

Ecological Impact Assessment
Allotment Relocation, Dewsbury Riverside

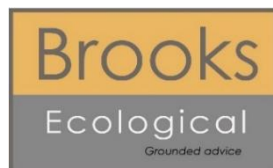
Kirklees Council

Report Reference: ER-5014-02A

20/11/2020

Report Title:	Ecological Impact Assessment Allotment Relocation, Dewsbury Riverside
Report Reference:	ER-5014-02A
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Summary

The Site has been assessed as having a low ecological baseline and the proposals are not expected to result in any significant adverse effects. Mitigation measures are therefore not required.

The scheme, creating an allotment on arable land, can deliver a significant net gain for biodiversity on site.

Standard precaution is recommended for nesting birds and badgers during initial Site clearance. A pre-commencement walkover could be secured through a suitably worded condition.

1. Introduction

1.1.1. Brooks Ecological Ltd has been commissioned by Kirklees Council to carry out an Ecological Impact Assessment (EclA) for a Site situated to the south of Ravensthorpe Road in Ravensthorpe, Dewsbury, SE 23164 19661.

1.1.2. The British Standard BS:42020 recommends that a proportional assessment of ecological impacts should be made - such that decision making relating to the NPPF 'mitigation hierarchy', the planning balance', and the use of conditions is suitably informed.

1.1.3. The purpose of the EclA report is to use the information gathered, alongside the proposals for the Site, to:

- identify any significant effects associated with the proposed development,
- set out any mitigation (including monitoring) required to address these effects, and to ensure compliance with legislation and policy,
- identify suitable enhancement,
- identify measures required to secure mitigation and enhancement,
- identify and assess any residual effects and their legal, policy and development management consequences.

1.1.4. This report adapts the format set out in the Chartered Institute for Ecology and Environmental Management (CIEEM) guidelines for Ecological Report Writing (December 2017).



Ecological Impact Assessment (EclA) Checklist



EclA Criteria (to ensure decisions are based on adequate information in accordance with Clauses 6.2 and 8.1 of BS42020:2013)		Yes No n/a	Paragraph reference number(s)
Pre-app/ scope	1. Where pre-application advice has been received from the Local Planning Authority and/or an NGO and/or statutory body (e.g. NE DAS, NRW DAS), it has been fully accounted for in the EclA		
	2. The scope, structure and content of the EclA is in accordance with published good practice ^{iii,iv}		
Surveys, Sites, Species and Habitats	3. Adequate ^v and up-to-date ^v : a. Desk study has been undertaken ^{vi} b. Phase 1 habitat survey (or equivalent) has been undertaken ^{vi} c. Phase 2 ecology surveys have been undertaken (where necessary) ^{vi}		
	4. All statutory and non-statutory sites likely to be significantly affected are clearly and correctly identified		
	5. All protected or priority species and priority habitats ^{vii} likely to be significantly affected are clearly and correctly identified, and adequate surveys have been undertaken to inform the baseline		
Impacts and Effects	6. Any invasive non-native plant species present are clearly and correctly identified		
	7. Where a separate PEA Report states that Phase 2 ecology surveys are required, these have been undertaken in full and results submitted with the application (or lack of such surveys is justified)		
	8. The assessment is based on clearly defined development proposals along with relevant drawings/plans (and any plans used are the same version number as those submitted with the application)		
Mitigation, Compensation and Enhancement	9. The residual ecological effects are considered to be not significant at any geographical scale irrespective of the detailed development proposals, and the assessment is based on a worst-case-scenario		
	10. The report describes and assesses all likely significant ecological effects (including cumulative effects) clearly stating the geographical scale of significance (where relevant)		
	11. The mitigation hierarchy has been clearly followed ^{vi}		
Competence/Good Practice	12. The report: a. Clearly identifies the proposed mitigation and compensation measures, and explains how these will adequately address all likely significant adverse effects b. Includes, where necessary, proposals for post-construction monitoring c. Recommends how proposed measures may be secured through planning conditions/obligations and/or necessary licences		
	13. A summary table of proposed mitigation and compensation measures has been provided		
	14. The need for any mitigation licences required in relation to protected species is clearly identified		
Conclusions	15. Proposals to deliver ecological enhancement/Biodiversity Net Gain have been provided		
	16. Limitations ^{viii} of the ecological work have been correctly identified and the implications explained		
	17. All relevant key timing issues (e.g. site vegetation clearance or roof removal) that may constrain or adversely affect the proposed timing of development have been identified		
Conclusions	18. All ecological work and surveys accord with published good practice methods and guidelines OR deviation from such guidelines is made clear and fully justified, and the implications for subsequent conclusions and recommendations made explicit in the report ^{ix}		
	19. All ecologists and surveyors hold appropriate species licences (where relevant) and/or have all necessary competencies to carry out the work undertaken		
	20. The report clearly identifies where the proposed development complies with relevant legislation and policy, highlighting any possible non-compliance issues, and highlighting circumstances where a conclusion cannot be drawn as it requires an assessment of non-ecological issues (such as socio-economic ones)		
	21. The report provides a clear summary of losses and gains for biodiversity, and a justified conclusion of an overall net gain for biodiversity		
	22. Justifiable conclusions ^x based on sound professional judgement ^x have been drawn as to the significance of effects on any designated site, protected or priority habitat/species or other ecological feature, and a justified scale of significance has been stated		

