PRELIMINARY ECOLOGICAL APPRAISAL

LOW BRAYSHAW FARM,

TOSSIDE,

SKIPTON

NORTH YORKSHIRE

BOM-RSC-21-35

DECEMBER 2021

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PRELIMINARY ECOLOGICAL APPRAISAL

BAT RISK ASSESSMENT

LOW BRAYSHAW FARM,

TOSSIDE,

SKIPTON

NORTH YORKSHIRE,

BD23 4SU

GRID REF

SD 77022 58223

REPORT FOR

MRS BEVERLEY ROBINSON

Quality Assurance

Version	Prepared by	Date	Checked by	Date	Approved by	Date
R1	David Pollard	20/12/2021	Clare Pollard	20/12/2021	Sarah Woods	20/12/2021
R2	David Pollard			01/02/2022		

This report is intended to provide an accurate description of findings from survey work undertaken on the date shown in the report; however, it cannot fully account for any changes to site conditions following the completion of the survey work due to activities carried out on site or the dynamic nature of the natural environment. All work carried out by Bombus Ecology is subject to our Terms and Conditions.

The report has been produced in accordance with current best practice guidelines

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1. Introduction

1.1: Due to a series of legal protections, it is illegal to cause disturbance or harm to many species across the whole of the UK, including nesting birds, bats of all UK species, great crested newts, badgers and many others. In order to determine the possible impact that development works or other land management proposals may cause, an ecological assessment is necessary to identify the species using the site, ways in which these species may be at risk, and potential avoidance, mitigation or compensation measures required during the planned works on site. The aim of this report is to provide the above listed information and to inform future works taking place on the proposed site, in terms of habitat protection and ecological enhancement (biodiversity net gain).

LEGISLATION

1.2: Within the UK, there is a suite of environmental legislative acts concerned with the protection, conservation and enhancement of the ecological and environmental factors present within our rural and built environments. The Wildlife and Countryside Act (1981) is the primary legislation for protection of wildlife within the UK and refers to the treatment and management of protected species listed as Schedule 1 (birds), 5 (mammals, reptiles, fish and invertebrates) and 8 (plants). Section 9 is arguably the most important part of the legislative act, as it states 'It is an offence to intentionally kill, injure, or take a scheduled species that is living wild at the time; to possess a scheduled species; to damage, destroy or obstruct access to the place of refuge used by the protected species.'

1.3: The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. A recent change in this legislation means that the provisions of this act now complement those of the Wildlife and Countryside Act more. Species to which these provisions apply are the European Protected Species, examples of this include any of the Bat species within the UK and Great Crested Newts. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

1.4: Badgers also have their own specific piece of legislation, the Protection of Badgers Act (1992), and there are other species that also have their own specific legislation.

1.5: Other important pieces of legislation that are important to protecting and conserving the environment as a whole within the UK and in some cases Europe

include the Ramsar Convention on Wetlands (1971), Convention on the Conservation of Migratory Species of Wild Animals (1979), Convention on Biological Diversity (1992), The Countryside and Rights of Way Act (2000) and the Plant Health Act (1967, amended 2008). This is by no means an exhaustive list, but these are the most important legislations with regards to the ecological protections of the UK countryside.

BIOSECURITY

1.6: Biosecurity is important when entering any land, or other premises where there is a risk of spreading pests. Primarily, the goal of biosecurity is to prevent, control and/or manage risks to life and health. Food safety, zoonoses, the introduction of animal and plant diseases and pests, and the introduction and management of invasive alien species are all possible aspects relating to biosecurity, and it is of vital importance that measures are taken to prevent the spread of disease, loss of biodiversity and introduction of pests and pathogens.

1.7: Biosecurity measures are a series of precautionary steps designed to reduce the risk of transmission of harmful organisms. Good biosecurity practice refers to ways of working that minimise the risk of contamination and the spread of pests and invasive plants. The term pest in this case should be taken to include all invertebrate, bacterial or fungal organisms that are harmful.

1.8: When conducting all on site survey work, appropriate biosecurity measures are employed to prevent breaches of biosecurity and the potential spread of harmful pests and disease. A detailed brief on our biosecurity measures and qualifications is available on request.

