

PRELIMINARY ECOLOGICAL APPRAISAL

CHISNALL FARM, DALTON, WIGAN, LANCASHIRE

JANUARY 2022

PRELIMINARY ECOLOGICAL APPRAISAL

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A report for

Mr. Phil Waterworth

A report by



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1. INTRODUCTION

1.1 REASON FOR SURVEY

PENNINE Ecological was commissioned in December 2022 by Mr. Phil Waterworth to undertake a Preliminary Ecological Appraisal (PEA) of Chisnall Farm, Dalton, Wigan, Lancashire, hereafter referred to as 'the site' (Figure 1). The survey and subsequent report or 'the study' are required to support a planning application to demolish the exiting farmhouse and rebuild a single residential dwelling and a stable block (Figure 2).

A survey of the site was undertaken on the Friday 13th January 2023.

The study includes the following elements:

- A desk-based search of freely available online ecological information (e.g., Defra's MAGIC mapping tool, Google Earth, Ordnance Survey mapping etc.).
- A UK Habitat Classification field survey.
- A field survey and evaluation of the site to support protected and/or notable species including but not limited to:
 - o Badger.
 - Birds, including Schedule 1 listed species of the Wildlife and Countryside Act 1981 (as amended) (WCA 1981) (e.g., barn owl, hobby, kingfisher, etc.).
 - European Protected Species (EPS) (i.e., all bat species, great crested newt (GCN), otter etc.).
 - Other protected species listed in the Wildlife and Countryside Act 1981 (as amended) and/or the Natural Environment and Rural Communities Act (NERC) 2006 Section 41 (e.g., water vole, brown hare, hedgehog, other amphibian species other than GCN, reptiles, etc.).

The report provides an evaluation of the ecological significance of the field survey results. If required, it also includes recommendations for further survey and/or precautions when and where appropriate.

1.2 SITE LOCATION

Chisnall Farm is approximately 750m north west of Roby Mill, 2.4km north of Up Holland and 2.85km north east of Skelmersdale. It is located within a largely rural landscape comprised farmyards, arable and pastoral farmland, deciduous woodland, hedgerows and brooks. A network of minor roads such as Farley Lane, Crow Lane, Beacon Lane and Stoney Brow provide access to the aforementioned villages and towns. Beacon Park Golf Club and Beacon Country Park are both approximately 750m to the south west of the site.

The site's central national grid reference is SD 51036 07543.

Refer to Figure 1 for the site boundary, marked by the red line, which illustrates the area surveyed as part of this study. An accompanying UK Habitat Classification survey habitat map of the site is provided in Appendix A, with photographs provided in Appendix B.



Figure 1 - Site location and the area subject to survey within the red line boundary (drawing provided by Patrick Wilson Architects, December 2022).



Figure 2 - Site proposals (drawing provided by Patrick Wilson Architects, December 2022).

2. METHODOLOGY

The methodologies relating to the desk-based searches and a field survey of the land within the red line boundary and adjacent, the latter if appropriate and possible due to access restrictions, undertaken in January 2023 are outlined below.

2.1 DESK-BASED STUDY

2.1.1 Defra's MAGIC Mapping Tool

Defra's Multi Agency Geographical Information Centre (MAGIC) (<u>www.magic.gov.uk</u>) was used to identify the following features of ecological interest only (MAGIC was last accessed on the 19th of January 2022).

- Statutory designated sites (e.g., Special Protection Areas (SPA), Sites of Special Scientific Interest (SSSI)), Local Nature Reserves (LNRs) within 2km of the site (and associated SSSI Impact Risk Zones).
- Non-statutory designated sites (Biological Heritage Sites (BHS)) within 1km of the site.
- Granted EPS Mitigation Licences (EPSML) within 500m of the site.
- GCN Class Survey Licence Returns within 500m of the site.

2.1.2 Local Records Centre Data Request

A request to the Local Records Centre, Lancashire Environmental Records Network, was not made. Should it be required, then a request can be made at a later date and the records reviewed for their potential association/implications with and for the proposals.

2.2 UK HABITAT CLASSIFICATION SYSTEM SURVEY

A UK Habitat Classification Survey (UKHab, 2020) of the site was undertaken on Friday 13th January 2022. Weather conditions during the survey were 8°C, light drizzle and overcast. The survey was conducted by Stuart Macpherson who is an ecologist with 13 years' experience in the land management and ecological consultancy sectors. He has undertaken numerous ecological surveys and holds survey licences for bats (for which he is also a qualified tree climber), barn owl and great crested newt.