2. Method

Scope of Assessment

- 2.1.1. The application site 'the Site' comprises a single arable field, situated along the south-western edge of Dewsbury. The extent of Sites red line boundary is defined in Figure 2.1, opposite.
- 2.1.2. The assessment uses a 2 km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.
- 2.1.3. The Preliminary Ecological Appraisal walkover survey was carried out in October 2020 and followed Phase 1 habitat survey methodology and UK Habitat descriptions.
- 2.1.4. To provide information on the Site's ecological value, the following studies have been carried out; with the relevant reports produced being:
- Preliminary Ecological Appraisal. Brooks Ecological Ltd. R-5014-01. November 2020.

Desk Study

- 2.1.5. A full desk study including consideration of local biological records, aerial photographs, local designations and planning guidance has been carried out.

Field Survey

Walkover – Extended Phase 1 Habitat Survey

- 2.1.6. The initial walkover survey was carried out during October 2020 and followed Phase 1 Habitat Survey Methodology (JNCC, 2010).

Figure 2.1 Site area under assessment (red line).



Assessment Method

- 2.1.7. In assessing the significance of effects, we refer to Section 5 of CIEEM (2018) - that a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. In relation to ecological features we consider the following factors in combination, including;
- the feature's value on an ascending scale from Site, to international value
 - the site's position in the local landscape,
 - its current management and
 - its size, rarity or threats to its integrity
- 2.1.8. There are several 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, Habitats of Principal Importance or presents any opportunities in this respect.
- 2.1.9. The assessment considers the development proposals set out below; from which the potential impacts can be summarised as:
- Vegetation and habitat removal
 - Disturbance, pollution or interference arising from the Site's construction
 - Disturbance, pollution or interference arising from the Site's operation
- 2.1.10. This report deals with any significant effects potentially arising from these impacts. It looks at how the mitigation hierarchy can be applied to any effects and the implications of any residual significant effects.

3. Ecology Baseline

3.1.1. A summary of the points salient to this assessment are set out below:

Designated Sites and Conservation Areas

3.1.2. Impacts on both Statutory (International and National) and Non-Statutory designations or their interests have been ruled out at PEA Stage.

Habitats

3.1.3. The Site comprises the following habitats – as mapped in the figure opposite and described in the table overleaf:

- c1c – Cereal crop
- c1a – Arable field margin
- r1 - ditch
- h2b – Native hedgerow with ditch

