

TAN YARD FARM, RIBCHESTER

Preliminary Ecological Appraisal Report

March 2024



Report Control Sheet

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EXECUTIVE SUMMARY

| | |
|---|---|
| Site Address | Tan Yard Farm, Ribchester, PR3 3XA |
| Grid Reference | SD 62411 36791 |
| Approximate Site Area | 0.39 ha |
| Current Site Use | The site consists of a disused vacant grassland field with surrounding lines of trees and woodland. |
| Designated Sites within Zone of Influence | <p>The site falls within the impact risk zone of the following Sites of Special Scientific Interest (SSSI):</p> <ul style="list-style-type: none"> • Red Scar and Turn Brook Wood SSSI located approximately 4.4km southwest from the site boundary. • Bowland Fells SSSI located approximately 8.2km north from the site boundary. |
| Notable Habitat Features | Species-rich Native Hedgerow was located along the northwestern and northeastern boundaries of the site. A small patch of woodland with a wet ditch was located in the southwestern corner connecting the site to adjacent habitats. |
| Notable Species Applicable to the Assessment | <ul style="list-style-type: none"> • Bats (Potential foraging and commuting) • Breeding birds • Great Crested Newt and Common amphibians • Reptiles • XXXXXXXXXX • Hedgehog • Water vole and otter • Invertebrates |
| Mitigation Recommendations | <ul style="list-style-type: none"> • A Construction and Environmental Plan (CEMP) should be created to minimise the risk of polluting the adjacent habitats. • Nesting bird checks prior to any works on site (March – September inclusive). • Bird boxes should be installed on new buildings or retained trees to compensate for the loss of nesting bird habitats. • Lighting mitigation for bats. • Avoiding utilising pesticides during habitat management post development as not to impact the numbers of invertebrate prey for foraging bats and birds. • Precautionary Working Methods for bird, bat, amphibians, reptiles, hedgehog and water vole. |
| Recommended Further Surveys and Assessment | <ul style="list-style-type: none"> • Environmental DNA of ponds onsite and offsite to determine presence/absence of great crested newt (15th April – 30th June). • Camera Trapping of unidentified mammal holes to determine use and associated species. |
| Recommended Ecological Enhancements | The inclusion of 'Hedgehog Highways' to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls. |

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1 INTRODUCTION

1.1. SCOPE & PURPOSE

1.1.1. Collington Winter Environmental Ltd was commissioned by Pegasus Group to undertake a Preliminary Ecological Appraisal (PEA) at Tan Yard Farm, Ribchester. This report has been prepared to inform an outline planning application for development of holiday cottages at Tan Yard Farm, including access roads.

1.1.2. The author of this report is Katie Brewer BSc (Hons), Ecological Project Manager at Collington Winter Environmental Ltd. This report has overseen by Katie Bird MEnvSci, ACIEEM, Associate Director at Collington Winter Environmental Ltd. Katie is highly experienced managing schemes and has produced many ecological reports to inform planning management plans.

1.2. LOCATION

1.2.1. Please refer to Figure 1.1 for the site location. The site is in the village of Ribchester along Ribchester Road, 8.7km northeast from the city centre of Preston. The site is located within a predominately rural location and connects to agricultural land.

Figure 1.1 Site Location



1.3. OBJECTIVES

1.3.1. The objectives of the Preliminary Ecological Appraisal are as follows:

- Identify the major habitats present.
- Ascertain the presence or potential presence of any legally protected or notable species or habitats.
- Identify any mitigation or further survey required and opportunities for strategic wildlife enhancements and long-term management.

2 METHODOLOGY

2.1. DESK STUDY

- 2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:
- - Obtaining local records of notable species and locally designated sites within 1 km of the site from the Lancashire Environment Record Network (LERN), obtained on the 07/03/2024.
 - Review of Magic.gov.uk website for details of any designated sites, notable habitats and presence of European Protected Species Licences.
 - Review of aerial and OS maps for habitat information, as well as determining locations of potential waterbodies to be considered in the assessment.
 - Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
 - On site consultation with the landowner which provided valuable information regarding historic land use and known species and habitats present within the site.
- 2.1.2. Please note, a lack of records for a species does not confirm absence. Instead, local surveys may not have been undertaken or records not submitted to LERN.

2.2. VEGETATION AND HABITAT ASSESSMENT

- 2.2.1. An Ecological Appraisal of the site was undertaken by Katie Brewer BSc (Hons). The survey was undertaken on the 11th March 2024. The weather was clear (2/8 oktas), with no precipitation, wind speed 2 and 8°C.
- 2.2.2. The walkover survey was undertaken broadly in line with standard UK HAB Methodology, Version 2 (2023). The assessment is undertaken with consideration of methodology as per "Preliminary Ecological Appraisal" (CIEEM, 2018).
- 2.2.3. A UK HAB Plan has been produced and is presented in the Appendix of this report. Standard methodology has been used, though adjustments have been made based on judgement to demonstrate habitats in a clearer manner, or where standard guidance does not fit the conditions found on site.

2.3. FAUNA ASSESSMENT

- 2.3.1. A search for signs of protected and notable species of fauna was undertaken during the site walkover. This included both field signs of species, as well as potential for species to be present based on habitat availability.
- 2.3.2. The searches broadly included the following:
- Assessment of waterbodies on site and within 250m of the site boundary, and terrestrial habitats for suitability to support notable amphibians.
 - Searches for field signs of, and habitat suitability for bats.
 - Suitability of habitats to support reptiles, and searches for incidental field signs.
 - Searches for field signs of badger (*Meles meles*), including setts, mammal paths, snuffle holes, badger hair and latrines to indicate activity.
 - Searches of watercourses for signs of water vole (*Arvicola amphibius*), white-clawed crayfish (*Austropotamobius pallipes*) and otter (*Lutra lutra*), and assessment of habitat availability for the species.
 - Assessment of the suitability of habitats to support notable birds and recording any field sightings of birds during the walkover.
 - Assessment of the sites ability to support notable invertebrates and flora.
 - Searches for non-native invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT AND BAT ACTIVITY ASSESSMENT

- 2.4.1. A Ground Level Tree Assessment (GLTA) of the site was undertaken by Katie Brewer. This has been overseen by Katie Bird who holds a Class 2 Bat Survey Licence from Natural England (Reference 2020-48950-CLS-CLS).
- 2.4.2. The survey was undertaken following guidance set out in Collins (2023). This includes undertaking a detailed

internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.

2.4.3. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins 2023).

2.4.4. The GLTA and Potential flightpaths and foraging habitats were assessed as per categories listed in Table 4.1, 4.2 and 6.2, demonstrated below (Collins 2023).