The site's habitats were fully mapped with reference to Stace (1997). Where present, species are given abundance values according to the standard DAFOR scale where: D is dominant, A is abundant, F is frequent, O is occasional, and R is rare.

2.3 BADGER SURVEY

Where access permitted, a survey was undertaken to identify evidence of badger (e.g., setts, pathways, footprints, latrines etc.) utilising the site. Surveys were undertaken in accordance with *Surveying Badgers* (Harris *et al.,* 1989) and *Badger* (Roper, 2010).

2.4 PRELIMINARY ROOST ASSESSMENT FOR BATS

A Preliminary Roost Assessment (PRA) for bats was undertaken following the methodology outlined in the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn) Collins (2016). The survey was undertaken by Stuart Macpherson who is a Class 2 bat licensed ecologist

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(licence number 2021-10079-CL18-BAT), prior to obtaining his Class 2 licence, Stuart was an accredited agent on former colleagues Class 2 licences from 2017.

If present, the survey included a survey for potential roost features (PRFs) within buildings (internally and externally if access permitted), trees or any other structures which may support a bat roost (e.g., culverts, bridges, walls etc.) within the site boundary which may be directly impacted on by the proposals or could potentially be at risk of significant disturbance as a result of the proposals.

The site and its adjacent habitats were also assessed for its suitability to support foraging and commuting bats.

2.5 BREEDING BIRD HABITAT ASSESSMENT

The potential for the site to support breeding and nesting birds was evaluated by an assessment of the site's habitats and any evidence of current or historic nesting e.g., active or disused nests within trees, buildings or walls. Habitats suitable for breeding birds could include but are not limited to buildings, scrub, hedgerows, dry stone walls and trees.

2.6 LIMITATIONS

The survey was conducted on the 13th of January 2023 which is outside of the optimal months (generally considered to be between and including April to September) for undertaking a UK Habitat Classification survey. However, due to the site comprising a residential garden and the timing of the survey is not regarded as a significant limitation to the survey. All conclusions and recommendations made in this report will account for the timing of the survey (if required).

3. RESULTS

The results of the desk-based searches, the UK Habitat Classification survey and the species-specific surveys are outlined below.

3.1 DESK-BASED STUDY

3.1.1 Statutory Designated Sites

There are no statutory designated sites within 2km of the site (Figure 3).

The SSSI Impact Risk Zones (IRZs) have been reviewed and consultation with Natural England is not required.

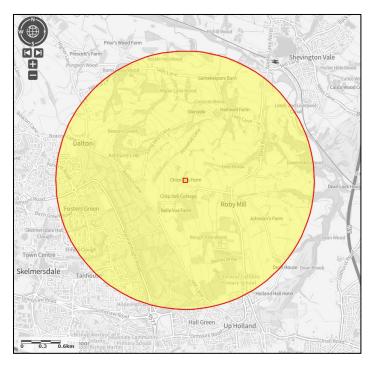


Figure 3 - Statutory designated sites within 2km of the site (MAGIC, 2023).

3.1.2 Protected and/or Notable Species

(a) Granted European Protected Species Licence Applications

There are no granted European Protected Species Mitigation Licences within 500m of the site (Figure 4).

(b) Great Crested Newt Class Survey Licence Returns

No Great Crested Newt Class Survey Licence Returns were identified within 500m of the site (Figure 4).

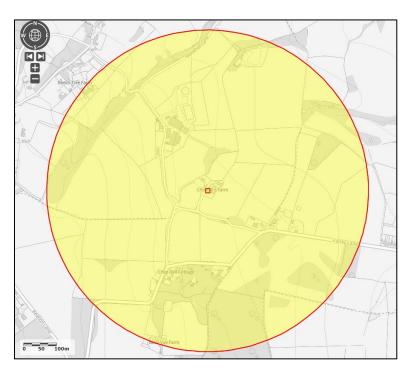


Figure 4 - European Protected Species Licences Issued and Great Crested Newt Licence Returns within 500m of Chisnall Farm.

3.2 UK HABITAT CLASSIFICATION SITE SURVEY

3.2.1 General Description

The site comprised a two storey, stone-built farmhouse; a disused milking shed; garden lawn with introduced shrub and semi-mature trees; and a hard standing (tarmac) driveway. The site is approximately 0.15 hectares and is within a rural location with improved grassland fields used for livestock grazing on all aspects of the site.

Habitat types recorded within the red line boundary are listed below, the UK habitat Classification code precedes the broad habitat type.

