

Land off Barnsley Road, Upper Cumberworth



Preliminary Ecological Appraisal Report

Report Ref. ER-8370-01

20/05/2025

Vivly Living

Report reference	ER-8370-01 - Preliminary Ecological Appraisal Report
Author	Joanna Bertwistle BSc (Hons) MCIEEM Senior Ecologist
Technical Review	Rob Weston BSc (Hons) MSc MCIEEM Associate
QA	Charlie Foreman BSc (Hons) ACIEEM Ecologist
Authorised	Joanna Bertwistle BSc (Hons) MCIEEM Senior Ecologist
Date	20/05/2025
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



Brooks Ecological Ltd has prepared this report for the sole use of Vivly Living. The information which we have prepared and provided is in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice. The report is in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party except the person, company, agent or any third-party for whom the report is intended without the prior written permission of Brooks Ecological Ltd. This report presents a snapshot of the site at the date it was surveyed; the conditions and the species recorded present, or likely absent, can change rapidly. Resurvey is recommended to any third-party seeking reliance on this report. The content of this report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third-party has not been independently verified by Brooks unless otherwise stated in the report. This report is the copyright of Brooks Ecological Ltd. Unauthorised reproduction or usage by any person is prohibited.

Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX
Phone: 01943 884451
01943 879129
www.brooks-ecological.co.uk
Registered in England Number 5351418

Contents

Introduction.....	1
Desk Study	2
Designations.....	3
Habitat Appraisal.....	5
Faunal Appraisal.....	9
Ecological Constraints and Opportunities	13
Conclusions and Recommendations	14
References.....	15
Appendix 1 Habitats and Ecological Features.....	17
Appendix 2 List of species recorded	18
Appendix 3 Explanatory Notes and Resources Used	19
Appendix 4 Bat Activity Survey Rationale.....	21
Appendix 5 Wildlife Legislation, Policy and Guidance	22

Summary

This report is produced to inform Vivly Living of potential ecological constraints associated with their proposed development site and the need for further reporting or output to support a planning application.

This report is based on a desk study of designated wildlife sites and records of protected or notable species, and an extended Phase 1 Habitat Survey carried out in March 2025.

Key Findings

The Site is an area of arable farmland, it is of generally low ecological value, apart from established trees on Site - which should be retained.

The Site borders a section of Plantation on an Ancient Woodland Site (PAWS). Following government guidance, it is recommended that a minimum buffer with no development of 15m is implemented along the southern boundary to avoid damage to this feature. This buffer zone should enhance the ancient woodland edge with additional woodland, mixed scrub and grassland habitat creation.

The Site borders the Kirklees Wildlife Habitat Network to the south. In accordance with the aims of the Wildlife Habitat Network, this boundary should be protected and enhanced to strengthen the network.

Biodiversity Net Gain

Details on measurement of the Site's biodiversity and the implications of complying with the requirement to provide a net gain for biodiversity are provided in our separate report ER-8370-02.

Further surveys

Further surveys have not been recommended.

Introduction

1. Brooks Ecological Ltd was commissioned by Vivly Living to carry out a Preliminary Ecological Appraisal (PEA) of Land off Barnsley Road, Upper Cumberworth, grid ref. SE 20989 08559. The survey includes land within the red line boundary shown in Figure 1.
2. This report is produced with reference to British Standard BS:42020 'Biodiversity Code of Practice for Planning and Development' and the CIEEM (2017) Guidelines for Preliminary Ecological Appraisal.

Purpose of a PEA

3. A PEA is an *initial assessment* of the baseline for a proposed development site and establishes whether the Site is likely to be constrained by ecology, and whether more information is needed to identify the ecological baseline.
4. The subsequent Preliminary Ecological Appraisal Report (PEAR) is intended to give guidance to a developer and assist with the early stages of project planning and design. Where a site is not complex or constrained, and no additional ecological input is necessary, the PEAR may be sufficient and suitable to support a planning application.
5. Biodiversity Accounting metrics are used separately to quantify the value of a Site in Biodiversity Units, which helps in the later stage of assessing the ecological impacts of the proposed development. This process is set out separately in the Biodiversity Gain Report which accompanies this PEAR.

Proposals/Reason for PEA

6. The PEA has been commissioned to inform proposals to develop this Site for housing.

The Site

7. The application site 'the Site' comprises a plot of cereal crop on the outskirts of Upper Cumberworth, Denby Dale. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 5.54ha.

Figure 1 The Site (red line boundary).



