

# Local Wildlife Site Assessment

"Owlthorpe Fields"

Sites C, D & E – Moorthorpe Way

Owlthorpe, Mosborough

Sheffield S20 6QB

Client: Sheffield & Rotherham Wildlife Trust



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**Date:** 10 November 2020

## Quality Assurance

<b>PROJECT NUMBER</b>	1286.20
<b>PROJECT NAME</b>	Owlthorpe Fields Local Wildlife Site Assessment
<b>SITE LOCATION</b>	Moorthorpe Way, Owlthorpe, Mosborough, Sheffield S20 6QB
<b>FILE NAME</b>	P1286 Owlthorpe Fields Local Wildlife Site Assessment
<b>VERSION</b>	V01.1

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by Wildscapes CIC and Sheffield and Rotherham Wildlife Trust for inaccuracies in the data supplied by any other party.

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# 1 Introduction

1. This report is written by Julie Riley, BA MA DipRSA ACIEEM, who holds a BSBI Field Identification Skills Certificate at Level 4, a Certificate in Biological Recording and Species Identification from Manchester Metropolitan University and is a certified trainer for the UK Habitat Assessment methodology.
2. The report was commissioned by Sheffield and Rotherham Wildlife Trust.
3. This report uses the comprehensive species list collected during Wildscapes Project P1226 Owlthorpe Preliminary Ecological Appraisal (Julie Riley, July 2020), data input by Owlthorpe Action Group into the Sheffield and Rotherham Wildlife Trust iRecord database 'Nature Counts' (extracted October 2020), and data supplied by SCC Ecology Unit to Owlthorpe Action Group and used with SCC's permission (supplied February 2020). Additionally, data collected by BWB in their Ecological Impact Assessment for Site E only (November 2019) has been added.
4. The site is variously known as "Owlthorpe Fields" or as "Sites C, D and E – Moorthorpe Way". For the purposes of this report, the site has been referred to as Owlthorpe Fields. In the text "the site" refers to the entire site; where a subsection of the site is being considered it is referred to as Site C, D or E. The central grid reference for the site is SK417826.
5. A location map is shown in Appendix 1.
6. The site is an arable reversion site, having been farmland adjacent to Moorhole Collieries since at least the 1900s, with farming appearing to cease around 1999-2002 when the road network was built across the site [Google Earth historical imagery], separating Sites C and D. Site E is separated from the other areas by Moorthorpe Rise to the southeast, and a tarmacked cycle track to the northeast.
7. Sheffield City Council's sale information states that Site C measures approx. 2.6 hectares; Site D measures approx. 1.9 hectares; and Site E measures approx. 3.35 hectares – approx. 7.85 hectares in total. These figures differ slightly from site size as measured on QGIS during habitat mapping.
8. The immediately surrounding land is a mixture of woodland and grassland, including three Local Wildlife Sites (Owlthorpe LWS, Ochre Dike LWS and Westfield Plantation LWS). Residential housing lies to the north, east and south of the site, with a patchwork of arable fields to the west, south and east.
9. There is a similar range of habitats present across all three areas, with some minor differences. Large areas of neutral grassland are present, often with species tolerant of wet conditions and occasionally with acid characteristics. Where ground was disturbed for road building, there is more diverse grassland present, and some modified grassland along paths. There is frequent scattered scrub and young trees, copses of young woodland and small areas of more mature woodland and wet woodland.
10. Other than some mowing along the road verges, the site appears to be largely unmanaged, probably since the early 2000s (Google Earth), although Site C went into a Higher Level Stewardship scheme in 2013 (Magic) – see Appendix 6. It is a popular location for dog walkers, cyclists and ramblers. There is some litter present, particularly around the access points.
11. The species lists for the site have been assessed against Local Wildlife Site criteria produced by Sheffield City Council as follows: *Botanical indicator species to aid the selection of grassland Local Wildlife Sites* (Sheffield Ecology Unit, January 2012); *Criteria for selection of woodland Local Wildlife Sites in the Sheffield Context* (Sheffield Ecology Unit, February 2012); and *Sheffield Local Wildlife Sites Partnership: Criteria for the Selection of Local Wildlife Sites* (Sheffield Ecology Unit, February 2012).

