

# Preliminary Ecological Appraisal

## Land at Cow Ark

Clitheroe

August 2024

Prepared for: Ribble Rivers Trust Limited

Report prepared by: Verity Webster BSc (Hons) MSc CEcol CMIEM



## EXECUTIVE SUMMARY

- On 20<sup>th</sup> August 2024 a Preliminary Ecological Appraisal was undertaken on land at Cow Ark, Clitheroe. The site supports modified grassland with tall herb vegetation, bounded by trees lines and hedgerow and boarding woodland. Cow Ark Brook runs close to the northwest boundary through woodland.
- The proposals on the land at Cow Ark are considered likely to improve biodiversity and the functionality of the site for wildlife including invertebrates, birds and mammals. Precautionary mitigation is proposed in relation to Cow Ark Brook and woodland and protected species.

### *Protection of habitat*

- Reasonable Avoidance Measures are recommended in relation to Cow Ark Brook, which discharges indirectly into Cow Ark and Adjoining Grasslands Biological Heritage Site.

### *Avoidance mitigation for protected species*

- Reasonable avoidance measures are recommended to take into consideration the potential presence in the locality of badger, nesting birds, common toad, common reptiles and hedgehog.

### *Enhancement*

- The proposals to create wetland, woodland and hedgerows will significantly enhance the site for wildlife and will ensure over 10% net gain in biodiversity.

*Verity Webster*

Ecology and Protected Species Consultancy



# 1 Introduction

## 1.1 Application Site

- 1.1.1. This report details a Preliminary Ecological Appraisal of land at Cow Ark, Clitheroe, BB7 3DF. Ordnance Survey grid reference (centre of site): SD67274519.
- 1.1.2. Ribble Rivers Trust Ltd commissioned Verity Webster Ltd to undertake a Preliminary Ecological Appraisal to inform the planning application.

## 1.2 Objectives

- 1.2.1 The objectives of the Preliminary Ecological Appraisal are to determine:
  - The potential for protected species and/or habitats of importance within and surrounding the site.
  - The presence of any designated sites within the surrounding area, or if the site is designated.
  - How the proposed works might impact protected species and/or habitats of importance.
  - How the proposed works might impact designated sites within the surrounding area.
  - How any impacts might be avoided, mitigated and/or ameliorated, including recommendations for further survey work if required.
  - Potential for enhancement of the site for protected species, habitats of conservation interest and overall biodiversity.

## 1.3 Proposals

- 1.3.1 The proposals comprise construction of waterbodies, wetland, woodland and hedgerow to improve the functionality of Cow Ark Brook.

## 1.4 Ecologist

- 1.4.1 The Ecological Assessment was undertaken by Verity Webster. Verity is a Chartered Ecologist and a full member of the Chartered Institute of Ecology and Environmental Management.
- 1.4.2 Verity has worked as an ecological consultant for over 15 years. She has undertaken Ecological Assessments and protected species surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes and method statements when necessary.



## 2 Site Location and Description

### 2.1 Site Location

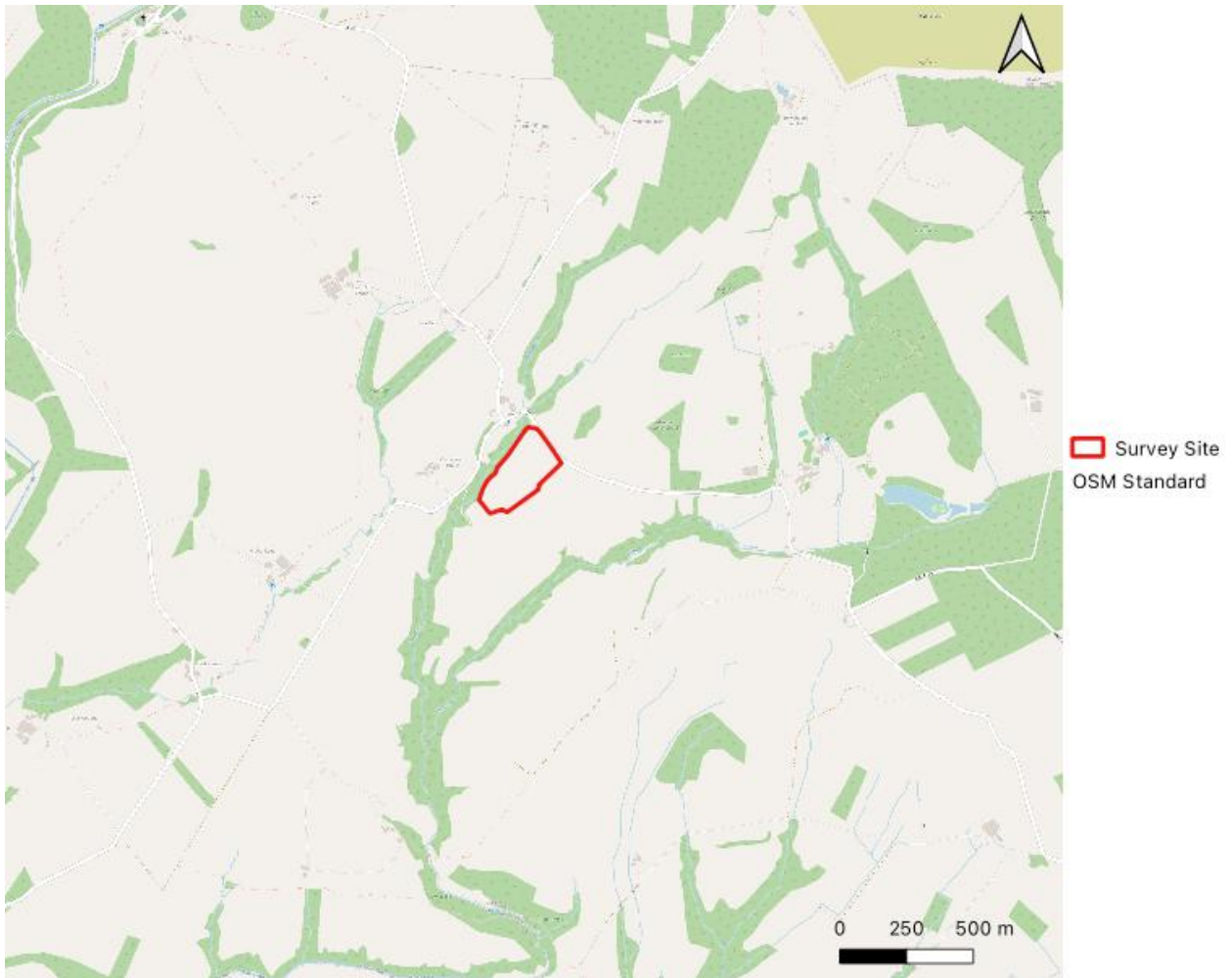
- 2.1.1 The survey site is located in rural Cow Ark, approximately 2km southeast of Whitewell and 3km northwest of Bashall Eaves, Clitheroe.
- 2.1.2 The site is surrounded by farmland, a mixture of pasture and arable land divided by a matrix of tree lines hedgerow and plots of woodland.
- 2.1.3 Linear strips of woodland follow the waterways that thread through the landscape. Cow Ark Brook Runs northwest to southwest approximately 20m from the northeast boundary of the site, whilst mill brook Runs east to southwest approximately 325m to the south.
- 2.1.4 The site is in an area with high suitability for protected species in the locality. See Figures 1 and 2.

### 2.2 Site Description

- 2.2.1 The survey site encompasses a roughly rectangular area of land. A lane runs long the northeast boundary. There are mature trees and a short section of mixed native hedgerow that boarder the lane. Cow Ark Brook Wood and Adjoining Grasslands BHS runs along the northwest boundary. A steep slope runs from approximately 5m into this woodland down to Cow Ark Brook which lies approximately 20m from the survey site boundary. Woodland also extends along the southwest boundary. The southern section of the southeast boundary is continuous with grassland to the southeast. The northern section of the southeast boundary is bounded by mature trees that run along a dry ditch. There is also a line of trees and shrubs, following a partial ditch, dividing the northern section of the site from the southern section of the site.
- 2.2.2 The open fields comprise modified grassland with patches of tall forb vegetation and some areas of the grassland that are dominated by rush.
- 2.2.3 See UK Habitat Classification Plan, Figure 3. A detailed description of the habitats is provided in section 6.1.



**Figure 1: Ordnance survey map showing the location of the proposed development site.**





**Figure 2: Aerial image showing the proposed development site and immediate surroundings**





## 3 Legislation

Relevant legislation is listed here. For full details, refer to Appendix A.