Potential future changes to the baseline

3.1.4. The Site's use and ecological baseline will likely remain unchanged until the time of the proposed development.

Figure 3.1 The Site's habitats



Table 3.1 Summary of habitats present

Code	Habitat Feature	Extent	Notes
c1c	Cereal crop	3.06 ha	A single arable field, recently sown with a cereal crop. The Site slopes gently from a high point at the southwest corner, down to a low point at the northeast corner. No arable weeds were seen growing within the field interior. <u>Common species-poor habitat - heavily influenced by human activity. Low value habitat of only Site level importance.</u>
c1a	Arable field margin; tussocky	0.22 a	Small farm track and narrow field margin (1-2m wide), supporting a typical species-poor rank neutral grassland community, interspersed with scattered scrub and tall ruderal herbs. <u>Common species-poor habitat - heavily influenced by human activity. Low value habitat of only Site level importance.</u>
r1	Ditches	0.02 ha	A minor field drain which has been left unmanaged for some time and is currently choked with a rank neutral grassland community, similar to that described in the arable field margin section. <u>Common habitat of low value in poor condition. Site level importance.</u>
	Total area	3.30 ha	
h2b	Native Hedgerow associated with ditch	0.152 km	A section of species-poor, native hedgerow, with a minor ditch present on its northern side. The hedgerow is unmanaged and stands at around 4-5m high by 4m wide. It comprises primarily of hawthorn, with scattered components of holly, elder and goat willow. The hedgerow is largely intact to the east, becoming defunct near the western end. A single mature oak standard is present roughly halfway along. Rank neutral grassland is present at the base, which covers the entire length the ditch. <u>Habitat of Principle Importance under Section 41 of the NERC Act (2006). Habitat of moderate value; valued at Local Level importance.</u>
	Total linear features	0.15 km	

DEFRA Metric (Baseline)¹

3.1.5. A summary of the baseline metric is set out in the tables below.

Ref	Habitats and areas			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline
	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance		Total habitat units
1	Cropland	Cropland - Cereal crops	3.06	Low	N/A - Agricultural	Low	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	6.12
2	Cropland	Cropland - Arable field margins tussocky	0.22	Medium	N/A - Agricultural	Low	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	0.88
3	Lakes	Lakes - Ditches	0.02	Medium	Poor	Low	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	0.08
4									
5									
6									
7									
8									
Total site area ha			3.30					Total Site baseline	7.08

Baseline ref	UK Habitats - existing habitats			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline
	Hedge number	Hedgerow type	length KM	Distinctiveness	Condition	Ecological connectivity	Strategic significance		Total hedgerow units
1		Native Hedgerow - Associated with bank or ditch	0.152	Medium	Moderate	Low	Area/compensation not in local strategy/ no local strategy	Like for like or better	1.216
2									
3									
4									
5									
Total Site length/KM			0.15					Total Site baseline	1.22

¹ Our report provides an estimate of the sites value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used the latest version of DEFRA's Biodiversity Metric Tool, the UK Habitats Classification and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer's own risk.

Species and Species Groups

3.1.6. Potential constraints relating to relevant groups were investigated through the surveys carried out.

Table 3.2 Summary of relevant faunal issues

Species/ Group	Status	Notes
Amphibians	Likely absence of great crested newt reasonably concluded. Low numbers of common amphibians expected to occur within field margins and neighbouring land, but Site is unlikely to be of significant value to any local populations.	No suitable breeding habitat is present on Site, or within the Site's sphere of influence. Most of the Site is of very low value to this group, with only the narrow field margins providing suitable terrestrial habitat. No further survey recommended.
Bats	<u>Bat Roost Potential</u> – Likely absence of roosts reasonably concluded. <u>Foraging and Commuting</u> - The Site is unlikely to be of value to any local bat populations.	The Site is very unlikely to be of significant value to any local bat populations, either as a foraging resource, or as a commuting route. Low-level irregular foraging could be expected along the east and south boundaries. No further survey recommended.
Birds	The Site is likely to attract only a small number of common bird territories, limited to the hedgerow boundary. Given the Site's proximity to residential development, it is unlikely to be of value to ground nesting birds.	No further survey recommended. Standard precaution applies regarding clearance of vegetation.
Badgers	No signs of badger activity were noted during the walkover survey. The site falls within the area of increased probability of badger activity.	The likely absence of badgers from Site can be reasonably concluded at present. Precautions required in clearing area of off-site scrub (for drainage and footpath access), and during construction to avoid entrapment.
Other fauna	The Sites potential to support other protected or notable fauna was scoped out at the PEA stage.	Direct or indirect impacts considered unlikely.
Invasive non-native plant species	No INNS have been identified on site.	No direct or indirect impacts expected. Should further assurances be needed in relations to INNS you should commission a dedicated Invasive Weed Survey in the growing season.