- Modified grassland (Secondary code: 230 Garden).
- u15b Buildings (Secondary code: 109 Residential).
- u15b Buildings (Secondary code: 88 Barn).
- u1e Built linear features (Secondary code: 68 mortared wall).
- 17 Ruderal / ephemeral.
- 1160 Introduced shrub.
- Small, medium, and large trees.

Target notes identified on site are listed and described in further detail below.

- Target Note 1 Confirmed bat roost within farmhouse loft space.
- Target Note 2 Milking shed.
- Target Note 3 Garden habitat.
- Target Note 4 Improved grassland field.

(a) Target Note 1 – Confirmed bat roost within farmhouse loft space.

An internal and external inspection of the farmhouse was undertaken and bat droppings were recorded thus this building is a **confirmed bat roost**. Refer to the Protected Species Survey Results section for further details on the property's construction, potential roost features (PRFs) and bat droppings recorded.

(b) Target Note 2 – Milking shed.

A disused milking shed, measuring approximately 10m x 10m, constructed of breeze block, wooden roof beams and corrugated sheet metal and wooden roof was inspected for its potential to support bats and nesting birds e.g., barn owl. No evidence of bats were recorded, however a swallow's nest and what was suspected to be either feral pigeon or a corvid (likely jackdaw) nest was recorded.

(c) Target Note 3 – Garden habitat.

Accounting for a large proportion of the site was the farmhouse' garden which comprised a mown lawn, introduced shrub and semi-mature trees. Shrub species recorded throughout the garden included laurel (O), hydrangea (R), heather species (R), rose (R) and berberis (R). Tree species included semi-mature apple (O), damson (O), lilac (R), and lime (R) trees.

(d) Target Note 4 – Improved grassland field.

An improved grassland field to the west of the milking shed comprised rye grass, clover species, and creeping buttercup.

3.3 PROTECTED SPECIES SURVEY RESULTS

3.3.1 Badger Survey

- a) Setts; No badger setts were recorded within the red line boundary.
- b) Other Field Signs; No evidence of badger was recorded within the site.

3.3.2 Preliminary Roost Assessment for Bats

An internal and external assessment for bat presence and potential roost features was undertaken on both the farmhouse and the milking shed. The results are described below.

The Farmhouse - Internal Assessment

Two loft spaces, Loft 1 and 2, were inspected for their suitability to support bats as well a survey for evidence of bats e.g., bats, droppings, feeding remains etc.

Loft 1 was in very good condition being comprised of wooden beams, roofing felt and a wooden boarded floor. Approximate dimensions were 2m high, 3m long by 5m wide. The loft was used to store an old child's toy thus was largely empty and could be fully inspected without any limitations. The boarded floor was devoid of any bat droppings, feeding remains etc. suggesting bats were likely to be absent. The ridge beams showed no evidence of staining caused by continual bat use and comprised cobwebs along its length. The roofing felt was in excellent condition with no obvious tears. The party walls of the loft were constructed of breezeblock and gritstone brick. The former was in excellent condition with no obvious

PRFs for bats. However, the latter comprised large gaps between the top of the wall and the roof beams/felt. It was suspected these gaps were connected to Loft 2 (see below). Mouse traps had been set in Loft 1 with the property owner informing PENNINE ecological that mice had been recorded in the past.

Loft 2 comprised bat droppings thus is a **CONFIRMED BAT ROOST.** The droppings were consistent with a pipistrelle species or possible a *Myotis* bat species (samples of the bat droppings were taken). Due to a wardrobe being situated directly beneath the loft hatch the loft space could not be accessed / thoroughly surveyed. Therefore, the only area of the loft floor that could be inspected in detail for droppings was approximately one meter from the hatch. Approximate dimensions for Loft 2 were 2m high, 7-10m long (access restrictions made it difficult to know the length) and 5m wide. As for Loft 1 the roof comprised wooden beams and roofing felt which whilst in very good condition appeared to be much older in age. The loft floor comprised wool insulation. Approximately a dozen bat droppings were recorded with what appeared to be more droppings on the insulation, however, due to the access limitations this could not be confirmed.

<u>The Farmhouse - External Assessment</u>

Refer to the Photographs in Appendix B which accurately identify each location of potential ingress/egress in to the farmhouse roof and potentially loft spaces. Multiple features were recorded throughout all aspects of the farmhouse. The vast majority were on the roof with slipped tiles and missing ridge tile mortar creating gaps of sufficient size that would enable ingress/egress for bats into the loft space. Additionally, gaps between the soffits and the external walls on the western, eastern, and southern aspects of the farmhouse were also identified. On the northern aspect a large gap in the mortar directly beneath the roof tiles was recorded. Also on the northern aspect it was suspected that a gap was present at the apex of the roof, however, due to poor light it was difficult to ascertain if this was a suitable feature of ingress/egress for bats.