Desk Study

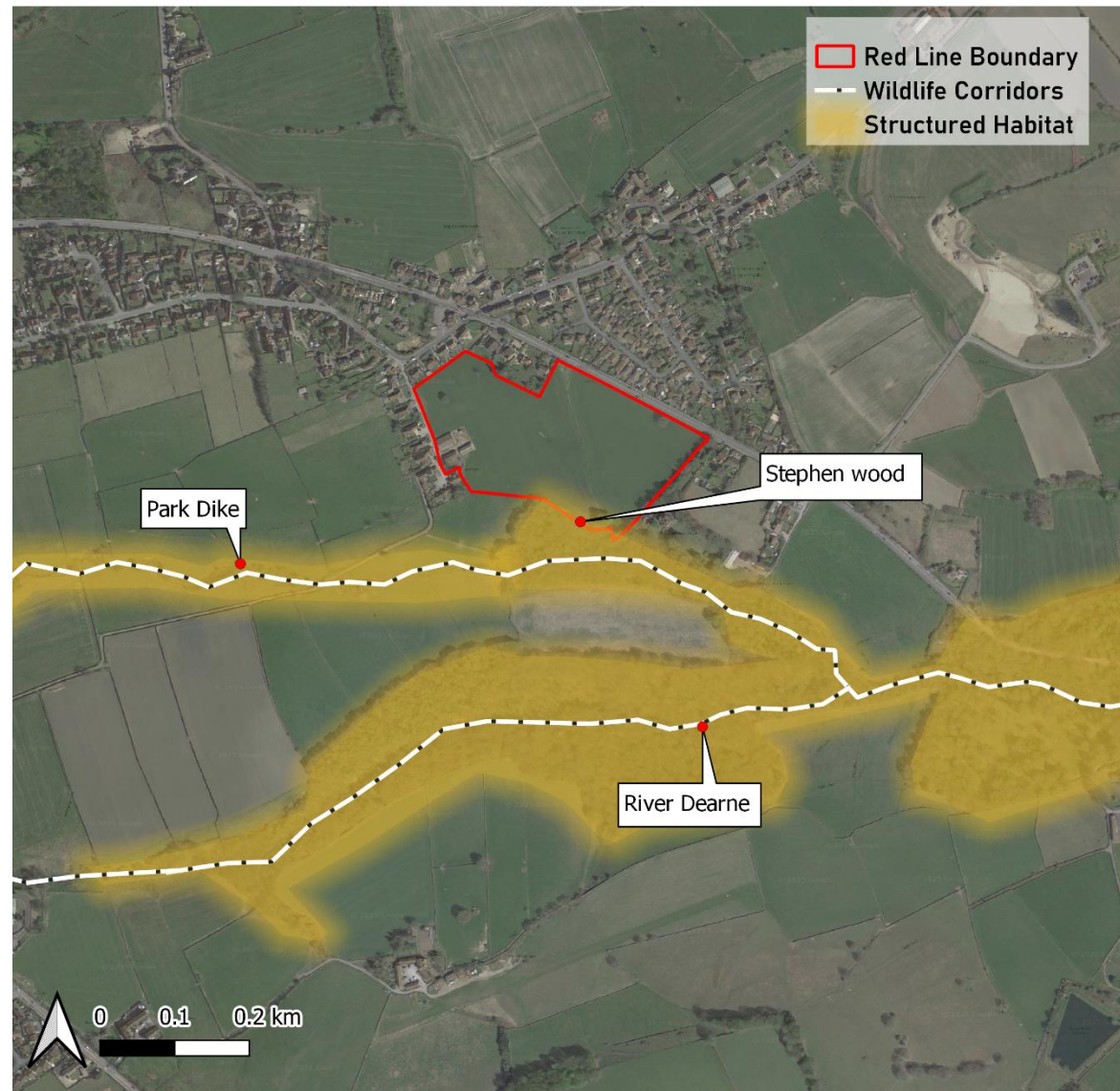
Landscape

8. The Site is located within the village of Upper Cumberworth, Denby Dale, 13km northwest of Barnsley, South Yorkshire.
9. The Site is bordered to the northeast by an A-road with housing beyond. The northwest, east and western borders are bounded by residential properties, gardens and farm buildings. To the south the Site is bordered by broadleaved woodland forming Dearne Park.
10. The Site overlies Grenoside sandstone, likely to give rise to sandy, well-drained soil conditions. However, due to the highly modified nature of the site, these influences are not likely to be seen on the surface.

Wildlife Corridors

11. The Site borders Stephen Wood (Plantation on an Ancient Woodland Site - PAWS) to the south, which forms part of the mapped Kirklees Wildlife Habitat Network (WHN) and houses Park Dike running west to east through the woodland and connects to the River Dearne further southeast.
12. This southern border of Site should be protected and enhanced to strengthen the wildlife corridor and protect the PAWS.

Figure 2 Analysis of wildlife corridors and structured habitat visible on mapping in relation to the Site.



Designations

13. The assessment uses a 2km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

Statutory Designations

14. A search has been made to identify any nationally designated sites within a 2km radius of the Site, or internationally designated sites within a 10km radius. The results are shown in the below table.

Table 1 Statutory Designated Sites.

Site Name	Distance from Site	Designation	Summary Interest
Denby Grange Colliery and Ponds	7km NE	Special Area of Conservation (SAC)	The main feature for designation is the large population of Great Crested Newts.
South Pennine Moors	9km SW	Special Area of Conservation (SAC) Special Protection Area (SPA)	The main features for designation are the European dry heaths, blanket bog and sessile oak woods and populations of merlin, golden clover and short-eared owl.

15. The Site is separated by a large expanse of developed land. Direct and indirect impacts on this site as a result of this development are unlikely.

SSSI Impact Risk Zones (IRZs)

16. The Site lies within the 10km IRZ for the Dark Peak SSSI but does not fall into any of the highlighted categories which require the LPA to consult with Natural England in relation to potential impacts.

Non-Statutory Designations

17. There are three Local Wildlife Sites in the search area, Lower Jane Well (500m NW, separated by residential development), Denby-Delf (1km SE) and Yew tree wood (1.3km NW).

18. The Site is not directly linked to any of these sites. Direct and indirect impacts on all sites as a result of this development are unlikely due to the Site's separation and distance.

Nature Improvement Area

19. The Site is not within any Nature Improvement Area.

Wildlife Habitat Network

20. The Site is not within any mapped Wildlife Habitat Network, but the Site does border the Kirklees Wildlife Habitat Network to the south. To follow the aims of the KWHN, measures should be put in place to protect and enhance this southern boundary and strengthen the wildlife corridor.

Granted EPSM Licences

21. There is one granted European Protected Species Mitigation (EPSM) licence shown within 1km of the Site. A licence for the destruction of a common pipistrelle day roost located 128m SE and dating back to 2020.

