

Preliminary Ecological Appraisal

BE-512.1a

15 Shelley Woodhouse Lane



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Report title	Preliminary Ecological Appraisal
Report reference	BE512.1
Revision	A
Site address	15 Shelley Woodhouse Lane, Huddersfield HD8 8PH
Grid reference	SE 21909 10863
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Client	Mr & Mrs J Woodhead
Date	27 th June 2017

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Executive Summary

Bagshaw Ecology Ltd have been requested by Mr & Mrs J Woodhead to carry out a Preliminary Ecological Appraisal of the land adjacent to 15 Shelley Woodhouse Lane, Huddersfield HD8 8PH (site centroid grid reference SE 21909 10863), in relation to a planning application.

The site survey was carried out on 5th June 2017 by Amy Reddick.

The surrounding land use is predominantly rural agricultural farmland. Several designated sites were recorded within 1km of the site, and tree cover in the surrounding area is intermediate. There is good terrestrial connectivity leading to and from the site. The site survey found the site to consist predominantly of poor semi-improved grassland, tall ruderal vegetation and hardstanding, all of low ecological importance.

The scoping survey found no buildings on site and no trees with features suitable for roosting bats. Therefore, there are no further considerations of the proposed development in regard to bats.

The pile of rubble to the east of the site provides suitable habitat for reptiles. As a precautionary measure, it is recommended that this be removed by hand.

Species including common toad *Bufo bufo*, Common frog *Rana temporaria*, great crested newt *Triturus cristatus*, smooth newt *Triturus vulgaris*, grass snake *Natrix natrix*, European badger *Meles meles*, hobby *Falco Subbuteo*, redwing *Turdus iliacus* and fieldfare *Turdus pilaris* have been recorded within 1km of the site.

The hedgerows and trees on site provide suitable habitat for nesting birds. It is recommended that no removals or pruning of trees or hedges be undertaken during bird nesting season (1st March – 31st August). If this is not possible, a nesting bird check should be carried out prior to removal, and works should only commence if it is determined that no nesting birds are present.

It is recommended that the ecological value of the site is enhanced through the incorporation of bird boxes into the development proposals.

1. Introduction

Background

- 1.1. Bagshaw Ecology Ltd have been requested by Mr & Mrs J Woodhead to carry out a Preliminary Ecological Appraisal of the land adjacent to 15 Shelley Woodhouse Lane, Huddersfield HD8 8PH, hereafter referred to as 'the site'.
- 1.2. The purpose of the report is to identify the habitat types on the site, along with the presence or absence of any protected or notable species. The ecological impact of any proposed development is assessed, and mitigation, management and aftercare proposals are suggested when appropriate.

Site Details

- 1.3. The site is accessed off the east of Woodhouse Lane in Shelley. The site is bordered by agricultural farmland to the north and east and by residential properties to the south and west.
- 1.4. The site is approximately 0.1ha in size, and comprises an area of hardstanding and scrub.



Figure 1. Aerial imagery of site and surrounding area (Google Earth Pro, 2017)

Development Proposals

- 1.5. The development proposals are to construct a residential property on site.

2. Legislation and Policy

2.1. The Wildlife and Countryside Act 1981 (as amended), makes it an offence to:

- Deliberately or recklessly injure, kill or capture any animal species protected under Schedule 5 of the act.
- Deliberately or recklessly kill, injure or take any wild bird; to take, damage or destroy the nest of any wild bird while occupied or being built, or to take or destroy the egg of a wild bird. Additional protection is afforded to bird species listed under Schedule 1 of the Act.
- Intentionally pick, uproot or destroy any wild plant included in Schedule 8 of the act.

2.2. The Conservation of Habitats and Species Regulations 2010 makes it an offence to deliberately capture, kill or disturb any animal protected under Schedule 2 of the regulations. It is also an offence to damage or destroy a breeding site or resting place of an animal, even if the animal is not present at the time.

2.3. The UK Biodiversity Action Plan (UKBAP) includes a list of 943 national priority species and 56 habitats of principal importance, with all species and habitats having specific action plans defining the measures required to ensure their conservation. Although the UKBAP has since been superseded by County Biodiversity Plans, it remains a useful point of reference.

2.4. Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 requires that any public bodies take into consideration any species and habitats listed in the UKBAP when implementing their duty and exercising any normal functions.