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

| Potential suitability | Description | |
|-----------------------|--|---|
| | Roosting habitats in structures | Potential flight-paths and foraging habitats |
| None | No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels). | No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats). |
| Negligible* | No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. | No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour. |
| Low | A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ² and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ³). | Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub. |
| Moderate | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ² and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed). | Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water. |
| High | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ² and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site. | Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts. |

Assessment Criteria for Bat Roosting Potential

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

| Suitability | Description |
|-------------|--|
| NONE | Either no PRFs in the tree or highly unlikely to be any |
| FAR | Further assessment required to establish if PRFs are present in the tree |
| PRF | A tree with at least one PRF present |

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

| Suitability | Description |
|-------------|---|
| PRF-I | PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats. |
| PRF-M | PRF is suitable for multiple bats and may therefore be used by a maternity colony. |

2.5. SURVEY LIMITATIONS

2.5.1. This survey does not constitute a full botanical survey. Key species for each habitat type have been identified to give a broad representation of habitats present within the site.

2.5.2. It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. This survey does not constitute a full botanical survey. Plant species may have been under-recorded, unidentifiable or not visible due to a number of factors including the time of year the survey was carried out.

- 2.5.3. March is a suboptimal time for carrying out a Habitat Surveys due to being outside of the optimal plant growing season. Therefore, it is likely that some plants are present on the site but were not evident at the time of the survey and were not recorded. This is not considered to be a significant constraint due to the size and location of the site and limited extent of the habitats; it is considered very unlikely that any rare or priority plant species were missed.
- 2.5.4. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area.
- 2.5.5. The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.
- 2.5.6. Ponds within 250m of the site boundary could not be accessed due to surrounding barbed wire on private land.

2.6. PROPORTIONALITY

- 2.6.1. Collington Winter Environmental Ltd provide recommendations in line with the British Standard for Biodiversity (BS42020). Within BS42020, proportionality is encouraged for both ecologists and Local Authority Decision Makers and Consultees. Please refer to the below extract from Section 5.5 of BS42020.

“The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.”

NOTE 1 This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England [41].

NOTE 2 The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.”

3 SURVEY RESULTS

3.1. SITE CONTEXT

3.1.1. The site is located within a predominately rural area, to the north of the village of Ribchester. The surrounding habitat consists of predominantly agricultural land, grassland field and woodland. These surrounding habitats and connecting features are anticipated to support local flora and fauna populations. The site also connects directly to local reservoirs which provide suitable habitat for wading birds.

3.2. DESIGNATED SITES

3.2.1. A total of one Site of Special Scientific Interest (SSSI), was located within the 5km site boundary, based on a consultation with Magic.gov.uk, this includes.

- Red Scar and Tun Brooks Wood is located approximately 4.4km southwest of the site boundary. The site constitutes one of the largest areas of deciduous woodland in Lancashire and provide a valuable refuge for wildlife close to the urban areas of Preston. Alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), wych elm (*Ulmus glabra*) and sycamore (*Acer pseudoplatanus*) are the main trees, with much hawthorn (*Crataegus monogyna*), elm (*Ulmus procera*) and ash in the understorey, totalling about 6ha of woodland. The woods support a good population of birds, including hawfinch (*Coccothraustes coccothraustes*). Badger (*Meles meles*) sets are also present in the site. The white letter hairstreak butterfly (*Satyrrium w-album*) has recently extended its range to these and other woods in the Ribble Valley, its only location in Northwest England. The oak bush-cricket (*Meconema thalassinum*), another notably rare species in Northwest England, has also been recorded.

3.2.2. The site falls within the impact risk zone of Red Scar and Turn Brook Wood SSSI.

3.2.3. The site also falls within the Impact Risk zone of Bowland Fells SSSI located approximately 8.2km north from the site boundary. The site consists of extensive upland fells support the largest expanse of blanket bog and heather moorland in Lancashire and provide suitable habitat for a diverse upland breeding bird community which includes three species (hen harrier (*Circus cyaneus*), merlin (*Falco columbarius*) and peregrine (*Falco peregrinus*)), which are afforded special protection under the Wildlife and Countryside Act 1981 by virtue of their rarity or vulnerability. Additional interest is provided by the existence of one of the largest lesser black-backed gull colonies in Great Britain, the presence of a number of nationally or locally uncommon plant species and a variety of upland habitats and their associated avifauna.

3.2.4. A total of one Local Nature Reserve (LNR) was located within the 5km site boundary, based on a consultation with Magic.gov.uk, this includes:

- Fishwick Bottoms LNR is located approximately 4.1km Southwest of the site boundary. The reserve consists of woodland, wetland, wildlife meadows, an orchard and hedgerows. The wetlands are home to sticklebacks, newts, dragonflies and other invertebrates. The wetlands also attract bird species such as heron (*Ardea cinerea*) and kingfisher (*Alcedo atthis*).

3.2.5. No other statutory sites are located within 5 km of the site boundary.

3.2.6. The following non-statutory Biological Heritage Sites (BHS) were identified in the 1km data search:

- Spade Mill Reservoirs BHS is located 0.8km north of the site boundary. The site is of ornithological interest. winter birds occurring at the reservoirs include goldeneye (*Bucephala clangula*), tufted duck (*Aythya fuligula*), lapwing (*Vanellus vanellus*), and snipe (*Gallinago gallinago*). In summer the reservoirs are valuable for breeding birds when water levels are low. On such occasions species such as little ringed plover (*Charadrius dubius*) and oystercatcher (*Haematopus ostralegus*) breed.
- College Wood BHS is located 0.9km west of the site boundary. The site comprises of predominately, semi-natural woodland with a stream running through. The woodland is listed in the Lancashire Inventory of Ancient Woodland. The canopy is dominated by Oak (*Quercus robur*), Sycamore and Alder with occasional Elm to the south and Beech (*Fagus sylvatica*) to the north. Ash, Rowan (*Sorbus aucuparia*) and Birch (*Betula pendula*) are also present, with Hazel (*Corylus avellana*), Hawthorn, Holly (*Ilex aquifolium*), and Blackthorn (*Prunus spinosa*) in the understorey. There are plantations along part of the western side of the woodland that include Larch (*Larix decidua*), Spruce (*Picea abies*), Beech and Oak amongst residual trees. The ground flora is known to includes Bluebell, Giant Horsetail (*Equisetum*

telmatiea), and Wood Sorrel (*Oxalis acetosella*).