### 3.1 Bats

3.1.1 All UK bats receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs).

3.1.2 This makes it an offence to:

- Capture, injure or kill any bat,
- Disturb a bat of any species,
- Damage or destroy a breeding site or resting place of a bat (ie. The roost)
- Possess any bat, or part of a bat
- Offer for sale or trade any bat, or part of a bat

### 3.2 Badger

3.2.1 Under the Badger Act 1992, it is an offence to:

- Take, injure or kill a badger, or attempt to do so
- Cruelly ill-treat a badger
- Interfere with a badger sett including:
  - Damaging a badger sett or any part of it
  - Destroying a sett
  - Obstructing access to, or entry to a sett
  - Causing a dog to enter a sett; or
  - Disturbing a badger whilst it is occupying a sett.

### 3.3 Reptiles

3.3.1 Smooth snake and sand lizard receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs).

3.3.2 This makes it an offence to:

- Capture, injure or kill one of these species,
- Disturb these species,
- Damage or destroy a breeding site or resting place of these species.
- Possess one of these species, or part of one
- Offer for sale or trade one of these species, or part of one

3.3.3 Common lizard, adder, grass snake and slow-worm are partially protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Kill or injure one of these species.
- Offer for sale or trade one of these species, or part of these animals.

### 3.4 Amphibians

3.4.1 Great crested newts receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regs).

3.4.2 This makes it an offence to:

- Capture, injure or kill one of these species,
- Disturb these species,
- Damage or destroy a breeding site or resting place of these species.



- Possess a great crested newt, or part of this animal
- Offer for sale or trade a great crested newt, or part of this animal.

3.4.3 Common lizard, adder, grass snake and slow-worm are partially protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Kill or injure one of these species.
- Offer for sale or trade one of these species, or part of these animals.

3.4.4 Common toad, common frog, palmate newt and smooth newt are protected from sale or trade only.

#### Schedule 1 Birds

3.4.5 In addition to the above, special penalties are available for offences related to birds listed on Schedule 1. Barn owl is included on this schedule.

3.4.6 It is an offence to disturb any Schedule 1 bird at the nest, or to disturb their dependent young.

### 3.5 Section 41 Habitats and Species of Principal Importance

3.5.1 Section 41 Habitats and Species of Principal Importance (NERC Act 2006) are a material consideration for planners. The list is derived from the UK Biodiversity Action Plan list and supports species and habitats of conservation concern.

3.5.2 Species relevant to this report include hedgehog and common toad.

### 3.6 Designated Sites

3.6.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

3.6.2 Statutory sites can be designated under UK legislation (the Wildlife and Countryside Act 1981), European Law (the Habitats Regulations 2017) or International law (Ramsar Convention).

3.6.3 Non-statutory sites can be designated by the Local Planning Authority, and different counties have different ways of designating local wildlife sites. Examples are Local Wildlife Sites and Biological Heritage Sites.

### 3.7 Planning Policy and Legislation

#### Biodiversity Net Gain

3.7.1 In England, biodiversity net gain is required under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This is referred to as biodiversity net gain in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.

3.7.2 Under the statutory framework for biodiversity net gain, every grant of planning permission is deemed to have been granted subject to a general biodiversity gain condition to secure the biodiversity gain objective. This objective is to deliver at least a 10% increase in relation to the pre-development biodiversity value of the development granted permission. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits (Gov.Uk Biodiversity Net Gain, 2023).



### The NERC Act, 2006

3.7.3 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

3.7.4 The National Planning Policy Framework (NPPF, 2021) encourages Local Planning Authorities to conserve and enhance biodiversity. This was updated in December 2023.

Chapter 15, Para 180 of NPPF states: *"The planning system should contribute to and enhance the natural and local environment by:*

- a) ***protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils...***
- d) ***minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"***.

Para 181 states: *"Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Para 185 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- a) ***"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and***
- b) ***Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."***

Para 186 states that *"when determining planning applications, local authorities should apply the following principles:*

- a) ***if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"***

3.7.5 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.



## 4 Survey Methodology

### 4.1 Desk Study

4.1.1 The following data sources used to establish background information about protected species and their likely presence in the locality:

- Magic Map, Natural England (2018)
- Bing Maps (2019)
- Lancashire Environment Record Network (LERN) (2024)

4.1.2 Online mapping facilities, including MAGIC (Defra 2015), Google earth (for aerial mapping) and Ordnance Survey maps for the area were consulted to assess the site in relation to the surrounding landscape and any statutory and non-statutory designated sites.

4.1.3 Records data from LERN includes records of protected species and habitats of conservation interest within 2km of the survey site.

### 4.2 Site Survey

4.2.1 The survey site, was walked in daylight on 20<sup>th</sup> August 2024, and during the visits the habitat was assessed for potential for protected species. The surveyor searched for signs of the presence of protected species where appropriate, including pathways, burrows / nests / resting places, scratch markings, footprints and droppings etc. The presence of all animals and birds, if seen or heard, was recorded.

4.2.2 Habitats on site were assessed and described in accordance with UK Habitat Classification (UK Hab Ltd, 2023) and a list of conspicuous species recorded.

4.2.3 Consideration is also given to the surrounding landscape with respect to protected species including badger, bats, birds, amphibians and reptiles.

#### Ground Level Tree Assessment (bats)

4.0.1 As part of the daytime walkover a ground level assessment of the trees to record Potential Roost Features (PRFs) was undertaken if the trees have been identified as likely to be impacted by the proposals. This work was undertaken following the latest good practice guidance (Collins, 2023).

4.0.2 Potential Roost Features (PRFs) include features created as a result of disease and decay, damage or association:

Damage PRFs:

- Branch scars and rips
- Lightening strikes
- Subsidence
- Cracks
- Shearing cracks
- Horizontal cracks and splits such as hazard beams
- Welds



- Desiccation
- Fissures
- Frost cracks
- Flaking or partially-detached bark

#### Disease and Decay PRFs

- Rot holes, including butt-rot
- Woodpecker holes
- Cankers with cavities
- Knot holes
- Squirrel holes
- Wounds
- Compression forks

#### Association PRFs

- Holes between double-leaders
- Fluting
- Dense ivy

#### Other:

- Bird, bat or dormouse boxes.

#### Suitability of trees for bats

4.0.3 Trees were assessed as having suitability for bats as follows:

- **None:** Lack any Potential Roost Features (PRFs) in tree or highly unlikely to be any. Precautionary methods of work may be required prior to felling / tree works.
- **FAR (Further Assessment Required):** Further assessment required to establish if PRFs are present in the tree.
- **PRF (Potential Roost Feature):** A tree with at least one PRF present.

#### Initial categorisation of Potential Roost Features

4.0.4 Potential Roost Features may be categorised as follows, although, on the basis of a ground level tree assessment, this may be an estimate only:

- **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.



### Potential Roost Feature Survey

- 4.0.5 If considered subject to direct or indirect impact by the proposals, PRFs present, further survey work may be necessary to inspect the PRFs with the use of an endoscope (Ridgid SeeSnake Inspection Camera CA-150). The inspection would assess the following factors:
- Presence of bats
  - Presence of droppings or odour
  - The dust / debris present
  - Whether the interior is smooth or rough, damp, wet etc.
  - Presence of association species (woodlice and dusky slug)
- 4.0.6 As a result of the inspection, the PRFs are categorised as to whether or not the features were likely to be, or are confirmed bat roosts or not.
- 4.0.7 Further survey is recommended depending upon the findings.

### Categorisation of Potential Roost Features

- 4.0.8 Potential Roost Features were assessed as follows:
- **Unsuitable** – feature is not suitable for roosting bats.
  - **Unlikely to be a roost** – features does not provide factors often favoured by bats. Very unlikely to be a roost. Precautionary method of work during felling may be required
  - **Possible roost** – Conditions of the PRF suggest that it may be suitable, but there are no signs to confirm this. Further survey work may be required to determine whether the site is a roost. Precautionary method of work during felling will be necessary, including a pre-check of any features for bats and signs of bats
  - **Confirmed roost** – Condition of the PRF or signs present confirm or strongly suggest the feature is a roost. Further survey work will be necessary. It would be a requirement to obtain an European Protected Species Mitigation (EPSM) licence from Natural England prior to works being undertaken. Appropriate mitigation will be necessary.

### 4.3 Survey Limitations

- 4.3.1 The survey work was undertaken in August 2024. At this time of year bats are active and are likely to be accommodating summer roost sites. Species such as reptiles and amphibians are also active at time of the year, although an assessment of the likelihood of presence is based upon the habitat present and not sightings of animals.
- 4.3.2 The majority of higher plants are visible in August, but some species are more conspicuous or only present at some times of the year, and some species may have been missed. The species list constructed is not comprehensive.



