



ECOLOGY APPRAISAL

BROAD OAK BARNES, COBBLERS LANE, ROSSETT

COF

19 April 2024

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This report has been prepared by Sambrook Associates Ltd on behalf of COF in connection with the demolition and conversion of barns at Broad Oak Farm and takes into account their particular instructions and requirements. It is not intended for, and should not be relied on, by any third party and no responsibility is undertaken to any third party.

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1 INTRODUCTION

1.1 Background Information

- 1.1.1 Sambrook Associates Ltd was instructed by COF to undertake an update Ecology Appraisal in relation to the application to extend the existing planning permission reference P/2018/0888 in order to allow the discharge of conditions and commencement of the development.
- 1.1.2 Multiple desk-top studies, surveys and assessments have been undertaken at this site over the last 16 years. This update appraisal has been undertaken at the request of Wrexham Council. The update simply provides confirmation that the ecology and biodiversity value of the site has either remained unchanged or has changed and additional actions are required.
- 1.1.3 It is noted that the site has recently obtained a NRW bat development/mitigation licence reference S093834/1.
- 1.1.4 As part of the Appraisal, a site walk-over was undertaken in addition to external and internal inspections of the barns. This report provides the results of these, as well as an appraisal of the potential effects the proposed development may have on biodiversity, and recommendations for further survey, mitigation and enhancement, where required.
- 1.1.5 The aim of the appraisal is to provide sufficient ecological information for the local planning authority (LPA) to determine the associated planning application. The objectives of the study were to:
 - Provide update baseline information on the current ecological features both on-site and in the immediate surrounding area (up to 30m where accessible);
 - Identify the presence or potential presence of any protected species or habitats and provide an appraisal of any potential effects that the proposed development may have on these; and
 - Provide recommendations for further pre-construction survey work and / or mitigation measures if required and present opportunities for habitat enhancement.
- 1.1.6 In consideration of the nature of the proposed work the assessment focuses on bats and birds but other mobile species such as great crested newts and badgers are also assessed.

1.2 Site Description

- 1.2.1 The farmstead is located within a rural setting, on the fringe of the village of Rossett and comprises a range of agricultural outbuildings. The main building comprises a 2 storey traditional red brick and slate roof. There are multiple other buildings comprising brick and slate roofs, flat roofs, single storey piggeries with corrugated fibre cement roofing and open fronted steel portal buildings for storing hay and straw.
- 1.2.2 The farmstead is surrounded by arable and pasture fields and there are a number of mature trees and a running watercourse in close proximity. The railway line that runs close to the farmstead and the adjacent lane provide potentially good commuting habitat for bats.

2 LEGISLATION AND PLANNING POLICY

2.1.1 Many sites, animals and plants are protected by European and/or UK legislation either because of their decline across Europe and the UK or due to the persecution they have placed upon them by negligent or illegal acts such as baiting or trade. Legislation is also in place to prevent the spread of introduced or non-native invasive species and harmful weeds. When undertaking an appraisal of a proposed development, such legislation is taken into account as follows.

- **European:** Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'); and Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds (codified version of Directive 79/409/EEC as amended) (the 'Birds Directive').
- **UK (England & Wales):** The Conservation of Habitats and Species Regulations 2017, as amended (the 'Habitat Regulations') which transposes the Habitats Directive in UK law. Since 1st January 2021, the UK is no longer a member of Europe but since the Habitats Directives are embedded into UK statute, The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 was published and still applies in England and Wales; The Wildlife and Countryside Act 1981 (as amended); the Countryside and Rights of Way Act (CROW) 2000; the Protection of Badgers Act 1992; the Natural Environment and Rural Communities Act (NERC) (2006) and the Environmental Protection Act (EPA) 1990.

2.1.2 Species such as bats, great crested newts, otter, water vole, reptiles, birds and badgers are all protected to varying degrees under this legislation.

