

EXTENDED PHASE 1 HABITAT SURVEY OF
THE OLD FARMHOUSE, COED DERWEN,
ERBISTOCK, WREXHAM

2021



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1.0 INTRODUCTION

- 1.1 Andy Harmer Limited was commissioned in 2021 by Mr David Watkin to undertake an Extended Phase 1 Habitat Survey of land at The Old Farmhouse, Coed Derwen, Erbistock, LL13 0DN. The site will be the subject of a planning application for demolition and new build/ refurbishment of on-site structures for residential use.
- 1.2 The Old Farmhouse is located off the A528, 6km east of Wrexham (O.S grid reference SJ357417 – see Figure 1). The site currently comprises a number of dilapidated agricultural structures, a dwelling that is in use, gardens and disused land. It sits within a pastoral landscape, close to the River Dee. The site is surrounded by habitats such as ponds, woodland and pasture, with hedgerows and tree belts. Many of the stream and river corridors in the vicinity are flanked with deciduous woodland.
- 1.3 The aims of the survey were to:
- Describe and map the habitats present on the site
 - Assess the potential for protected species to be present on the site or just outside the immediate site boundary
 - Identify where further survey may be necessary.



Figure 1 showing the location of the side, edged in red

2.0 METHODOLOGY

- 2.1 The Extended Phase 1 Habitat survey was undertaken to JNCC standards. The entire site was walked, along with some of the adjacent habitats, and each habitat was mapped. Species lists were taken at locations of botanical interest. All botanical nomenclature follows Stace, C. A., 2010. *New Flora of the British Isles*, 3rd Ed. Cambridge University Press. A Phase 1 habitat map was produced showing habitat boundaries.
- 2.2 During the Phase 1 survey, the habitats were assessed for their potential to support protected species. Any evidence found of potential or definite protected species activity was mapped. This included, but was not limited to, searching for evidence of Badger activity, assessing any trees or buildings on site for their potential to support bats and Barn Owl, and assessing any waterbodies on site for their potential to support Great Crested Newt.
- 2.3 The site was also surveyed for invasive, non-native plant species such as Japanese Knotweed and Giant Hogweed.
- 2.4 Andy Harmer, Principal Ecologist, and Sam Harmer, Ecologist, undertook the survey on 9th February 2021. Andy Harmer has over twenty years of experience of habitat and protected species surveys and holds protected species licences. Sam Harmer has been undertaking protected species surveys for seven years. The entire site could be surveyed except for the occupied bungalow (Building 1). There were no other constraints to the survey.

3.0 RESULTS OF THE HABITAT SURVEY

- 3.1 The Phase 1 Habitat Map can be found at the back of the report. The habitats are described below.

Amenity Grassland

- 3.2 Approximately 40% of the proposed development site is made up of amenity grassland (see Photograph 1). This is used and maintained as a garden. The sward is species-poor and comprises Perennial Rye-grass *Lolium perenne*, Annual Meadow-grass *Poa annua* and Daisy *Bellis perennis*.



Photograph 1: showing amenity grassland

Neutral Grassland

- 3.3 Neutral, rank grassland now covers the area that was once the bare ground of the farmyard, and access to other structures. This makes up about 30% of the site and contains a typical assemblage of rank grass species including Cock's-foot *Dactylis glomerata*, Yorkshire Fog *Holcus lanatus*, Meadow Foxtail *Alopecurus pratensis* and Perennial Rye-grass *Lolium perenne* (see Photograph 2).



Photograph 2: showing neutral grassland

3.4 Bare Ground

Bare ground makes up around 10% of the site and forms a driveway, a path around the house and down the side of one of the barns to a small allotment.

Intact Species-poor Hedgerow

- 3.5 Two sections of intact species-poor hedgerow exist on the northern boundary of the site. One is on the western end and measures approximately 20m in length, whilst the other lies at the eastern end of the site and measures around 5m in length. Both are made up of Holly *Ilex aquifolium* and Hawthorn *Crataegus monogyna*.

Existing Buildings

- 3.6 Six buildings exist on site (see Figure 2). Building 1 is currently a dwelling whereas Buildings 2 - 6 are agricultural-related structures in varying states of dereliction.



Figure 2 showing the locations of the six buildings

Building 1

- 3.7 Building 1 is a brick-built bungalow which is in good order and currently in use as a dwelling.

Building 2

- 3.8 Building 2 is a linear amalgam of buildings ranging from a two-storey barn to a corrugated covered lean-to (see Photograph 3). The main barn is of brick construction with a pitched corrugated metal roof, stepping down to a smaller brick barn with a pitched slate roof. The remaining two structures are brick or blockwork and both have metal corrugated roofs. None of the buildings show sign of recent use.



Photograph 3: showing Building 2

Building 3

- 3.9 Building 3 can be conveniently split into two sections, eastern and western (see Photographs 4 and 5). The most westerly compartment is a single storey, single-skin, brick structure with a flat, corrugated metal roof. It is in a dilapidated state. The building was inaccessible due to vegetation blocking the access, though windows were missing which allowed for an internal assessment to be taken place from outside. The most easterly compartment, also single storey is of metal and wood construction with corrugated metal roof and walls. Most of this section of the building is open fronted from floor to roof.