- Alston Reservoir BHS is located 1.3km west of the site boundary. The site is of both ornithological and botanical importance. The reservoirs support a high diversity and good numbers of wintering wildfowl. Wildfowl species include mallard (*Anas platyrhynchos*), pochard (*Aythya ferina*), tufted duck, goldeneye and goosander (*Mergus merganser*). Non-wildfowl species include lapwing. Steeply sloping grass embankments surrounding the reservoirs support species-rich grassland. The grassland includes the following plant species: common knapweed (*Centaurea nigra*), oxeye daisy (*Leucanthemum vulgare*), great burnet (*Sanguisorba officinalis*), greater burnet-saxifrage, and selfheal, lady's mantle (*Alchemilla mollis*).
- Eatoughs Wood BHS is located 1.5km southeast of the site boundary. The site comprises semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
- Buckley Wood and Dale Hey Wood BHS is located 1.6km east of the site boundary. The site comprises of semi-natural woodland adjoining both sides of Boyce's Brook and is listed in the Inventory of Ancient Woodland. Wood to the east of the stream is dominated by Birch with regeneration of Ash with Hazel frequent in the understorey and some Guelder-rose (*Viburnum opulus*). The ground flora includes Greater Chickweed (*Stellaria media*), Wood Anemone (*Anemone nemorosa*), and Bluebell (*Hyacinthoides non-scripta*).
- Hothersall Wood BHS is located 1.7km south of the site boundary. The site comprises semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
- Norcross Grassland BHS is located 1.7km southwest of the site boundary. The sloping land alongside the stream supports semi-improved grassland, much of which is species rich. The diverse flora includes the following plants: Betony (*Betonica officinalis*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Knapweed, Devil's-bit Scabious (*Succisa pratensis*), Eyebright (*Euphrasia officinalis*), Fairy Flax (*Linum catharticum*), and Great Burnet (*Sanguisorba officinalis*).
- Norcross Pond BHS is located 1.7km southwest of the site boundary. site comprises a small pond and the surrounding vegetation. Common Club-rush (*Schoenoplectus lacustris*) is present around the pond margins. This plant is uncommon in Lancashire and is included in the Provisional Lancashire Red Data List of Vascular Plants. Surrounding the pond is tall, herb-rich vegetation, with Great Burnet, and Meadowsweet (*Filipendula ulmaria*). Both Soft Rush and Hard Rush are also present.
- Leece's Wood BHS is located 1.9km south of the site boundary. The site comprises semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
- Norcross Wood is located 2.1km southwest of the site boundary. The site comprises semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland.
- Red Bank Grass Land BHS is located 2.2km northeast of the site boundary. The site comprises the river Ribble and associated semi-natural habitats. The river is of great importance for salmon (*Salmo salar*), otter (*Lutra lutra*) and water vole (*Arvicola amphibius*). Along the riverbanks sandy cliffs provide nesting habitat for sand martin (*Riparia riparia*) and kingfisher (*Alcedo atthis*). Where shingle banks develop, nesting waders include oystercatcher, common sandpiper, (*Actitis hypoleucos*), and ringed plover, whilst suitable adjacent fields support breeding waders including lapwing and curlew. Mature trees and woodlands adjacent to the river provide for nesting goosander. Plant species of interest along the river include the northern spike-rush (*Eleocharis austriaca*) which is a nationally rare species at its southern limit of distribution in the UK, and green figwort (*Scrophularia umbrosa*).

3.3. PRIORITY HABITATS

3.3.1. Consultation with Magic.gov.uk highlighted the presence of the following Priority Habitats within 1km of the site boundary:

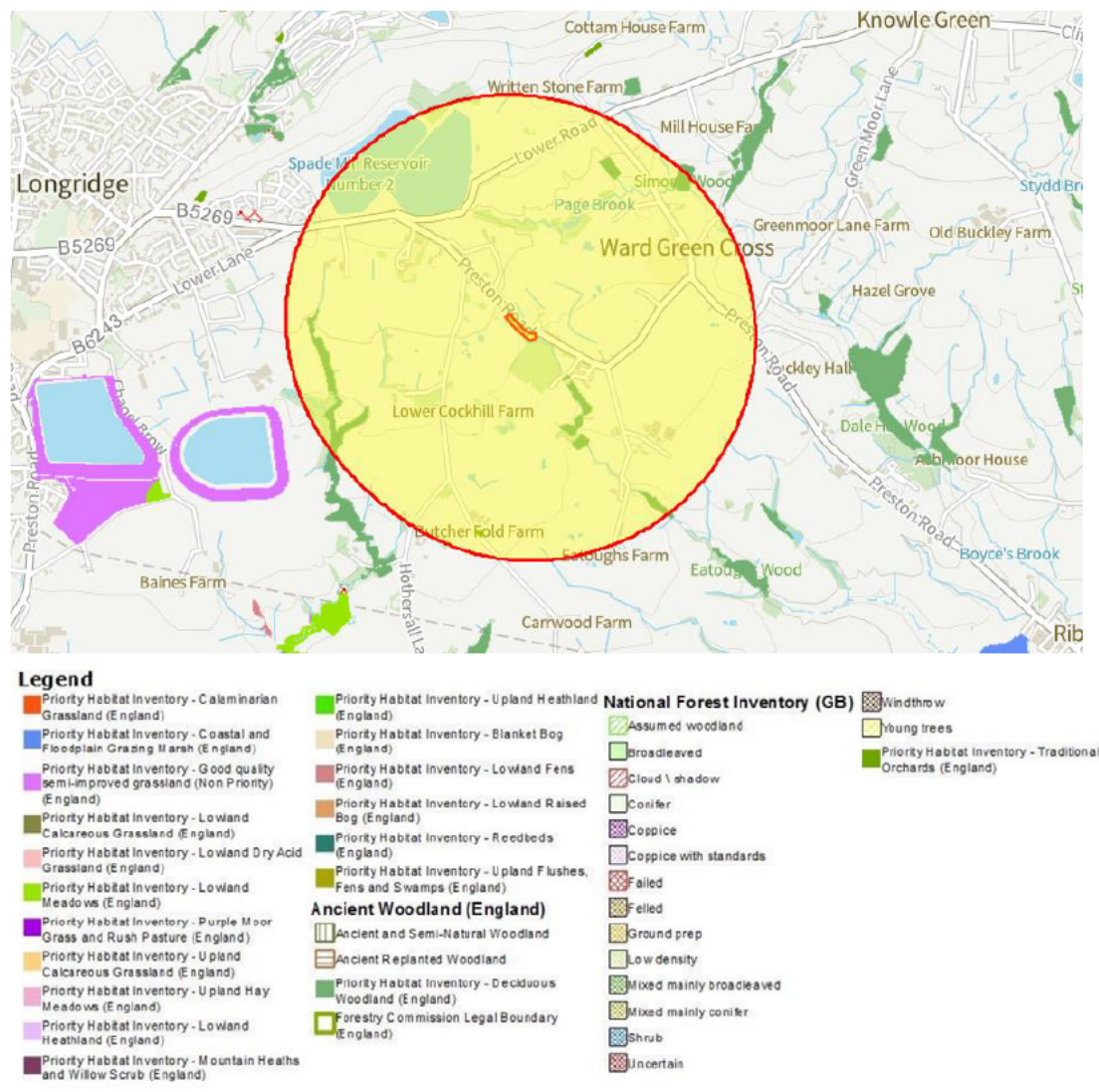


Figure 3.2 Priority Habitats within 1km from the Site (Magic.gov.uk, 2024)

3.4. HABITATS

3.4.1. Please refer to Drawing 20-1690 – 001 for the UK HAB Map for the site. Photographs of the site are presented in the Appendix.