## 5 Findings: Surrounding Designated Sites

- 5.0.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.
- 5.0.2 The protection over European designated sites (or Natura 2000) sites and Ramsar sites require any potential direct and indirect impacts are assessed within at least a 5km radius of the survey site.
- 5.0.3 The protection over UK statutory sites (Sites of Special Scientific Interest and Local Nature Reserves) requires that any potential direct and indirect impacts from a development are assessed within at least a 2km radius of the survey site.
- 5.0.4 Any potential direct or indirect impacts upon non-statutory sites are assessed within 1km of the survey site.

### Statutory Sites

- 5.0.5 The protection over UK statutory sites (Sites of Special Scientific Interest) requires that any potential direct and indirect impacts from a development are assessed within at least a 2km radius of the survey site, whilst the protection over European designated sites (or Natura 2000) sites and Ramsar sites require any potential direct and indirect impacts are assessed within at least a 5km radius of the survey site.
- 5.0.6 There are no EU designated sites within 5km. There are no UK Statutory Site within 2km:

### Non-statutory sites

- 5.0.7 There are three Biological Heritage Sites (BHS) within 1km of the survey site:
- Cow Ark Brook Wood and Adjoining Grasslands, located adjacent to the west of the survey site. The site is an ancient semi-natural woodland and is designated for the woodland present and ancient woodland indicator plants.
  - Hagg Clough Wood, located approximately 115m to the north of the survey site. This site is ancient semi-natural woodland and is designated for the woodland present and ancient woodland indicator plants.
  - Mill Brook Wood, located approximately 285m to the southeast. This site is ancient semi-natural woodland and designated for for the woodland present and ancient woodland indicator plants.

### Assessment

- 5.0.8 The survey site is sufficiently distanced from the Mill Brook Wood and Hagg Clough Wood that any direct impacts are negligible. However, it lies adjacent to Cow Ark Brook Woodland.
- 5.0.9 The proposals to create wetland will not impact the woodland directly, and the habitat within the work area (modified grassland) is not expected within the woodland, so there is not likely to be a functional link for the flora. Indeed, the proposals may diversify the floristic interest of the



woodland edge and grassland.

- 5.0.10 However, there is a risk of pollutant run off and indirect impacts upon Cow Ark Brook, which must be taken into consideration during works.

---

#### **Statutory Site Designations**

**Site of Special Scientific Interest (SSSI)** A Site of Special Scientific Interest (SSSI) is the land notified as an SSSI under the Wildlife and Countryside Act (1981), as amended. SSSI are designated for wildlife and natural features (including geological features) in England. They support characteristic, rare and endangered species, habitats and natural features.

#### **Non-statutory Site Designations**

**Biological Heritage Sites (BHS)** Biological Heritage Sites in Lancashire are identified within the county using a set of published guidelines. Their selection is based on the most important, distinctive and threatened species and habitats within a national, regional and local context. Local Wildlife Sites are locally valuable areas and are often corridors for wildlife forming key components of ecological networks. They are non-statutory designations, but are a material consideration within the planning process.



## 6 Findings: Habitat Survey

### 6.1 Habitat Assessment

#### Data Search

- 6.1.2 The data from LERN includes numerous records of plant species recorded within 2km. The data recorded within the last 20 years has been used for this analysis. Fifteen species have been recorded within 2km of the survey site and two species have been recorded within 1km of the survey site; bluebell (*Hyacinthoides non-scripta*) and green-leaved hawkweed (*Hieracium acuminatum*). Bluebell is listed on Schedule 8 of the Wildlife and Countryside Act. It is a species of woodland and sheltered hedgerows and has been recorded in Cow Ark Wood adjacent to the site. Green-leaved hawkweed is Nationally Scarce and is associated with grasslands and wetlands. This species was not recorded within the survey site and the modified grassland present is unlikely to be favourable.
- 6.1.3 Of the other species recorded, six are Species of Principal Importance, recorded on Section 41 of the NERC Ac, 2006. These comprise wild daffodil (*Narcissus pseudonarcissus*), small-leaved lime (*Tilia cordata*), grass-of-Parnassus (*Parnassia palustris*), toothwort (*Lathraea squamaria*), tutsan (*Hypericum androsaemum*) and small-fruited yellow-sedge (*Carex viridula* subsp. *viridula*).
- 6.1.4 The daffodil *Narcissus pseudonarcissus* grows naturally in woodland and old calcareous grasslands and is an ancient woodland indicator. Toothwort is a species parasitic to the roots of hazel and sycamore. Tutsan is a woodland species also. These species may be found in the adjacent Cow Ark Woods.
- 6.1.5 Grass of Parnassus is associated with marshland habitats, whilst small-fruited yellow-sedge is associated with bogs and wet grasslands. These species are not expected on the site. Small-leaved lime is not present on site.

#### Survey Site

- 6.1.6 The survey site supports, hard standing, ruderal vegetation and modified grassland with boundary hedgerows and trees.
- 6.1.7 The UK Hab classifications are as follows:
- Modified grassland g4, scattered rushes (14)
  - Modified grassland g4, rushes dominant (15)
  - Tall forb vegetation: Modified grassland g4 with secondary code 16 (tall forb).
  - Native hedgerow h21
  - Broadleaved tree line w1, ecological valuable line of trees (34)
- 6.1.8 Refer to the UK Habitat Classification Plan (Figure 3) below.



### Modified grassland

6.1.9 The grassland (TN1) is dominated by Yorkshire fog (*Holcus lanatus*) and rye grass (*Lolium perenne*), which vary in dominance across the site. Tor grass (*Brachypodium pinnatum*) is also abundant to the southwest. Herbs were rare and comprise broad-leaved dock (*Rumex obtusifolius*), creeping buttercup (*Ranunculus repens*), silverweed (*Potentilla anserina*) and very occasional spear thistle (*Cirsium vulgare*). There are occasional stands of soft rush (*Juncus effusus*) indicating wetter ground. These stands of rush are particularly dense in patches along the northwest boundary (TN2) where there are depressions in the ground indicating water run-off or a higher water table. Toad rush (*Juncus bufonis*) is also present here in patches. Soft rush is also more dominant around the boundaries of the field, and along the ditch that spans across the centre of the site dividing the northern section from the southern section. The central ditch (TN3) supports dense soft rush, common nettle and greater bird's-foot trefoil (*Lotus pedunculatus*).



Modified grassland (TN1)

6.1.10 This stand meets the criteria under the UK Habitat Classification of Modified grassland as it supports under 9 species per m<sup>2</sup>, is dominated by palatable grasses including Yorkshire fog and rye grass, and because the grass cover is over 75%.



Modified grassland dominated by rushes (TN2)

### Tall forb vegetation

6.1.11 Tall forb vegetation (TN4) is present in patches where there is nutrient enrichment and around the site boundaries. This vegetation is still classified under g4, modified grassland. The forbs are composed of common nettle (*Urtica dioica*), soft rush and Dock.



Dense soft rush (TN3)

### Native hedgerow

6.1.12 The native hedgerow (TN5) spans approximately 63m along the northern length of the northeast boundary. This is composed of a mix of hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*), guelder rose (*Viburnum opulus*) and alder (*Alnus glutinosa*) with dog rose (*Rosa canina*) and bramble (*Rubus fruticosus* agg.).

### Tree Lines

6.1.13 The tree line along the northeast boundary adjacent to the road (TN6) is composed of mature ash (*Fraxinus excelsior*)



Tall forb (TN4)



and horse chestnut (*Aesculus hippocastanum*). The southeast boundary (TN7), adjacent to the ditch comprises a line of mature alder (*Alnus glutinosa*) with occasional hawthorn.

- 6.1.14 Trees across the centre of the site (TN8) comprise alder, oak (*Quercus petraea*), birch (*Betula pendula*) and hawthorn.
- 6.1.15 Along the southeast and southwest boundary (TN9 and TN12) the trees are mainly mature oak and this boundary is continuous with the woodland adjacent to the northwest of the site.

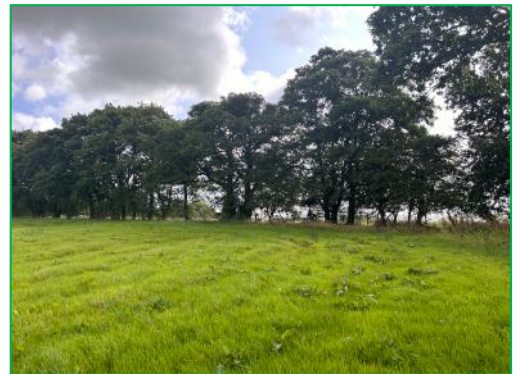


Tree line (TN8)

- 6.1.16 All the tree lines are considered ecologically valuable as connective habitat in the wider landscape, creating habitat corridors, but also because the mature trees provide ecological functionality for a range of wildlife alone.