## 2 Local Planning Policy

12. This information is a summary and intended for general guidance only. It is recommended that the original documentation is referred to for detailed and definitive information.

### 2.1 Local Planning Policy

13. The Sheffield Local Plan has a number of 'saved' policies from the Unitary Development Plan (1998) associated with conservation and biodiversity, including but not limited to GE11: Nature Conservation and Development; GE13: Areas of Natural History Interest and Local Nature Sites; and GE15: Trees and Woodland. These policies guide decision making around development where it is likely to impact on the natural environment and local wildlife sites.
14. Sheffield also has a Grasslands Habitat Action Plan (HAP) from 2012, which includes targets for maintaining and increasing the amount of good quality grassland habitat in the city. Owlthorpe Local Wildlife Site (immediately west of Owlthorpe Fields) is targeted for improvement/enhancement under this plan.
15. Sheffield's Unitary Development Plan Map 7 (1998) shows the area of Owlthorpe Fields largely designated for proposed housing, surrounded by open space areas. The Sheffield Development Framework Core Strategy key diagram shows that part of the Strategic Green Network runs parallel to the site, directly to the south.



Figure 1: UDP Map 7 extract



Figure 2: Core Strategy Map extract

## 2.2 Local Wildlife Site Selection Criteria

16. The Sheffield Local Wildlife Sites Partnership aims to conserve, maintain and enhance Sheffield's diversity through a system of Local Wildlife Sites (LWS). These are also identified in the Local Development Framework.
17. There are three main methods by which a potential site may be assessed and proposed to the Local Wildlife Sites Partnership for selection as a LWS:
  - The principles set out in the Sheffield 1991 Nature Conservation Strategy
  - The Sheffield Local Red Data List
  - The use of criteria based on indicator species and assemblages of species
18. A potential LWS may be assessed and proposed using just one of these methodologies, or any combination of them. The cumulative value of a site across 2 or more methodologies may also be considered, with the same true of sites which contain more than one habitat type and/or faunal interest and are assessed using different indicator species and assemblages.

## 3 Methodology

### 3.1 Desk Study

19. The species list collected during the UK Habitat Classification Scheme (UKHab) survey on the 3<sup>rd</sup>, 14<sup>th</sup> and 20<sup>th</sup> July 2020 was extracted from the PEA report produced by Wildscapes, and analysed using the Woodland and Grassland LWS selection criteria. The filtered species list is available as an excel spreadsheet, Appendix 2.
20. Ecological record information for Owlthorpe was downloaded from the Sheffield and Rotherham Trust 'Nature Counts' website on 12<sup>th</sup> October 2020. This was then filtered manually to only include records that appear within Sites C, D and E at Owlthorpe Fields and analysed using the Grassland LWS selection criteria only. The filtered species list is available as an excel spreadsheet, Appendix 3.
21. Ecological record information for Owlthorpe was received by the Action Group from Sheffield City Council's Ecology Unit in February 2020. Permission was received from SCC to use the data for this report. This was filtered manually to only include records that appear within Sites C, D and E at Owlthorpe Fields and analysed using the Grassland LWS selection criteria only. The filtered species list is available as an excel spreadsheet, Appendix 4.
22. The botanical species list supplied in the BWB Ecological Impact Assessment (November 2019) for Site E was used, the filtered species list is available as an excel spreadsheet, Appendix 5.
23. Once the individual datasets were analysed, a combined species list using all of the data was created and also analysed. This is available as an excel spreadsheet, Appendix 6.
24. The form provided in Annex 1b within the *Sheffield Local Wildlife Sites Partnership: Criteria for the Selection of Local Wildlife Sites* document was completed as far as possible.