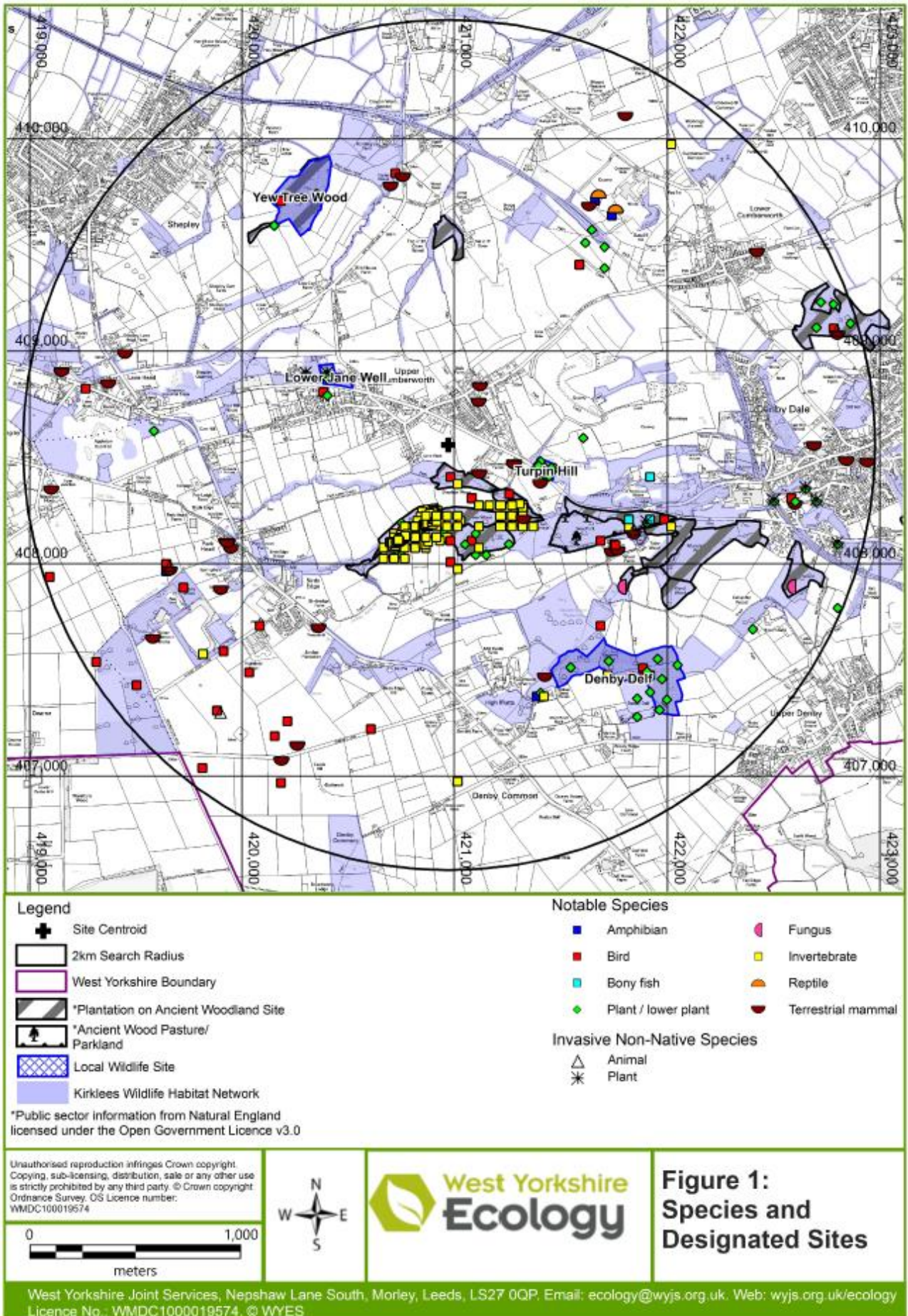
Mapped Ancient Woodland and Trees

22. There is mapped Plantation on an Ancient Woodland Site (PAWS) bordering the Site to the south (Stephen Wood). This woodland should be protected with a 15m buffer of no development.
23. Records of Ancient Trees have been returned the nearest being c.3km SW of the Site.

Mapped Priority Habitat

24. There is PAWS (Stephen Wood) bordering the Site, as discussed above.

Figure 3 Records of designated sites and notable species within 2km of the Site; West Yorkshire Ecology.



Survey

25. The survey was carried out during March 2025¹ and followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010).
26. The timing of the survey meant that it was possible to confidently classify the type and condition of habitats present on this Site.
27. Although out of the main growing season, the nature of habitats present here, and the expertise and training of the surveyor meant that it was still possible to confidently classify the type and condition of habitats present on this Site.
28. Enough time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.
29. Whilst the majority of the Site was accessible, at least 5% of the Site was inaccessible due to very dense vegetation, which could not be closely inspected. This could have concealed invasive species or protected species evidence.

Habitat Appraisal

30. The Site's habitats are described in order on the following pages. In line with the requirement to provide information on Biodiversity Net Gain (BNG), habitats are named in accordance with the UK Habitats classification system. We have used the UK Habitats v2.01 guidance in identifying habitats. Habitat descriptions are divided into the 'distinctiveness' categories used in the calculations presented in the Biodiversity Gain Assessment, with more weight being afforded the more distinctive/important habitats.
31. Generally, the following apply to each tier of distinctiveness, although some authorities might highlight some lower distinctiveness habitats as having a higher importance locally. Where relevant we have highlighted these.

Very Low Distinctiveness Habitats

32. Habitats of little or no habitat value, i.e., lacking any significant native vegetation, but could still provide supporting habitat for protected or notable fauna such as birds or bats. In the context of BNG, their areas are included in calculations, but mitigation or compensation is not required.

Low Distinctiveness Habitats

33. Habitats which are ubiquitous, often which have been created or modified intentionally. They tend to lack diversity of species and structure. They are unlikely to support notable flora but could still provide supporting habitat for protected or notable fauna. In the context of BNG, they are included in calculations, but

compensation/mitigation needs only to provide habitat of similar or higher distinctiveness.

Medium Distinctiveness Habitats

34. Habitats which are common but provide a higher level of structural and species diversity. Though unlikely to support more notable assemblages, species of interest could be present here and they are more likely to be important supporting habitat to fauna. In the context of BNG, mitigation needs to provide habitat of the same broad habitat type, or that of higher distinctiveness.

High Distinctiveness Habitats

35. Habitats which are more natural and contain more important assemblages of plants and potentially species which are rare in their own right. They will provide good habitat for fauna. These habitats are likely to be targeted as conservation priorities and will be the subject of additional policy guidance or legislation. In the context of BNG, whilst mitigation or compensation for loss or damage is possible, provision of more of the same type of habitat would be required, which (with a few exceptions) is likely to be difficult.

Very High Distinctiveness Habitats

36. These are the UK's rarest/best habitats. They will be present in very particular locations and a range of rare or important plant and animal species will depend on the particular conditions they provide. These habitats will be the subject of restrictive policy guidance or legislation. Whilst the BNG metric does not preclude mitigation or compensation in respect of these habitats, creation of the same habitat type would be required, and this would range between very difficult/expensive and impossible.
37. Each habitat is mapped and an area for each type is provided in the format of the Statutory Biodiversity Metric Calculation Tool. The areas can be used to quantify the impacts of development in an Ecological Impact Assessment if this is required by the Local Planning Authority.

Condition Assessment

38. Our condition assessment for each habitat described references where available the criteria set out in DEFRA (2024) Statutory Biodiversity Metric Condition Assessments. A completed version of this spreadsheet is provided digitally with the Biodiversity Gain Report which accompanies this report.

¹ This Report has been prepared during May 2025 following a visit to the Site in March 2025, and our findings are based on the conditions of the Site that were reasonably visible and accessible at that date. We accept no liability for any areas that were not

reasonably visible or accessible, nor for any subsequent alteration, variation, or deviation from the Site conditions which affect the conclusions set out in this report.

Habitats and Hedgerows of Low/Very Low Distinctiveness

Figure 4 Approximate location and extent of these habitats.



Table 2 Summary – Habitats of Low/Very Low Distinctiveness.

UK Habitats	Summary Description
Cereal crop	Monoculture of cereal crop in seedling stage at time of survey.
Developed land, sealed surface	Farm building foundations devoid of significant vegetation.
Artificial unvegetated; unsealed surface	A mixture of stone slab and gravel, devoid of significant vegetation.
Modified Grassland	Neutral grassland along field boundaries, dominated by coarse grasses such as Yorkshire fog, perennial rye grass and creeping bent. Forbs were sparse and included cow parsley, cleavers, nettle, creeping buttercup, common ragwort and coltsfoot.

Table 3 Summary –Hedgerows of Low Distinctiveness.

UK Habitats	Summary Description
Native hedgerow	Small defunct sections of hedgerow along the southeastern boundary of the Site. Species included beech, young oak and holly.

Trees - Medium distinctiveness

Figure 5 Approximate location and extent of these habitats.



Table 4 Summary - trees.

UK Habitats	Summary Description
Individual trees - Rural	<p>A mixture of trees is present on Site, varying in size from small-large.</p> <p>Trees comprising old field boundaries are present to the south of Site, with some stems within the boundary and some outside of the boundary. For the purposes of this report the trees within the boundary have been mapped individually.</p> <p>Three trees are also present towards the field centres.</p> <p>Tree species included sycamore, ash, holly and oak.</p>

Figure 6 Modified grassland



Figure 7 Cereal crop



Figure 8 Developed land and artificial unvegetated



Figure 9 Native holly hedge



Figure 10 Individual tree



Faunal Appraisal

39. The following pages discuss only the groups and species that could be reasonably expected to be found on the type of habitats present on, or adjacent to, the Site.

