

Biodiversity Net Gain Assessment

Survey site:

Oxford Grange Nursing Home, 30 Oxford Road, Dewsbury, WF13 4LL

Client:

Orange Design Studio

Survey date:

23rd January 2026

Project:

This report is prepared to inform a planning application with the Kirklees Council. The proposal is described as:

“The conversion of the existing vacant nursing home into flats with associated landscaping and parking areas.”

[Unsubmitted]

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **[BNG Methodology and Legislation – 2025.](#)**

The results and recommendations contained within this report are valid for 18 months. An updated site visit and BNG assessment may be required if the report is to be used any longer than 18 months after completion.

Version Control			
Status	Issue	Name	Date
Draft	0.1	Harry Brindle, BSc (Hons), Consultant Ecologist	23/01/2026
Final	1.0	Harry Brindle, BSc (Hons), Consultant Ecologist	26/01/2026

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Site Location and Context
A baseline habitat map is provided in Appendix 1, a post development habitat map in Appendix 2, a proposed development plan in Appendix 3, headline BNG results in Appendix 4, and condition assessments in Appendix 5.
The survey site is centred on National Grid Reference: SE 23468 22185 and has an area of approximately ~0.308ha. The site comprises developed sealed surfaces including one building and hardstanding, scrub, shrubbery, a gravel bed, grassland, woodland, scattered trees, and built linear features, in Dewsbury. The underlying geology of the site is sandstone (Birstall Rock), overlain by slowly permeable seasonally wet acid loamy and clayey soils of low fertility. Typical habitats of this soil type include seasonally wet pastures and woodlands. MAGIC habitat designations within 2km include patches of: ‘Priority Deciduous Woodland’ (closest ~0.20km northeast), and ‘Open Mosaic Habitat’ (closest ~1.40km northwest). The site is situated in a suburban area in Dewsbury, surrounded by dwellings and gardens, with pockets of urban greenspace including treelines, grassland, and larger playing fields. The wider landscape comprises more built-up areas in the centre of Dewsbury to the southeast, and more rural areas with linear hedgerow networks and arable land as well as grassland and woodland further west. The closest watercourse to the site is the River Spen ~1.31km west. This report should be read in conjunction with the following documents: ❖ Statutory BNG Metric - Oxford Grange Nursing Home, WF13 4LL – v1 (Arbtech Consulting Ltd., 2026) ❖ Proposed Plan (Orange Design Studio, 2025) ❖ Preliminary Ecological Appraisal (PEA) - Oxford Grange Nursing Home, WF13 4LL – v1 (Arbtech Consulting Ltd., 2025)
Executive Summary
The current landscaping proposal generates a net loss of area-based habitat units (-22.90%) with unmet trading rules. In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 1.56 will need to be achieved. At present, there is a unit deficit of 0.47 units. However, a total of 0.50 units are required to satisfy BNG trading rules, 0.15 units must be of other neutral grassland habitats, 0.15 units must be of heathland and scrub, and 0.20 units must be of individual trees to satisfy trading rules. There is limited scope on site and this provision may not be possible to achieve on site or adjacent with the current arrangement (within the redline boundary or offsite on other owned land) considering the size of the proposed development area and the limited amount of soft landscaping within the parcel. Therefore offsite compensation will be required.

There is scope on site to reduce the number of units required to meet a 10% net gain. This could include:

- Planting of small trees
- Retained all on site trees
- Creation of native mixed scrub
- Creation of other neutral grassland

These habitats would need to be managed to a high standard and kept free from damage. These habitats will need to clearly be identified within a plan. If incorporated the BNG maps, metric and report will need updating.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	7th October 2025
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025). As evident in the screenshots of satellite imagery obtained from GoogleEarth dated April 2020 and September 2023, the site does not appear to have undergone any degradation. The habitats on site, and therefore biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.	
		