2.5. The National Planning Policy Framework (NPPF) states that planning decisions should aim to protect or enhance biodiversity and conservation interests, and where possible any development should aim to increase net gains in biodiversity.

3. Methods

Ecological Data Search

- 3.1. The local biological record centre, West Yorkshire Ecology Service (WYES), was consulted as to any protected/notable species and land based designations within 1km of the site centroid.
- 3.2. The Department for Environment, Food and Rural Affairs' (DEFRA) Magic Maps website was consulted as to any land based designations within 1km of the site.
- 3.3. Aerial imagery was assessed to give an appraisal of the surrounding land use.

Site Survey

- 3.4. The habitat survey and mapping exercise was carried out on 5th June by Amy Reddick BSc (Hons) an assistant ecological consultant, with experience of carrying out habitat and protected species surveys, and who is an accredited agent under the licence of David Watts BSc (Hons) MCIEEM, an ecological consultant and licensed bat worker (2016-24731-CLS-CLS).
- 3.5. The study area was surveyed in accordance with JNCC (2010) guidelines. Habitat types were assigned an alphanumeric code, and target notes were made identifying important species, along with the presence of potential habitats for any protected or notable species.
- 3.6. Habitats and species present on or adjacent to the site were assessed using CIEEM's (2016) guidelines. Ecological features were classed as being of either international, national, regional, district, local, low or of negligible importance (see table 3.1).

Table 1. Importance of Ecological Features

Value of feature	Key examples
International	• Internationally designated sites (SPA, pSPA, SAC, cSAC, pSAC, Ramsar site, Biogenetic Reserve, or an area which meets designation for such sites. • Internationally significant and viable areas of a habitat type listed in Annexe 1 of the Habitats Directive. • Any regularly occurring, globally threatened species. • A regularly occurring population of an internationally important species, which is threatened or rare in the UK.
National	• A nationally designated site (SSSI, NNR), or an area which has met the published selection criteria. • A regularly occurring significant number/population of a nationally important species (e.g. listed on the Wildlife and Countryside Act 1981 (as amended)). • A feature identified as being of critical importance in the UK BAP.
Regional/County	• Viable areas of key habitat identified in the regional or county BAP. • A regularly occurring significant population/number of any important species important at regional/county level. • Sites of conservation importance which exceed the district selection criteria but which fall short of SSSI selection guidelines.

Value of feature	Key examples
District	• Areas of habitat identified in District/City/Borough BAP. • Sites that the designating authority has determined meet the published ecological selection criteria for designation. • Sites/features which are scarce within the District/City/Borough. • A regularly occurring significant population/number of any important species important at District/City/Borough level.
Local	• Areas identified in a Local BAP. • Sites/features which are scarce in the locality or which are considered to appreciably enrich the habitat resource within the local context (e.g. species-rich hedgerows). • Local Nature Reserves. • Any populations, species or habitats of local importance.
Low/Site	• Habitats of moderate to low diversity which support a range of locally and nationally common species, the loss of which can be easily mitigated.
Negligible	• Habitats of no ecological value, the removal of which requires no mitigation.

3.7. The trees on site were assessed for bats using methodologies prescribed by Collins (2016). This involved an inspection of trees from ground level, to determine of potential roost features were present.

3.8. Taking account of the structural features of trees, and the surrounding habitat, trees were assigned a level of roost suitability based upon professional judgement (see table 2).

Table 2. Bat Roosting Potential in Trees

Roosting potential	Criteria
Confirmed Presence	Presence confirmed by the survey.
High	A tree with one of more potential roost features that is obviously suitable for large numbers of bats.
Moderate	A tree with one or more potential roost features but which is unlikely to support roosts of high conservation status.
Low	A tree of sufficient size and age to contain potential roost features but with none seen from the ground, or features with very limited roost potential.
Negligible	Negligible habitat features likely to be used by roosting bats.

4. Results

Constraints

- 4.1. The site survey was conducted inside the optimum period for Phase 1 Habitat surveys. Some species are only visible at certain times of the year, and may not have been present during the survey.