Amphibians

Desk evidence

40. There are two ponds within 500m of the Site. Pond 1 is separated by an expanse of developed residential land and a main A-road, this has been scoped out of further assessment. Pond 2 is a fishpond fed by a stream and a river, making the likelihood of the protected Great Crested Newt (GCN) being present extremely low. This pond has also been scoped out of further assessment.
41. No records of GCN were returned for the area. Some records of common frog, toad and smooth newt were returned for the area, dating back to 2014.

Field Evidence

42. There are suitable amphibian breeding ponds on site or visible on mapping, located within 500m of the Site.
43. Some suitable terrestrial habitat is present on Site however the distance from any suitable breeding habitat means that the site will not be important to amphibians generally, and the likely absence of GCN can be reasonably assumed.

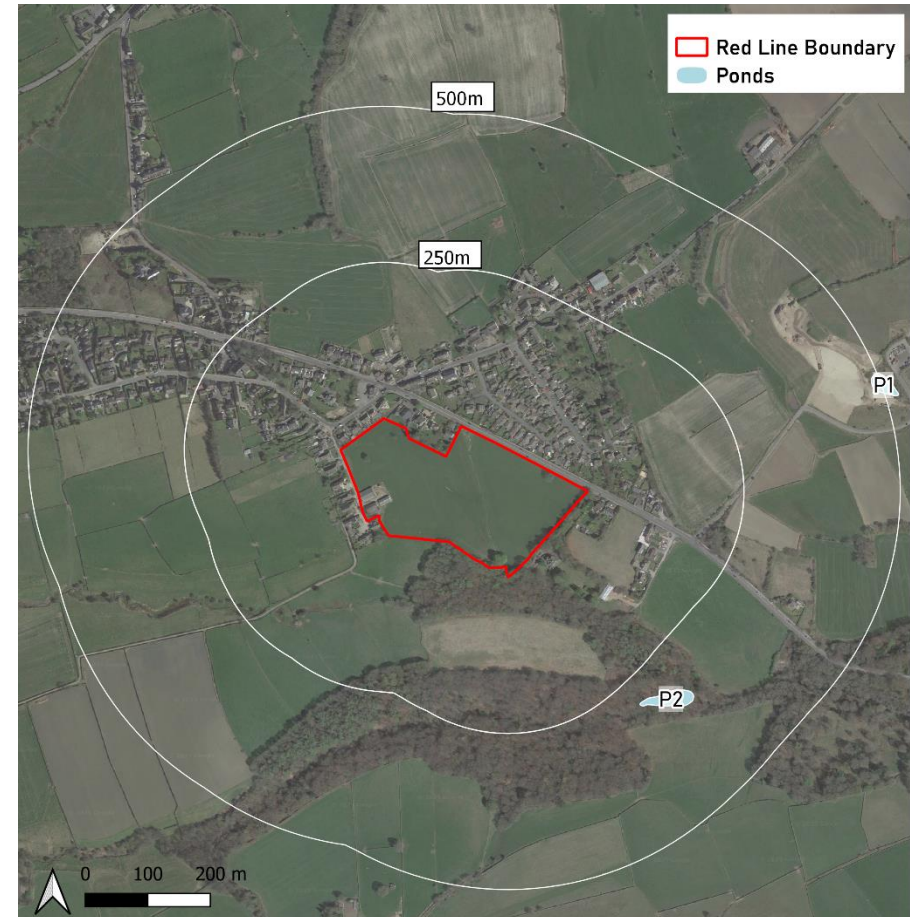
Summary Evaluation

44. The Site is not likely to be used by GCN.
45. The Site is likely to be used by a small number of common amphibian species.

Further Surveys and Recommendations

46. No further surveys or precautions are considered necessary.

Figure 11 Pond plan



Bats

Desk evidence

47. There are multiple records of bats returned for the area. Records pertaining to a roost are also present in the data search, with the nearest being a common pipistrelle roost 180m east of site dating back to 2020. Additional roosts in the area include soprano pipistrelle, brown long-eared bat and whiskered bat.

Field Evidence (Roosting)

48. There are three farm buildings on Site. All buildings were of a breezeblock and corrugated bitumen construction. The buildings were open and draughty and provided 'Negligible' roost suitability.
49. Trees have been inspected for roost suitability; no potential roost features were identified. All trees are assigned a suitability rating of 'None'.

Field Evidence (foraging and commuting)

50. The Site borders some areas suitable for foraging and commuting including the woodland edge to the south, and treeline along the eastern boundary. The interior of the Site is an arable field with no structured habitat.
51. The Site does not however, form part of any apparent wider network of habitat which could provide key commuting habitat locally.

Summary Evaluation

52. The Site's habitats and location suggest that it will not be important to this group.

Further Surveys and Recommendations

53. Further surveys are not recommended in relation to roosting bats. There would be opportunities to provide new roost sites in buildings at the Site.
54. Due to the structured habitats on Site being restricted to the site boundaries, the bat activity on Site is predictable likely focussed to the southern and eastern boundaries not within the centre of the Site, and therefore bat activity surveys would be deemed disproportionate.
55. A sensitive lighting scheme should be implementing around retained and enhanced boundary vegetation to minimise light spill.

Figure 12 Building plan.



Birds

Desk Evidence

61. Many bird records were returned for the area. Notable species included barn owl, curlew, dunnock, house sparrow, kestrel, tawny owl, tree sparrow and goldfinch.

Field Evidence

62. A very small number of common bird species were noted during the survey comprising carrion crow, woodpigeon and long-tailed tit. Older signs of swallow nests were identified in the buildings.
63. Nesting habitat is present on site, mainly limited to the field boundaries. The field interiors could be suitable for a small number of arable specialists such as skylarks, however given the proximity to houses, bringing high levels of disturbance and pets, the Site is unlikely to be significant to local populations.

Summary Evaluation

64. Based on its location, size and habitats the Site will not be important to local bird populations.

Further Surveys and Recommendations

65. No further surveys are considered necessary to demonstrate current baseline in respect of birds.
66. Standard precautions apply in respect of restrictions on clearing vegetation during the nesting season.

Hedgehogs / Brown Hare (NERC Act 2006/Local BAP)

Desk evidence

67. Hedgehogs and Brown hare are recorded within the search area.

Field Evidence

68. No evidence of either species was found on site.

Summary Evaluation

69. The Site provides suitable habitat for hedgehog and brown hare and at least occasional presence should be assumed.

Further Surveys and Recommendations

70. The Site is connected to ample wider farmland and woodland to the south. It is expected that Brown hare present on Site will disperse into the wider suitable habitat.
71. Hedgehog presence assumed; no further surveys are considered necessary however measures to allow them continued access to green space should be planned for.

Invasive Non-Native Species (INNS)

72. INNS are species listed on Schedule 9 of the Wildlife and Countryside Act (1981), for which it is an offence to cause or allow it to grow in the wild.
73. No INNS were noted during survey².