Irreplaceable Habitat Statement	No irreplaceable habitats as listed under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024) are currently present nor were present before 30 th January 2020.
Metric Version & Publication Date	Statutory Biodiversity Metric Calculation Tool first published 29 th November 2023 with last updates to metric tools and user guides on 3 rd July 2025.
BNG Target Uplift	+10%
National Character Area (NCA)	37 - Yorkshire Southern Pennine Fringe
Strategic Significance	West Yorkshire Combined Authority (WYCA), the responsible authority for the Local Nature Recovery Strategy (LNRS) covering Kirklees Metropolitan Borough, is preparing the West Yorkshire LNRS. Until the strategy is adopted and its Local Habitat Map published, Kirklees Council uses its adopted Local Plan (2019), the Biodiversity Net Gain Technical Advice Note (2021) and identified ecological networks such as the Kirklees Wildlife Habitat Network and Local Wildlife Sites to determine strategic significance for habitat parcels under the statutory biodiversity metric.
Limitations	
There were no specific limitations to the assessment.	

Baseline

Baseline Biodiversity Value: On-Site

Area-Based Habitats (A-1)

Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Developed land; sealed surface	0.067	There majority of the site comprises hardstanding surfaces utilised as a car parking area, with one building.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Developed land; sealed surface	0.109			
Artificial unvegetated, unsealed surface	0.003	A small patch south of the building is a gravel bed with bare soil substrate beneath.		
Introduced shrub	0.003	Areas of the site are scattered buddleia, with a small prominent patch south of the building		
Bramble scrub	0.038	North of the site is an area of bramble scrub with bramble dominant and creeping buttercup, white clover Trifolium repens, dandelion, and young ash trees occasional.		
Other neutral grassland	0.03	The site consists of unmanaged grassland with a varied sward height of ~25-40cm. Species richness among the sward is <8 species per m2 but based on the time of year, it is possible more species would not be visible. There is >20% cover of broadleaved herbs and sedges.	Moderate: passes 3 of 6 criteria	
Other woodland; broadleaved	0.059	Small sections along the east, south, and west boundaries of the site are other broadleaved woodland.	Poor: passes 25 of 39 criteria	
Urban tree	0.0977	There are two large, one medium and two small trees within the site boundary.	Moderate: passes 4 of 6 criteria.	

Post-Development

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained (A-1)	Developed land; sealed surface	0.067	Retained building.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement	Low Strategic Significance
	Other neutral grassland	0.03	Retained grassland to the south.	Moderate: passes 3 of 6 criteria	
	Other woodland; broadleaved	0.059	Retained woodland around the site.	Poor: passes 25 of 39 criteria	
	Urban tree	0.0977	Two large, retained trees.	Moderate: passes 4 of 6 criteria.	
Created (A-2)	Developed land; sealed surface	0.0074	Proposed building.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement	
	Developed land; sealed surface	0.112	Proposed hardstanding for associated buildings.		
	Modified grassland	0.0529	Proposed areas of grassland.	Moderate: passes 5 of 7 criteria	