#### Adjacent woodland

- 6.1.17 Cow Ark Brook Wood (TN10), adjacent to the northwest of the survey site is a Biological Heritage Site and also classified as Ancient Woodland.



Tree line (TN7)

- 6.1.18 The woodland is composed of standard oak with alder and sycamore and occasional birch. The understorey is holly (*Ilex aquifolium*), hazel (*Corylus avellana*) and hawthorn. To the northwest of the site (TN11) Scots pine (*Pinus sylvestris*) and leylandii (*Cupressus x leylandii*) are also present and much of the woodland understorey is composed of *Rhododendron* spp. with cherry laurel (*Prunus laurocerasus*). The presence of these non-native species suggests historic intervention with planting.

#### Non-native invasive plant species

- 6.1.19 No non-native invasive species including Himalayan balsam (*Impatiens grandiflora*), Japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*) were found on site during the survey.



Tree line (TN7)



Tree line (TN6)



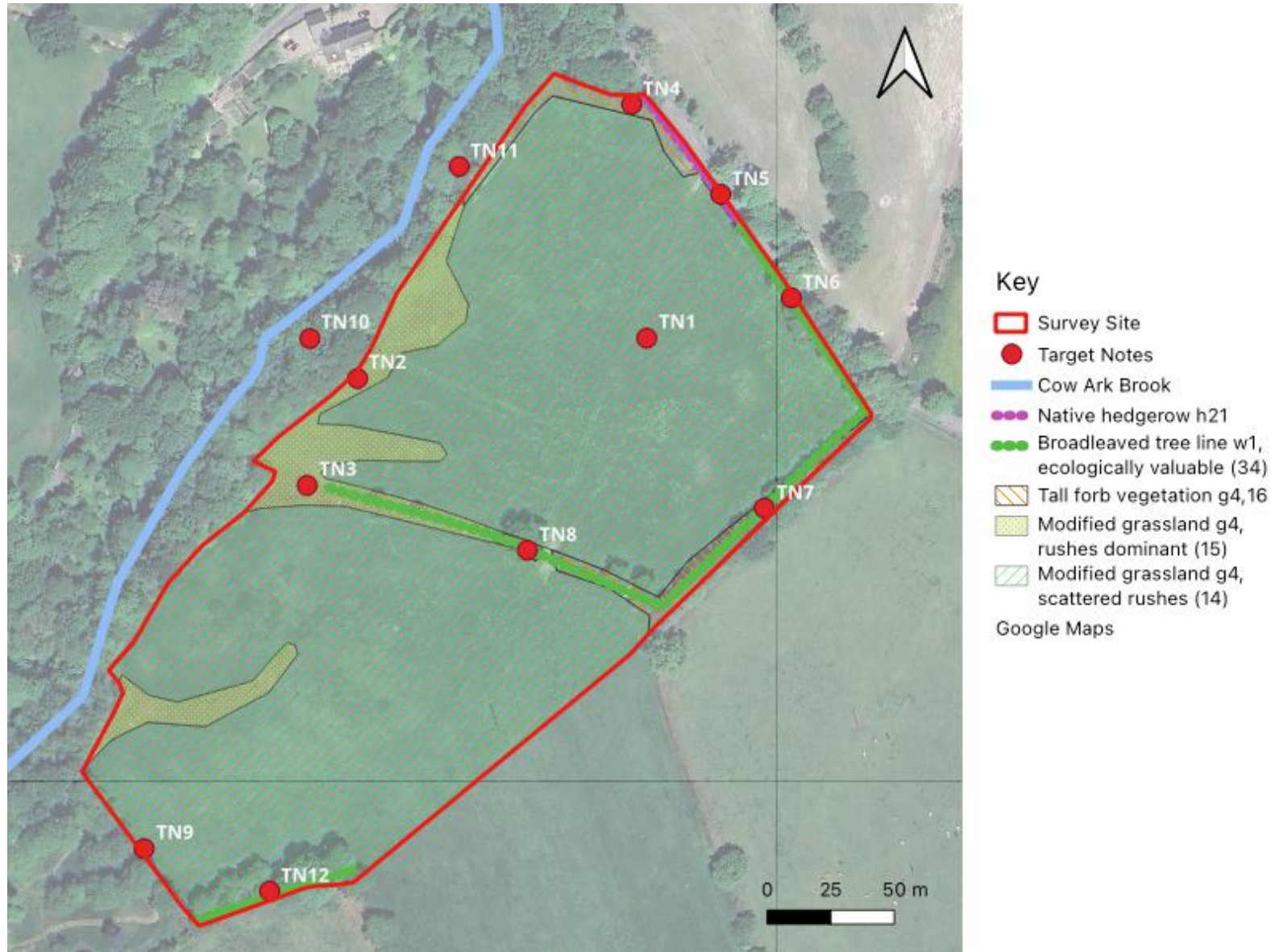
### Assessment

- 6.1.20 The habitats present within and adjacent to the site support a range of species. The adjacent Cow Ark Wood has potential to support some scarce plant species also.
- 6.1.21 However, the majority of the site is composed of species poor modified grassland. The loss of a portion of this habitat is not considered likely to be of significance to flora in the locality. Indeed, the creation of waterbodies will encourage wetter grasslands that may support, over time, a more diverse ground flora including rushes.
- 6.1.22 Creation of additional hedgerow and woodland plots will create additional habitat corridors and locally valuable foraging and nesting habitat for wildlife.
- 6.1.23 **Overall thee proposals provide the opportunity to improve the ecological functionality of the site for wildlife and are likely to have a positive impact upon biodiversity in the locality.**



*Native hedgerow (TN5)*

Figure 3: The Survey Site – UK Habitat Classification Plan



## Target Notes

**TN1** – Modified grassland dominated by rye grass with few herbs.

**TN2** – Modified grassland dominated by rushes, mainly soft rush.

**TN3** – Ditch dominated by rush, nettle and greater bird's-foot trefoil

**TN4** – Tall forb including dock and common nettle.

**TN5** – Native hedgerow with hawthorn, hazel, bramble and guelder rose.

**TN6** – Tree line with mature ash and horse chestnut.

**TN7** – Tree line of mature alder along a dry ditch.

**TN8** – Sparse tree line with oak, birch, alder and hawthorn.

**TN9** – Oak trees that are continuous with Cow Ark Wood.

**TN10** – Cow Ark Wood and Associated Grasslands Biological Heritage Site and Ancient Woodland.

**TN11** – Cow Ark Wood that has understorey of Rhododendron and laurel. Scots pine is also present.

**TN12** – Tree line comprised mainly of mature oak.



*Looking southwest across the site*

## 7 Findings: Protected Species

### Mammals

#### 7.1 Bats

##### Potential for Bats

- 7.1.1 At a landscape level, the area surrounding the survey site is very good for bats. Refer to Figure 2.
- 7.1.2 A mix of surrounding habitat types including grassland, woodland, tree lines and waterways will support a variety of bat species including widespread species such as common and soprano pipistrelle bat (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively). Species that favour open habitats such as Leisler's (*Nyctalus leisleri*) and noctule bat (*Nyctalus noctula*) would also be expected. Species that favour wooded habitat, such as brown long-eared bat (*Plecotus auritus*), Natterer's bat (*Myotis nattereri*), whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*) are also likely to be present as there are substantial areas of woodland in close proximity.

##### Data Search

- 7.1.3 Data from LERN include a small number of records of three bat species within 2km of the survey site:
- Pipistrelle spp. (*Pipistrellus* spp.)
  - Natterer's bat (*Myotis nattereri*)
  - Daubenton's bat (*Myotis daubentonii*)
  - Brandt's bat (*Myotis brandtii*)
  - Brown long-eared bat (*Plecotus auritus*)
- 7.1.4 There are records of 11 roosts within 2km of the survey site, but none within 1km.
- 7.1.5 The lack of records data for the locality is likely to be a reflection of the lack of survey effort rather than the absence of the species, however.



