

# Land off Sheffield Road, Birdwell. Preliminary Ecological Site Appraisal

29<sup>th</sup> April 2016



Prepared by:

Peter Middleton MCIEEM *Peter Middleton*.....

Middleton Ecological Consultancy, 33 Wilthorpe Road, Barnsley S75 1JA

<b>Site Name</b> Land off Sheffield Road, Birdwell	<b>Location</b> Sheffield Road Birdwell, Barnsley.
<b>Job Number / Ref</b> 16/Eco07	<b>Document ref</b> MEC/SheffRd/2016
<b>Site Code</b> None	<b>Grid Reference</b> SE 3453 0116
<b>Surveyor</b> Peter Middleton MCIEEM	<b>Date of Survey</b> 29/04/16
<b>Geology/Soil Type</b> Not needed	<b>Designation</b> None

<b>Phase 1 Habitat Types</b> J.2.1.2 Species poor hedgerow, A.2.1 Dense scrub, C.3.1 Tall ruderal, B.2.2 Semi improved grass.
<b>NVC Communities</b> None
<b>Protected Species</b> None
<b>Red List Species</b> House sparrow
<b>UK Biodiversity Species</b> House sparrow
<b>Barnsley BAP</b> None

### Document History

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Purpose and Description	Originated	Checked	Reviewed	Authorised	Date
For Planning	PM	-	-	PM	3/05/16

### Summary Statement

There are no national, regional or locally important habitats but the former allotment site contains a mosaic of scrub, tall ruderal vegetation and rank grass together with privet hedgerows.

The proposed future development of the site is unlikely to present any impacts on protected species. General recommendations in terms of mitigation and enhancement of the site's biodiversity are made in the report.

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## **1. Introduction**

- 1.1 The preliminary ecological site appraisal was commissioned by planning consultant Michael Townsend on behalf of the client. The site is subject to a planning application for a small development.
- 1.2 The purpose of this report is to present the results of a preliminary site appraisal (walkover survey) which includes determining the potential for, or presence of, protected species and Red listed/UK BAP/Local BAP species, plus an appended map of the site showing the Phase 1 habitats present. Some sites will require subsequent targeted species surveys but with smaller sites they are often not required and the preliminary site appraisal is sufficient to accompany the planning application. Therefore, some recommendations and enhancements for biodiversity are included in this report.

## **2. Site description**

- 2.1 The site consists of approximately 2450m<sup>2</sup> of land off Sheffield Road at Birdwell, Barnsley. The site was formally used as allotments but has become abandoned resulting in a complicated mosaic of dense bramble scrub, tall ruderal vegetation and rank grass. Privet hedges that would have formally separated the plots have also become overgrown. The boundary to the site also has some privet hedges. Much of the scrub has recently been cleared together with some large trees.
- 2.2 The surrounding area consists predominantly of residential and grassland with woodlands and arable land further afield (see plate 1).

## **3. Methodology**

- 3.1 A desk study was carried out to identify species or habitats that are considered important in a local context and to identify any species recorded locally that may be associated with the application site. This information can then be used to help target groups that need to be considered in more detail in order to identify the ecological baseline for the application site.
- 3.2 A visit was made to the site on the 29<sup>th</sup> April 2016 and a walkover survey was undertaken lasting approximately one hour, to record all the plant species present in each of the different habitats or plots on site.
- 3.3 The whole of the site and important adjacent habitats were also surveyed for European/UK protected species, UK BAP species, Schedule 1 Species, Red List Species and species listed on Schedule 9.
- 3.4 For assessing Habitats the standardised system of Phase 1 habitat classification published in JNCC Handbook for Phase 1 Habitat Survey was used. Additionally, and where possible, habitats were classified using the

National Vegetation Classification (NVC) as described in the JNCC National Vegetation Classification – Users Handbook.

**Plate 1** The site



## 4. Results

### 4.1 Desk Study

4.1.1 Sheffield biological records centre hold no records for Great Crested Newt *Triturus cristatus* within a 1.5km radius of the site. There are however records of Badger *Melis melis* and Water Vole *Arvicola terrestris* within 1.5km radius of the application site. Almost 5000 records of which have no significance to the application site were supplied by the data centre. The excel spreadsheet containing mostly common vascular plants and birds was too large to copy and therefore it is not presented in the appendix.

4.1.2 South Yorkshire Badger Group were not consulted because the author of this report knows the location of the badger setts within a one kilometre radius of the site and they will not be affected by the proposed development. South Yorkshire Bat Group were not consulted also because there are is no bat roost potential on site and its location suggests that it will not provide important foraging habitat.