MODIFIED GRASSLAND

3.4.2. The majority of the site consisted of unmanaged modified grassland with limited species identified throughout. Species identified includes cocks-foot grass (*Dactylis glomerata*), soft-rush (*Juncus effusus*), spear thistle (*Cirsium vulgare*), broadleaved dock (*Rumex obtusifolius*), creeping buttercup (*Ranunculus repens*), common nettle (*Urtica dioica*), meadow buttercup (*Ranunculus acris*) and creeping thistle (*Cirsium arvense*). There were small patches of tall forbs identified within the modified grassland along the eastern line of trees, these areas were not large enough to identify as a separate habitat.

SPECIES-RICH NATIVE HEDGEROW

3.4.3. A Species-Rich Native Hedgerow was located on the northeastern and northwestern aspect of the site. This consisted of hawthorn (*Crataegus monogyna*), bramble (*Rubus fruticosus agg.*), hazel (*Corylus avellana*), holly (*Ilex aquifolium*). This consisted of an understory of common nettle, broad-leaved dock, cuckooflower (*Cardamine pratensis*), common mouse-ear (*Cerastium fontanum*) and hairy bitter-cress (*cardamine hirsuta*).

LINE OF TREES

3.4.4. A line of trees is located along the south-western aspect of the site. This consisted of hawthorn, oak (*Quercus robur*), bramble, hazel, sycamore (*Acer pseudoplatanus*) and holly. This has an understory of creeping buttercup, common nettle, broad-leaved dock and common ivy (*Hedera helix*),

OTHER BROADLEAVED WOODLAND WITH DITCH

- 3.4.5. A small area of broadleaved woodland is located on the south-eastern aspect of the site, this connects directly to the woodland adjacent to the southern aspect. The woodland consists of elder (*Sambucus nigra*), hawthorn, hazel and oak. The woodland has a sparse understory of vegetation, and a lot of bare ground was present. The understory consisted of common ivy, common nettle, broad-leaved dock, cuckooflower and dandelion (*Taraxacum spp.*).
- 3.4.6. A wet ditch was located within the woodland on the southwester aspect of the site, this ditch ran directly into the woodland located adjacent to the southern aspect of the site. As the woodland connected to a line of trees along the western aspect of the site, the ditch became dry suggesting that the water is from drainage in adjacent fields. It is anticipated that the ditch will become dry in the summer.

3.5. SPECIES

FLORA

- 3.5.1. The data search returned multiple records of notable vascular plants within the local area relating to coastal and terrestrial habitat. Species included, but not limited to; Narrow Leaved Water-Plantain (*Alisma lanceolatum*), Columbine (*Aquilegia vulgaris*), Common Spotted-orchid (*Dactylorhiza fuchsia*), Petty Spurge (*Euphorbia peplus*), Snowdrop (*Galanthus nivalis*), Wood Crane's-bill (*Geranium sylvaticum*), Green-leaved Hawkweed (*Hieracium acuminatum*), Bluebell, Tutsan (*Hypericum androsaemum*), Pale St John's-wort (*Hypericum montanum*), Sheep's-bit (*Jasione montana*), Welsh Poppy (*Meconopsis cambrica*), Daffodil (*Narcissus pseudonarcissus*), Common Twayblade (*Neottia ovata*), Early-purple Orchid (*Orchis mascula*), Greater Butterfly-orchid (*Platanthera chlorantha*), Buckthorn (*Rhamnus cathartica*), Northern Yellow-cress (*Rorippa islandica*), Round-leaved Dog-rose (*Rosa obtusifolia*), Common Club-rush (*Schoenoplectus lacustris*), and Corn Spurrey (*Spergula arvensis*).
- 3.5.2. The site consisted of limited floristic diversity with only common and widespread flora species identified within the field. There were no notable flora species identified within the site. Due to the survey being completed in March it is anticipated that additional flowering species within the grassland may have been missed but not considered to be of notable value.
- 3.5.3. It is anticipated that notable species could be present within the adjacent woodland on the southern aspect of the site and connecting woodland area. It is understood that the proposals are not to impact the woodland habitats within and adjacent to the site.

INVERTEBRATES

- 3.5.4. The data search returned a total of 156 records of notable invertebrates within the local area, including the site. Species included (not limited to); cinnabar (*Tyria jacobaeae*), Brown-spot Pinion (*Agrochola litura*), Green-brindled Crescent (*Allophyes oxyacanthae*), Ear Moth (*Amphipoea oculatea*), Mouse Moth (*Amphipyra tragopoginis*), Dusky Brocade (*Apamea remissa*), Garden Tiger (*Arctia caja*), Sprawler (*Asteroscopus sphinx*), Centre-barred Sallow (*Atethmia centrugo*), Mottled Rustic (*Caradrina Morpheus*), Ruddy Carpet (*Catarhoe rubidata*), Broom Moth (*Ceramica pisi*), Latticed Heath (*Chiasmia clathrate*), Sallow (*Cirrhia icteritia*), Small Heath (*Coenonympha pamphilus*), Small Square-spot (*Diarsia rubi*), Small Phoenix (*Ecliptopera silaceata*), September Thorn (*Ennomos erosaria*), Dusky Thorn (*Ennomos fuscantaria*), Autumnal Rustic (*Eugnorisma glareosa*), Double Dart (*Graphiphora augur*), Crescent (*Helotropha leucostigma*), and Ghost Moth (*Hepialus humuli*).
- 3.5.5. The habitats on site such as the woodland and wet ditch located on the southwestern corner of the site are anticipated to be of value for local invertebrate populations. These habitats are anticipated to support local populations for commuting and foraging purposes.
- 3.5.6. Overall, invertebrates are likely to be present within the site; however, due to the small scale of the scheme it is not considered to be of significance. They are anticipated to utilise the connecting habitats such as the woodland as it is anticipated to provide greater opportunities.

