

Title	Erection of an Agricultural Building (In Retrospect) at Penrhos Farm, Brymbo Road, Brymbo, Wrexham – Biodiversity Statement
Date issued	5th September 2023
Author	Tom Knight
Reviewed by	Max Ellison
Client	
Report Version	C524/ V1.0

1 Introduction

Background

- 1.1 An application for retrospective planning consent (Ref. ENF/2023/0253) is to be submitted for the erection of a new agricultural building at Penrhos Farm, Brymbo Road, Brymbo, Wrexham (approximate OS Grid Ref. SJ 2870 5331). Wrexham County Borough Council (WCBC) has requested further information to support the application including '*Ecology Report: A Preliminary Ecological Assessment*'.
- 1.2 The requirements of the ecology report have subsequently been discussed with WCBC's Ecology and Biodiversity Officer. It was agreed that a Biodiversity Statement should be submitted with the application and that this would include the following:
 1. A brief description and assessment of the existing habitat immediately around the building.
 2. Identification of locations and opportunities for potential ecological enhancements.
 3. Demonstration of how net benefit for biodiversity (and ecosystem resilience) will be secured and maintained. Full details of the recommended ecological enhancements.
- 1.3 This document has been produced by Marches Ecology to provide the above information.

Site Description

- 1.4 A site visit was undertaken on 5th September 2023 by Tom Knight of Marches Ecology. The weather during the visit was bright sunshine with no cloud cover and a light breeze. One of the purposes of the visit was to broadly characterise the existing ecological resource and vegetation immediately around the building. An Extended Phase 1 Habitat Survey or other similar ecological survey has not been undertaken. The brief description provided here is based entirely on information collected during the site visit.
- 1.5 The new agricultural building is located in a pasture to the immediate north of Penrhos Farm. This field forms the top of a low hill with the building on the western side. At the time of the site visit the field was being grazed by cows, the sward height largely being 0.1-0.15 m high. The field is characterised by agriculturally improved grassland with scattered stands of tall ruderals.
- 1.6 The remaining grassland around the building is dominated by *Lolium perenne* (Perennial Rye-grass) with frequent *Trifolium repens* (White Clover), locally frequent *Achillea millefolium* (Yarrow), occasional *Ranunculus repens* (Creeping Buttercup), and lesser amounts of *Ranunculus acris* (Meadow Buttercup), *Rumex acetosa* (Common Sorrel) and *Plantago lanceolata* (Ribwort Plantain). Parts of the field have been extensively disturbed by the grazing animals and the passage of vehicles, particularly closer to the existing farm complex. This patchy bare ground supports a number of low-growing ruderals including

Matricaria discoidea (Pineappleweed), *Lepidium didymum* (Lesser Swinecress), *Polygonum aviculare* (Knotgrass), *Capsella bursa-pastoris* (Shepherd's-purse), *Cerastium fontanum* (Common Mouse-ear), *Potentilla anserina* (Silverweed), *Stellaria media* (Common Chickweed) and *Plantago major* (Greater Plantain). The stands of tall ruderals include *Cirsium arvense* (Creeping Thistle), *Cirsium vulgare* (Spear Thistle), *Urtica dioica* (Common Nettle) and *Rumex obtusifolius* (Broad-leaved Dock).

- 1.7 The western boundary of the field within which the building is located is formed by an unmanaged hedge. The hedge is approximately 5 m from the western side of the building.
- 1.8 The fields in the surrounding area, including those to the immediate west and north of the field within which the building is located, typically support agriculturally improved grassland and are grazed by cows or sheep. They are generally bounded by managed/ unmanaged hedges.



View of the building from the east.



The improved grassland/ tall ruderals to the north of the building with the hedge to the west on the right-hand side, background.



The bare/ disturbed ground to the south of the building.



The hedge to the west of the building.

The Proposal

- 1.9 The boundary (solid red line) of the development site is shown on a D.S. Jones & Co. plan entitled 'Location Plan', dwg. no. 10645.01.dsj, dated August 2023. This plan shows the location of a single-unit livestock building and associated infrastructure including access track.
- 1.10 The floor plan and external elevations for the new building are presented on a D.S. Jones & Co. plan entitled 'Proposed Floor Plan & External Elevations', dwg. no. 10645.03.dsj, dated August 2023. The building is just over 30 m long, 13 m wide and 6.4 m high to the roof apex. The materials are typical of such agricultural buildings with a steel frame, concrete panels and timber boards to the sides and cement board sheeting on the roof.