Designated Sites

- 4.2. A search on Magic Maps (DEFRA, 2017) found several designated and notable habitats within 1km of the Site, including:
- Two Ancient Woodland Priority Habitats.
 - Seven Deciduous Woodland Priority Habitats, the closest of which is 225m to the northwest of the site.
- 4.3. WYES hold no records of designated sites within the survey area, but do hold records of five designated site within 1km of the site:
- Yew Tree Wood, a Local Wildlife Site (LWS) consisting of an acid woodland surrounded by improved grassland.
 - Shelley Wood, a LWS consisting of a semi-natural ancient woodland and semi-improved neutral grassland.
 - Hob Royd Shrogg and Miry Greaves Shrogg, a LWS comprising two areas of plantation woodland near a stream.
 - Gelder Wood, a LWS comprising a beech plantation.
 - Blacker Wood, a LWS consisting of a predominantly oak woodland near a railway line.

Habitats

- 4.4. The immediate surrounding area consists predominantly of agricultural land. The tree cover in the immediate area around the site is intermediate with several small patches of woodland nearby.
- 4.5. Habitat types, as defined by JNCC (2010) on the site include:
- **B6 Poor Semi-improved Grassland:** The majority of the site consists of species poor grassland, dominated by cock's foot *Dactylis glomerata*, red fescue *Festuca rubra* and Yorkshire fog *Holcus lanatus*. Other species are those typical of disturbed land, such as red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium*, common vetch *Vicia sativa*, sheep's sorrel *Rumex acetosella*, ragwort *Jacobaea vulgaris*, oil rapeseed *Brassica napus*, creeping buttercup *Ranunculus repens*, common dandelion *Taraxacum officinale*, lady's mantle *Alchemilla mollis*, hairy bitter cress *Cardamine hirsuta*, scentless mayweed *Tripleurospermum inodorum*, shepherd's purse *Capsella bursa-pastoris*, common ramping-fumitory *Fumaria muralis* and hedge woundwort *Stachys sylvatica*.
 - **C3.1 Tall ruderal:** Surrounding the grassland and adjacent to the hedgerows are common nettle *Urtica dioica*, rosebay willowherb *Chamerion angustifolium*, cleavers *Galium aparine*, fox and cubs *Pilosella aurantiaca*, red valerian *Centranthus ruber*, oil rapeseed and bramble *Rubus fruticosus*.

- **J1.1 Arable fields:** Adjacent to the north and east of the site was arable land which had been recently cultivated.
- **J2.3 Hedgerow with trees:** Bordering the south and east edges of the site. The southern hedge is within the adjacent garden and is predominantly Leyland cypress *Cupressus × leylandii* and privet *Ligustrum vulgare* along with common ivy *Hedera helix*, rosebay willowherb and common nettle. Two mature trees, an ash *Fraxinus excelsior* and goat willow *Salix caprea*, are also included here. The eastern hedgerow is predominantly beech *Fagus sylvatica* and copper beech *Fagus sylvatica* 'purpurea', with some hawthorn *Crataegus monogyna* and Japanese laurel *Aucuba japonica*.
- **J4 Hard standing:** an area of tarmac at the entrance of the site towards the southwest.

4.6. For further details, see Appendix B: Phase 1 Habitat Map.

Bats

4.7. WYES hold records of bat species within the site or within 1km of the site, including:

- Common pipistrelle *Pipistrellus pipistrellus*
- Noctule *Nyctalus noctula*
- Brown long eared *Plecotus auritus*

4.8. DEFRA (2017) holds no records of granted European Protected Species License within 1km of the site.

4.9. The bat scoping survey found no buildings on the site. No potential roost features were identified within the trees on the site.

Other Mammals

4.10. WYES hold records of mammal species within 1km of the site including European badger *Meles meles*.

4.11. There are no riparian habitats adjacent to the site that could provide suitable habitat for otter *Lutra lutra* or water vole.

Reptiles and Amphibians

4.12. WYES hold records of amphibians and reptiles within 1km of the site, including common toad *Bufo bufo*, Common frog *Rana temporaria*, great crested newt *Triturus cristatus*, smooth newt *Triturus vulgaris* and grass snake *Natrix natrix*.

4.13. A pile of rubble is located in the east of the site, which could provide suitable habitat for reptiles.

4.14. A search on aerial imagery (Google Earth Pro, 2017) revealed one pond 112m south of the site. It is possible that there are ponds within gardens of nearby properties, which are not visible from aerial imagery. A Habitat Suitability Index (HSI) for great crested newt was conducted on the pond.