4.1.3 A search of the website 'Magic' the Geographical information system and data supplied by Sheffield biological data centre did not identify any internationally or nationally designated sites within a 1.5km radius of the application site. There are however, three locally designated sites (see table 1), the nearest is Rockley woods which is approximately 330m west of the application site. No impacts are therefore anticipated because of the distance from the application site.

**Table 1** Designated sites

Designation	Name	Habitats
Local wildlife site	Rockley Woods	Ancient woodland, Lowland Mixed Deciduous Woodland, Wet Woodland, Rivers, Ponds
	Short Wood and Hay Green	Ancient woodland, Lowland Mixed Deciduous Woodland, Wet Woodland, Lowland Meadow, semi-improved neutral grassland, with a species-poor hedgerow.
	Potter Holes	Lowland Mixed Deciduous Woodland
	Worsborough Reservoir	Reservoir, Wet Woodland, Reedbeds, River, Lowland Mixed Deciduous Woodland.
Local nature reserve	Potter Holes	Lowland Mixed Deciduous Woodland

## 4.2 Field Survey (Phase 1 habitat survey)

### 4.2.1 A.2.1 Dense scrub

The dense Bramble *Rubus fruticosus* scrub component at this site has largely been cleared but it is still evident throughout the site often growing within tall ruderal vegetation.

### Plate 2



### 4.2.2 B.2.2 Semi improved grass

The grass areas have been classified as semi improved for it is naturally colonised on garden plots but has been subject to large amounts of organic and

possibly inorganic applications. The grass is therefore species poor and dominated by False oat-grass *Arrhenatherum elatius*, Cock'sfoot *Dactylis glomerata* and Common couch *Elytrigia repens*. In damp areas there is occasional Soft rush *Juncus effuses*.

**Plate 3**



**4.2.3 C.3.1 Tall ruderal**

Tall ruderal vegetation is found throughout the site often within bramble scrub and in the rank grass. Nettle *Urtica dioica* is abundant throughout together with patches dominated by both Rosebay *Chamerion angustifolium* and Great willowherb *Epilobium hirsutum*. Additionally, Broad leaved docks *Rumex obtusifolius* are abundant within the small areas of grassland.

**4.2.4 J.2.1.2 Species poor hedge**

Large uncut hedges totally dominated by Garden privet *Ligustrum ovalifolium* are present along the former boundaries of the garden plots and along some of the boundaries of the site.

**Table 2**

**D** = Dominant, **A** = Abundant, **F** = Frequent, **O** = Occasional, **R** = Rare

Full Species List		
English Name	Scientific Name	DAFOR Rating
Broad leaved dock	<i>Rumex obtusifolius</i>	A
Nettle	<i>Urtica dioica</i>	F
Garden privet	<i>Ligustrum ovalifolium</i>	O
Honeysuckle	<i>Lonicera x italica</i>	R
Cleavers	<i>Galium aparine</i>	Loc D

Soft rush	<i>Juncus effusses</i>	O
Rosebay	<i>Chamerion angustifolium</i>	Loc D
Ivy	<i>Hedera helix</i>	Loc D
Spearmint	<i>Mentha spicata</i>	Loc D
False oat-grass	<i>Arrhenatherum elatius</i>	A
Cock'sfoot	<i>Dactylis glomerata</i>	A
Dandelion	<i>Taraxicum officinale</i>	F
Garden daffodil	<i>Narcissus sp</i>	F
Herb robert	<i>Geranium robertianum</i>	R
Couch grass	<i>Elytrigia repens</i>	A
Rough meadow-grass	<i>Poa trivialis</i>	O
Lavender	<i>Lavendula sp</i>	R
Goosberry	<i>Ribes uva-crispa</i>	R
Creeping bent	<i>Agrostis stolonifera</i>	R
Bramble	<i>Rubus fruticosus</i>	Loc A
Grey willow	<i>Salix cinerea</i>	R
Holly	<i>Ilex aquifolium</i>	R
Common vetch	<i>Vicia sativa</i>	R
Hawthorn	<i>Crataegus monogyna</i>	R

### 4.3 Schedule 9 species (Invasive species)

4.3.1 No species which are listed on Schedule 9 of the Wildlife and Countryside Act 1981 Part 2, section 14, which prohibits the release of such plants into the wild were found on site.

### 4.4 Protected species

4.4.1 **Great crested newt *Triturus cristatus*** – There are no ponds on site and the nearest pond is 660m northeast of the application site and at the other side of the A61 Sheffield Road. There are also no records of GCNs within a 2km radius of the site.

4.4.2 **Water voles *Arvicola amphibious*** – There are no water courses on site and therefore no habitat for this species.

4.4.3 **Badger *Melis melis*** – There was no signs of Badgers on site but they are known to be in the wider area.