### 3.2 Limitations

25. The UKHab survey took place in late summer and will not necessarily have picked up species that are more likely to be visible in the spring.
26. The Nature Counts data was collected by Owlthorpe Action Group volunteers, it is not known exactly what survey methodology they used or the botanical ability of the volunteers, however they have provided photographs of some of the species identified for verification. Data where they have expressed low confidence in their identification has not been included in the assessment.
27. It is not known if the data supplied by SCC was collected during a systematic survey, or if it comprises incidental records. The botanical ability of the surveyor is unknown.
28. The BWB information is based on a PEA survey that took place in February 2019 by an MCIEEM qualified surveyor. The specific botanical knowledge of the surveyor is unknown but it should be noted that the survey was conducted out of the main botanical survey season.
29. For the woodland assessment, only information collected during the Wildscapes UKHab survey was used. The habitat map created for that report should be referred to when reading Section 5.2 below.
30. Some issues were encountered when completing the evaluation form within the criteria document; these are explained in more detail in Section 6 below.

## 4 Woodland Results

### 4.1 Woodland Selection Criteria

31. For all woodlands the site must cover at least 0.5Ha

32. Site selection criteria are divided into four:

- Ancient woodland - site is not an ancient woodland and will not meet this criterion.
- Upland oakwood - site does not meet this criterion.
- Wet woodland - essential: underlying soils must be permanently or seasonally wet. The canopy must be dominated by alder and/or birch and/or willow. Desirable: mosses are abundant in the ground layer. Woodland is associated with wetland habitats (e.g. ponds and marshes).
- Woodland with other features of importance for nature conservation. BAP priority species and/or Red Data Book species, veteran trees, rookeries, heronries and major bird roosts.

### 4.2 Woodland Assessment Results

#### 4.2.1 Wet Woodland

33. Woodlands are mapped and coded on the UKHab map as A1, A2, A3 and A4.

34. Woodlands coded as A1 are dominated by willow with a dry or bramble understorey. Probably would not meet the criteria as the ground flora species are not consistent with the UKHab definition of wet woodland.

35. Woodland coded as A2 is dominated by ash and does not meet the criteria.

36. The woodland coded as A3 to the west of Site E is dominated by alder and is older, it was not fully accessed during the survey. It is possible that it could qualify as wet woodland, depending on the ground flora present and whether there are any wetland habitats present. This would need further assessment.

37. The woodland coded as A4 has been mapped as wet woodland. As it measures 0.07Ha it would not be eligible for selection.

#### 4.2.2 Woodland with Features of Importance

38. No veteran trees noted within the woodlands on site, although there are a number of veteran trees present in the adjoining Local Wildlife Site Ochre Dyke, which are not included in this assessment.

39. No rookeries, heronries or major bird roosts noted on site (although some of the woodland was not fully accessed).

40. Recent records of BAP priority species and/or red data book species: no plant records on the list noted during the survey. However, records and sightings from the data search and site visit include records of 9 priority species as listed in the criteria: willow tit, willow warbler, song thrush, lesser redpoll, badger, common pipistrelle, soprano pipistrelle, noctule bat, brown long-eared bat. The PEA recommended further bird and bat surveys to determine likely populations on site. Depending on the results of these, the woodland areas could be deemed to hold features of importance for nature conservation.

## 5 Grassland Results

### 5.1 Grassland Selection Criteria

41. Areas to be considered for selection must cover an area of at least 0.25 hectares, or be more than 50 metres in length, if a linear feature. All the sub-sites C, D and E contain areas of grassland that meet the size criteria, as does the site as a whole.
42. A comprehensive list of flowering plants is provided, divided into 'positive indicators' (highlighted pink) and 'strong positive indicators' (highlighted green).
43. For acid grassland to be considered, as well as meeting the size criteria, there must be a total of 8 or more indicator species present, including at least 4 strong positive indicators.
- 44. For neutral/calcareous/mixed grassland to be considered, as well as meeting the size criteria, there must be a total of 10 or more indicator species present, including at least 5 strong positive indicators.**
45. It should be noted that during the Wildscapes UKHab survey, some plants indicating acid characteristics such as lesser stitchwort *Stellaria graminea* were found, however the grasslands were thought to be more neutral in character. They have therefore been assessed against the neutral criteria.