2 Biodiversity Enhancement

Introduction

- 2.1 Technical Advice Note 5 (Nature Conservation and Planning) (Welsh Assembly Government, 2009)¹ and Wrexham County Borough Council (2011)² seek developments to achieve net biodiversity gain. The requirement to secure and maintain net benefit for biodiversity (NBB) (through enhancements) was reinforced in a letter issued by the Chief Planner (Welsh Government) to all planning departments in October 2019. NBB has been defined as *'the concept that development should leave biodiversity and ecosystems in a better state than before, through securing long term, measurable and demonstrable benefit, primarily on site.'*³
- 2.2 WCBC (2011) lists *'examples of how enhancements could be achieved on development sites'*. The options provided include the provision of bird-boxes. CIEEM (2022) states that *'a key requirement is that the measures put forward are suitable in the local context of the site'*⁴. A small number of House Sparrows (*Passer domesticus*) were noted using the adjacent hedge during the site visit. Loss of nest sites in rural areas is one of the reasons that this species has declined. It is proposed to provide nest-boxes for the House Sparrow which is a priority species listed on *Section 7 of the Environment (Wales) Act 2016*⁵.

Assessment of Required Level of Provision

- 2.3 The agricultural building can be categorised as a small/ low impact development. It is located in a cow-grazed agriculturally improved field and is surrounded by this habitat on three sides. The agriculturally improved grassland is of low ecological value. The building is not connected to any other habitat types, and is not close to other valued ecological resources with the exception of the hedge to the west which has been retained.
- 2.4 The loss of a small area (approximately 390 m²) of agriculturally improved grassland would not result in a significant impact on any valued ecological resource at this location. NBB provision *'should be proportional to the extent and impact of development'* (CIEEM 2022). In this instance it is not deemed necessary to offset the loss of a small area of low value habitat. The proposed enhancement will therefore target a priority species known to be present at the site.

¹ Welsh Government (2009). *Planning Policy Wales - Technical Advice Note 5: Nature Conservation and Planning*. September 2009.

² Wrexham County Borough Council (2011). *Local Planning Guidance Note 32 Biodiversity and Development*. Adopted March 2011.

³ <https://www.gov.wales/targeted-policy-changes-planning-policy-wales-net-benefit-biodiversity-and-ecosystems-resilience>

⁴ CIEEM (2022). *Welsh Government's Approach to Net Benefits for Biodiversity and the DECCA Framework in the Terrestrial Planning System*. CIEEM Briefing Paper September 2022. CIEEM, Romsey.