Change of Biodiversity Value

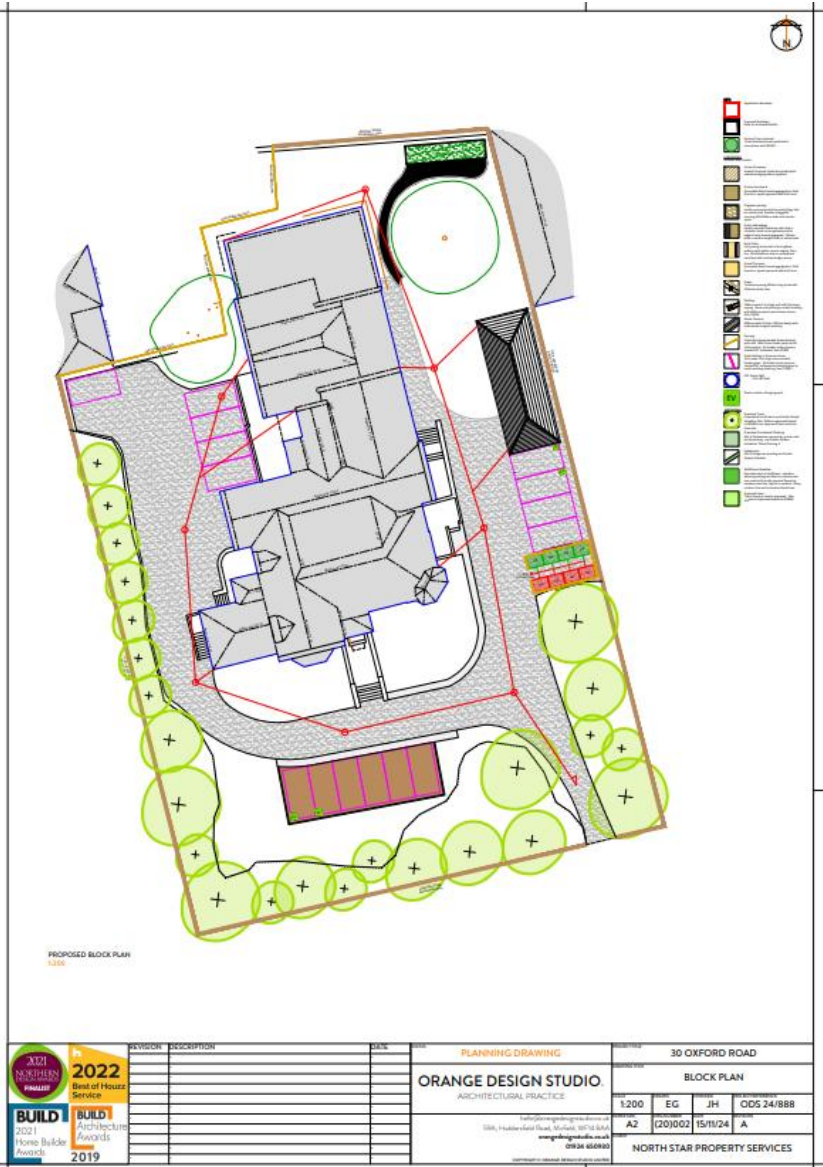
		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	1.42 units	N/A	N/A
	Post-Development	1.09 units	N/A	N/A
	Net Change	-0.32 units (-22.90%)	N/A	N/A
Off-Site	Baseline	N/A	N/A	N/A
	Post-Development	N/A	N/A	N/A
	Net Change	N/A	N/A	N/A
Overall Net Change		-0.32 units (-22.90%)	N/A	N/A

Results, Discussion, and Next Steps

BNG Informative	
Results	The current landscaping proposal generates a net loss of area-based habitat units (-22.90%) with unmet trading rules. In line with the Statutory Biodiversity Metric User Guide (2025), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. At present, trading conditions are not satisfied for the loss of urban trees, areas of scrub and neutral grassland (medium distinctiveness). With unmet trading conditions and a net loss, the proposal fails principal Rules 1 and 2 of BNG and is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2025). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 1.56 will need to be achieved. At present, there is a unit deficit of 0.47 units. However, a total of 0.50 units are required to satisfy BNG trading rules, 0.15 units must be of other neutral grassland habitats, 0.15 units must be of heathland and scrub, and 0.20 units must be of individual trees to satisfy trading rules.
Recommendations and Next Steps	In order to achieve the required net gain in biodiversity as a result of the proposed development, the provision of additional or alternative landscaping should be explored and the proposed plans amended accordingly to achieve a net gain on site. The provisioning of additional landscaping should first be considered within the site boundary. There is limited scope on site and this provision may not be possible to achieve on site or adjacent with the current arrangement (within the redline boundary or offsite on other owned land) considering the size of the proposed development area and the limited amount of soft landscaping within the parcel. Based on the proposed plans, it is unlikely that net gain will be achieved by ways of habitat creation/enhancement without significant changes to the proposals on site or require unfeasible commitments off-site. As such, a financial contribution to off-site ecological enhancements (i.e. purchasing biodiversity units) within an approved scheme is required to make up the +10% net gain for area-based habitat units. The mechanism for securing this off-setting will need to be proposed to and confirmed by the LPA and would be linked to the application through a planning obligation Section 106 (s106) agreement. The proposed habitat compensation must be of an appropriate distinctiveness to meet the trading rules of BNG.