4.4.4 **Reptiles** – There is no suitable habitat on site and no connectivity with potential suitable habitat elsewhere.

4.4.4 **Bats** – There are no buildings on site and no trees with any potential to accommodate bats.

#### **4.5 UK/Local BAP/Red Listed species**

4.5.1 House sparrows *Passer domesticus* were found in the privet hedges on site and also in the wider area.

#### **4.6 Other fauna**

4.6.1 The usual assemblage of common birds were recorded on site including Wren *Troglodytes troglodytes*, Dunnock *Prunella modularis*, Goldfinch *Carduelis carduelis* and Blackbird *Turdus merula*. A Blackcap *Sylvia atricapilla* was also heard singing briefly.

#### **4.7 Habitat assessment and summary**

4.7.1 The site was formally allotment gardens and consequently it will have been subject to extreme nutrient enrichment from applications of manure or inorganic fertilizer. Consequently, the naturally colonised grass is species poor. The site has been largely cleared of bramble scrub but would soon revert to a complicated mosaic of scrub and tall ruderal vegetation if left.

4.7.2 The site contains no national, regional or local important habitats and the hedges are species poor and consist only of garden privet. Although the mosaic of scrub and tall ruderal vegetation has some ecological value the site is relatively small and has no connectivity to other habitats because it is surrounded by the built environment.

4.7.3 There are no potential issues regarding protected species for the site. A pond that exists north east of the application site is more than the 500m radius of the terrestrial habitat of great crested newts. Furthermore, there is a major highway between the pond and the application site.

### **5. Constraints**

5.1 No constraints have been identified. Much of the vegetation in April is only just emerging but this did not affect the flora survey or the habitat assessment.

### **6. Legislation**

6.1 Development and construction works need to comply with the complex requirements of the wildlife protection legislation and government policy in the UK.

#### **Core Legislation**

- The Wildlife and Countryside Act 1981 (as amended)
- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
- The Protection of badgers Act 1992
- The Hedgerow Regulations 1997

- The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended)
- The Countryside and Rights of Way Act 2000
- The Natural Environment and Rural Communities Act 2006

### Key Policy

- The UK Biodiversity Action Plan (1994)
- National Planning Policy Framework: 11 Conserving and enhancing the natural environment (2012)
- Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (2005)
- Technical Advice Note 5: Nature Conservation and Planning (2006)
- Regional Planning Policy and Local Development Documents

## 7. Mitigation/recommendations

7.1 For mitigation and in order to enhance the ecological value of the site in accordance with the aims of planning policy NPPF: 11, it is suggested that the developer follows the recommendations detailed below. Please note that the mitigation/enhancements have been informed by the results and findings of the preliminary ecological appraisal and data search (see 4). For more information, contact Middleton Ecological Consultancy.

### Figure 1

- Hedges along boundaries should be retained where possible.
- Boundaries to the site should not impede the free movement of Hedgehogs across the site and beyond therefore provision in the form of holes at the bottom of fences or walls must be created.
- Site clearance should take place at a time when it will not affect nesting birds (March to August).
- The new development should include House sparrow boxes integral to the fabric of the buildings high on walls or under soffits (see example in fig 1).

**Figure 1** Vivara Pro WoodStone House Sparrow Nest Box



- 7.2 House sparrows (*Passer domesticus*) are sociable opportunists that survive in most UK habitats, from towns and cities to farmland and countryside. Substantial declines in both urban and rural populations (estimated 71% decrease between 1977 and 2008) have led to concerns for this species.

This House Sparrow Nest Box is manufactured from WoodStone - a mix of concrete and FSC wood fibres. This material is strong and highly insulating which helps to provide a thermally stable environment within the box. It also protects against damage from predators such as cats, woodpeckers and squirrels. It has two breeding chambers making it particularly suitable for house sparrows as they prefer to nest in colonies.

The House Sparrow Nest Box can be integrated into the masonry of a new house or fixed onto an external wall using strong screws and wall plugs (not included). If possible, it should be positioned near to vegetation and at a minimum of 2m above ground.

## **8. Further Survey Needs**

- 8.1 Based on the results of the Phase 1/Preliminary ecological appraisal it is recommended that the following protected species surveys be undertaken.

- No further surveys are necessary.

## **9. Conclusion**

- 9.1 The site contains no national, regional or locally important habitats and there is no issues regarding European or UK protected species. House sparrows were recorded in the hedges and they are Red Listed Species of conservation concern. However, with mitigation the site can be enhanced for this species.
- 9.2 By implementing the recommendations outlined in section 7 of this report the impacts of the proposed development will be negligible.

## **References:**

Bat Conservation Trust, 2007. Bat Surveys, Good Practice Guidelines.