2. Site Context

2.1: The site, known as Low Brayshaw Farm, is located at Tosside, Skipton North Yorks BD23 4SU at Grid Reference SD 77022 58223 (Figure 1). This can be accessed by a private road from Longtons Lane. The plans for this site include the conversion of the grazing field to provide a glamping experience.

2.2: Bombus Ecology was commissioned to carry out a Preliminary Ecological Appraisal of the field at Low Brayshaw Farm, in order to identify the current ecological value of the site and any potential issues that will need to be mitigated or compensated for as a result of the planned works, , as well as providing the basis for a suite of ecological habitat enhancement which is a key aim of the project.

FIGURE 1. Site boundary indicated by the red line above.

3. Methodology

3.1: During the course of our Preliminary Ecological Assessment, we use two main methods of survey: field based and computer based. When conducting these surveys we ensure that we adhere to all guidelines set out by the appropriate expert bodies, including Natural England, the Bat Conservation Trust, The British Trust for Ornithology and the Amphibian and Reptile Conservation Trust to name a few. In accordance with best practice, levels of wildlife disturbance caused when conducting these surveys are kept to an absolute minimum and appropriate biosecurity measures are assessed and put in place.

FIELD SURVEY

3.2: The field based survey consists of an initial walkover survey conducted over the proposed site to identify the presence of any protected species or habitats, as well as to identify any invasive species that may be present and any possible detrimental impacts on site that the proposed works may cause. Any ponds and watercourses within the immediate vicinity of the site would also be assessed for their value to protected species, and if deemed necessary a habitat suitability index would be carried out. Through this initial field based survey, the need for further species specific surveys would be confirmed and it would also be determined if any alternate biosecurity methods would be necessary for future site visits.

COMPUTER BASED SURVEY

3.3: The computer based survey is carried out using data sets from open source resources such as OpenStreetMap, the Ordnance Survey OpenData, the governmental open data download portal and the Multi-Agency Geographical Information for the Countryside web portal (MAGIC) which collates datasets from a wide variety of governmental and non-governmental organisations including DEFRA, Historic England, the RSPB, the Forestry Commission and the Environment Agency to name a few. Designated areas within the near vicinity of the site are important to know in case of any impact that may be caused through the planned future use of the site and any proposed works to take place. From this information, a landscape scale map is produced using geographical information services (GIS) software to illustrate and investigate the distances and geographical barriers between the site and the designated areas, in order to determine any potential impacts.

PROTECTED SPECIES SURVEY

3.4: Based on the habitats present, the site was assessed with particular regard to determining the presence or otherwise of badgers (*Meles meles*), bats, great crested newts (GCN) (*Triturus cristatus*), nesting birds, and reptiles. An overview of the survey methods used is outlined below.

3.5: **Badgers:**

An assessment of the site and surrounding habitats (where access was available), with a focus on any areas of dense vegetation, was carried out in order to identify any evidence of badgers, including:

- the presence of any setts
- well-used runs/tracks
- supplementary evidence, such as hairs or prints
- badgers themselves

Any badger holes found during the survey were classified in accordance with standardised survey guidelines (Harris *et al.*, 1989), being grouped into setts, where applicable, and categorised in terms of the type of sett (in descending order of significance: main, annexe, subsidiary, outlier) and the level of use of each hole (well-used, partially-used, disused).

3.6: **Bats:**

A preliminary ground level roost assessment of any trees if present within an impact zone or directly adjacent to the barns was also carried out to identify the presence of any PRFs for bats, such as split bark, woodpecker holes and other cavities for bats and/or evidence of roosting bats. All trees assessed were categorised in terms of their value in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2016), shown in Table 1.

Features that are symptomatic of bat use include bat droppings in around or below an entrance hole, staining around an entrance hole, small scratches around an entrance hole, audible squeaking at dusk or in warm weather, smoothening of surfaces around the cavity of an entrance hole and the distinctive smell of bats. The bat risk assessment was completed using ladders, binoculars and a powerful torch. An endoscope was also available to check any small gaps/cracks for evidence of bats.