2.1.2 The Environment (Wales) Act 2016 introduced an enhanced biodiversity¹¹⁹ and resilience of ecosystems¹²⁰ duty (Section 6 Duty). This duty applies to public authorities in the exercise of their functions in relation to Wales and will help maximise contributions to achieving the well-being goals. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of ecosystems by taking specific action focused around the 6 objectives for habitats and species.

2.1.3 In addition to legislation, there are also national and local planning policies pertaining to the protection of biodiversity. Planning Policy Wales (PPW) Edition 11 (February 2021) states: 'the planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Development plan strategies, policies and development proposals must consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;

- ensure statutorily and non-statutorily designated sites are properly protected and managed;
- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.'

- 2.1.4 To accompany the PPW, Technical Advice Note 5 (TAN5) demonstrates how local authorities, developers and stakeholders can deliver sustainable development that does not result in losses to biodiversity and takes the opportunity to protect and enhance it. Wrexham council also have their own guidance and local policy to promote ecological resilience in their decision making.
- 2.1.5 Under the NERC Act, local authorities (and other public bodies) have a duty to conserve biodiversity. The Act confers responsibility on the local authority to take the protection of priority habitats and species (as listed in Section 41) into consideration when making a planning decision. Habitats listed in this section include eutrophic standing waters, rivers, lowland meadows and lowland mixed deciduous woodland. Species listed in this section include great crested newt *Triturus cristatus*, sky lark *Alauda arvensis*, hedgehog *Erinaceus europaeus*, otter *Lutra lutra*, soprano pipistrelle *Pipistrellus pygmaeus* and red squirrel *Sciurus vulgaris*. Full habitats and species' lists can be found at the Natural History Museum website, nhm.ac.uk or jncc.defra.gov.uk.
- 2.1.6 The RSPB's Birds of Conservation Concern 3' (Eaton et al., 2009) is also taken into consideration when undertaking this appraisal.
- 2.1.7 Because of the type of development proposed, it is usual that bats are the most likely protected species affected and so the legislative and licensing obligations pertaining to bats are described in more detail below.
- 2.1.8 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).
- 2.1.9 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.
- 2.1.10 If you wish to undertake works that would affect an EPS then you will need a licence. Natural England (NE) and 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;
- 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;

2.1.11 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)”.

2.1.12 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.

3 METHODOLOGY

3.1 Introduction

3.1.1 To inform this Ecological Appraisal, a desk-top study, site walk-over survey including building inspections were undertaken between January and April 2024.

3.2 Desk-top Study

3.2.1 The desktop study involved a check for any newly (since 2016) designated statutory and non-statutory designated sites within 1km and ponds within 250m radius of the Site. The centre of the Site (Ordnance Survey Grid Reference SJ36735849) was used for the search.

3.2.2 The following sources were searched for information about the Site:

- Defra's 'MAGIC' website;
- Google Earth;
- Bing Maps;

3.3 Walk-over Survey

3.3.1 The walk-over survey comprised recording of habitats within the Site. The survey also included potential for protected and notable species, and invasive species such as Japanese knotweed *Fallopia japonica* and Himalayan balsam *Impatiens glandulifera*. The purpose of the survey was to determine any changes to:

- the habitats present;
- any potential constraints to development;
- legally protected species potentially present;
- the presence of invasive plant and animals; and
- any requirement for additional ecological surveys.

3.3.2 The walk-over survey was conducted on 17 April 2024. The weather was mild with an average temperature of 14°C.

3.3.3 The survey was not a full Phase 1 Habitat survey. The Site and immediately adjacent areas (up to 30m) were searched for evidence of protected species that may occur in this area such as bats, birds, great crested newts *Triturus cristatus*, badgers *Meles meles*, otters *Lutra lutra*, and water vole *Arvicola amphibious* and any invasive plants or animals.

3.3.4 Photographs are included within this report. Plant names follow the third edition of the New Flora of the British Isles (Stace, 2010). The common name of the plant is stated first and is followed by the Latin name, on the first occasion that it is used. Only the common name is used subsequently.

3.4 Bat Ground Based Building Inspection

- 3.4.1 As part of the pre-submission site visit for a licence application to NRW, the named ecologist (Mick Smith) and two assistants undertook an external and internal inspection of the buildings in January 2024.