4.15. The HSI score of 0.28 indicated that the pond was poor habitat for great crested newts. The pond was extremely large with a significant waterfowl presence.

Table 3. Great Crested Newt Habitat Suitability Index (HSI) (Oldham et al, 2000)

Pond Grid Ref		SE 21938 10745
SI No	SI Description	SI Value
1	Geographic location	1
2	Pond area	0.8
3	Pond permanence	0.9
4	Water quality	0.67
5	Shade	1
6	Water fowl effect	0.01
7	Fish presence	0.67
8	Pond Density	0.9
9	Terrestrial habitat	0.33
10	Macrophyte cover	0.3
HSI Score		0.44
Pond suitability		Poor

Bird Species

- 4.16.** The hedges and trees on the site provide suitable habitat for nesting birds although none were observed during the survey.
- 4.17.** WYES hold numerous records of bird species within 1km of the site including hobby *Falco Subbuteo*, redwing *Turdus iliacus* and fieldfare *Turdus pilaris*, which are afforded protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).

5. Assessment

- 5.1. The surrounding area consists predominantly of agricultural land. The tree cover in the immediate surrounding area is intermediate and there is good terrestrial connectivity to and from the site.
- 5.2. The habitats on site consist predominantly of poor semi-improved grassland, tall ruderal and hardstanding that are considered to be of low ecological importance.
- 5.3. There are no buildings on site and no trees with features suitable for roosting bats.
- 5.4. A pile of rubble is located in the east of the site, which could provide suitable habitat for reptiles. No further signs of reptiles were observed during the site survey.
- 5.5. The trees and hedges on the site provide suitable habitat for nesting birds. All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) when nesting.

6. Conclusion and Recommendations

- 6.1.** The habitats on the site are considered to be of low ecological value. No further surveys or mitigation is considered necessary for these habitats.
- 6.2.** The pile of rubble to the east of the the site provides suitable habitat for reptiles. It is recommended that this is removed from the site by hand, under the supervision of a consultant ecologist.
- 6.3.** It is recommended that no removal of trees or hedges on the site be undertaken during bird nesting season (1st March – 31st August). If this is not possible, a nesting bird check should be carried out prior to removal, and works should only commence if it is determined that no nesting birds are present.
- 6.4.** In accordance with the National Planning Policy Framework, it is recommended that the ecological value of the site is enhanced through the incorporation of two bird boxes into the development proposals. Bird boxes of type Schwegler 1MR Avianex should be hung on trees at a height of 1.5 to 5m, in sheltered locations and with clear flight paths to the entrances.

7. References

- CIEEM (2016). *Guidelines for Ecological Impact Assessment in Britain and Ireland: Terrestrial, Freshwater and Coastal, 2nd Edition*. Winchester: Chartered Institute of Ecology and Environmental Management
- Collins, J. (2016). *Bat Surveys Good Practice Guidelines – 3rd Edition*. London: Bat Conservation trust
- Conservation of Habitats and Species Regulations 2010*
- DEFRA (2017) *Magic Maps* [online]. Available at >www.magic.gov.uk< [accessed 6th June 2017]
- Google Earth Pro (2017). *Google Earth* [online]. Available at: >www.earth.google.com< [accessed 6th June 2017]
- Harris, S., Yalden, D. (2008). *Mammals of the British Isles*. Southampton: The Mammal Society
- Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey*. Peterborough: JNCC
- Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature
- Mitchell-Jones, A.J., McLeish, A.P. (2004). *Bat Workers Manual*. Joint Nature Conservation Committee
- 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), 143-156.
- Wildlife and Countryside Act 1981 Ch. 69*

Appendices

Appendix A: Photographs



Plate 1: North aspect of the site. Hardstanding and grassland



Plate 2: East aspect of the site.



Plate 3: Hardstanding, tall ruderal and southern hedge.



Plate 4: West aspect of the site.



Plate 5: West aspect of the site. Rubble and tall ruderal vegetation.



Plate 6: Eastern boundary hedgerow.