Table 1. Guidelines for assessing bat roosting potential of structures and trees

Suitability	Habitat description	Further action required?
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further bat risk assessment effort or bat activity surveys are required.
Low	A tree of sufficient size and age to contain PRFs, but with none seen from the ground or features seen with only very limited roosting potential.	**Trees:** No further bat risk assessment effort or bat activity surveys are required.

Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection conditions and surrounding habitat, but unlikely to support a roost of high conservation status.	Two bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey. One survey must occur between May and August.
High	A structure or tree 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 and surrounding habitat.	Three bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey, with an additional survey (either dusk or dawn). Two surveys must occur between May and August.

3.7: **Great Crested Newts:**
An assessment of the habitats present on the site was carried out in order to determine their suitability to support GCN and any natural or artificial refugia (such as logs, stones, discarded building materials etc.) present were also lifted to check for the presence of GCN.

3.8: **Nesting Birds:**
The habitats on site were assessed to determine their suitability for nesting, with a check carried out for the presence of any active nests or any evidence of nesting behaviour.

3.9: **Reptiles:**
The assessment for reptiles followed a similar methodology to that for GCN, with an assessment of the habitats present carried out to determine their suitability to support reptiles, and with any refugia lifted to check for the presence of reptiles or evidence of reptiles, such as sloughs (shed skins).

3.10: **Other Wildlife:**
In accordance with good practice, the site was checked for the presence of any other protected/notable species, with a regard to any other species highlighted in the desktop study.

3.11: **Invasive Species:** The site was also surveyed for the presence of any invasive, non-native flora or fauna.

4. Results

4.1: The survey was carried out on the 7th of December 2021 by Director of Ecology David Pollard BSc (Hons) MRSB and was assisted in this commission by Principal Ecologist Sarah Woods BSc (Hons) MSc AMRSB MRES and Assistant Ecologist Holly Pollard.

4.2: The weather conditions at the time of the field survey initially were cold, overcast and breezy with an air temperature of 6° C, and as such were suitable for this initial walkover survey. Whilst it is recognised the survey was carried out outside the vegetative growing season, the surveyor is confident of identifying most of the flora in a vegetative state using Poland et al 2020. There were no constraints with regards to access on the site. All survey and biosecurity guidelines were adhered to. The results of the field and computer-based study are as listed below

ECOLOGICAL FEATURES ON SITE

4.3: The site consists of a site is a grazed improved grassland field with perennial rye grass *Lolium perenne*, false oat grass *Arrhenatherum elatius*, cock's foot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens* and broad-leaved dock *Rumex obtusifolium.* This was extensively grazed by sheep at time of survey.

4.4: The field was surrounded on two sides by a dry stone wall and the other two sides by post and wire fencing.

4.5: The edges of the field was dominated by patches of hard and soft rush *Juncus inflexus /J. effusus* other ruderal type species are represented by false oat grass *Arrhenatherum elatius*, Timothy grass *Phleum pratense*, rough meadow-grass *Poa trivialis* and cock's foot *Dactylis glomerata* were noted within the tall ruderals.; broad leaved dock *Rumex obtusifolium*, yarrow *Achillea millefolium* with spear thistle *Cirsium vulgare*, creeping thistle *Cirsium repens*, common sorrel *Rumex acetosa* and sheep's sorrel *Rumex acetollosa*.

4.6: In the southern corner of site is a small rushy area.

ECOLOGICAL FEATURES OFF SITE

4.7: The site is what can be described as 'In Bye' land i.e. fields at the moorland edge heather and rush dominated pastureland, it is located in a wider pasture landscape on the edge of Gisburn Forest close to the village of Tosside in the Forest of Bowland AONB.

PROTECTED SPECIES ON SITE

4.8: Badgers

Badgers are likely to use the pasture field On the periphery for foraging. There are no obvious setts in the close environs of the site. There is a bit of badger activity in the periphery of site, including foraging signs and trails. Thus, badgers are not considered to be of material consideration in this development of this portion of land.

4.9: Bats

The trees on the borders are not mature enough to offer PRFs for bats. The woodlands in the wider landscape and associated landscapes have the potential to be a bat flight lines/foraging routes given the optimal foraging habitat close by and thus should be maintained and protected from light spill and noise disturbance.