### 5.2 Grassland Assessment Results (neutral grassland)

46. The full details of the assessment for each dataset, and a combined dataset, are available in the appendices.
47. Summary tables of the results are presented below.

Table 1: Data from Wildscapes UKHab Survey

	Site C	Site D	Site E	Combined
Positive indicator	20	19	17	27
Strong positive indicator	3	3	2	4

Table 2: Data from SRWT Nature Counts database

	Site C	Site D	Site E	Combined
Positive indicator	15	9	9	27
Strong positive indicator	7	4	3	11

Table 3: Data from SCC LRC

	Site C	Site D	Site E	Combined
Positive indicator	21	9	15	31
Strong positive indicator	4	0	3	6

N.B. Some SCC supplied records fall to the south of Site C, they are not included in these figures but have been separated and assessed in the appendix.

Table 4: Data from BWB EclA Appendix

	Site C	Site D	Site E	Combined
Positive indicator	n/a	n/a	18	n/a
Strong positive indicator	n/a	n/a	1	n/a

Table 5: Combined data from all sources

	Site C	Site D	Site E	Combined
Positive indicator	31	26	34	43
Strong positive indicator	9	6	5	12

### 5.3 Discussion of Grassland Results

48. Data from the Wildscapes UKHab survey show that individually, each sub-site does not meet the criteria for a neutral grassland local wildlife site. When the data are combined together from this survey only, the site as a whole does not meet the criteria, falling short by just one strong positive indicator species.
49. Data from the SRWT Nature Counts database show that individually, Site C meets the assessment criteria for a neutral grassland local wildlife site. Sites D and E do not. When data are combined from this dataset only, the site as a whole meets the criteria.
50. Data from the SCC LRC show that Site C meets the assessment criteria for a neutral grassland local wildlife site. Sites D and E do not, however as the methodology for collecting these records is not known, this may be because these areas have not been fully surveyed. When data are combined, the site as a whole meets the criteria.
51. Data from the BWB EclA report does not cover Sites C and D. Site E does not meet the criteria based on this data.
- 52. When the data from all four sources are combined, all three sites individually meet the assessment criteria for a neutral grassland local wildlife site. The combined data from all three sources show that the site as a whole meets the criteria.**
53. It is the opinion of the author that the areas of neutral grassland have the potential to be enhanced and managed to improve their species diversity. Over time this would increase the number of positive and strong positive indicators present.

## 6 Evaluation against Local Nature Site selection criteria from 1991 Sheffield Nature Conservation Strategy

### 6.1 Evaluation Table

54. The table has been completed following the tick box guidance, based on the limited knowledge of the site gained from carrying out a Preliminary Ecological Appraisal, and reviewing data. The table should be reviewed in conjunction with the PEA report which goes into detail regarding the habitats present on site.

55. Not all of the necessary supplementary information was available to the author and some questions have been left unanswered or need commenting on, these are discussed below.

Table 6: Completed evaluation table

#### Evaluation against Local Nature Site selection criteria from 1991 Sheffield Nature Conservation Strategy

SITE CHARACTERISTICS	Sub elements for site characteristics for the site.				COMMUNITY FACTORS	Sub elements for community factors for the site.				
	A	B	C	D		A	B	C	D	E
Richness/Diversity	Y	Y	Y	Y	Community & Amenity Value	Y	Y	Y	?	
Rarity	Y	Y	N	?	Educational Value	N	Y	Y	N	?
Continuity of Landuse	Y	?	N		In an area of deficiency	?				
Typicalness	?	?			Threat of disturbance/destruction	Y				
Size	Y				History of scientific recording	?	?	?		
Irreplaceability	N									
Fragility	Y	N	Y	Y						
Ecological Position	Y	Y	Y							
Part of sequence of features	?									
Significant Populations	N	N			Aesthetic Appeal & Landscape	?	Y	Y	Y	
Potential Value	Y	Y			Geographical Position	N	Y			
Naturalness	Y				Physical & Visual Access	Y	Y	Y	Y	

### 6.2 Comments on Evaluation Table

#### 6.2.1 Richness/Diversity

56. An NVC survey was not carried out; the assessment of (A) high species diversity of flowering plants was based on the UKHab criteria.