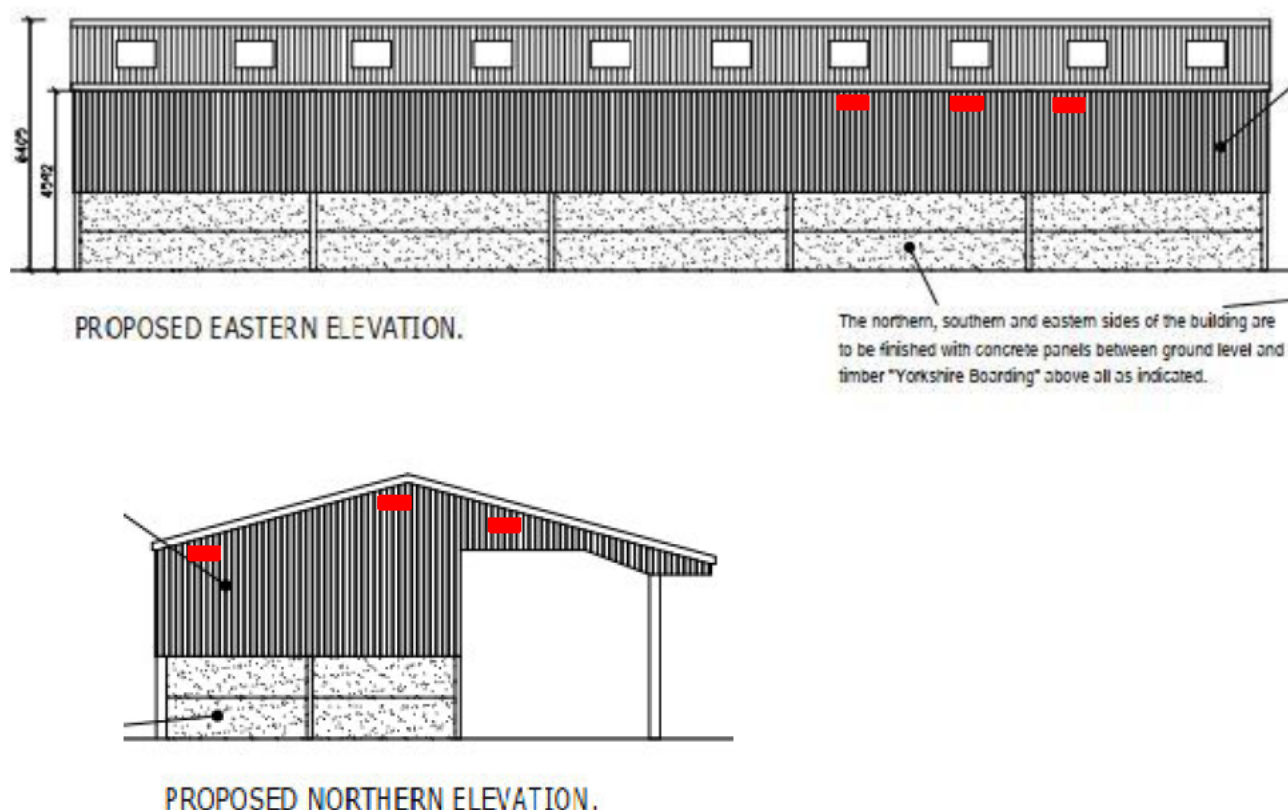
⁵ HMSO (2016). *The Environment Act (Wales) 2016*. HMSO, London.

Biodiversity Enhancement Recommendations

Bird-boxes – House Sparrow

- 2.5 It is proposed to erect six double chamber Vivara Pro Woodstone House Sparrow nest-boxes⁶ onto the building. This would provide potential nesting opportunities for at least six pairs of House Sparrow. These nest-boxes would be attached to the outside of the building on the timber boarding.
- 2.6 The nest-boxes should be attached to the northern and eastern elevations. The nest-boxes should be installed at 'soffit/ eaves level' (more than 3 m above ground level) out of direct sunlight, and at least 1 m apart. They should have unobstructed access and should not be located directly above any windows or doors. They should be placed in locations where droppings will not cause future nuisance, though it is likely that most faecal matter will be removed from the immediate area around the nest-box by the parent birds.
- 2.7 The approximate locations for the six nest-boxes on the north and east elevations are shown on the plans reproduced below⁷ with the approximate locations for the nest-boxes indicated by red rectangles. On the eastern elevation they would be located approximately 15-20 cm below the gutter.

Figure 1 – Approximate Locations of Sparrow Nest-boxes



⁶ <https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box>

⁷ Images taken from the D.S. Jones & Co. plan entitled 'Proposed Floor Plan & External Elevations', dwg. no. 10645.03.dsj, dated August 2023.

Maintenance and Monitoring

- 2.8 The importance of securing long-term management/ maintenance and monitoring is central to the NBB approach (e.g., CIEEM 2022). This should also be proportional to the scale and impact of the development.
- 2.9 Each nest-box should be inspected annually and cleaned if necessary. This can be undertaken by the land-owner. All maintenance should be carried out when the last bird has left the nest-box; at least October. As such all nest-boxes should be cleaned in late-autumn (late October/ November). At least 2 to 3 weeks should be allowed after fledging before undertaking any cleaning. The *Wildlife and Countryside Act 1981*, as amended states that cleaning should only be carried out between 1st August and 31st January and that any eggs present should be destroyed immediately. All nest material should be completely removed and disposed of safely along with any other debris. To ensure that parasite build-up is controlled the inside of the nest-box should be cleansed with water. Care should be taken when opening nest-boxes as it is possible that they could be inhabited by bees, wasps or even bats.
- 2.10 The use of any of the nest-boxes by House Sparrows (or any other species) should be recorded during the nesting season (March to August inclusive). House Sparrows typically raise two to three broods a year, usually between April and August. Records of nesting birds should be submitted to Cofnod⁸ (the Local Environmental Records Centre for North Wales).

⁸ <https://www.cofnod.org.uk/Home>