Gunnel K, et al 2013, Designing for Biodiversity: A technical guide for new and existing buildings, RIBA Publishing.

Handbook for Phase 1 habitat survey, 2003, JNCC.

Rodwell J.S, 1991, JNCC British Plant Communities.

Appendix A

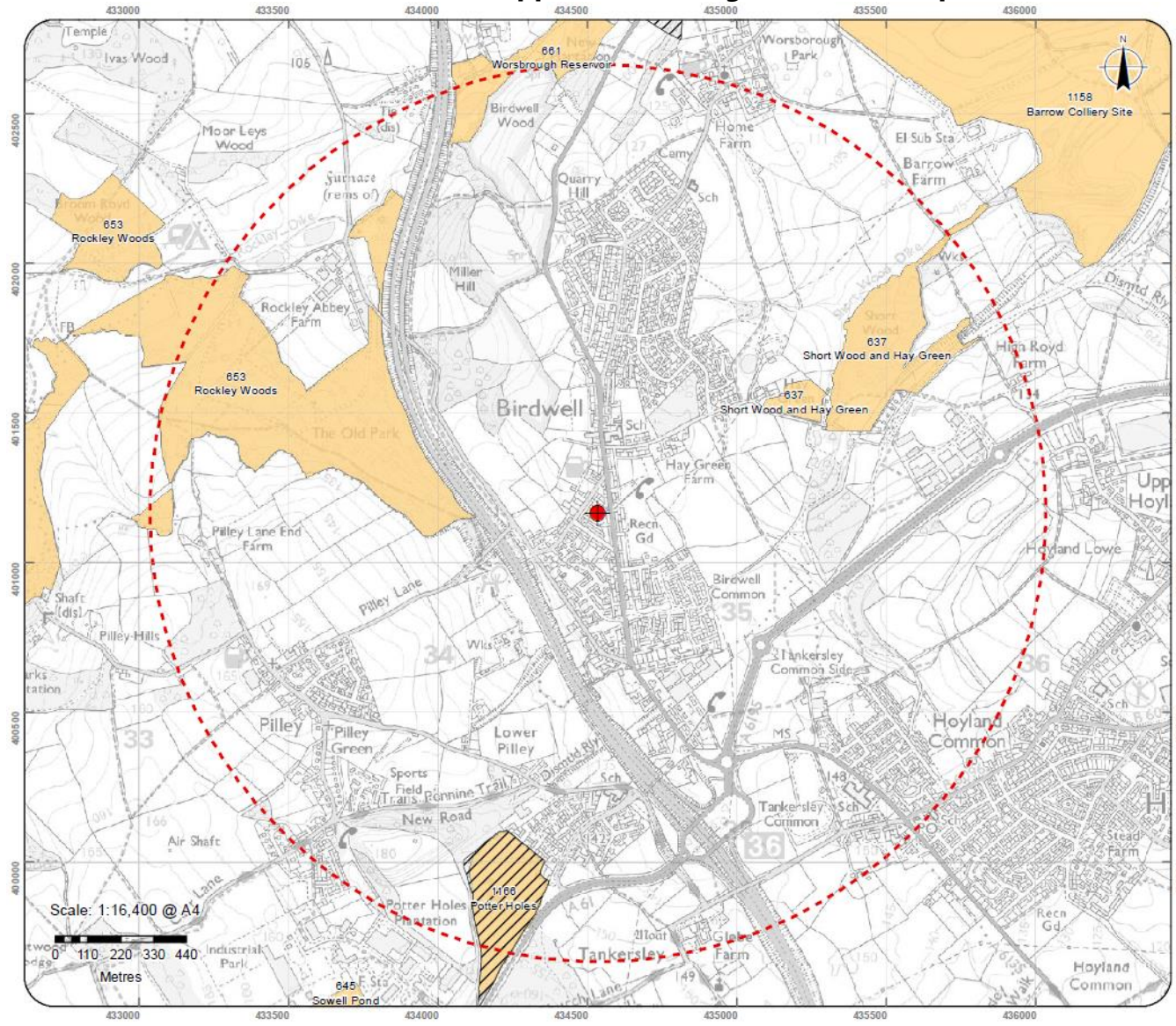
Phase 1 Habitat Map



Target Note 1 Mosaic of scrub, tall ruderal and grass



### Appendix B (Designated Sites Map)



**SHEFFIELD BIOLOGICAL RECORDS CENTRE**

Statutory and Non Statutory Local Wildlife Sites Within the Search Area

**Sheffield Road Birdwell**

- Location
- 1.5km Radius
- Local Wildlife Sites
- ▨ LNR Natural England
- ▭ Barnsley District Boundary

Map Created - 04 May 2016

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