Survey constraints

74. This survey is constrained by the presence of areas that were inaccessible due to the density of vegetation.
75. Although no INNS have been identified in this preliminary survey, it is not always possible to conclude absence from preliminary survey alone due to factors such as season, accessibility, third-party attempts to hide evidence, or undisclosed treatment programmes. For this reason, this report should not be relied upon as definitive evidence of absence of INNS.
76. This site presents a small risk of supporting undetected INNS based on the following factors:
- Areas of site inaccessible to survey
 - Proximity to nearby potential sources of infection
 - Potential for tipping of material
77. Should further assurances be needed in relations to INNS, a dedicated Invasive Weed Survey should be commissioned.

² Whilst our ecologists are trained in the identification of invasive species, this report is not a dedicated invasive species survey. Detectability of invasive plant species can be affected by several factors, and conclusive determination status, or extent, is not

possible through preliminary survey alone. As the presence of invasive species can generate significant costs to development, the client may wish to instruct a dedicated invasive species survey prior to entering into contracts.

Ecological Constraints and Opportunities

Habitat Value

78. The usual approach to development is to minimise any net loss of biodiversity towards a gain in biodiversity value where this is possible on-Site. Our separate report on Biodiversity Gain sets out the position of the Site in terms of measured biodiversity.
79. Irrespective of the Biodiversity Gain process, development should still seek to retain what is best about the Site.
80. The plan opposite shows the Site in the context of mapped habitat distinctiveness (as assessed at the time of the survey*) with the aim of informing the design of any layout. It shows that the trees are targets of medium distinctiveness and should be avoided where possible. The rest of the Site is relatively uniform in terms of potential impact. Medium-distinctiveness habitats are part of the BNG hierarchy, and must be avoided where possible and mitigated where not.
81. The Site borders the Kirklees Wildlife Habitat Network, and a section of replanted ancient woodland. A 15m no development buffer should be instated along the woodland edge. A tree survey will be needed to define the protection stand-off required. The southern edge of Site should be protected and enhanced with habitat creation and a sensitive lighting scheme to strengthen the wildlife corridor.

**This represents our assessment of the habitat type and condition at the time of survey. This may change if the survey was carried out in sub-optimal season or growing conditions. Where this is the case, we will recommend updating surveys during the optimal season.*

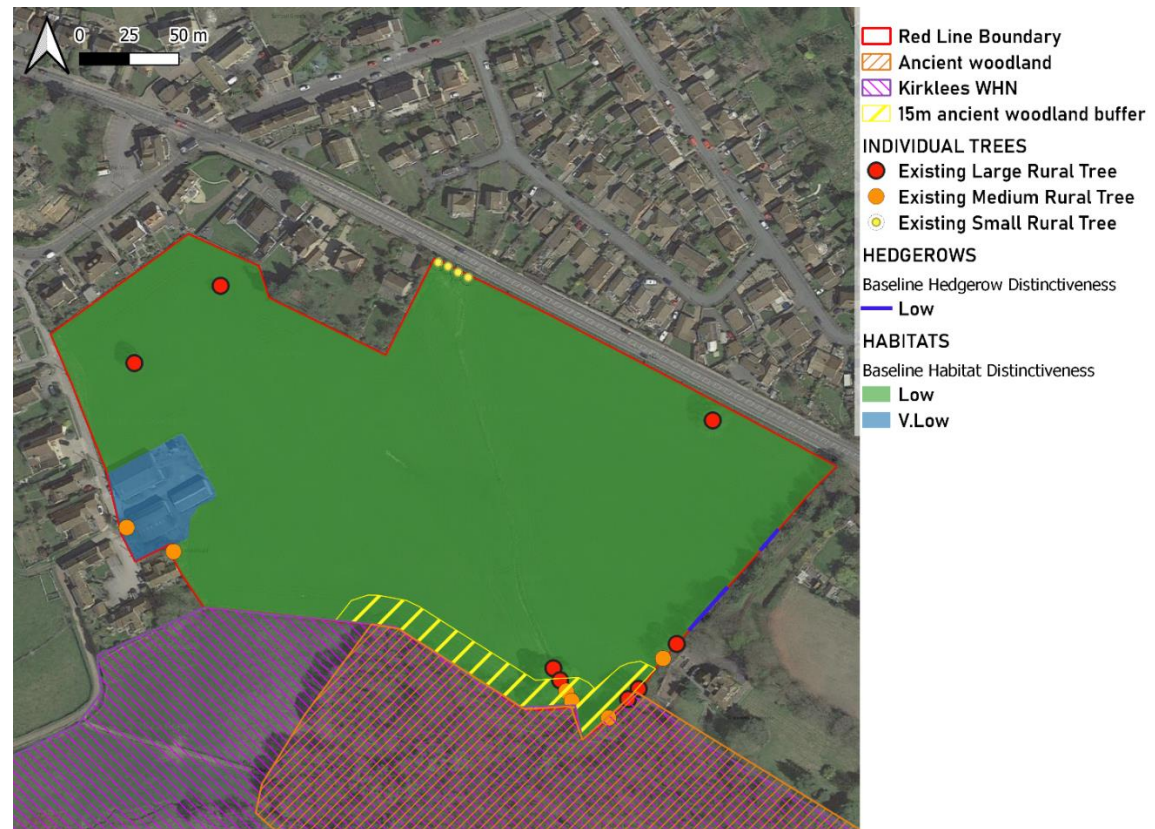
Faunal constraints

82. A sensitive lighting plan will be needed to ensure that bats continue to use the southern and eastern boundaries.

Opportunities

83. Ecological opportunities at the Site relate to:
- Potential to improve connectivity locally by enhancing the eastern and southern boundaries through habitat creation.
 - Installing roosting or nesting features on new buildings.
84. A Biodiversity Management Plan would be useful in defining these enhancements and can be secured by standard condition.

Figure 13 Habitat distinctiveness.



Conclusions and Recommendations

Planning considerations		
Recommendation	Rationale	When
R1 Additional Surveys not required		
R2 Produce a layout which minimises loss of biodiversity	Engage with the Constraints and Opportunities set out above, involve your ecologist in designs at an early stage. The proposals will need to consider the NPPF hierarchy of Avoid–Mitigate–Compensate in minimising any loss of biodiversity. Biodiversity Net Gain (BNG) policy mandates a minimum 10% Net Gain in Biodiversity Units, and the LPA may request additional gains. Your layout may need to change to accommodate your findings from R1 surveys.	During the design process
R3 Design	Make sure your design team follows ecological advice to and make sure there are no design conflicts. <u>Produce a habitat retention plan at an early stage</u> which can be used to inform BNG and maximise scores. A habitat retention plan should identify areas which can be excluded from any impacts of clearance and construction. In producing a plan you should consider the need to provide (amongst other things) Site compounds, to store and move materials, to install drainage, flood storage, access and services, all with suitable easements. <u>Decide on the extent of red-line vs blue/black-line land.</u> Minimising the extent of your red line can limit exposure to BNG, but can also leave you needing separate legal agreements to use off-Site land for BNG delivery. Work out at an early stage what is right for your project. Your planning consultant should be able to help with this decision.	During the design process
R4 Biodiversity Net Gain (BNG)	Carry out a BNG Assessment using the Statutory Biodiversity Metric Calculation Tool and accompanying Condition sheets produced by Defra. It is important that the baseline survey is undertaken during the appropriate season for the habitat type being assessed, so as to ensure the accuracy of habitat mapping and calculating condition scores. Where an initial survey is undertaken at a sub-optimal time of year, it is recommended that updating surveys be carried out during the optimal season for that habitat, prior to the BNG assessment being finalised. Failure to do this could mean that the final Biodiversity score calculated for a project is incorrect, which could then impact on any financial contribution that has been budgeted for to address Biodiversity Offsetting.	During the design process. Baseline survey to be completed during the appropriate season.
R5 Produce a Biodiversity Management Plan	To specify in detail how the development will cater for biodiversity on-Site and to show how habitats incorporated will be managed.	Delivery report Suitable for planning condition