3.5 Limitations

- 3.5.1 No significant limitations were encountered during the surveys.

4 RESULTS

4.1 Introduction

- 4.1.1 This section provides a commentary on the data collected during the desk-top study and surveys undertaken in 2024.

4.2 Desk-top Study

- 4.2.1 There are no statutory sites within 1km of the Site. The non-statutory site Darland Wood, 0.74km east of the site as identified in the Bowland Ecology Ltd Ecological Appraisal in 2016 appears to be the only non-statutory site within 1km.
- 4.2.2 No new ponds were recorded within 250m of the site. The pond to the southwest of the site was not visited as it is on third party land, but it is assumed to still be present.

4.3 Walk-over Survey

- 4.3.1 Habitats remain largely unchanged. The Phase 1 habitat plan provided in Appendix C of the Bowland Ecology Ltd Ecological Appraisal report continues to be an accurate representation of the site. Tall ruderals and bramble on the eastern, southern and northern boundaries. The farm yards around the back of the main buildings are still entirely hardstanding but now in parts, are covered in mosses and brambles *Rubus fruticosus* with some buddleia.
- 4.3.2 The brook remains in the same condition as previous surveys, being an open narrow channel approx. 0.5m width, culverted at either end, shallow (5-10cm depth), moderate flow with riffles. Silt substrate and bare earth walls with no in channel vegetation. Shaded by overhanging trees and bankside vegetation; sycamore *Acer pseudoplatanus*, horse chestnut *Aesculus hippocastanum* and beech *Fagus sylvatica*, ivy *Hedera helix*, common nettle *Urtica dioica*, bramble and grasses.
- 4.3.3 The road hedgerow continues to be a heavily managed hawthorn *Crataegus monogyna* hedgerow with some ivy.
- 4.3.4 Bats are present in a number of the buildings within the site. The buildings are deteriorating and are becoming dilapidated in some cases. Some of the piggeries previously identified as Low suitability are now negligible due to collapsed roofs. The main U-shaped 2 storey building is now in a deteriorated state with a number of roof slates missing and significant roof damage in some parts. The suitability of the site for foraging and commuting remains as per previous surveys; suitable for various species.
- 4.3.5 Active nest building or current nests were not recorded in or around the Site at the time of the survey but it is highly likely birds will nest in the buildings, particularly swallows who have been recorded nesting during the bat surveys in 2018. There is evidence of barn owls around the site. Nesting has not been confirmed but it is clear barn owls use the site on an occasional basis.

- 4.3.6 The Site does not support ponds but there is a pond approx. 220m south west of the site which was found to support great crested newts in 2008. There are places of shelter within the site for great crested newts and other amphibians. The road hedgerow and hedgerows in the wider landscape could offer shelter and foraging opportunities for amphibians.
- 4.3.7 [REDACTED]
- 4.3.8 There are areas within the site and overgrown habitats on the boundaries that provide suitable habitat for basking and sheltering reptiles, if present.
- 4.3.9 There was no evidence of otter or water vole in the running brook along the northern edge of the site.
- 4.3.10 No evidence of non-native invasive or harmful weeds such as Japanese knotweed or Himalayan balsam was identified during the survey.

Road hedge	Barn A (Building 13)
	
Barn M (Building 2)	
	

Brook along northern boundary of the site			
			
Barn M (Building 1)		Barn L (Building 3)	
			
Barn K (Building 4)		Barns G, H, J (5, 6, 7)	
			

Barn F (Building 8)	Barn F (Building 8)
	
Barn G (Building 5)	Barn D (Building 9)
	
Strip of ruderal/grass on eastern boundary	Strip of ruderal/grass on eastern boundary
	

Barn E (Building 10)	Barns D and C (Buildings 11 & 12)
	
Barn C (Building 12)	Barns E and D (Buildings 10 & 11)
	
Southern boundary	Barns L, K., F (Buildings 3, 4, 8)
	
Barn B (Building 14)	Barn A (Building 13)
	