#### 6.2.2 Rarity

57. (D) Good quality semi-improved grassland is rare and should be selected – answering Yes to this question will depend on the panel's assessment of the grassland in Section 5, and how 'good quality' is defined.

### 6.2.3 Continuity of Landuse

58. No information regarding archaeology has been considered.

### 6.2.4 Typicalness

59. Unsure how to respond to this given that the grassland is arable reversion.

### 6.2.5 Part of a Sequence of Features

60. Unsure how to respond to this question as its meaning is not clear from the documentation to hand. The site does form part of a wildlife corridor but that has already been covered in the Ecological Position section. The site adjoins other Local Wildlife Sites Ochre Dike, Owlthorpe and Westfield Plantation.

### 6.2.6 Community and Amenity Value

61. No information regarding community history has been considered.

### 6.2.7 Educational Value

62. There are schools to the north of the site, but 'nearby' is not defined in the document.

### 6.2.8 In an Area of Deficiency

63. No information regarding the areas of impoverishment in the city has been considered.

### 6.2.9 History of Scientific Recording

64. Unsure if this relates to biological recording, in which case there are some records as provided by Sheffield City Council, or if this is related to social/archaeological history, which has not been considered.

### 6.2.10 Aesthetic Appeal and Landscape Character

65. No information was located on the Sheffield Landscape Area characteristics, however the site is fairly typical of the mix of grassland, scrub and woodland found in the general area.

## 7 References

Google Earth [accessed July-September 2020]

Magic website, 2020 [Online] Available at: <https://magic.defra.gov.uk/home.htm> [Accessed July-September 2020]

Rose, F., 1989. *Colour identification guide to the grasses, sedges, rushes and ferns of the British Isles and north-western Europe*.

Rose, F., 2006 *The Wild Flower Key*. 2<sup>nd</sup> 3d.

Sheffield City Council Unitary Development Plan (1998) 'saved' policies GE11: Nature Conservation and Development; GE13: Areas of Natural History Interest and Local Nature Sites; and GE15: Trees and Woodland available from <https://www.sheffield.gov.uk/home/planning-development/sheffield-plan> [accessed October 2020]

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Sheffield Ecology Unit, January 2012. *Botanical indicator species to aid the selection of grassland Local Wildlife Sites*

Sheffield Ecology Unit, February 2012. *Criteria for selection of woodland Local Wildlife Sites in the Sheffield Context*

Sheffield Ecology Unit, February 2012. *Sheffield Local Wildlife Sites Partnership: Criteria for the Selection of Local Wildlife Sites*