Other considerations (managing legal or financial risks)		
Issue	Rationale	When
R6 Nesting bird management	As with most sites, the standard precaution in relation to birds would apply. To prevent the proposed works impacting on nesting birds, any clearance of vegetation will need to be undertaken outside of the breeding bird season, which runs from 1st March–31st August inclusive. Any clearance required during the breeding bird season should be preceded by a nesting bird survey to ensure that the law is not contravened through the destruction of nests and that any active nests are identified and adequately protected during the construction phase of the development.	Prior to and during clearance

References

Guidelines and Best Practice

British Standards Institution (BSI). 2013. *BS42020 Biodiversity – Code of practise for planning and development*. London: BSI Standards Limited.

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>

Chartered Institute of Ecology and Environmental Management (CIEEM). 2017. *Guidelines for Preliminary Ecological Appraisal (2nd edition)*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/>

Hill, D. et al. 2005. *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring*. Cambridge: Cambridge University Press.

Institute of Environmental Assessment. 1995. *Guidelines for baseline ecological assessment*. London: E & FN Spon.

Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey – A technique for environmental audit (revised)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/9578d07b-e018-4c66-9c1b-47110f14df2a>

Ratcliffe, D.A. 1977. *A Nature Conservation Review*. Cambridge: Cambridge University Press on behalf of the Nature Conservancy Council and the Natural Environment Research Council.

UK Hab Ltd. 2023. *The UK Habitat Classification Version 2.0*. Stockport : UKHab Ltd. [Online]. Available from: <https://ukhab.org/ukhab-documentation/>

Desk Study

Bat Tree Habitat Key (BTHK). 2018. *Bat Roosts in Trees – A Guide too Identification and Assessment for Tree-Care and Ecology Professionals*. Exeter: Pelagic Publishing.

Collins, J. 2023. *Bat Surveys for Professional Ecologists: Good Practise Guidelines (4th edition)*. London: The bat Conservation Trust.

English Nature. 2001. *Great Crested Newt Mitigation Guidelines*. Peterborough: English Nature. [Online]. Available from: https://mokrady.wbs.cz/literatura_ke_stazeni/great_crested_newt_mitigation_guidelines.pdf

Fay, N. 2007. *Defining and Surveying Veteran and Ancient Trees*. [Online]. Available from: https://www.treeworks.co.uk/downloads/publications/DEFINING_AGE_AND_SURVEYING_VETERAN_AND_ANCIENT%20TREESa.pdf

Gent, T. and Gibson, S. 2003. *Herpetofauna Workers' Manual (revised reprint)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/9d7da8c4-9d76-4b65-8263-6b925b3433a4>

Mitchell-Jones, A.J. and McLeish, A.P. 2004. *Bat Workers Manual (3rd Edition)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/e5888ae1-3306-4f17-9441-51a5f4dc416a>

Natural England. MAGiC. [Online]. [Accessed 16th January 2024]. Available from: <https://magic.Defra.gov.uk/MagicMap.aspx>

Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M. 2000. Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal*. **10**(4), pp. 143-155. [Online]. Available from: <https://www.thebhs.org/publications/the-herpetological-journal/volume-10-number-4-october-2000/1617-03-evaluating-the-suitability-of-habitat-for-the-great-crested-newt-triturus-cristatus/file>

Reason, P.F. and Wray, S. 2023. *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Version 1.1. Ampfield: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf>

Legislation and Strategy

Department for Environment, Food and Rural Affairs (DEFRA). 2011. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. London: Her Majesty's Government. [Online]. Available from: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services>

Joint Nature Conservation Committee (JNCC). *UK Biodiversity Indicators 2023*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://jncc.gov.uk/our-work/uk-biodiversity-indicators-2023/>

Government Circular 06/05: Office of the Deputy Prime Minister (ODPM) 2005. *Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System*. London: Her Majesty's Government. [Online]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

House of Commons, Environment, Food and Rural Affairs Committee. 2011. *Natural Environment White Paper*. London: Her Majesty's Government. [Online]. Available from: <https://www.parliament.uk/globalassets/documents/commons-committees/environment-food-rural-affairs/NEWPConsolidatedWrittenEvidenceNov11.pdf>

Ministry of Housing, Communities & Local Government. 2024. *National Planning and Policy Framework*. London: Her Majesty's Government. [Online]. Available from: <https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf>

Natural Environment and Rural Communities Act 2006. (c.61, Part 3, Section 41). London: Her Majesty's Government. [Online]. Available from: [https://www.legislation.gov.uk/ukpga/2006/16/section/41#:~:text=41Biodiversity%20lists%20and%20action%20\(England\)&text=\(1\)The%20Secretary%20of%20State,%5BF1or%20enhancing%5D%20biodiversity](https://www.legislation.gov.uk/ukpga/2006/16/section/41#:~:text=41Biodiversity%20lists%20and%20action%20(England)&text=(1)The%20Secretary%20of%20State,%5BF1or%20enhancing%5D%20biodiversity)

The Conservation of Habitats and Species Regulations 2010. (No. 490). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/uksi/2010/490/contents/made>

The Statutory Biodiversity Metric User Guide. 2024. London: Department for Environment, Food and Rural Affairs (Defra). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

UK Statutory Nature Conservation Bodies (SNCBs). 2018. *Favourable Conservation Status : UK Statutory Nature Conservation Bodies Common Statement*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from : <https://hub.jncc.gov.uk/assets/b9c7f55f-ed9d-4d3c-b484-c21758cec4fe>

Wildlife and Countryside Act 1981. (c.69, Schedule 9). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1981/69/schedule/9>

Appendix 5 Legislation (where not stated above)

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/eudr/1992/43/contents>

Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive). London: Her Majesty's Government. [Online]. Available from: https://www.legislation.gov.uk/eudr/1979/409/pdfs/eudr_19790409_1994-07-20_en.pdf

Hedgerows Regulations (1997). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>

Natural Environment and Rural Communities Act 2006 (NERC). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/2006/16/contents>

Protection of Badgers Act (1992). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1992/51/contents>

The Countryside and Rights of Way Act 2000 (CRoW). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/2000/37/contents>