4.4 Appraisal of Potential Effects

- 4.4.1 The proposal comprises: Change of use and conversion of barns to 10. No residential units including demolition, new build parking barns, access and parking arrangements.
- 4.4.2 Effects on **designated sites** are not anticipated due to the distance between the site and Darland Wood.
- 4.4.3 **Habitats:** the tall ruderal/scrub on the northern, eastern and southern boundaries will be handed over to the adjacent landowner and reverted back to agriculture. The scheme otherwise incorporates the retention of boundary habitats, but the construction of the proposed development has the potential to affect these habitats and hence a scheme of protection is to be implemented to protect habitat from damage during the construction period. As a minimum, good site management should be implemented in line with the Considerate Constructors Scheme, Code of Considerate Practice. Key principals of good management to protect habitats include:
- Being organised, clean and tidy; always net skips to prevent materials and rubbish from blowing around the site and onto adjacent habitats.
 - Identifying, managing and promoting environmental issues.
 - Seeking sustainable solutions, and minimising waste, carbon footprint and resources.
 - Minimising the impact of vibration, and air, light and noise pollution.
 - Protecting the ecology, the landscape, wildlife, vegetation and water courses.
- 4.4.4 Boundary vegetation is to be fenced off with Heras fencing (or similar fencing) to act as a robust physical barrier to plant machinery.
- 4.4.5 A section of the road hedgerow requires re-aligning to ensure an appropriate visibility splay is achieved for users of the site. This hedgerow is species poor comprising hawthorn as the dominant species and will be removed and replanted 1-3 metres to the west with a species diverse hedgerow mix, thus improving the biodiversity value of the hedgerow.

- 4.4.6 No long-term effects on habitats are anticipated.
- 4.4.7 **Bats:** see Condition 18 of the planning permission and NRW licence reference S093834/1.
- 4.4.8 **Birds:** No active bird nests were identified in the buildings or surrounding vegetation, but it is highly likely they may do at some point between the survey and start of proposed works. It is advised that the disturbance and/or destruction of breeding birds and their nests is illegal under the Wildlife and Countryside Act 1981 (as amended). In the case where vegetation and/or buildings works are due to commence between March to August inclusive, a nesting bird check will be undertaken by a competent ecologist. If any nests are identified, the nests must remain intact and undisturbed until young have fledged. Building/vegetation works on other areas may continue. With this in mind, negative effects on nesting birds are not anticipated
- 4.4.9 **Great crested newts:** see Condition 19 of the planning permission.
- 4.4.10 No further survey work for great crested newts is required.
- 4.4.11 It is possible that **badgers** and **hedgehog** pass through the Site on occasion and it is important not to cut off valuable habitat by the erection of impenetrable boundary features such as solid wooden fences and walls without gaps. Providing natural boundary markers such as hedgerows and tree lines, or post and rail fencing (as is proposed here), allow mammals open access to areas that they use. During construction, it is pertinent to cover any excavations overnight or fit a means of escape such as a ramp at 45° angle to prevent animals becoming trapped. Similarly, any pipes or culverts in storage should be capped to prevent animals taking refuge within them. In this regard, no effects are anticipated.
- 4.4.12 **Reptiles** could be present within areas of suitable habitat on site and the proposed works have the potential to disturb, injure or kill species of reptile. Therefore, a watching brief will be implemented by the site team and the great crested newt RAMS detailed in Condition 19 will also protect reptiles. If a reptile is found during the course of the works, works in the vicinity must stop, the reptile covered over with a clean bucket, and the retained ecologist contacted for advice immediately.
- 4.4.13 **Enhancement:** The proposed scheme includes the installation of bat and bird boxes which will provide a net gain in roosting and nesting opportunities. See the mitigation licence for details on bat mitigation and enhancement.
- 4.4.14 The following bird boxes are proposed:
- 3no. Schwegler 1B nest box or similar, comprising a mix of 32mm, 26mm and oval holes. These are to be installed on suitable trees to the boundaries, at least two metres off the ground to reduce risk of predators and human interference.
 - A barn owl box is to be installed on the southern gable wall of the bat barn.
 - Swallow (5no) and swift boxes (2no) are to be installed on or in the bat barn.