4. Description of the Proposed Development

- 4.1.1. Proposals are to create a new allotment, within the north-eastern half of the Site, to replace an existing allotment present in the local area which will be lost to facilitate a large-scale infrastructure project.
- 4.1.2. Proposals are shown in the figure opposite; overlaid on qGIS mapping.
- 4.1.3. The proposals are extracted from AHR Building Consultancy Ltd drawing no. 197911-AHR-AL-S0-DR-A-90-032 Rev. P01 (July 2020).

Figure 4.1 Illustrative Masterplan J (Drawing Reference P-4176-3DG-0100-0014-07, August 2020).



5. Impacts and Effects on the Proposed Development

- 5.1.1. Figure 5.1 shows the development footprint (black hatch) in relation to the mapped habitats.
- 5.1.2. As can be seen, only part of the Site will be impacted upon by the proposals.
- 5.1.3. Only those impacts arising from the proposed Allotment relocation project are assessed within this report. Impacts from the adjacent infrastructure works are not included within this assessment, other than within the Cumulative Impacts section.

Figure 5.1 Development footprint in relation to existing on-Site habitats.



Table 5.1 Summary of impacts and effects.

Feature	Impact	Stage	Significant Effects
Loss of low value habitat	Permanent loss of 1.13 ha of cereal crop and 0.09 ha of arable field margin.	Clearance	Small-scale loss of low value habitat. The hedgerow, ditch and remaining cereal crop and arable field margin will not be impacted upon by these proposals. <u>No significant effect</u>
Displacement of nesting birds	Negligible loss of nesting habitat. Damage or destruction of small number of common garden birds' nests if clearance undertaken during March-August.	Clearance	<u>No significant effects</u> on local bird populations from loss of baseline habitat. Potential direct impacts from destruction of active bird's nests if vegetation is cleared during the nesting bird season – legal issue. Standard precaution recommended in terms of pre-commencement checks.
Bat foraging habitat	Increase in foraging habitat quality	Construction Operation	<u>Positive effect on bats</u> Construction of an allotment on arable land will significantly increase its value to this group, providing better quality more structured and diverse habitat.
Other fauna	The Sites potential to support other protected or notable fauna was scoped out at the PEA stage. No signs of badger activity were observed during the walkover survey; however, the Site lies within the area of increased probability of badger activity alert zone.	Clearance	<u>No significant effect</u> Standard precaution recommended in terms of pre-commencement checks.

6. Mitigation & Residual Effects

- 6.1.1. Based on the scale of the Site, its low ecological baseline and the nature of the proposals, significant adverse ecological effects have not been predicted.
- 6.1.2. Proposals for a new allotment will impact upon only a small amount of low value habitat and is not expected to affect any rare or protected species, other than nesting birds.
- 6.1.3. The creation of allotments (moderate value habitat) on land currently assessed as being of low value will in itself mitigate the effects of small-scale habitat loss.
- 6.1.4. Dedicated mitigation is therefore not required, and residual impacts are expected to be positive overall.
- 6.1.5. Standard precautions are recommended for nesting birds and badgers. These can be secured through a suitably worded condition for a pre-commencement walkover survey.

7. Enhancement

- 7.1.1. Opportunities to provide ecological enhancement, are shown in Figure 7.1 opposite. These measures could be detailed in an Ecological Design Strategy, or the Landscape Masterplan.

Figure 7.1 Opportunities for Ecological Enhancement



8. Biodiversity Net Gain

- 8.1.1. The proposed development is expected to be able to deliver a significant net gain for biodiversity.
- 8.1.2. Relevant extracts of the Biodiversity Metric 2.0 Calculator are shown in Figures 8.2 and 8.3 overleaf; whilst the Headline results are shown opposite in Figure 8.1.
- 8.1.3. This demonstrates that the Site is able to achieve a net gain of 1.5 Habitat Units (+21.15%).