The Ramsar Convention on Wetlands of International Importance (1971). Switzerland: Convention on Wetlands Secretariat. [Online]. Available from: https://www.ramsar.org/sites/default/files/documents/library/original_1971_convention_e.pdf

The Wildlife and Countryside Act (1981) as amended. London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1981/69/contents>

Appendix 1 Habitats and Ecological Features



Appendix 2 List of species recorded

Ash	<i>Fraxinus excelsior</i>
Beech	<i>Fagus sylvatica</i>
Bent	<i>Agrostis sp.</i>
Bramble	<i>Rubus fruticosus</i>
Broad buckler fern	<i>Dryopteris dilatata</i>
Broad leaved dock	<i>Rumex obtusifolius</i>
Cleavers	<i>Galium aparine</i>
Clover	<i>Trifolium sp.</i>
Coltsfoot	<i>Tussilago farfara</i>
Common ivy	<i>Hedera helix</i>
Common ragwort	<i>Jacobaea vulgaris</i>
Common toadflax	<i>Linaria vulgaris</i>
Cow parsley	<i>Anthriscus sylvestris</i>
Creeping bent	<i>Agrostis stolonifera</i>
Creeping buttercup	<i>Ranunculus repens</i>
Daisy	<i>Bellis perennis</i>
Elder	<i>Sambucus nigra</i>
False oat grass	<i>Arrhenatherum elatius</i>
Herb robert	<i>Geranium robertianum</i>
Holly	<i>Ilex aquifolium</i>
Nettle	<i>Urtica dioica</i>
Oak	<i>Quercus sp.</i>
Perennial rye grass	<i>Lolium perenne</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Snow drops	<i>Galanthus spp.</i>
Sycamore	<i>Acer pseudoplatanus</i>
Yorkshire fog	<i>Holcus lanatus</i>

Appendix 3 Explanatory Notes and Resources Used

Site Context

Aerial photographs published on commonly used websites were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This approach can be very useful in determining if a site is potentially a key part of a wider wildlife corridor or an important node of habitat in an otherwise ecologically poor landscape. It can also identify potentially important faunal habitat (in particular ponds) which could have a bearing on the ecology of the application site. Ponds may sometimes not be apparent on aerial photographs so we also refer to close detailed maps that identify all ponds issues and drains.

Designated Sites

A search of the MAGIC (Multi-Agency Geographic Information for the Countryside) website was undertaken. The MAGIC site is a Geographical Information System that contains all statutory (e.g. Sites of Special Scientific Interest [SSSIs]) as well as many non-statutory listed habitats (e.g. ancient woodlands and grassland inventory sites). It is a valuable tool when considering the relationship of a potential development site with nearby important habitats. In addition, information from the local record holders was referred to on locally designated sites.

Functional linkage with off-Site habitats

When assessing these we consider whether the Site could be functionally linked to them, considering links such as:

- Hydrological links - is the Site upstream downstream, or could ground water issues affect it?
- Physical links - is the site in close proximity and could it be directly or indirectly affected by construction and operational effects? Conversely it may be that despite proximity major barriers separate the two.
- Recreational links - do footpaths and roads make it likely that increased recreational pressure could be felt?
- Habitat links - is the site part of a network of similar habitat types in the wider area? These could be joined by linear corridors or could simply be 'stepping stones' of habitat of similar form or function.

Method

20/05/2025

Phase 1 habitat survey methodology (JNCC, 2010). This involves walking the site, mapping and describing different habitats (for example: woodland, grassland, scrub). The survey method was "Extended" in that evidence of fauna and faunal habitat was also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). This modified approach to the Phase 1 survey is in accordance with the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995) and Guidelines for Preliminary Ecological Appraisal (CIEEM 2017).

Faunal Appraisal

This section first looks at the types of habitat found on Site or within the sphere of influence of potential development, then considers whether these could support protected, scarce, or NERC Act 2006 Section 41 species (referred to collectively as 'notable species').

Records of notable species supplied from a 2km area of search by West Yorkshire Ecology are used to inform this appraisal.

We discuss further only notable species or groups which could be a potential constraint due to the presence of suitable habitat and their presence (or potential presence) in the wider area. We screen out and do not present accounts of notable species or groups which do not meet these criteria - in some cases it may be necessary to explain this reasoning.

Bats

Bat roosting potential is classified according to the following criteria set out below, taken from the Bat Conservation Trust Good Practice Guidelines (2023).

Bat Roosting Suitability of Buildings

Suitability	Criteria
<i>None</i>	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
<i>Negligible</i>	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
<i>Low</i>	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
<i>Moderate</i>	A structure 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 (with respect to roost type only, such as maternity and hibernation - the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
<i>High</i>	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

Bat Roosting Suitability of Trees

Suitability	Criteria
<i>None</i>	Either no PRFs in the tree, or highly unlikely to be any.
<i>FAR</i>	Further assessment required to establish if PRFs are present within the tree.
<i>PRF-I</i>	Potential roost feature suitable to support individual or low numbers of bats
<i>PRF-M</i>	Potential roost feature suitable to support multiple bats and possibly be used by a maternity colony

Evaluation

In evaluating the Site, the ecologist will take into account a number of factors in combination, such as:

- the baseline presented above,
- the Site's position in the local landscape,
- its current management and
- its size, rarity or threats to its integrity.

There are a number of tools available to aid this consideration, including established frameworks such as Ratcliffe Criteria or concepts such as Favourable Conservation Status. Also of help is reference to Biodiversity Action Plans in the form of the Local BAP and Section 41 of the NERC Act (2006) to determine if the Site supports any Priority habitats or presents any opportunities in this respect.

The assessment of impacts considers the generic development proposals from which potential effects include:

- Vegetation and habitat removal
- Direct effects on significant faunal groups or protected species
- Effects on adjacent habitats or species such as disturbance, pollution and severance
- Operation effects on wildlife such as noise and light disturbance

Appendix 4 Bat Activity Survey Rationale

The Bat Conservation Trust Guidelines (BCTG) (Collins 2023) is now widely accepted as providing a basis and rationale for scoping and conducting bat surveys. It is acknowledged that the guidelines provide a wealth of background and are a very useful tool in standardising approaches to survey, it is also felt that an over reliance on some of the guidelines within this document can result in the provision of complicated surveys where they have significant consequences for the cost, or timescale of a large project, but could never deliver positives for bat conservation.

Taking the BCTG document as a whole, Chapter 2 helps the reader understand whether or not surveys are required, and that in the context of planning and development survey is required in relation to ensure;

- the avoidance of legal offences, and;
- the provision of a sufficient level of information – such that will allow the Local Planning Authority to make an informed decision on the proposals and their potential impacts on the Favourable Conservation Status (FCS) of bats.

Attendance at seminars presented by, and discussions with, those involved in production of the BCTG document has emphasised the point that it is within the remit of the consultant ecologist to make a decision on the necessity and scope of surveys – they will use the guidelines in doing so but are not in any way bound by them: this is reflected in Section 1.1 of the guidelines –

‘The Guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.’