Milking Shed - Internal Assessment

The milking shed was constructed of breezeblock, with wooden roof beams lined with felt and corrugated sheets of metal forming the flat roof. A breezeblock partition wall, with a single doorway created two sections to the building. The building was no longer used as a milking shed and instead stored a car and general storage.

Milking Shed - External Assessment

The walls of the milking shed were rendered with wooden fascias. The render was in very good condition with the fascias showing some signs of decay in places throughout the exterior. The northern section of the milking shed had been converted to an office space with a metal roller shutter door.

3.3.3 Breeding Bird Habitat Assessment

The site comprised semi-mature trees and introduced shrub which could feasibly support nesting birds.

3.4 OTHER PROTECTED SPECIES

Issues in relation to other potential protected species where no specific survey was undertaken are assessed in the following section If required.

4. ECOLOGICAL EVALUATION & RECOMMENDATIONS

Where relevant, this section evaluates the site in relation to statutory sites, and protected habitats/species listed in national and local legislation and policy.

4.1 STATUTORY DESIGNATED SITES

(i) Evaluation

No statutory designated sites were identified within 2km of the site.

(ii) Recommendations

No further recommendations are required.

4.2 HABITATS AND HIGHER PLANT SPECIES

(i) Evaluation

The habitats within the red line boundary are of ecological value and are considered to be of 'site' value only.

(ii) Recommendations

There are no requirements for further surveys.

4.3 BADGER

(i) Evaluation

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981, and under the Protection of Badgers Act 1992, which prohibits deliberate interference with the animal or its sett.

The field survey found no evidence of historic, recent, or current use of the site by badger. Therefore, badger is considered to be absent from the site.

(ii) Recommendations

There are no requirements for further surveys.

4.4 BATS

(i) Evaluation

Bats are comprehensively protected by the Wildlife and Countryside Act (1981) (as amended) and Conservation of Habitats and Species Regulations (2017) (as amended).

Bat droppings, suspected to be from either/or a pipistrelle species and/or *Myotis* bat species were recorded in the loft space of the farmhouse, thus this is a **CONFIRMED BAT ROOST.**

Habitats present within close proximity to the site (refer to Figure 5) and are likely to be of value to commuting/foraging and potentially roosting bats include a tree lined brook approximately 50m to the north west, relatively large linear woodland 350m north west, and a large area of woodland/scrub habitat 250m south of the site.



Figure 5 - Habitats likely to be of use for commuting/foraging and potentially roosting bats.

(ii) Recommendations

With regards to the droppings, to confirm which species are present DNA analysis can be undertaken which will confirm exactly which species are using the loft space of the residential property. Depending on the species present and roost type (see below) and the impact the proposals are likely to have on the loft space it may dictate the type of mitigation implemented.

For the existing farmhouse property, three (dusk emergence or dawn re-entry) should be undertaken. The surveys are required to establish whether bats are continuing to use the residential property and if present, how they are using it. No further surveys of the milking shed are required.

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).				
Low roost suitability	Moderate roost suitability	High roost suitability		
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn reentry survey. The third visit could be either dusk or dawn. ^b		
^a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see Section 5.2.9). If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category. ^b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.				

4.5 BIRDS

(i) Evaluation

All birds are offered various levels of protection under the Wildlife and Countryside Act (1981) as amended.

There are both deciduous and coniferous trees within the red line boundary which could potentially supporting nesting birds.

(ii) Recommendations

No strategic bird surveys are required.

However, any removal of vegetation should take place outside of the breeding season, i.e., between September 1st and February 28th. Following the removal, any piles of brash should be removed from the site, failure to do so could provide potential nest sites if left in situ until the following breeding season. If vegetation removal is envisaged during the breeding season, prior to removal checks should be made immediately prior to any clearance by a suitably experienced ecologist to establish any nesting or breeding activity. Should it be identified that birds are nesting or breeding then works should be paused until the young have naturally fledged the nest.

4.6 OTHER PROTECTED SPECIES

No other issues with regards to other protected species were identified thus no further action is required.