9. Offsite Measures or Compensation

- 9.1.1. The scheme is expected to result in an overall net gain for biodiversity through on-site measures; as such, no off-site compensation will be required.

Figure 8.1 Biodiversity Metric Calculator Headline Results

On-site baseline	<i>Habitat units</i>	7.08
	<i>Hedgerow units</i>	1.22
	<i>River units</i>	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	8.58
	<i>Hedgerow units</i>	1.22
	<i>River units</i>	0.00
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	<i>Habitat units</i>	1.50
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	<i>Habitat units</i>	21.15%
	<i>Hedgerow units</i>	0.00%
	<i>River units</i>	0.00%

Figure 8.2 Impacts to Site baseline

Ref	Habitats and areas			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested action to address habitat losses	Ecological baseline	Retention category biodiversity value							
	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance		Total habitat units	Area retained	Area enhanced	Area succession	Baseline units retained	Baseline units enhanced	Baseline units succession	Area lost	Units lost
1	Cropland	Cropland - Cereal crops	3.06	Low	N/A - Agricultural	Low	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required	6.12	1.93			3.86	0.00	0.00	1.13	2.26
2	Cropland	Cropland - Arable field margins tussocky	0.22	Medium	N/A - Agricultural	Low	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	0.88	0.13			0.52	0.00	0.00	0.09	0.36
3	Lakes	Lakes - Ditches	0.02	Medium	Poor	Low	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required	0.08	0.02			0.08	0.00	0.00	0.00	0.00
4																	
5																	
6																	
7																	
8																	
		Total site area ha	3.30														
								Total Site baseline	7.08	2.08	0.00	0.00	4.46	0.00	0.00	1.22	2.62

Figure 8.3 Habitat Creation.

Post development/ post intervention habitats								Habitat units delivered	Assessor comments
Proposed habitat	Area (hectares)	Distinctiveness	Condition	Ecological	Strategic significance	Temporal	Difficulty		
				Ecological connectivity	Strategic significance	Time to target condition/years	Difficulty of creation category		
Urban - Developed land; sealed surface	0.08	V.Low	N/A - Other	Low	Area/compensation not in local strategy/ no local strategy	0	Low	0.00	Access road and car park
Urban - Artificial unvegetated, unsealed surface	0.12	V.Low	N/A - Other	Low	Area/compensation not in local strategy/ no local strategy	0	Low	0.00	Paths
Heathland and shrub - Mixed scrub	0.06	Medium	Moderate	Low	Area/compensation not in local strategy/ no local strategy	3	Low	0.43	Mix native tree and shrub planting along north and east boundaries
Urban - Introduced shrub	0.01	Low	Poor	Low	Area/compensation not in local strategy/ no local strategy	1	Low	0.02	Ornamental planting along access road/ site entrance
Urban - Allotments	0.95	Medium	Poor	Low	Area/compensation not in local strategy/ no local strategy	1	Low	3.67	
Totals	1.22							4.12	

10. Timing Issues

- 10.1.1. Other than the standard constraint surrounding nesting birds and vegetation clearance, no specific timing issues are foreseen.

11. Cumulative Effects

- 11.1.1. A major infrastructure project is planned by the Local Planning Authority, which will impact upon parts of the Site outside of this assessment, as well as surrounding farmland, housing and allotments.

12. Monitoring

- 12.1.1. No monitoring required.

13. Policy and Legislation

- 13.1.1. Given the implementation of the measures set out above, it is anticipated that the proposals will comply with the relevant policy and legislation relating to wildlife and ecology.

14. Conclusion

- 14.1.1. The Site has been assessed as having a low ecological baseline, and significant adverse effects are not expected to result from the proposed development.
- 14.1.2. The scheme is able to deliver a significant net gain for biodiversity on site.
- 14.1.3. Standard precaution is recommended for nesting birds and badgers, in terms of initial Site clearance. A pre-commencement walkover check could be secured through a suitably worded condition.

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