AMPHIBIANS

- 3.5.7. The data search returned a total of 34 records of great crested newt (*Triturus cristatus*). The records of great crested newts were associated or within the vicinity of Lowland Meadows located approximately 1.7km southwest from the site, the most recent record was obtained in 2015. The data search also returned records of smooth newt

(*Lissotriton vulgaris*), and common frog (*Rana temporaria*) within 1km of the site boundary.

3.5.8. The following EPSL's were located within 5km from the site boundary based on consultation with magic.gov.uk:

| Case reference of granted application | Species on the licence* | Distance from site (KM) | Direction | Licence Start Date | Licence End Date | Does the Licence | | | | |
|---------------------------------------|-------------------------|-------------------------|-----------|--------------------|------------------|----------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|
| | | | | | | impact on a breeding site? | allow damage of breeding site? | allow damage of a resting place? | allow destruction of breeding site? | allow destruction of a resting place? |
| 2014-3762-EPS-MIT-3 | Great crested newt | 2.5 | SW | 20/10/2016 | 30/04/2017 | N | N | Y | N | Y |
| 2014-4871-EPS-MIT | Great crested newt | 2.5 | SW | 17/11/2014 | 30/06/2017 | N | N | Y | N | Y |
| 2015-17353-EPS-MIT | Great crested newt | 2.7 | SW | 20/11/2015 | 31/05/2016 | N | N | Y | N | Y |
| 2015-7605-EPS-MIT | Great crested newt | 2.7 | SW | 14/05/2015 | 31/10/2015 | N | N | Y | N | Y |
| 2015-9441-EPS-MIT | Great crested newt | 2.7 | SW | 12/05/2015 | 01/07/2020 | N | N | Y | N | Y |
| EPSM2013-5902 | Great Crested Newt | 2.7 | SW | 20/08/2013 | 30/06/2017 | N | - | - | N | Y |
| EPSM2010-1766 | Great Crested Newt | 2.7 | SW | 31/03/2010 | 30/09/2010 | N | - | - | N | Y |
| 2014-3762-EPS-MIT-1 | Great crested newt | 3.3 | NE | 12/01/2015 | 31/10/2015 | N | N | Y | N | Y |
| 2017-31689-EPS-MIT | Great crested newt | 3.3 | NE | 12/10/2017 | 31/10/2018 | N | N | Y | N | Y |
| 2017-31689-EPS-MIT-1 | Great crested newt | 3.5 | SW | 17/11/2017 | 31/10/2018 | N | N | Y | N | Y |
| 2014-3762-EPS-MIT-4 | Great crested newt | 3.5 | SW | 09/11/2016 | 09/11/2016 | N | N | Y | N | Y |
| 2018-34556-EPS-AD2 | Great crested newt | 3.5 | SW | 25/07/2018 | 31/07/2030 | N | N | Y | N | Y |
| 2018-34556-EPS-AD2-1 | Great crested newt | 3.5 | SW | 22/01/2019 | 31/07/2030 | N | N | Y | N | Y |
| 2018-34556-EPS-AD2-2 | Great crested newt | 3.5 | SW | 16/04/2019 | 31/07/2030 | N | N | Y | N | Y |
| 2018-34556-EPS-AD2-3 | Great crested newt | 3.5 | SW | 09/08/2019 | 31/07/2030 | N | N | Y | N | Y |
| 2018-34556-EPS-AD2-4 | Great crested newt | 3.5 | SW | 25/09/2020 | 31/07/2030 | N | N | Y | N | Y |
| 2014-3762-EPS-MIT | Great crested newt | 4.6 | NW | 08/10/2014 | 30/12/2015 | N | N | Y | N | Y |
| 2014-3762-EPS-MIT-2 | Great crested newt | 4.9 | SW | 17/09/2015 | 31/10/2016 | N | N | Y | N | Y |

3.5.9. A total of nine ponds were located within 250m of the site boundary and a further five ponds are located within 250-500m from the site boundary. It is currently unknown whether these ponds provide suitable habitat for great crested newt as they were inaccessible during the survey. Based on the accepted terrestrial range of great crested newt generally <250m and occasionally <500m it is considered that great crested newts could be present within the ponds due to the connectivity to the lowland meadows which is known to support a population of newts. The ponds are connected to the lowland meadows via grassland fields and areas of woodland which are anticipated to support local populations. The site and the surrounding habitats provide suitable features for the species, and it is anticipated that they will utilise these local habitats.

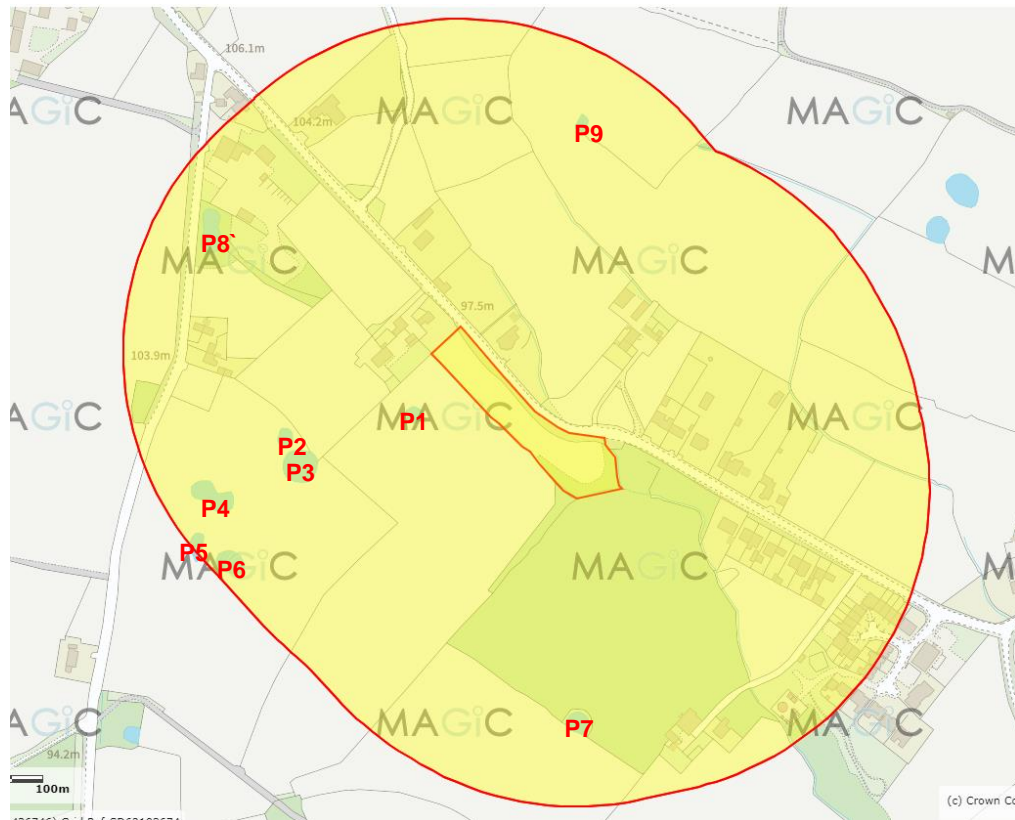


Figure 3.3 Ponds within 250m of the site (MAGIC.gov.uk, 2024)