5. REFERENCES

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at http://www.ukhab.org/

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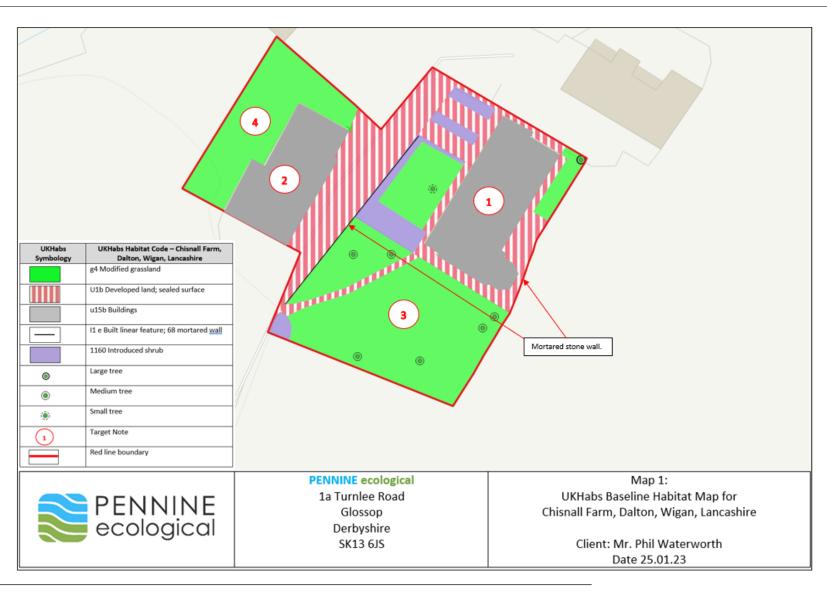
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Google Earth. Accessed various dates. Latest access 19/01/23

Appendix A: Map 1 - UK Habitat Classification Survey Baseline Map



Appendix B - Site Photographs 13th January 2023



Photograph 1: Overview of the front garden which lies to the west of the existing farmhouse.



Photograph 3: Overview of main garden which lies to the south of the existing farmhouse.



Photograph 2: Overview of front garden.



Photograph 4: South western corner of the red line boundary with the front and main garden partially in view.



Photograph 5: Garden to the rear (east) of the existing farmhouse.



Photograph 7: Northern gable end of the existing farmhouse.



Photograph 6: Northern end of the existing farmhouse comprised a flat roofed covered area.



Photograph 8: Tarmac driveway to the west of the existing farmhouse and east of the former milking shed.



Photograph 9: Eastern aspect of the former milking shed.



Photograph 11: Breezeblock party wall of Loft 1.



Photograph 10: Southern aspect of the former milking shed.



Photograph 12: Gritstone brick party wall of Loft 1.



Photograph 13: Floor of Loft 1.



Photograph 15: Party wall and woollen loft insulation of Loft 2.



Photograph 14: Floor of Loft 1.



Photograph 16: Woollen loft insulation of Loft 2. Access was restricted but bat droppings were found on top of the insulation but these could not be more closely inspected than is seen in this photograph.

Photograph 17: Floor and wooden rafters, uprights and supporting beams of Loft 2.



Photograph 19: Bat droppings on the floor recorded on the insulation of Loft 2.



Photograph 18: Roof structure of Loft 2.



Photograph 20: Remnants of a bat dropping crushed between the fingers of the ecologist inspecting Loft 2.



Photograph 21: Western aspect of the existing farmhouse. Red arrows indicate potential ingress/egress for bats.



Photograph 22: Western aspect of existing farmhouse. Porthole window in this photograph is that which is in Photograph 21.



Photograph 23: Southern aspect of existing farmhouse. Red arrows indicate potential ingress/egress for bats.



Photograph 24: Southern aspect of existing farmhouse (refer to Photograph 23 which includes the same larger double glazed, upstairs bedroom window). Red arrows indicate potential ingress/egress for bats.

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Photograph 25: Eastern aspect of the existing farmhouse. Red arrows indicate potential ingress/egress for bats.



Photograph 26: Red arrow indicates potential ingress/egress for bats. The feature here is the right most arrow in Photograph 25.



Photograph 27: Northern gable end of the existing farmhouse. Red arrows indicate potential ingress/egress for bats.



Photograph 28: Red arrow indicates potential ingress/egress for bats. The feature here is the right most arrow in Photograph 27.



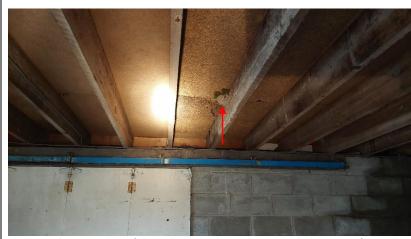
Photograph 29: Interior of the milking shed.



Photograph 31: Interior of the milking shed.



Photograph 30: Interior of the milking shed.



Photograph 32: Interior of the milking shed. Red arrow marks location of a swallow nest.