### *The Conservation Status of Bats in the Area*

7.1.6 The conservation status of bats in the area is shown in Table 1.

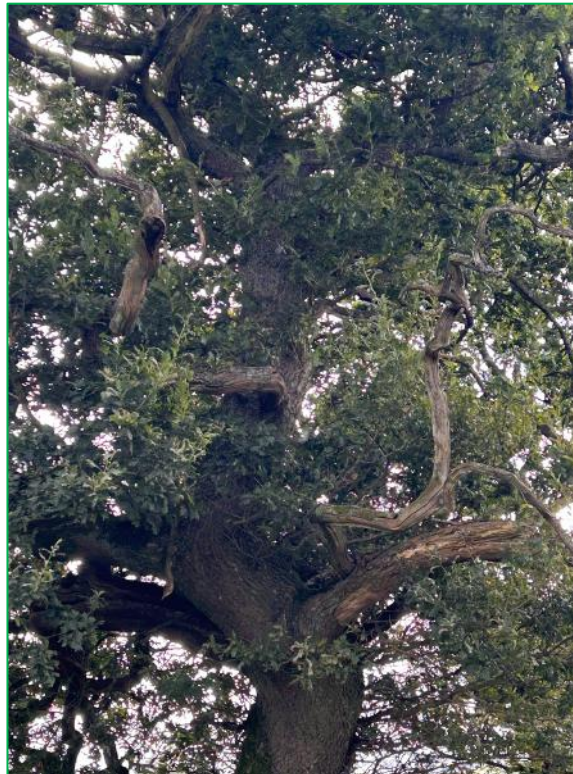
**Table 1:** *The Conservation Status of Bats in the area at a Local, County and Regional Level*

<b>Species</b>	<b>Local</b>	<b>County</b>	<b>Regional</b>
<i>Common pipistrelle</i>	<i>Likely to be common in the area. There are records of this species in the area (10km).</i>	<i>Common and widespread Frequently recorded.</i>	<i>Common and widespread Frequently recorded across the Northwest</i>
<i>Soprano pipistrelle</i>	<i>Likely to be present due to the presence of riparian habitat.</i>	<i>Widespread. Frequently recorded.</i>	<i>Common and widespread Frequently recorded across the Northwest</i>
<i>Nathusius's pipistrelle</i>	<i>Likely to be rare in the area.</i>	<i>Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.</i>	<i>Rare across the northwest. A migratory species.</i>
<i>Brown long-eared bat</i>	<i>Likely to be in the area. There is a recent record of this species within 10km of the site.</i>	<i>Common and widespread Frequently recorded.</i>	<i>Common and widespread Frequently recorded across the Northwest.</i>
<i>Natterer's bat</i>	<i>Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.</i>	<i>Frequently recorded</i>	<i>Widespread and scattered across the Northwest.</i>
<i>Noctule</i>	<i>Present</i>	<i>Widespread and frequently recorded.</i>	<i>Common and widespread. Frequently recorded in the Northwest.</i>
<i>Whiskered bat</i>	<i>Present but likely rare</i>	<i>Present</i>	<i>Widespread.</i>
<i>Brandt's bat</i>	<i>Rare / absent</i>	<i>Present</i>	<i>Widespread.</i>
<i>Alcathoe's bat</i>	<i>Unknown</i>	<i>Unknown</i>	<i>Widespread. Likely under-recorded.</i>
<i>Daubenton's</i>	<i>Presence is likely due to the riparian habitat present.</i>	<i>Widespread, frequently recorded near water.</i>	<i>Widespread</i>
<i>Serotine</i>	<i>Rare / absent</i>	<i>Unknown</i>	<i>Restricted to south and southwest Britain, rarely recorded in the northwest.</i>
<i>Leislars</i>	<i>Rare</i>	<i>Unknown</i>	<i>Rare, but widespread in Britain. Present in the northwest.</i>
<i>Barbastelle</i>	<i>Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.</i>	<i>Unknown</i>	<i>Present south of a line from North Wales to the Wash.</i>



### Ground Level Tree Assessment

- 7.1.7 **Several of the trees on site have potential for bats as they contain potential roost features such as split limbs and rot holes.**
- 7.1.8 None of the trees will be removed or directly impacted in any way by the proposals, however, and so the need for further survey work for bats is not recommended.
- Habitat for foraging and commuting bats.*
- 7.1.9 The tree lines, hedgerow and woodland edge habitat around the site has suitability for foraging bats such as pipistrelle species. The tree lines are also likely to act as habitat corridors, facilitating movement of bats through the landscape.
- 7.1.10 The adjacent Cow Ark Wood is likely to support a variety of woodland bat species such as brown long-eared bat and Natterer's bat. The tree lines will be of particular value to woodland species as they move through the wider landscape.
- 7.1.11 The modified grassland does provide some potential foraging habitat for bats, but this is not considered likely to be of high significance given the poor species richness and the matrix of habitat in the wider area.
- 7.1.12 **Indeed, the proposals to create waterbodies and additional hedgerow are considered likely to improve the habitat complexity and therefore value of the site for bats.**
- 7.1.13 **No negative impact upon bats or bat populations in the locality are anticipated.**



*Showing potential roost features in an oak at TN8*



## 7.2 Badger

### Data Search

- 7.2.1 Data from LERN include just three records of (*Meles meles*) within 2km of the survey site and no records within 2km.

### Survey and Assessment

- 7.2.2 The habitat within the survey site and within the wider area, comprising pasture, woodland, tree lines and hedgerows, has high suitability for badger, which are considered highly likely to be present in the wider locality.
- 7.2.3 The survey site has suitability for foraging badger, which could pass through the site from time to time. No evidence of badger (setts, tracks, latrines, snuffle holes) was found within the survey site, however, so badger are not likely to visit the area with any frequency.
- 7.2.4 **Any direct impact on badger is considered unlikely. Reasonable avoidance measures are proposed during work to avoid harm to individual animals in the event that they cross the site during works. No further survey work or mitigation for badger is recommended.**

## 7.3 Water Vole

### Data Search

- 7.3.1 Data from LERN does not include any records of water vole (*Arvicola terrestris*) within 2km of the survey site.

### Survey and Assessment

- 7.3.2 Cow Ark Brook has potential to support migrating water vole, although the stretch of brook within close proximity to the survey site has low suitability for this species. This is because it is wooded and shaded and water vole favour waterways with dense grassy banks.
- 7.3.3 The brook will not be directly impacted as a result of the proposals and given that the brook lies approximately 20m away from the works site, no further survey work is considered necessary.
- 7.3.4 **Precautionary mitigation during works to protect the brook will ensure no accidental negative impact to wildlife, including itinerant water vole.**

## 7.4 Otter

### Data Search

- 7.4.1 Data from LERN does not include any records of otter (*Lutra lutra*) within 2km of the survey site.

### Survey and Assessment

- 7.4.2 Cow Ark Brook, located approximately 20m from the site boundary, has some suitability for



otter. Otter do often travel widely from a main, source river, and may travel along the brook upon occasion. However, the waterbody is distanced from the area of proposed works and any direct or indirect impact upon this species is considered very unlikely.

- 7.4.3 **Nevertheless, precautionary mitigation to protect the brook is proposed, which will also ensure protection of otter.**

## 7.5 Brown hare

### Survey and Assessment

- 7.5.1 Data from LERN include several records of brown hare (*Lepus europaeus*) within 2km of the survey site and a single record within 1km.
- 7.5.2 Brown hare are a Species of Principal Importance under the NERC Act, 2006.
- 7.5.3 The habitat within the survey site and immediate surroundings has some suitability for this species, which are likely to be present in the area. However, the homogenous nature of the grassland within the survey site makes it unfavourable for this species, which requires some cover, such as scrub as well as open grassland.
- 7.5.4 The loss of a small proportion of modified grassland is unlikely to be of significance to this species, given that there is higher quality habitat within the wider countryside.
- 7.5.5 **The proposals are considered unlikely to be of significance to brown hare and no further survey work or mitigation is considered necessary.**

## 7.6 Hedgehog

### Data Search

- 7.6.1 Data from LERN include several records of hedgehog (*Erinaceus europaeus*) within 2km of the survey site and a single record within 1km.

### Survey and Assessment

- 7.6.2 Hedgehog are a Species of Principal Importance under the NERC Act, 2006 (also known as UK Biodiversity Action Plan species).
- 7.6.3 The survey site, supporting modified grassland with tall forb vegetation, connected to adjacent woodland, has high suitability for hedgehog, which are likely to be present in the area.
- 7.6.4 **The proposals are unlikely to have a significant negative impact upon populations of this species, but since this species is expected in the area, reasonable avoidance measure to ensure the protection of hedgehog during works are proposed.**



## 7.7 Reptiles

### Data Search

- 7.7.1 The data from LERN include a single record of one reptile species, slow worm (*Anguis fragilis*) within 1km of the site.

### Survey and Assessment

- 7.7.2 The records for reptiles in the northwest are generally low. Reptiles are of very low distribution and found at low density even in ideal habitats such as rough grassland with scrub.
- 7.7.3 The habitat present, comprising homogenous, maintained grassland with sparse tall herb vegetation has limited suitability for reptiles.
- 7.7.4 The site is considered unlikely to support a viable population of reptiles, although, due to the adjacent woodland and the proximity of the brook, the presence upon occasion of common reptiles including grass snake (*Natrix helvetica*) cannot be ruled out.
- 7.7.5 **Reasonable avoidance measures are proposed to reduce the risk of harm of individual animals to negligible.**

## 7.8 Amphibians

### Great crested newt

#### Data Search

- 7.8.1 The data from LERN does not include any records of amphibians within 2km of the survey site.