- 3.5.10. The site is located to the northern aspect of the connect habitats and is located adjacent to Ribchester Road, there are no ponds located within the site. It is anticipated that the surrounding habitats of the site will provide greater opportunities for great crested newt however, it is noted that present within the woodland, surrounding line of trees and grassland.
- 3.5.11. It is anticipated that unknown ornamental water bodies may be located within nearby residential gardens which may provide suitable conditions for common amphibians and possible great crested newts as they are known to be present within the area.
- 3.5.12. A review of Natural England's Impact Zone for Great Crested Newt found that the site is located within an Amber Impact Risk Zone and is predominantly surrounded by amber zones.
- 3.5.13. Overall, great crested newts are known to be present within the local area and it is anticipated that they could be present on site.

REPTILES

- 3.5.14. The data search returned one record of reptile species within the local area. The species included slow worm (*Anguis fragilis*) located over 1.9km from the site, however this was recorded in 1979 so is considered historical.
- 3.5.15. The site provides value for reptile species in reference to the unmanaged grassland and woodland that could provide suitable habitats. One historic record of a slow worm was recorded within 1km of the site, it is unknown whether reptiles are present within the area.
- 3.5.16. Overall, the site has suitable habitat for reptiles and is located to other suitable connecting habitats.

BIRDS

- 3.5.17. A total of 169 records of birds were returned during the 2 km data search. The majority of which related to the Alston Reservoirs and Spade Mill Reservoirs. Records relevant to the site included (not limited to); Sand Martin, Woodcock (*Scolopax rusticola*), Tawny Owl (*Strix aluco*), Starling (*Sturnus vulgaris*), Redshank (*Tringa tetanus*),

Wren (*Troglodytes troglodytes*), Song Thrush (*Turdus philomelos*), Barn Owl (*Tyto alba*), Lapwing, Coal Tit (*Periparus ater*), Great Crested Grebe (*Podiceps cristatus*), House Sparrow (*Passer domesticus*), Curlew, Pied Wagtail (*Motacilla alba*) and Snipe (*Gallinago gallinago*).

3.5.18. The site provides potential nesting habitats for breeding birds in association the line of trees, hedgerows and woodland. Bird species identified within the site includes European robin (*Erithacus rubecula*), Eurasian blue tit (*Cyanistes caeruleus*), coal tit, house sparrow (*Passer domesticus*), great tit (*Parus major*), common wood-pigeon (*Columba palumbus*), common chaffinch (*Fringilla coelebs*) and dunnoek (*Prunella modularis*). A buzzard (*Buteo buteo*) was identified commuting over the site several times during the survey. The birds were identified within the line of trees along the western boundary of the site and the woodland adjacent to the southern aspect.

3.5.19. It was noted that the unmanaged grassland and adjacent habitats may provide habitats that could support ground nesting birds. However, the site is connected to a woodland on the southern aspect of the site and a line of trees on the western boundary. These habitat features will provide suitable perches for birds of prey which were identified during the survey. These features could deter ground nesting birds from the site.

3.5.20. Overall, the site was identified as of value for nesting birds and suboptimal value for ground nesting species.

BATS

3.5.21. A total of seven records of bats were returned within 1 km of the site boundary, all of which related to activity and roost. Species included unidentified pipistrelle (*Pipistrellus* sp.), and common pipistrelle (*Pipistrellus pipistrellus*), and Brown Long-eared Bat (*Plecotus auratus*)

3.5.22. The following EPSL were located within 5km from the site boundary:

| Case reference of granted application | Species on the licence* | Distance from site (KM) | Direction | Licence Start Date | Licence End Date | Does the Licence | | | | |
|---------------------------------------|-------------------------|-------------------------|-----------|--------------------|------------------|----------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|
| | | | | | | impact on a breeding site? | allow damage of breeding site? | allow damage of a resting place? | allow destruction of breeding site? | allow destruction of a resting place? |
| 2015-6907-EPS-MIT | BLE C-PIP | 1 | E | 01/08/2015 | 31/07/2020 | N | N | Y | N | N |
| EPSM2011-3791 | C-PIP;BLE | 2.8 | SE | 13/12/2011 | 31/10/2013 | N | | | N | Y |
| EPSM2013-6761B | C-PIP | 2.9 | SW | 09/01/2014 | 30/09/2015 | N | N | Y | N | Y |
| EPSM2013-6761 | C-PIP | 2.9 | SW | 09/01/2014 | 30/09/2015 | N | | | N | Y |
| 2017-27875-EPS-MIT | NATT S-PIP | 3 | SW | 01/04/2017 | 31/08/2022 | N | N | N | N | Y |
| 2017-32032-EPS-MIT | BLE | 3.1 | SE | 06/11/2017 | 05/11/2027 | Y | Y | N | N | Y |
| 2019-39612-EPS-MIT | BRAN C-PIP S-PIP | 4 | N | 01/03/2019 | 31/12/2024 | N | N | N | N | Y |
| 2019-43457-EPS-MIT | S-PIP | 4 | N | 11/11/2019 | 09/11/2024 | Y | N | N | Y | N |
| 2019-43475-EPS-MIT | S-PIP | 4 | N | 12/11/2019 | 10/11/2024 | N | N | N | N | Y |
| 2019-43634-EPS-MIT | C-PIP | 4 | N | 29/11/2019 | 01/08/2020 | N | N | N | N | Y |
| 2019-39612-EPS-MIT-1 | BRAN C-PIP S-PIP | 4.3 | SE | 21/01/2020 | 31/12/2024 | N | N | N | N | Y |
| 2019-39612-EPS-MIT-2 | BRAN C-PIP S-PIP | 4.3 | SE | 21/01/2020 | 31/12/2024 | N | N | N | N | Y |
| 2020-48347-EPS-MIT | BRAN C-PIP S-PIP | 4.3 | NE | 22/07/2020 | 31/12/2024 | N | N | N | N | Y |
| 2020-44526-EPS-MIT | C-PIP | 4.8 | SW | 25/02/2020 | 31/03/2021 | N | N | N | N | Y |

| Species on the licence* | Species name | Latin |
|-------------------------|----------------------|----------------------------------|
| C-PIP | Common pipistrelle | <i>Pipistrellus pipistrellus</i> |
| S-PIP | Soprano pipistrelle | <i>Pipistrellus pygmaeus</i> |
| BRAN | Brandt's bat | <i>Myotis brandtii</i> |
| NATT | Natterer's bat | <i>Myotis nattereri</i> |
| BLE | Brown Long-eared Bat | <i>Plecotus auritus</i> |

3.5.23. The habitats onsite are anticipated to be of value for foraging and commuting habitats for local bat populations. It is anticipated that the wet ditch and woodland located on the southwestern aspect of the site will attract invertebrate prey into the site and connecting habitats. The line of trees on the western aspect of the site creates a linear feature for commuting bats. There were no roosting features identified within the site.