4.10: Birds

The site itself could offer nesting opportunities for lapwing *Vanellus vanellus* and these will be displaced to the undeveloped section of the field. The presence of tourists on site might be beneficial by deterring predators like corvids. The site itself is unsuitable for other wading birds due to sward height of vegetation and the rushy sections are not big enough to accommodate curlew *Numiensis arquata*/redshank *Tringa totanus*. The dry-stone walls offer numerous nesting opportunities for other common passerine species i.e. wren *Troglodytes troglodytes* and pied wagtail *Motacilla alba yarrelli*.

4.11: Great Crested Newts and Other Amphibians

Common amphibians including GCN could utilise the peripheries of site for foraging purposes. They will not forage on short sward grazed fields due to the threat of visible predation. There are no ponds or water bodies within 500m.

4.12: Reptiles

The majority of the site is sub-optimal for common reptiles due to short sward habitat. Reptiles could utilise the adjacent moorlands for commuting and foraging.

4.13: Invasive Species on Site

No invasive species, as listed on Schedule 9 of the Wildlife and Countryside Act, were recorded on-site at the time of the survey. However, grey squirrel *Sciurus carolinensis*. was noted within the woodland just off-site.

Computer-Based Study of Site

4.14: The computer-based study was carried out on a landscape wide scale, using open source GIS software to research and analyse any potential impacts to

designated areas that may occur as a result of the planned works. The closest internationally designated site is the Bowland Fells Special Protected Area (SPA), at 6.6 km to the west of the site. The nearest nationally designated site is the Hesley Moss Site of Special Scientific Interest (SSSI) and lies 1.8 km southeast of the site.

4.15: There are five areas of Ancient woodland within 5km the closest is Park Wood at 2.6 km west of site,

4.16: Due to the intrinsic compact nature of the proposed development, it is not thought there will be any impact on any local protected sites.

Table 2. Statutory Designated Sites within 5km of site

Designated area type	Site Name	Reference code	Reason for designation	Size (ha)	Distance from site (km)
Special Protected Area (SPA)	Bowland Fells	UK 9005151	Ornithological	16,007.83	6.6
Sites of Special Scientific Interest (SSSI)	Hesley Moss	1003186	Biological	10.96	1.8
	Cocket Moss	1003519		20.28	3.3
	River Ribble (Long Preston Deeps)	1003550		158.94	3.8
	White Moss	1003725		13.43	4.1

Biological Records

4.17: Biological records were requested from North and East Yorkshire Ecological Data Centre at the time of writing of this report, these have not yet been received. Upon receipt the records will be analysed and added to the report and the report reissue.