#### Survey and Assessment

- 7.8.2 Great crested newt, which have the highest protection of all amphibians under UK and EU law, favour still water bodies, such as ponds with good vegetation. They breed in ponds, but spend much of the year terrestrially, within habitat such as rough grassland and woodland, which provides good foraging and hibernacula. Great crested newts are known to travel, usually, within a 250m radius of breeding ponds, but can travel up to 500m.
- 7.8.3 According to the relevant Ordnance Survey and aerial maps there are no potentially suitable waterbodies within 500m of the site.
- 7.8.4 The waterways to the northwest and southeast will also provide partial barriers to the movement of great crested newts, which do not favour moving water.
- 7.8.5 The terrestrial habitat within the survey site, comprising modified grassland with tall herb vegetation and boundary woodland provides potential habitat for great crested newt, but given the absence of suitable waterbodies within or in close proximity to the survey site, this species is not expected in the locality.



- 7.8.6 **Overall, the proposals are considered unlikely to have any negative impact upon great crested newt. No further survey work or mitigation is recommended.**

### Common Toad

#### Data Search

- 7.8.7 Data from LERN do not include any records of common toad (*Bufo bufo*) within 2km of the survey site.

#### Survey and Assessment

- 7.8.8 Common toad are a Species of Principal Importance under the NERC Act, 2006 (also known as UK BAP species).
- 7.8.9 The modified grassland and tall herb vegetation on site provides potential habitat for foraging and sheltering common toad. Common toad are a mobile species and will regularly travel long distances to reach breeding ponds; they may travel across the site regularly.
- 7.8.10 **The proposals for the site are not expected to impact upon populations of this species, but precautionary measures are proposed during works to avoid unnecessary harm to individual animals.**

## 7.9 Nesting Birds

#### Data Search

- 7.9.1 Data from LERN includes records of 58 bird species within 2km of the survey site. 9 have been recorded in the last 10 years. Of these 9 species, none are listed on Schedule 1 of the Wildlife and Countryside Act, 1981. There is one species listed as a Section 41 Species of Principal Importance under the NERC Act, 2006; skylark (*Alaudia arvensis*). This ground nesting species is associated with long grassland and farmland.
- 7.9.2 The records data also include species listed on the Red list of Birds of Conservation Concern (BoCC) including pied flycatcher (*Ficedula hypoleuca*), curlew (*Numenius arquata*) and lapwing (*Vanellus vanellus*).

#### Survey and Assessment

- 7.9.3 The modified grassland is considered unlikely to provide potential nesting habitat for ground nesting birds, such as skylark (*Alauda arvensis*) as it is cut regularly, but there is potential to improve the habitat for nesting birds by managing it as meadow in some locations.
- 7.9.4 The trees and hedgerow around the boundaries of the site will provide habitat for a variety of passerine birds in the spring and summer months.



- 7.9.5 **The proposals are very unlikely to have a negative impact upon nesting birds, but avoidance mitigation will be necessary to prevent harm and unnecessary disturbance to nesting birds during works.**

---

**\*Birds of Conservation Concern (BoCC):** These lists indicate the population status of birds in the UK, Channel Islands and the Isle of Man.

- BoCC Red list: Includes species globally threatened, a historical population decline in the UK, a severe 9at least 50% decline in the UK breeding population over the last 25 years or long-term period. A severe (at least 50%) contraction of the UK breeding range over the last 25 years or the longer term.
- Amber list: Includes species with unfavourable conservation status in Europe, a historical population decline, moderate (25-50%) decline in the UK breeding population over the last 25 years, moderate (25-50%) contraction in UK breeding or non-breeding range, rare breeders (1-300 breeding pairs in UK), rare non breeders, localised rare breeders or non-breeders, internationally important breeders or non-breeders.

## 7.10 Invertebrates

### Data Search

- 7.10.1 Data from LERN includes records of numerous Lepidoptera (butterfly and moth) species, including 8 on Section 41 of the NERC Act, 2006 recorded within 2km of the site; dusky brocade moth (*Apamae remissa*), small square-spot moth (*Diarsia rubi*), small phoenix (*Ecliptopera silaceata*), autumnal rustic (*Eugnorisma glareosa*), shaded broad-bar (*Scotopleryx chaenopodiata*), neglected rustic (*Xestia castanea*), white ermine (*Spilosoma lubripeda*), buff ermine (*Spilosoma lutea*) and cinnabar (*Tyria jacobaeae*).
- 7.10.2 Dusky brocade, small square-spot, small phoenix, shaded broad-bar, white ermine and buff ermine moths are associated with a variety of habitats including dry pastures, marshes and woodland. Autumnal rustic moth is associated with woodland, moorland and sandy soils. Neglected rustic is associated with heathland, specifically heather (*Calluna vulgaris*) and heath (*Erica* spp.). Cinnabar moth is associated specifically with ragwort.

### Survey and Assessment

- 7.10.3 The habitat within the survey site, comprising short, modified grassland and tall forb vegetation is composed of common and widespread plant species. These will support common and widespread invertebrates.
- 7.10.4 The wooded and tree-lined boundaries are likely to support a greater variety of species, associated with the trees and shrubs.
- 7.10.5 **The loss of the grassland and tall forb vegetation as a result of the proposals is considered unlikely to be of significance to invertebrate populations in the locality, but the proposals to create waterbodies and additional hedgerows may enhance the site for invertebrates, providing additional microhabitat.**



7.10.6 **The proposals are not expected to be of significance to invertebrates either rare or of conservation interest and are likely to improve biodiversity for invertebrates. No further survey work or mitigation is recommended.**

### **7.11 Other protected species and habitats.**

7.11.1 Other protected species, including red squirrel (*Sciurus vulgaris*) and white-clawed crayfish (*Austropotamobius pallipes*) are not expected on or near the site as the site is either out of the species range, as it is for red squirrel, or the habitat is unfavourable.



## 8 Summary and Recommendations

- 8.0.1 The land at Cow Ark, Clitheroe comprises modified grassland, tall forb vegetation, with boundary tree lines and hedgerow.
- 8.0.2 The loss of modified grassland and tall forb vegetation to created wetland is not considered likely to be of significance to local flora or fauna. Indeed, the proposals are considered likely to significantly enhance the habitat present for flora and invertebrates.
- 8.0.3 Reasonable avoidance measures are proposed during works to avoid any potential indirect impact to Cow Ark Brook and to avoid negative impact upon badger, hedgehog, common toad, common reptiles, and nesting birds.

### 8.1 Cow Ark Brook

- 8.1.1 Measures must be put in place to prevent accidental pollution of the Cow Ark Brook during works:
- Heras fencing must be installed along the edge of the woodland to prevent accidental damaged of the banking and vegetation.
  - Machinery must not be left running on site without attendance.
  - Precautions to prevent accidental pollution including run off must be undertaken, including retention of plant nappies on site for spills.
  - Any works that might result in high levels of dust must be undertaken on damp days to minimise the risk of spread, otherwise materials dampened on site.

### 8.2 Reptiles, Hedgehog, Common Toad

- 8.2.1 In order to reduce the risk of harm to individual reptiles, common toad and hedgehog during works, the following Reasonable Avoidance Measures are recommended.
- Machinery or materials are stored areas of short, previously mown grassland.
  - Materials on site are stored on pallets to prevent reptiles and amphibians hiding in them.
  - Vegetation on site is cleared in stages, with care. Cutting grassland to a low level, leaving it for a couple of days in good weather, then clearing the topsoil will allow animals to leave of their own volition.
  - If any wildlife is found, for example common toad or hedgehog, they can be moved to a safe place away from the area of works where there is vegetative cover.



## 8.1 Badger

9.1.1 In order to reduce the risk of harm to badger that may move across the site upon occasion, the following Reasonable Avoidance Measures are recommended:

- Any deep holes or ditches created on site are covered overnight to prevent animals falling into them.
- If this is not possible and board, plank or similar must be placed in the hole to enable animals to climb out.

## 8.3 Nesting Birds

8.3.1 Birds may nest in trees and shrubs site in the spring and summer months. In order to prevent disturbance and/or harm to nesting birds, if vegetation works are necessary, it is recommended that:

- Initial works to construct the sports pitch are undertaken in the winter months (October – February).
- If this is not possible, a suitably qualified ecologist should check the trees and vegetation close to the works site to determine the presence / absence of nesting birds prior to the start of any works.
- If birds are found actively nesting close to the works area a buffer of (5m) must be left undisturbed around the tree/area of vegetation supporting the nest until the young have fledged.
- During the bird nest season (March – September) machinery should be stood at least 5m from the east wooded boundaries, to minimise disturbance of any associated nesting birds.