- 3.5.24. The connecting habitats on the western and southern aspect of the site are anticipated to support commuting, foraging and possible roosting bats. Due to the small scheme of the site, these connecting habitats are anticipated to be of greater value for local bats.
- 3.5.25. Overall, it is anticipated that bats will be present onsite and within the local area. The site provides moderate value for roosting bats due to the connecting features.

OTHER TERRESTRIAL MAMMALS

- 3.5.29. A total of six records of west European hedgehog (*Erinaceus europaeus*) were located within the 1 km search area. Given the habitats present within the site including hedgerows and woodland, it is anticipated that hedgehog could be present within the site.
- 3.5.30. A total of three records of brown hare (*Lepus europaeus*) were recorded in Leeces Wood and Alston Reservoirs, approximately 1.8km southwest of the site. The site consists of unmanaged modified grassland and connects to grassland habitats which provides suitable habitats for brown hare.

WATER VOLE

- 3.5.31. There were no records of water vole (*Arvicola amphibius*) obtained from the 1km data search. The banks depth and height varied along the wet ditch with some earth banks suitable for burrow construction. However, there was limited vegetation along the brook which will provide limited foraging resources and cover along the bank. It is also anticipated that the water level will fluctuate, and it is anticipated to become dry within the summer, water voles will often avoid these habitats.
- 3.5.32. A wet ditch does run through the adjacent woodland habitat which connects to further habitat which could support water voles within the local area however, the site provides limited value. There was no evidence of water vole identified during the walkover (though it is noted the check was completed outside the optimum period (April-September).
- 3.5.33. As such water vole could be present within the local area however they are likely absent from the site.

OTTER

- 3.5.34. There were no records of otter (*Lutra lutra*) within 1km of the site boundary. There was no evidence of otter notes within the site or ditch during the survey. The ditch is anticipated to become dry in the summer months providing limited value for otters.
- 3.5.35. Otters and potential otter holts are deemed likely absent from the site.

NON-NATIVE INVASIVE SPECIES

- 3.5.36. Multiple records of non-native invasive flora species were located within the 1 km search area. Species includes Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*), Japanese Rose (*Rosa rugosa*), Rhododendron (*Rhododendron ponticum*), Yellow Archangel (*Lamium galeobdolon*), Indian Balsam (*Impatiens glandulifera*), and Butterfly-bush (*Buddleja davidii*).
- 3.5.37. There were non-native invasive species were observed during the survey. However, March is a sub-optimal period for identified and it is possible that specimens have been missed.

SPECIES DISCOUNTED FROM ASSESSMENT

- 3.5.38. Hazel Dormouse (*Muscardinus avellanarius*) mainly occur in southern counties, especially in Devon, Somerset, Sussex, and Kent. There were no records of hazel dormouse obtained within the data search, the site is of limited value for the species with only a small patch of woodland located in the southwestern aspect of the site. As such, the species are reasonably discounted from the site.
- 3.5.39. Red squirrel (*Sciurus vulgaris*) has been discounted from the assessment. There were no records of red squirrel within 1km of the site boundary. It is anticipated that grey squirrel will be present within the local area. This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

4 MITIGATION RECOMMENDATIONS

4.1. DESIGNATED SITES

- 4.1.1. The site is located within the impact risk zone of Red Scar and Tun Brook Woods Site of Special Scientific Interest which is located approximately 4.4km southwest from the site boundary and Bowland Fells SSSI located approximately 8km north from the site boundary. As the application consist of the inclusion of holiday homes, a consultation with Natural England is not required based on consultation with Magic.gov.uk. It is anticipated that that the designated sites are a sufficient distance away and are separated by anthropogenic barriers such as the residential areas, such that no impacts as a result of development are anticipated.
- 4.1.2. There were numerous Biological Heritage Sites were located within 5km of the site boundary. Spade Mill Reservoirs located 0.8km North of the site boundary. This site is designated for supporting wading bird and notable bird populations. This includes little ringed plover and oystercatcher which are known to breed within the site. The site does not provide habitats that could be utilised by these nesting species as they typically nest on undisturbed bare ground/ rubble habitats. The site consists of unmanaged grassland with surrounding trees that could provide perches for birds of prey. There are no waterbodies within the site to support wading populations. Overall, the site is not anticipated to impact notable species that are recorded within the BHS.
- 4.1.3. It is understood that the proposed development includes in the introduction of holiday cottages within the site. Information packs should be kept within each cottage stating the importance of the designated sites, current threats and measures to protect it.

4.2. HABITATS

LINE OF TREES AND HEDGEROWS

- 4.1.4. It is understood from the proposals that the boundary line of trees and native hedgerows are to be retained during the proposed development. Generally, the protection measures of retained trees will be through used of temporary protective demarcation fencing to protect the trees and shrubs. The fencing must extend outside the canopy of the retained trees and must remain in position until all plots have been developed to ensure protection is provided throughout the construction phase.
- 4.1.5. The fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.
- 4.1.6. A wet ditch is located within the southwestern woodland which connects to a woodland adjacent to the southern aspect of the site. The site is adjacent to grassland fields and greater habitats which are anticipated to support local flora and fauna populations. Therefore, it is recommended that a detailed Construction and Environment Management Plan (CEMP) specific to the proposed development is created (and adhered to throughout the course of construction works) to avoid, minimise and mitigate for negative impacts resulting from construction practices on all habitats surrounding the site. It is also recommended that a minimum of 5m buffer is maintained from the woodland and associated wet ditch.
- 4.1.7. This plan will detail measures to avoid, minimise or mitigate any potential negative effects caused by construction practices on the environment on and surrounding the site including:
- The control of run-off from areas of arisings to prevent any pollutants/contaminants entering nearby waterbodies.
 - Appropriate measures to suppress dust during hot, dry and/or windy conditions.
 - Excavations should be sealed overnight or should have at least one shallow-sloping side to allow any animals that may fall in to escape.
 - An ecologist should be contacted for advice should any protected species be discovered during construction.