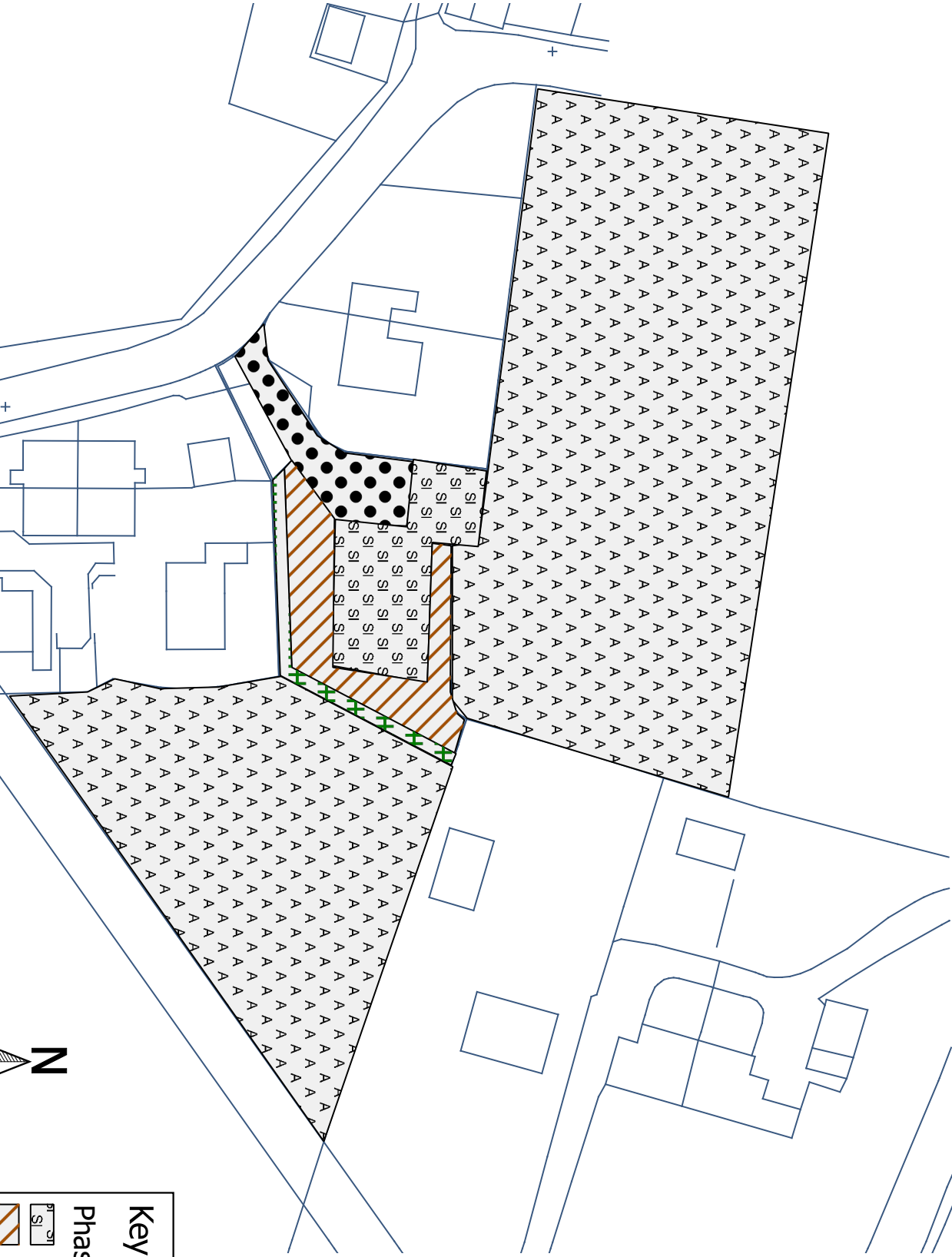
Plate 7: Southern boundary hedgerow and rubble.



Plate 8: The pond 112m from the site.

Appendix B: Phase 1 Habitat
Map

Site name:	15 Woodhouse Lane
Client:	Mr & Mrs J Woodhead
Drawn by:	Amy Reddick
Date:	8th June 2017



Key

Phase 1 Habitats:

-  B6 - Poor semi-improved grassland
-  C3.1 - Tall ruderal
-  J1.1 - Arable land
-  J2.3.2 - Hedge with trees
-  J4 - Hardstanding