## 8.4 Enhancement for Biodiversity

8.1.1 The proposals for Cow Ark Wetlands provide significant biodiversity enhancement as showed in the Statutory Biodiversity Net Gain Metric.

8.1.2 The enhancement includes creation of ponds, wetland overflow, creation of broadleaved woodland and planting of native-species hedgerows.

8.1.3 It is recommended that species utilised to create hedgerows and broadleaved woodland complement the native community present and associated with Cow Ark Wood.

8.1.4 Native trees and shrubs could include oak (*Quercus petraea*), wych elm (*Ulmus glabra*), birch (*Betula pendula*), alder (*Alnus glutinosa*), hazel (*Corylus avellana*), rowan (*Sorbus aucuparia*), hawthorn (*Crataegus monogyna*) and holly (*Ilex aquifolium*).



## 9 References

- Bing Maps (Accessed 2024) <https://www.bing.com/maps/>
- Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023). UK Habitat Classification V2.0 – Advance publication of selected Habitat Definitions at <http://ukhab.org>
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management.
- Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6
- Eaton, M.A., Aebischer, N.J., Brown, A., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A., & Gregory, R.D. (2015). Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds*, 108: 708-746.
- Google maps (Accessed 2024) <https://www.google.co.uk/maps>
- MAGIC Map (Accessed 2024) <http://www.magic.gov.uk/MagicMap.aspx>. DEFRA.
- Natural England (Accessed 2000) Method Statement Template for Great Crested Newt Mitigation Licence. <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>
- NBN (2019) National Biodiversity Network.
- UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>)



## • APPENDIX A: Wildlife Legislation and Planning Policy

### 1.0 UK AND EU LEGISLATION

#### KEY LEGISLATION

In the UK, the following legislation relates to wildlife and habitats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Badger Act 1992
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations (2017)
- The Hedgerow Regulations (1997)

#### 1.1 WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

1.1.1 The Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)).

##### BIRDS

1.1.2 The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird.

##### Schedule 1 birds

1.1.3 Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young, for example Barn Owl and Red Kite.

##### Areas of Special Protection for Birds

1.1.4 The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds.

##### Other offences

1.1.5 The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

##### OTHER ANIMALS

1.1.6 The Act makes it an offence (subject to exceptions) to intentionally ([or recklessly] - only under the Nature Conservation (Scotland) Act 2004) kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.

1.1.7 For animals listed in Schedule 5 of the act, it is an offence under:

- Section 9(1) to kill, injure or take the animal by any method
- Section 9(2) to possess or control a dead or live animal (or part of derivative).
- Section 9(4)(a) to cause damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection.
- Section 9(4)(b) to disturb any animal on the schedule occupying such as structure or place.
- Section 9(4)(c) to obstruct access to any structure or place which any such animal uses for shelter or protection.
- Section 9(5)(a) to sell, offer or expose for sale, possess or transport for the purpose of sale, any live or dead wild animal, or part or derivative of an animal included in Schedule 5.



- Section 9(5)(b) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

**Species that receive FULL PROTECTION under the act:**

- All UK bats
- Otter
- Water vole
- Dormouse
- Red squirrel
- Wildcat
- Reptiles – Smooth snake and sand lizard
- Amphibians – Great crested newt, Natterjack toad, Pool frog
- Invertebrates – some including, but not restricted to Swallowtail butterfly, Marsh fritillary butterfly, Large copper butterfly, Heath fritillary butterfly, Large blue butterfly, Barberry carpet moth, Rainbow leaf beetle, Violet click beetle, Medicinal leech.

**Species that protected from intentional KILLING, INJURY and SALE only:**

- Reptiles – widespread species; Common lizard, Slow-worm, Grass snake and Adder.

**Species protected from TAKING and SALE only:**

- Atlantic stream (white-clawed) crayfish

**Species protected from SALE only:**

- Common toad
- Common frog
- Palmate newt
- Smooth newt
- Invertebrates – Some including 18 butterflies such as Chalk hill blue butterfly, Adonis blue butterfly, Large tortoiseshell butterfly.

**Vascular Plants, Bryophytes, Lichens and Fungi (PLANTS)**

1.1.8 For any vascular plant, bryophyte, lichen or fungi listed in Schedule 8 of the Act, it makes it an offence under:

- Section 13(1)(a) to Intentionally pick, uproot or destroy plants in Schedule 8.
- Section 13(1)(b) to undertake unauthorised intentional uprooting of any wild plant not included in Schedule 8.
- Section 13(2)(a) to sell, offer for sale, possess or transport for the purpose of sale any plant (live or dead, part or derivatives) on Schedule 8.
- Section 13(2)(b) to publish or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

1.1.9 Species with protection under Schedule 8 include, but are not restricted to:

1.1.10 Bluebell, Wood calamint, Rock cinquefoil, Early spider orchid, Spring gentian, Stinking goosefoot, Small hare's-ear, Alpine copper moss (*Mielichoferia mielichoferi*), Goblin lights lichen (*Catolechia wahlenbergii*).

**Non-Native Species**

1.1.11 Species listed in Schedule 9 of the Act are non-native species, which the establishment of in the wild may be detrimental to native wildlife. Species listed in Schedule 9 include Japanese knotweed, Himalayan Balsam and Giant hogweed.

1.1.12 For species listed in Schedule 9 of the act it is an offence:

- Under Section 14(1) if any person releases or allows to escape into the wild any animal which—
  - (a) is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or
  - (b) is included in Part I of Schedule 9,
- Under Section 14ZA (1) to sell, offers or exposes for sale, or has in his possession or transports for the purposes of sale an animal or plant to which this section 14 applies, or anything from which such an animal or plant can be reproduced or propagated.



- Under Section 14ZA (2) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell an animal or plant to which this section applies, or anything from which such an animal or plant can be reproduced or propagated.

1.1.13 Section 14ZB gives the Secretary of State the power to issue codes of practice, or approve a code of practice issued by others, relating to non-native animal and plant species. It is intended that the codes will be used to provide recommendations, advice and information on how to stop the damage caused by non-native animals and plants.

## 1.2 SITES OF SPECIAL SCIENTIFIC INTEREST (SSSIs) AND OTHER PROTECTED AREAS

1.2.1 Sections 28 to 33 of Part 2 of the Wildlife and Countryside Act detail the law regarding SSSIs. Sections 34 to 53 deal with other protected areas within Great Britain.

- The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) – these sites are identified for their flora, fauna, geological or physiographical features – by the country conservation bodies in England (Natural England) and Wales (Natural Resources Wales).
- The Act also contains measures for the protection and management of SSSIs.
- The Act provides for the making of Limestone Pavement Orders, which prohibit the disturbance and removal of limestone from such designated areas
- The Act provides means for the designation of Marine Nature Reserves.
- The Act prohibits the undertaking of agricultural or forestry operations on land within National Parks which has been either moor or heath for 20 years, without consent from the relevant planning authority.

## 1.3 THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT 2000

1.3.1 The Countryside and Rights of Way Act 2000 strengthened the Wildlife and Countryside Act 1981 in the following ways:

### Schedule 12

1.3.2 Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981 and strengthens the legal protection of species by:

- Providing provisions to make certain offences 'arrestable'
- Changing the term 'intentional' to 'reckless' with regard to disturbance offences, such that ignorance of the law is no longer a defence.
- Conferring greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and;
- Enabling heavier penalties on conviction of wildlife offences.

### Schedule 9

1.3.3 Schedule 9 of the Act amends SSSI provisions of the Wildlife and Countryside Act 1981, including provision to change SSSIs and providing increased powers for their protection and management, placement of a duty on public bodies to further the conservation and enhancement of SSSIs and increases in penalties on convictions where the provisions are breached.

## 1.4 THE BADGER ACT 1992

1.4.1 Under the Badger Act 1992, it is an offence to:

- Section 1 – Take, injure or kill a badger, or attempt to do so
- Section 2 – Cruelly ill-treat a badger, inclusive of digging for a badger
- Section 3 – Interfere with a badger sett. A person is guilty of an offence if, except as permitted by or under this Act, he interferes with a badger sett by doing any of the following things—

(a)damaging a badger sett or any part of it;

(b)destroying a badger sett;

(c)obstructing access to, or any entrance of, a badger sett;



(d)causing a dog to enter a badger sett; or

(e)disturbing a badger when it is occupying a badger sett,

- o Section 4 – To sell or possess a live badger.
- o Section 5 – To mark or ring a badger unless under licence to do so.

