps

Magic Maps available at: http://magic.defra.gov.uk

Mitchell-Jones, A. J. (2004) *Bat Mitigation Guidelines,* Peterborough: English Nature

Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual,* Peterborough: Joint Nature Conservation Committee

UK BAP Priority Habitats available at: jncc.defra.gov.uk

Wildlife and Habitat Conservation available at: https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation

Appendix 13.1: Activity Surveys

Survey Conditions

Date	Sunset/ Sunrise	Start Time	End Time	Temp. Start °C	Temp. End °C	Cloud %	Wind 0-6	Rain
4/8/24	21:00	20:45	22:30	15	15	70	1	None
9/8/24	20:50	20:35	22:20	13	11	60	2	None
5/9/24	19.49	19.35	21.:20	14	10	70	1	None

4/8/24

Observer or area
Sue Worsfold (SW) south east corner
South gables ends

Equipment
Peersonic RPA3 + Canon XA20 NVA
Nightfox Whisker

Bats recorded:
None

Bats observed:
21.14 1 bat flew W to E
21.42 1 bat flying above driveway between house and track, came from the east.
21.44 1 bat flying above driveway between house and track, came around SW corner of house.
21.45 1 bat came round SE corner and flew W.

9/8/24

Observer or area	*Equipment*
Sue Worsfold (SW) north west corner	Peersonic RPA3 + Canon XA20

Bats recorded:
None

Bats observed:
20.48 1 bat flew NE to SW
21.11 1 bat flew NE to SW

5/9/24

Observer or area	*Equipment*
Sue Worsfold (SW) north side	Peersonic RPA3 + Canon XA20 NVA
Anne Thackwell (AT) south east corner	Peersonic RPA3 + Canon XA20 NVA
South gable ends	Nightfox Whisker NVA

Bats recorded:
20.11 Common pipistrelle (*Pipistrellus pipistrellus*) then fairly frequently subsequently.

Bats observed:
20.09 1 bat flew over roof E to W
20.14 1 bat foraging near the SE corner & up and down track
20.20 1 bat flew NW to SE along side of house
20.24 1 bat flew over roof E to W
20.26 1 bat flew NW to E

Appendix 13.2: Aerial Photograph Showing Position of Observers



N

Bat detector

Bat detector, NVA and observer



Appendix 13.2: Aerial Photograph Showing Position of Observers



★ Bat detector

★ Bat detector, NVA and observer

Appendix 13.3: Photographs


House


House


House


House


House

Appendix 13.3: Photographs







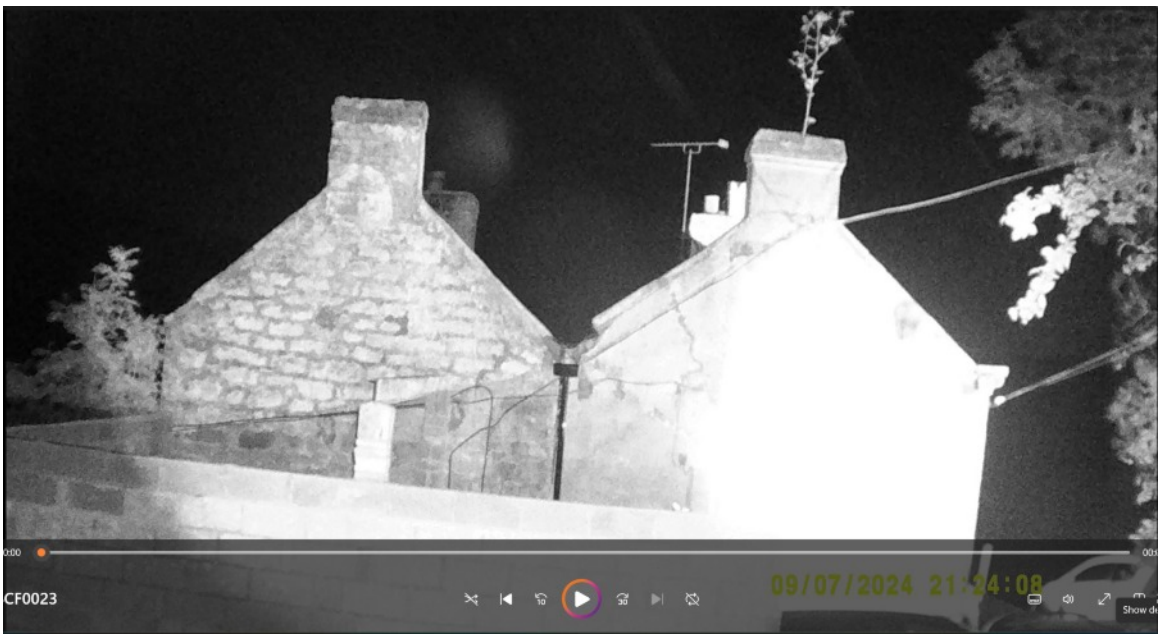




Appendix 13.3: Photographs From NVAs







Appendix 13.4: Legislation Relating to Bats

All species of bats in the UK are European Protected Species (EPS). It is against the law to damage or destroy a bat's breeding site or resting place (known as a roost), or deliberately to capture, kill, injure or disturb a bat

Bats are the only mammals which can fly. They are warm blooded, they suckle their babies and are intelligent, social animals. British bats feed only on insects, of which they consume vast numbers to sustain their energetic lifestyles. A pipistrelle bat can eat up to 3000 midges in a single night!

We have 12 species of bat breeding in Wales. Many of these have suffered severe declines, not just in Britain but throughout Europe.

All British bat species are protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'. Bats have a unique relationship with humans, sometimes sharing our homes for part of the year. For this reason, Natural Resources Wales (NRW) deals with many hundreds of bat enquiries each year from householders.

Under the Habitats Regulations, it is an offence if you:

deliberately capture, injure or kill any wild animal of an EPS
deliberately disturb wild animals of any such species
damage or destroy a breeding site or resting place of such an animal
Disturbance includes, but is not limited to, any disturbance which is likely:

1. to impair their ability –
to survive, to breed or reproduce, or to rear or nurture their young, or
in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

2. to affect significantly the local distribution or abundance of the species to which they belong.

Defra and the Welsh Government will publish a joint guidance document on the interpretation of the offences relating to disturbance, and to damage and destruction of breeding sites and resting places.

There are other offences relating to possession, transport and sale.

NRW issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

If you are a householder and have concerns about bats at your property (other than queries related to planning applications or a development), contact the NRW Enquiry Line for advice, telephone 0300 065 3000

Appendix 13.5: Legislation Relating to Birds

All wild birds, their nests and eggs are protected. It is an offence to intentionally:

- kill, injure or take any wild bird,
- take, damage or destroy the nest of a Golden Eagle, White-tailed Eagle or Osprey (even if disused),
- take, damage or destroy the nest of any wild bird whilst it is in use or being built,
- take, damage or destroy an egg or any wild bird,
- possess any live or dead wild bird or the egg of any wild bird, or any derivative

Many rare birds are listed on Schedule 1, which makes it an offence to intentionally or recklessly:

- disturb a Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturb dependent young of such a bird

Natural Resources Wales (NRW) issues licences for specific purposes, so that you can undertake legitimate work without breaking the law. See ‘Bird licensing’ for more information.