Such decisions require a consideration of the potential of the project to impact on bat habitat, alongside analysis of the value of habitat on and around the site and of local records and the likelihood that bats might occur in significant numbers. Our reports aim to present information on how we have arrived at our decision on the Site, what assumptions we have based this on, and where further survey is recommended we indicate what the objective of this survey should be and how best this would be achieved.

The Site is not strategically located and does not contain any potential key habitat features for bats, its use by this group can be easily predicted making any requirement for additional survey disproportionate.

This assessment was made by Joanna Bertwislte BSc (Hons) MCIEEM. Joanna has over 6 years of experience conducting bat surveys in a professional capacity.

Appendix 5 Wildlife Legislation, Policy and Guidance

This is not an exhaustive list but sets out briefly the relevance of Legislation, Policy and Guidance in terms of planning applications and this assessment.

Legislation

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive).

Provides framework at an international (EU) level for the consideration/protection of European Protected Species (EPS), and habitats through the designation of sites.

Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive) and The Ramsar Convention on Wetlands of International Importance (1971)

Provides framework at an international (EU) level for the consideration/protection of important bird populations and the sites on which they are dependant.

The Conservation of Habitats and Species Regulations (2010)

This transposes the EC Habitats Directive into UK law and provides the basis on which all EPS are protected and impacts on them can be licensed in the UK.

The Wildlife and Countryside Act (1981) as amended

This provides the basis on which UK species are legally protected or restricted and confers protection on Sites of Special Scientific Interest SSSIs. It contains annexes of plants and animals which are legally protected as well as those which are considered to be invasive or harmful. It provides the basis on which impacts on such species can be licensed in the UK and provides controls on work on or near SSSIs.

The Countryside and Rights of Way Act 2000 (CRoW)

Provides a statutory basis for nature conservation, strengthens the protection of SSSIs and UK protected species and requires the consideration of habitats and species listed on the UK and Local Biodiversity Action Plans (UKBAP/LBAP).

Natural Environment and Rural Communities Act 2006 (NERC)

Sets out the responsibilities of Local Authorities in conserving biodiversity. Section 41 of the Act requires the publishing of lists of habitats and species which are "of principal importance for the purpose of conserving biodiversity". At present these largely reflect those making up the UKBAP lists.

Hedgerows Regulations (1997)

Define and provide protection for Important Hedgerows.

Protection of Badgers Act (1992)

Protects badgers from persecution, this includes excavation/development in the proximity of setts.

Protected Sites

Statutory EU/International Protected Sites

Special Areas of Conservation (SACs); and Special Protection Areas (SPAs) and Ramsar Sites contain examples of some of the most important natural ecosystems in Europe. Work on or near these sites is strictly protected and Local Authorities will be expected to carry out 'Appropriate Assessment' of development in proximity of them. In this case there is often an increased burden on the developer in relation to provision of information and assessment.

Statutory UK Protected Sites

Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs) all receive strict protection under UK legislation. Work in or in proximity to these sites would be restricted with any needing to be agreed with Natural England. Natural England now provide guidance on the nature of development which could impact on SSSIs through Impact Risk Zones.

Locally Protected Sites

Local Authorities have a variety of protected wildlife sites designated at a local or regional level. These are gradually being brought under the banner of Local Wildlife Sites (LWS) but at present a plethora of different designations exist - all subject to local policy.

Protected Species

European Protected Species

A number of species (most relevantly bats, great crested newts [GCN], and otters) receive strict protection from killing, injury and disturbance under The Conservation of Habitats and Species Regulations (2010). Protection is also conferred on the habitats on which they rely such as roost space in the case of bats and ponds and fields etc. in the case of GCN.

UK Protected Species

A number of species (including bats, GCN, water vole and white clawed crayfish) are strictly protected under The Wildlife and Countryside Act (1981) as amended, from killing, injury, disturbance and damage or destruction of their resting places etc. Certain species (such as reptiles) and some birds (such as barn owl) receive partial protection e.g. at certain times of the year or from certain activities only. All

nesting bird species are protected from damage or destruction of their nests - whilst active.

Invasive species

Schedule 9 of the Wildlife and Countryside Act (1981) as amended.

Lists these species and makes it an offence to cause or allow their spread in the wild. This often has impacts on development and planning in relation to the presence of invasive plant species such as: Himalayan balsam (*Impatiens glandulifera*), Japanese knotweed (*Reynoutria japonica*), and giant hogweed (*Heracleum mantegazzianum*).

Planning Policy/Guidance

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework was updated in December 2024. The most relevant paragraphs from the NPPF are set out below.

The approach to assessing the natural environment is now embedded within the definition of what 'sustainable development' is and this falls under one of three objectives of the planning system - the 'environmental objective' applying in this case. Paragraph 8c (P8c) of the NPPF states that sustainable development should "protect and enhance our natural, built and historic environment", including "improving biodiversity". P10 sets out the Framework's presumption in favour of sustainable development.

Section 11 of the NPPF details making effective use of land. The Framework states that planning policies and decisions should take "opportunities to achieve net environmental gains - such as developments that would enable new habitat creation" and should "recognise that some undeveloped land can perform many functions, such as for wildlife" (P125).

Section 15 details conserving and enhancing the natural environment; policies and decisions should be "protecting and enhancing valued landscape [and] sites of biodiversity [...] value", "recognise the intrinsic character and beauty of the countryside" and contribute to conserving and enhancing the natural environment and reducing pollution (P187). Allocations of land for development should, "allocate land with the least environmental or amenity value, where consistent with other policies in this Framework" and "take a strategic approach to maintaining and enhancing networks of habitats" (P188).

The Framework sets out ways to minimise the impacts on biodiversity through plans which "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" and promote the "conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity" (P192).

It is made clear in P193 that local planning authorities should apply a set of principles when determining planning applications. Planning permission should be refused "if significant harm to biodiversity resulting from development cannot be avoided [...], adequately mitigated, or, as a last resort, compensated for". Development should not normally be permitted where an adverse effect on a SSSI

is likely, and "opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity".

UK Biodiversity Indicators 2023: update to Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services

The UK Biodiversity Indicators 2023 provide updates to the indicators set out in Biodiversity 2020 including new species abundance targets as set out in the Environment Act 2021. Biodiversity 2020 builds on the Natural Environment White Paper (June 2011) - Setting out the current UK Government's approach to nature conservation. It promotes a more coherent and inclusive approach to conservation and the valuing in economic and social terms of economic resources.

The strategy promotes initiatives such as Biodiversity Offsetting, Nature Improvement Areas and a focus on well-connected natural networks and introduces the concept of securing a 'no net loss' situation with regard to UKBAP/Section 41 habitats and species.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System

Provides guidance to Local Authorities on their obligations to biodiversity - particularly in relation to assessing planning applications and ensuring the adequacy of information.

BSI (2013) British Standards Institute BS 42020:2013 Biodiversity – Code of Practice for Planning and Development

Provides a standard for the biodiversity assessment and development industries and decision makers such as Local Planning Authorities to work to.