	A summary as to what off-site units will be required is detailed in the table below. <table><tr><td></td><td>Distinctiveness</td><td>Broad Habitat Group</td><td>Habitat</td><td>Units Required</td></tr><tr><td rowspan="4">Area-Based</td><td rowspan="3">Medium</td><td>Grassland</td><td>Other Neutral Grassland</td><td>0.15</td></tr><tr><td>Individual Trees</td><td>Urban Tree</td><td>0.20</td></tr><tr><td>Heathland and scrub</td><td>Mixed scrub</td><td>0.15</td></tr><tr><td colspan="3">Total</td><td>0.50</td></tr></table> There is scope on site to reduce the number of units required to meet a 10% net gain. This could include: - Planting of small trees - Retained all on site trees - Creation of native mixed scrub - Creation of other neutral grassland These habitats would need to be managed to a high standard and kept free from damage. Theses habitats will need to clearly be identified within a plan. If incorporated the BNG maps, metric and report will need updating.		Distinctiveness	Broad Habitat Group	Habitat	Units Required	Area-Based	Medium	Grassland	Other Neutral Grassland	0.15	Individual Trees	Urban Tree	0.20	Heathland and scrub	Mixed scrub	0.15	Total			0.50
	Distinctiveness	Broad Habitat Group	Habitat	Units Required																	
Area-Based	Medium	Grassland	Other Neutral Grassland	0.15																	
		Individual Trees	Urban Tree	0.20																	
		Heathland and scrub	Mixed scrub	0.15																	
	Total			0.50																	
Pre-Commencement	A Biodiversity Gain Plan (BGP) and Habitat Management and Monitoring Plan (HMMP) must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years to ensure that biodiversity net gain is delivered. These additional requirements can only be actioned following the finalisation of the BNG assessment – be it on-site or off-site net gains sought.																				

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheet.

FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)			Area habitat units	-0.32
			Hedgerow units	0.00
			Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)			Area habitat units	-22.90%
			Hedgerow units	0.00%
			Watercourse units	0.00%
Trading rules satisfied?			No - Check Trading Summaries ▲	
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	1.42	1.56	0.47
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Condition Sheet: WOODLAND Habitat Type					
Condition Assessment Criteria					
Indicator	Good (3 points)	Moderate (2 point)	Poor (1 point)	Score per	Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	3	
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ ≥10% cover.	2	
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	
E Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 – 80% of canopy trees and 50 – 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .	2	
F Open space within woodland	10 – 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 – 20% temporary open space is permitted ⁷ .	21 – 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁷ .	1	
G Woodland regeneration	All three classes present in woodland ⁸ ; trees 4 – 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	
H Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	10% to 25% tree mortality and/or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and/or any high-risk pest or disease present ⁹ .	2	
I Vegetation and ground flora	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.	1	
J Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	2	
K Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	
L Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 20% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	2	
M Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ .	1hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground ¹⁴ .	2	
Total Score (out of a possible 39)				25	
Condition Assessment Result		Condition Assessment Score		Result Achieved	
Total score > 32 (33 to 39)		Good (3)		Poor	
Total score 26 to 32		Moderate (2)			
Total score < 26 (13 to 25)		Poor (1)			

Condition Sheet: INDIVIDUAL TREES Habitat Type			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	no	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	yes	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	yes	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	yes	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	no	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	yes	
Number of criteria passed			
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score	Score Achieved x/✓
Passes 5 or 6 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	yes
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)		
Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	yes	
B Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	yes	
C Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	yes	
D Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	no	
E Combined cover of species indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	no	
Additional Criterion - must be assessed for all non-acid grassland types		
F There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	no	
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	Score Achieved x1/4
Acid grassland types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	Yes

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	yes	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	no	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Yes	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	
Essential criterion achieved (Yes or No)			
Number of criteria passed			
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved */✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	yes	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		