## 1.5 THE HEDGEROWS REGULATIONS, 1997

1.5.1 The Hedgerows Regulations, 1997 ensure the protection from damage or destruction of 'important' hedgerows. Criteria within the regulations determine the importance.

## 1.6 THE CONSERVATION OF HABITATS AND SPECIES AND PLANNING (VARIOUS AMENDMENTS) (ENGLAND AND WALES) REGULATIONS 2017

1.6.1 In addition to the Wildlife and Countryside Act 1984, certain species have additional protection under European Law.

1.6.2 The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 (the Habitats Regs) consolidate the amendments made to the Conservation (Natural Habitats. &c.) Regulations 1994 in England and Wales. The Regulations transpose the Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (EC Habitats Directive) into UK law.

1.6.3 The Habitats Regulations 2010 provide protection for 'European Protected Species' and protection and designation for 'European Protected Sites'.

### Schedule 2: European Protected Species of Animals

- All UK bats
- Dormice
- Otter
- Large blue butterfly
- Wild cat
- Sand lizard
- Smooth snake
- Great crested newt
- Natterjack toad
- Fishers estuarine moth
- Lesser whirlpool ram'- horn snail
- Sturgeon
- Marine turtles
- All dolphins, porpoises and whales.

1.6.4 For species listed in Schedule 2, Under Part 3 Regulation 41(1) it is an offence to

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb a wild animal of any such species,
- (c) deliberately take or destroy the eggs of such an animal, or
- (d) damage or destroy a breeding site or resting place of such an animal.

1.6.5 Under Part 3 Regulation 41 (2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

- (a) to impair their ability—
  - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
  - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) to affect significantly the local distribution or abundance of the species to which they belong.

Under Part 3 Regulation 41.(3) It is an offence for any person—

- (a) to be in possession of, or to control,
- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange any animal in Schedule 2.

### Schedule 5: European Protected Species of Plants

- Shore dock
- Killarney Fern



- Early Gentian
- Lady's-slipper
- Creeping marshwort
- Slender naiad
- Fen orchid
- Floating-leaved water plantain
- Yellow-marsh saxifrage.

1.6.6 For species listed in Schedule 2, Under Part 3 Regulation 45(1) It is an offence deliberately to pick, collect, cut, uproot or destroy a wild plant of a European protected species.

1.6.7 Under Part 3 Regulation 45(1) (2) It is an offence for any person

- (a) to be in possession of, or to control,
- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange any plant in Schedule 5

#### European Designated Sites

1.6.8 These include:

- Special Protection Areas – SPAs are classified in accordance with Article 4 of the EC Birds Directive for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species
- Special Areas of Conservation – SACs are classified in accordance with Article 3 of the EC Habitats Directive. SACs are designated to establish a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended).

1.6.9 Natura 2000 is the name of the European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives. This network will comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Marine Natura 2000 sites contribute to our ecologically coherent network of marine protected areas.

## 1.7 NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

### Planning Authorities: A Duty to Conserve Biodiversity

1.7.1 Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.

1.7.2 Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

*"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity"*

### Species of Principal Importance

1.7.3 Part 3, Section 41 requires the Secretary of State to "*publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of **principal importance** for the purpose of conserving biodiversity*".

1.7.4 This requirement lead to production of a list of species and habitats of Principal Importance, which should be a material consideration during the planning process.

## 1.8 DESIGNATED SITES OF CONSERVATION INTEREST

1.8.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

### Statutory Sites

1.8.2 Statutory sites can be designated under UK legislation (the Wildlife and Countryside Act 1981), European Law (the Habitats Regulations 2010) or International law (Ramsar Convention).

1.8.3 The designated sites are referred to under the relevant legislation above.

1.8.4 UK designated sites include Sites of Special Scientific Interest (SSSIs).

1.8.5 European designated sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).



1.8.6 Ramsar sites are wetlands of international importance designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971.

1.8.7 Local Nature Reserves (LNRs): Under the National Parks and Access to the Countryside Act 1949 LNRs may be declared by local authorities after consultation with the relevant statutory nature conservation agency. LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.

1.8.8 National Nature Reserves (NNRs): are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981.

#### Non-Statutory Sites

1.8.9 Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.

1.8.10 These sites, which may be given various titles such as 'Listed Wildlife Sites' (LWS), 'Local Nature Conservation Sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), 'Biological Heritage Sites' (BHS) or 'Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

## 2.0 Plans and Policies

In the UK, the following plans and policies relate to wildlife and habitats:

- o National Planning Policy Framework (NPPF, 2021)
- o The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature'
- o Biodiversity – The UK Action Plan (1994, and subsequent revisions)
- o Local Biodiversity Action Plans where applicable
- o Neighbourhood plans where applicable

### NATIONAL PLANNING POLICY FRAMEWORK

2.1.1 In March 2012 the Government introduced the National Planning Policy Framework (NPPF). This was revised in December 2023.

#### Chapter 15: Conserving and Enhancing the Natural Environment

Chapter 15, Para 180 of NPPF states: *"The planning system should contribute to and enhance the natural and local environment by:*

- b) **protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils...**
- e) **minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".**

Para 181 states: *"Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries."*

Para 185 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- c) **"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and**
- d) **Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."**

Para 186 states that *"when determining planning applications, local authorities should apply the following principles:*

- b) **if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"**



- c) **Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted.** The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- d) **Development result in the loss of deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensatory strategy exists;** and
- e) **Development whos primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.**

Para 188 states "the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined."

## 2.2 ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

- 2.2.1 This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.

## 2.3 The Natural Environment White paper

- 2.3.1 The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature' states that 'We want to create a resilient and coherent ecological network at national and local levels across England... To make this happen the government will put in place a clear institutional framework to support nature restoration. This means: establishing Local Nature Partnerships... Creating new Nature Improvement Areas (NIAs) and strengthening support though the planning system.'

### Biodiversity Offsetting

- 2.3.2 Biodiversity offsetting is described in the Natural Environment White Paper as 'conservation activities designed to deliver biodiversity benefits in compensation for losses in a measurable way. Good developments incorporate biodiversity considerations in their design but are still likely to result in some biodiversity loss. One way to compensate for this loss is by offsetting: the developer secures compensatory habitats elsewhere.'
- 2.3.3 The level of biodiversity offsetting required could be determine by means of assessments undertaken in accordance with the Department for Environment, Food and Rural Affairs (DEFRA) metric contained in Biodiversity Offsetting Pilots published in March 2012 as applied in the Defra offsetting pilot projects. Biodiversity offsetting could be delivered by developers in partnership with various partners including conservation organisations, local landowners and the borough council.

## 2.4 Biodiversity Action Plan (Local or UK)

### UK Biodiversity Action Plan

- 2.4.1 Biodiversity: The UK Action Plan outlines how the UK plans to address biodiversity conservation in response to the Rio Convention on Biological Diversity (1992). In 2004 a UK Biodiversity Steering Group was formed and discussions resulted in the publication of 'Biodiveristy: the UK Steering Group Report – meeting the Rio challenge', which established a framework and criteria for identifying species and habitats of conservation concern. From this list, action plans for 391 species and 45 broad habitat types were prepared. In 2007, the UK List of Priority Species and Habitats was reviewd and the revised list identifies 1149 species and 65 habitats requiring conservation action.
- 2.4.2 These species are now listed in Section 41 of the NERC Act, 2006 and referred to as Habitats and Species of Principal Importance (HPI or SPI).



2.4.3 Outcome 3 of the Government's Biodiversity 2020 strategy (DEFRA, 2011) contains an ambition to ensure that "*By 2020, we will see an overall improvement in the status of our wildlife and will have prevented further human-induced extinctions of known threatened species*". Protecting and enhancing England's Species and Habitats of Principal Importance is key to delivering this outcome.

#### Local Biodiversity Action Plans

2.4.4 Local Biodiversity Action Plans (LBAPs) are a means for delivering UK Biodiversity Action Plan targets at a local level. LBAPs were launched in 1997 by a partnership of conservation groups, government agencies and local authorities. They set out a framework for nature conservation in the specified area. This framework includes priority species and habitats and sets targets to maintain and enhance their conservation status.

## 2.5 Other Species Lists of Species of Conservation Concern

2.5.1 Species lists of Species of Conservation Concern also considered within this assessment are as follows:

- Birds of Conservation Concern: Based on an assessment of the conservation status of British birds. Following an assessment of data on population and trends against established criteria, there are red, amber and green lists of BoCC. The latest review was BOCC 4 (Eaton et al, 2015)
- Red Data Book Species: In 1999 the Species Status Assessment project (JNCC) assigned conservation status to the UK flora and fauna using the internationally approved IUCN Red Data Book criteria and categories. The reviews were published in a series of data sheets and assigned a conservation status to each species.