4.4.15 The landscaping scheme includes the planting of a native species rich hedgerow along the eastern boundary, replacement planting along the road hedgerow and sowing of a species rich neutral grassland mix in the communal open grassland areas. See Green Infrastructure Statement for further information.

4.4.16 **Site contractors, directors, owners, other personnel and their agents are reminded that many species and habitats are protected by law, and to kill, injure or harm such species and their habitats is a criminal offence. Custodial sentences and/or large financial penalties are expected if you break the law. Protected species and habitats commonly found on development sites include (but not limited to):**

- **bats including their roosts in buildings and trees;**
- **birds including their nests;**
- **great crested newts including their areas of shelter such as hedgerows, ponds and natural and artificial habitats such as log and rubble piles;**
- **reptiles; and**
- **[REDACTED]**

5 CONCLUSION & RECOMMENDATIONS

5.1.1 The Site has been subject to an update appraisal in 2024. The site remains largely unchanged and the findings of the Bowland Ecology appraisal in terms of habitats, badger, otter and water vole remains valid – no significant effects – but some recommendations are updated in this 2024 appraisal. In terms of bats, the assessments between 2017 and 2024 are valid and the approved Condition 18 and the recently issued NRW derogation licence covers impacts, mitigation and compensation adequately. For great crested newts, the assessment remains valid but the RAMS presented in the approved Condition 19 supersede those in the Bowland Ecology report. The birds, reptiles and enhancement sections of this 2024 PEA covers impacts and mitigation.

5.1.2 The following recommendations are made.

5.1.3 The avoid effects on boundary habitats the following is recommended.

- **Recommendation:** good site management is implemented in line with the Considerate Constructors Scheme, Code of Considerate Practice.
- **Recommendation:** barrier fencing is installed at the outset of site works to protect boundary features.

5.1.4 The following recommendation is made in respect of birds.

- **Recommendation:** to prevent impacts on nesting birds, building works and vegetation removal shall occur outside of the nesting bird season i.e. not during the months of March through to August inclusive. If works are to be undertaken during this time, a nesting bird survey will be undertaken by a competent Ecologist and only if no nests are found can works commence. If nests are found, they will remain in-situ and undisturbed until the young have fledged.

5.1.5 The following recommendations are made in respect of great crested newts and reptiles.

- **Recommendation:** the RAMs strategy in Condition 19 is implemented at the outset of the proposed construction work.
- **Recommendation:** If a GCN or reptile is found during the course of construction, work must stop immediately, a clean bucket or other protective covering placed over the animal (allowing a small gap to allow the animal to escape, but detract from susceptibility to predators), and the retained ecologist contacted for advice. A derogation licence for GCN from Natural Resources Wales may be required before works can continue.

Reason: to avoid impacts on great crested newts and other amphibians and mammals.

5.1.6 The following recommendation is made in respect of bats:

- **Recommendation:** Works to be undertaken in accordance with Condition 18 and the NRW mitigation licence.

5.1.7 The following recommendations are made in respect of mammals, particularly badger and hedgehog.

- **Recommendation:** to prevent harm to mammals, excavations are to be covered overnight or fitted with a means of escape. Pipes and culverts in storage are to be capped.
- **Recommendation:** to prevent valuable foraging resources being cut off, boundary markers should remain penetrable to mammals. Natural features such as hedgerows or fence or walls with gaps allowing access are recommended.

5.1.8 The enhancement scheme comprises the following measures:

- **Recommendation:** install bird boxes as per the specification detailed above in Section 4.
- **Recommendation:** the landscaping scheme is to include the planting of native species rich hedgerow along the eastern boundary and species rich neutral grassland in the communal green areas.

5.1.9 Taking into consideration these recommendations, long term negative effects on biodiversity are not anticipated and the proposed development actually gives rise to biodiversity enhancement opportunities within the Site, improving biodiversity at a local level. No further surveys are required.

6 REFERENCES

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