Photograph 4: showing most westerly compartment of Building 3



Photograph 5: showing most easterly compartment of Building 3

Building 4

- 3.10 Building 4 is single-storey structure, constructed from a mixture of breezeblock, wooden frame, corrugated sheet metal walls and flat roof (see Photograph 6). A small room within the building is made from single-skin brick and breeze block. The structure is dilapidated and unused.



Photograph 6: showing Building 4

Building 5

- 3.11 Building 5 is a single-storey, dilapidated structure constructed from breezeblock (see Photograph 7). The roof is flat, made from corrugated metal and has partially collapsed.



Photograph 7: showing Building 5

Building 6

- 3.12 Building 6 is a dilapidated barn in danger of collapsing (see Photograph 8). The wooden and metal framed structure is open on two sides and has metal corrugated top and sides.



Photograph 8: showing Building 6

INVASIVE SPECIES

- 3.13 No invasive, non-native species, as listed on Schedule 9 of The Wildlife & Countryside Act 1981 (as amended), were located during the survey.

4.0 PROTECTED SPECIES RESULTS

Badger

- 4.1 Badgers *Meles meles* are protected under the Protection of Badgers Act 1992. This Act, for example, makes it illegal to disturb a Badger whilst it is in a sett, to kill, injure or take a badger and to obstruct the entrance to a Badger sett.
- 4.2 No Badger sett was located within the site boundary or immediately outside of the site boundary during the survey. No evidence of Badger activity could be located.

Bats

- 4.3 All bat species are European Protected Species under the Conservation (Natural Habitats etc.) Regulations 1994, implemented in the UK by the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit). Bats are also protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006. It is illegal to disturb or damage a bat roost.
- 4.4 Five out of the six buildings on site were assessed for their potential to support a bat roost. There was no access to Building 1 (the bungalow). Evidence of bat usage was found within Building 2 in the form of bat droppings and feeding remains. Building 2 also supports many Potential Roosting Features such as lifted slates, gaps in brickwork, gaps between wooden beams etc. Considering the results of the survey, Building 2 is assessed as having **high** suitability for a bat roost.
- 4.5 Bat droppings were found on an internal brick wall within Building 4. Building 4 is of open construction and lacks features capable of supporting a bat roost. It is considered that the bat droppings are likely a result of bats using the building for foraging. Building 4 offers **low** suitability for a bat roost.
- 4.6 No evidence of bat activity was found in Buildings 3, 5 and 6. The structures are draughty, exposed to the elements and considered sub-optimal for roosting bats. Buildings 3, 5 and 6 are deemed to be of **negligible** potential for roosting bats.
- 4.7 There are no trees within the development area that would support a bat roost.

Barn Owl

- 4.8 All bird species are protected at their nest under the Wildlife and Countryside Act 1981 (as amended) but Barn Owls *Tyto alba* are afforded extra protection through inclusion on Schedule 1 of the Act which makes it an offence to 'recklessly disturb a Barn Owl whilst near a nest...or recklessly disturb dependent young of a Barn Owl'.

- 4.9 The site supports limited suitable Barn Owl foraging habitat and no evidence of Barn Owl nesting or roosting was found within any of the structures.

Great Crested Newt

- 4.10 Great Crested Newt *Triturus cristatus* is a European Protected Species (EPS). It is listed under Annex IV of the EC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. This is implemented in the UK by the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit). Great Crested Newt is also afforded full protection under the Wildlife and Countryside Act 1981 (as amended).
- 4.11 No waterbodies exist on the site. One pond exists within 250 metres of the proposed development. The pond is around 220m to the north-east (see Figure 3). There is limited connectivity between the pond and the site.



Figure 3 showing the site and location of the pond within 250 metres

- 4.12 Suitable terrestrial habitat for Great Crested Newt exists within the boundary of the site. The rank grassland, shrubs and hedgerow bases offer foraging and commuting habitat. The amenity grassland and bare ground are not considered to be suitable habitat for Great Crested Newt.

Nesting Birds

- 4.13 All bird species are protected at their nest under the Wildlife and Countryside Act 1981 (as amended).
- 4.14 Suitable habitat for nesting birds exists on site, within the hedgerows, shrubs, trees and open buildings. No evidence of bird nests was found.

PROTECTED SITES

- 4.15 The nearest statutory protected site is River Dee & Bala Lake Special Area of Conservation (SAC), an internationally important site, and River Dee Site of Special Scientific Interest (SSSI). This lies 160 metres to the north at its nearest point. The site lies within a SSSI Impact Risk Zone, which lists certain types of development that may impact upon local protected sites. Only rural residential developments of 50 units or more are listed as a risk.