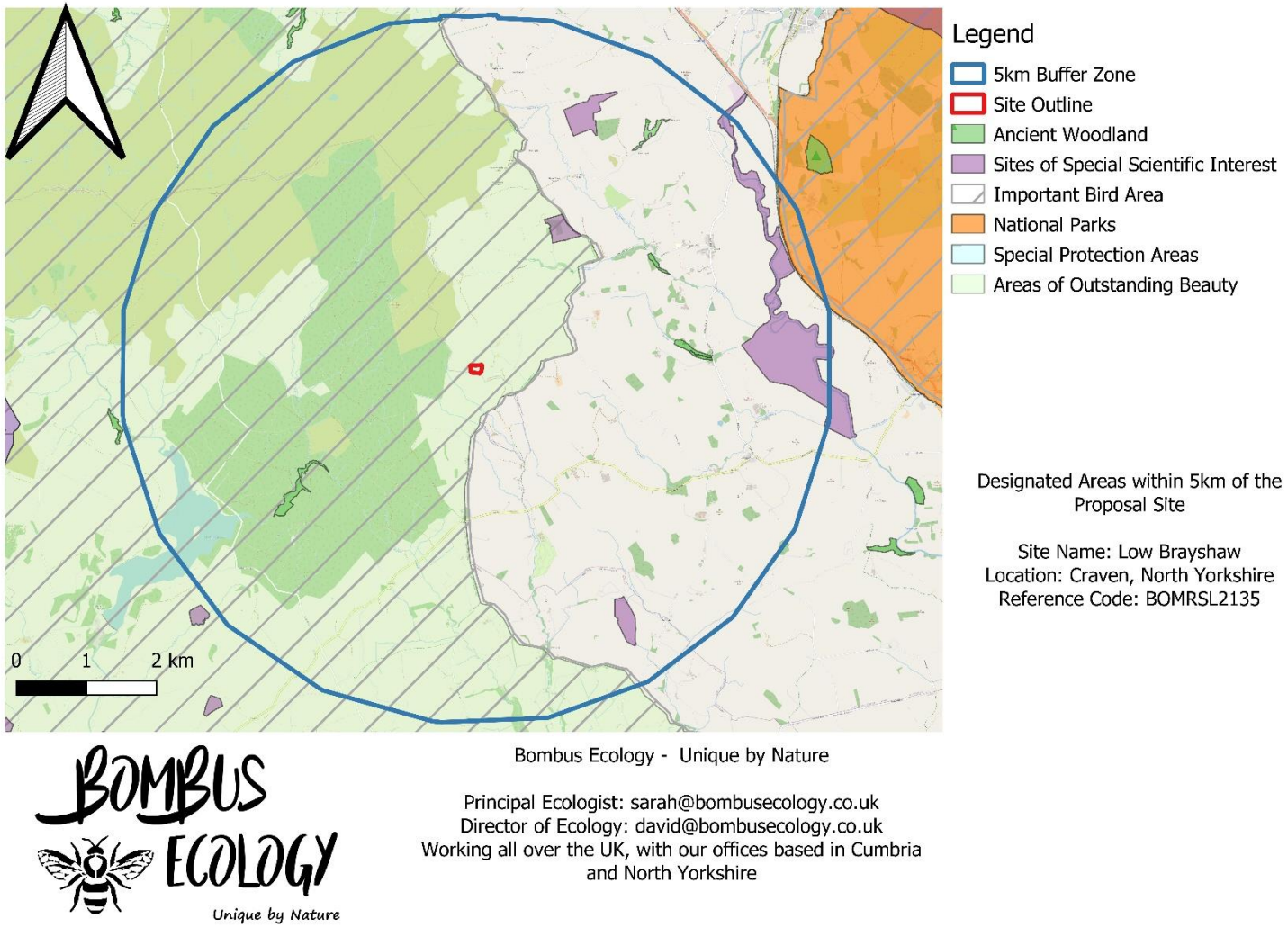

Figure 2 Designated Sites within 5km

5. Conclusion and Recommendations

5.1: The site itself is minimal quality for wildlife apart for the potential for breeding waders particularly lapwings, the drystone walls and trees on the periphery of site offers scope for birds to nest within it especially commensal species such as wrens wagtails and finches.

MITIGATION

5.2: Ideally, any demolition/construction or vegetation removal should take place outside the nominal bird breeding season (March to August) If this is not achievable then the ecologist will provide advice and potentially a watching brief.

5.3: It is recommended that a wildlife-friendly, low-level lighting scheme should be adopted during and post-development to minimise disturbance to any nocturnal wildlife using the peripheries of site, such as bats foraging along the site boundaries. Further details can be obtained from the ecologist.

ENHANCEMENT

5.4: Emerging Government policy supports the pursuit of measurable net gains for biodiversity. The Environment Bill includes a requirement of 10% for biodiversity net gain on all development sites.

5.5: Looking at the proposal there is the potential for measurable net gains in excess of 10%.

5.6: The following measures are recommended to achieve the required biodiversity gain:

- Incorporation of a small wetland area will increase the potential for biodiversity .
- Replanting of a range of ruderal type plants and scrub that will attract pollinators along the periphery.
- Landscape planting of trees that provide nectar, fruit or nuts i.e. rowan *Sorbus acuperia*, hornbeams *Sorbus sp*. blackthorn Prunus spinosa, hazel and crab apple *Malus sylvestris.*

FURTHER SURVEYS

5.7: No further surveys will be required at this point.

6. Site Images

Image 1 Looking SW across site to small rush dominated section

Image 2 Dry Stone walls

Image 3 Small area of rush in SW corner of site

Image 4 Northern edge of site post and wire fencing

Image 5 Nearby moorland

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