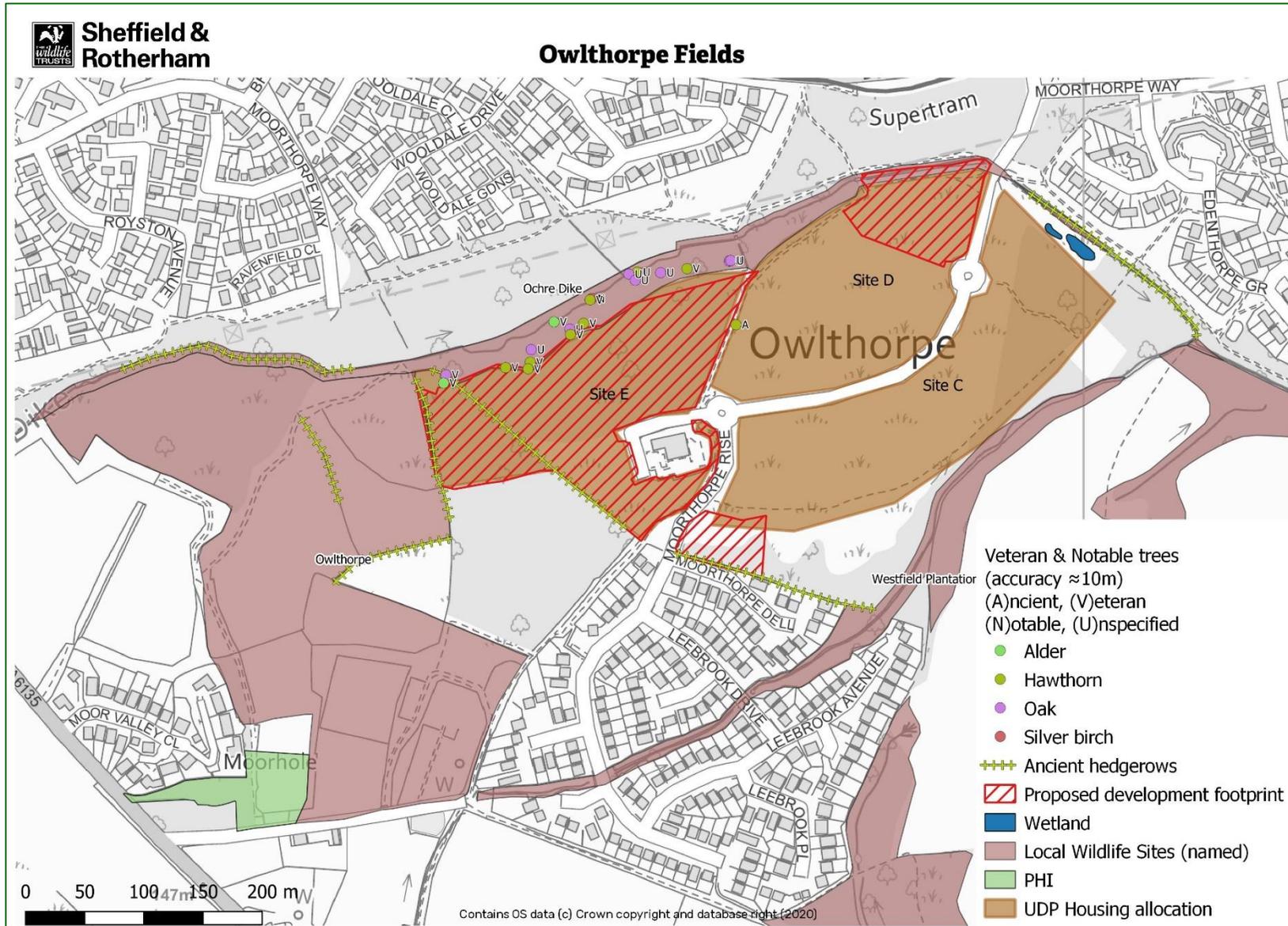
QGIS Desktop Version 3.4.14

UK Habitat Classification Working Group, 2018. *UK Habitat Classification - Habitat Definitions V1.0*

UK Habitat Classification Working Group, 2018. *UK Habitat Classification User Manual*

## 8 Appendices

## 8.1 Appendix 1: Location Plan



## 8.2 Appendices 2 to 6

Please refer to the separately available Excel spreadsheets:

Appendix 2: Wildscapes species list

Appendix 3: Species downloaded from SRWT Nature Counts database

Appendix 4: SCC records

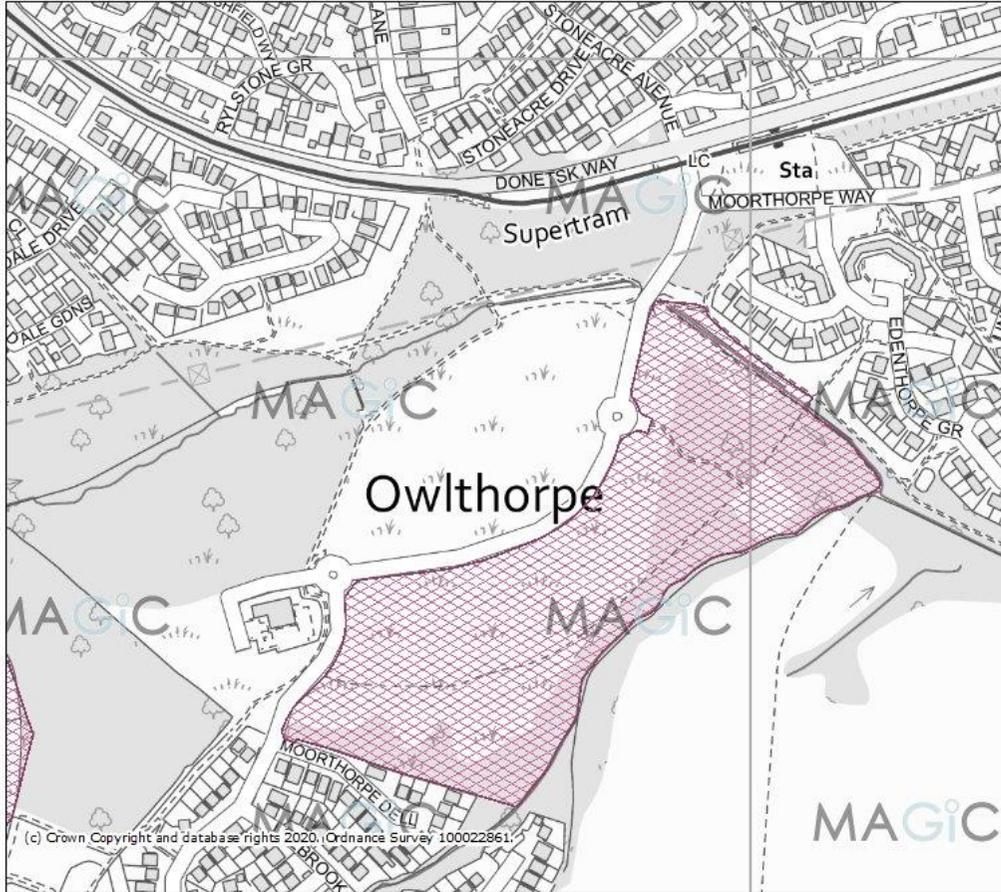
Appendix 5: BWB records (Site E only)

Appendix 6: Combined data from all sources

### 8.3 Appendix 7: Higher Level Stewardship Areas

MAGiC

Owlthorpe



**Legend**

- Countryside Stewardship Agreement Management Areas (England)
  - Countryside Stewardship (Middle Tier)
  - Countryside Stewardship (Higher Tier)
  - Countryside Stewardship - Arable Offer (Middle Tier)
- Feasibility Study and Historic Building Restoration
- Hedgerows and boundaries
- Implementation plan
- Woodland Creation Grant
- Tree Health Improvement
- Tree Health Restoration
- Woodland Management Plan
- Environmental Stewardship Agreements (England)
  - Entry Level plus Higher Level Stewardship
  - Entry Level Stewardship
  - Higher Level Stewardship
  - Organic Entry Level Stewardship
  - Organic Entry Level plus Higher Level Stewardship

Projection = OSGB36  
 xmin = 441100  
 ymin = 382400  
 xmax = 442600  
 ymax = 383100

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Site Check Report generated on Mon Oct 26 2020  
**You selected the location:** Centroid Grid Ref: SK41898262  
 The following features have been found in your search area:  
**Environmental Stewardship Agreements (England)**  
**Agreement Reference** AG00430322  
**Business Name** Sheffield City Council  
**Town** Sheffield  
**Scheme Strand** Higher Level Stewardship  
**Agreement Start Date** 01/04/2013  
**Total Cost (£)** 63933.20  
**Amount Paid to Date (£)** 27080.25  
**ARUAGR** 16.25  
**STATUS** Live  
**ACCESS** NA  
**ESMOL** <http://esmol.naturalengland.org.uk/sot.aspx?id=AG00430322>