5.0 ASSESSMENT

HABITATS

- 5.1 The Phase 1 Habitats present on the site are common throughout the UK. No nationally rare or locally rare plant species were located during the Extended Phase 1 Habitat Survey.
- 5.2 The site offers limited ecological value. The habitats are species-poor and most are intensively managed as garden space. The rank grassland offers a limited source of pollen and nectar for invertebrates. The hedgerows offer habitat for nesting birds.

Development Context

- 5.3 The proposed development will involve the loss of the habitats, including the buildings, on site. The hedgerows will be retained. Given the low ecological value of the habitats to be lost, no specific habitat mitigation will be required. However, in line with the NPPF, it is recommended that the site is designed to ensure it is enhanced ecologically, with, for example, new species-rich hedgerows on boundaries, species-rich amenity grassland, flowering shrubs and bird and bat boxes.

PROTECTED SPECIES

Badger

- 5.4 No Badger setts were located within the site boundary or immediately outside of the site boundary. Given the lack of setts within the site or within 30 metres of the site, no further Badger survey work is considered to be necessary.

Bats

- 5.5 Building 2 and Building 4 were found to support evidence of bat activity. Further survey work will be required at these structures, to determine if an active bat roost is present and if so, the type of bat roost. **Three** dusk emergence or dawn re-entry surveys will be required at Building 2 and **one** dusk emergence survey required at Building 4.
- 5.6 A daytime inspection of Building 1 will be required. If evidence of bat activity is found within Building 1, further surveys will be required.
- 5.7 No further bat work is required at Buildings 3, 5 and 6.
- 5.8 Due to the general lack of good quality linear habitats on site, there will be no loss of bat foraging habitat due to the development. It is recommended that the boundaries of the site be planted with species-rich hedgerows, to encourage invertebrates and bats.

Barn Owl

- 5.9 No evidence of Barn Owl roosting or nesting was found during the surveys. No Barn Owl mitigation is necessary.

Great Crested Newt

- 5.10 No ponds exist on site. One pond was located within 250 metres of the site. This lies 220 metres to the north-east. There is limited habitat connectivity between the site and this pond. The site supports suitable terrestrial habitat for Great Crested Newt. However, given the lack of connected breeding habitat to the site and the general lack of ponds in the vicinity, as well as the distance between the site and the pond, it is considered reasonably unlikely that Great Crested Newt occurs on site. No further amphibian survey work is recommended.

Nesting Birds

- 5.11 The site supports suitable nesting habitat for passerines, within the hedgerows, trees, buildings and shrubs. Nesting birds can be somewhat mitigated for by allowing no works to be carried out to nesting habitat within the bird nesting season (which is generally March to August). Or, if any work needs to proceed within the bird nesting season, then a nesting bird survey will be required immediately prior to any work commencing.

PROTECTED SITES

- 5.12 The nearest statutory protected site is River Dee & Bala Lake SAC and River Dee SSSI, which lies 160 metres to the north at its nearest point. A track and grazed pasture lie between the development site and the protected site. Given the low impact nature of the development, and the fact that the development is less than 50 units, there is expected to be no deleterious impact on the SAC & SSSI from the development.

6.0 RECOMMENDATIONS

Further Survey

- 6.1 The presence of protected species is a material consideration when a planning authority is considering a planning application. The presence of protected species and the effect of the proposed development must be established before planning permission can be granted. Following the results of the Extended Phase 1 Habitat Survey, the following surveys are recommended:

- **Bats** – Three dusk emergence/dawn re-entry surveys must be undertaken on Building 2 and one dusk emergence survey must be undertaken on Building 4. These must take place between May and September, in suitable weather conditions and with an adequate number of surveyors to observe each building. A daytime bat survey will also be undertaken at Building 1 (the dwelling), with further dusk or dawn surveys here if bat evidence is found.

- 6.2 Depending on the timing of the site clearance, the following survey may be required:

- **Nesting Birds** – If any potential nesting habitat is to be felled/demolished within the nesting bird season (which is generally 1st March to 31st August), then a nesting bird check will be required immediately prior to work commencing.

Protected Species

- 6.3 If a protected species is found on site during the development works, work must stop and a suitably experienced ecologist be contacted for advice.

Habitat Creation and Biodiversity Enhancement

- 6.4 The site should be designed to increase the ecological value of the land. This could include the following:

- Species-rich native hedgerows on the site boundaries (replacing existing fencing).
- Species-rich planting such as amenity grassland, wildflower grassland and shrub beds.
- Native trees planted.
- Bird boxes and bat boxes/tiles erected onto retained trees or erected/incorporated into the new dwellings.

PHASE 1 HABITAT MAP

Points

- Tree
- Introduced shrub

Lines

— J2.1.2 - Intact hedge - species-poor

⌌ J2.4 - Fence

Polygons

▲ J1.2 - Cultivated/disturbed land - amenity grassland

■ J3.6 - Buildings

● J4 - Bare ground

■ B2 Neutral grassland

The Old Farmhouse
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MAP NOT TO SCALE