4.3. SPECIES

AMPHIBIANS

- 4.1.8. Due to the potential presence of great crested newts within the offsite ponds, there is a risk the proposed

development would cause a risk of injury/death to individual great crested newts (if present).

- 4.1.9. Further surveys of the offsite ponds to determine the presence/ absence of great crested newts throughout Environmental DNA testing as detailed in Section 5 is required. Please note, Environmental DNA surveys area seasonally constrained and can only be undertaken between 15th April – 30th June.
- 4.1.10. The further survey results would determine if any further mitigation for great crested newt is required in the form of a European Protected Species Licence from Natural England and/or inform a District Level Licence to amend the cost of the compensation if ponds are found to not support the species. A District Level Licence can also be applied for without additional data.
- 4.1.11. Common amphibians may be present onsite, within the adjacent boundary habitats. If any common amphibians are identified during works, they should be moved by hand to a place of safety away from construction activities.

REPTILES

- 4.1.12. The proposed development is within the modified grassland, the habitats of highest value consist of the boundary features which includes the woodland, and the line of trees are to be retained. Therefore, it is deemed suitable for Reasonable Avoidance Measures (RAMs) to be adopted.
- 4.1.13. It is recommended that Reasonable Avoidance Measures (RAMs) are followed to minimise the likelihood of killing, injuring or disturbing any reptiles present on the site during the construction phase:
- An experienced Ecological Clerk of Works (ECoW) shall be appointed to ensure RAM's are enforced;
 - A walkover of the area should be undertaken by the ECoW to determine any change in status of the habitats on site prior to the initiation of any works;
 - A toolbox talk by the appointed ECoW will be given to the site manager and all contractors working on site with respect to the surrounding habitats and potential for protected/notable species. A copy of species factsheets relating to reptiles will be provided for display within the site office.
 - Suitable vegetation is to be strimmed under ECoW to approximately 15cm in a northern to southern direction. It is to be checked by the ECoW following strimming to identify individuals. If discovered, they will be removed from the working area and covered. Once the areas are deemed reptile free, they are to be strimmed to ground level and maintained at this length for the remaining works.
 - Any excavations will be back-filled on the same day as excavation, or checked by the ECoW immediately prior to backfilling. If not possible, a ramp, will be provided in all excavations that cannot be backfilled on the same day or alternatively, all excavations should be well-covered with plywood;
 - No piles of loose construction materials are to be created during works – all material will be kept on hardstanding, stored on pallets, removed immediately from the site or checked by an ECoW prior to being removed;
 - In the event reptiles are discovered, works will halt immediately and the ECoW will be contacted for advice. Contractors are not to handle reptiles unless informed to do so by the ECoW.
- 4.1.14. The precautionary destructive search work will be undertaken during the summer at a time of year when reptiles are active. The ecologist will be present during the strimming works. Any reptiles found during the destructive search will be relocated to the retained grassland to the south of the site.

BREEDING BIRDS

- 4.1.15. Nesting birds are anticipated to be present within the woodland, line of trees and hedgerows. It is understood from the proposals that these habitats are to be retained. As the grassland was found to be unmanaged, there is a possibility that ground nesting birds could be present.
- 4.1.16. Although there is a possibility that ground nesting birds could be present on site, the loss is not considered to be significant due to the small scheme of the site. The habitats within the surrounding areas of the site are anticipated to be of greater importance for local populations.
- 4.1.17. Any vegetation management should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to removal. If nesting activity is observed, the nest(s) should be left in situ until the young have fledged. A suitable buffer will be maintained and determined by the ecologist.

BATS

4.1.18. It is anticipated that the wet ditch and woodland will attract foraging bats into the site boundary as they will attract invertebrate prey. The habitat management should aim to minimise use of insecticides and increase the invertebrate population which in turn will benefit bats. The habitats of highest value include the woodland and line of trees that are to be retained, recommended safeguarding measures should be followed to protect these habitat features. Grassland should be retained where feasible and enhanced to benefit local bat populations.

4.1.19. Slow-flying species such as brown long-eared, which are known to be in the local area, are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.

4.1.20. Any proposed lighting/existing lighting should follow the guidance outlined in the Institute for Lighting Engineers document "Guidance for the Reduction of Obtrusive Lighting" (2005) and BCT's "Bats and Artificial Lighting at Night" (2023).

4.1.21. An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill from unintended areas.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating habitats of value.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
- Column heights of lighting can be considered to minimise light spill.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

TERRESTRIAL MAMMALS

4.1.25. European Hedgehog are anticipated to be present within the site and are a Species of Principal Importance. During habitat management, any areas of dense vegetation should first be carefully hand searched to check for the species. If identified during management, should be relocated carefully by hand to a location away from the working area. If any injured either species are located they should be taken to a local vets.

5 FURTHER SURVEYS AND CONCLUSION

5.1. GREAT CRESTED NEWT SURVEY

5.1.1. A total of nine ponds are located within 250m of the site, based on aerial Ponds 1 – 7 could provide suitable aquatic habitats for breeding great crested newts. It is recommended that eDNA is taken of pond 1 – 7 as they connect directly to the site and providing access into the site boundary. The results will either confirm presence or absence and inform mitigation.

[REDACTED]

[REDACTED]

[REDACTED]

5.3. CONCLUSION

5.2.1. The site was found to predominantly comprise of a modified grassland field with boundary hedgerows, and lines of trees with a woodland and wet ditch. The habitats present onsite and within the surrounding habitats are anticipated to support local flora and fauna populations. The site was found to have potential value for birds, bats, amphibians, reptiles and terrestrial mammals.




5.2.2. Specific enhancement recommendations for the site include the following:

- Bat and bird boxes could be placed on the new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.
- The site was identified as suitable to support hedgehog. The proposed development should include 'hedgehog highways' to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls.

6 BIBLIOGRAPHY

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| Description | Photographs |
|-----------------------|--|
| Modified Grassland |  |
| Wet Ditch |  |
| Species rich hedgerow |  |

| [REDACTED] | [REDACTED] |
|------------|------------|
| [REDACTED] | [REDACTED] |



Tan Yard Farm - UkHab
Date: 26.06.2024

-  Other Developed Land
-  Other Broadleaved Woodland with Ditch
-  Wet Ditch
-  Species-rich Native Hedgerow
-  Line of Trees
-  Modified Grassland
-  Red line Boundary

Scale: 1:2000

Drawn By: CW

Checked By: KB

Approved By: KB



Client: Pegasus Group

Site: Tan Yard Farm, Ribchester

Project Number: 20-1690 | Rev: 1.0

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