

Biodiversity Net Gain Assessment

Survey site:

Hillybarn Farm, The Mount, Ifield, Crawley, West Sussex RH110LF

Client:

Sammy Bristow

Assessment Date:

9th March 2026

Project:

This report is prepared to inform a planning application with the Horsham District Council. This proposal can be described as full application for a proposed two pitch settled Gypsy accommodation site.

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	Rosie Ryland BSc (Hons) MSc, Graduate Ecologist	09/03/2026
Reviewed	0.2	Abby Pidgenson BSc (Hons) MSc, Senior Ecologist	11/03/2026
Draft	0.3	Rosie Ryland BSc (Hons) MSc, Graduate Ecologist	12/03/2026
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Final	1.0	Rosie Ryland BSc (Hons) MSc, Graduate Ecologist	16/03/2026

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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 site is located at National Grid Reference TQ 23039 38006 and has an area of approximately 0.318ha comprising seven buildings, five scattered trees, modified grassland, artificial unvegetated, unsealed surfaces and a ditch. The site is located in a rural setting, immediately surrounded by grasslands and arable/pastoral fields. The site is enclosed by fencing and tree lines to the south and west. The grassland on site extends outside the site boundary on the north and east sides.

The site is set within a wider agricultural landscape of arable and pasture, with dwellings intermittently scattered throughout. The fields are delineated by lines of trees and hedgerows extending throughout the landscape. There are parcels of woodland to the northwest and east of the site. There are 8 ponds (P1-P8) within 500m of the site. The River Mole is located ~470m south of the site. The area is characterised by medium, silt-loam but locally light, silt-rich, or sometimes heavy clay-rich soils and subsoils. Mildly Acidic to Neutral (pH: 6.0 - 7.0).

This report should be read in conjunction with the following documents:

- ❖ Statutory BNG Metric - Hillybarn Farm, RH11 0LF – v1 (Arbtech Consulting Ltd., 2026)
- ❖ Proposed Plan (Rhett Flashman, 2020)
- ❖ Preliminary Ecological Appraisal Preliminary Roost Assessment (PEAPRA) - Hillybarn Farm, RH11 0LF – v1 (Arbtech Consulting Ltd., 2026)

Executive Summary

- ❖ In order to achieve a minimum of +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 3.71 will need to be achieved. In order to achieve a minimum of +10% biodiversity net gain for watercourse habitats, a minimum watercourse unit score of 0.26 will need to be achieved.
- ❖ To account for the lost modified grassland onsite, remaining grassland onsite will be enhanced to a higher distinctiveness grassland such as other neutral grassland of good condition. By enhancing the remaining grassland onsite to other neutral grassland and creating other neutral grassland of moderate condition, a net gain of +4.82% is achieved. This also satisfies trading rules. If 13 small, UK native trees were planted and reached moderate condition, this would increase the net gain to 10.13%.
- ❖ There is good scope on site to achieve the required net gain. A landscape or planting plan would need to be produced showing the improved grassland, ditch, and planting of trees.

Introduction

BNG Informative	
	Date reflected by BNG calculations 9th March 2026
Habitat Degradation Statement	The baseline biodiversity value of the site is not derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2026) as evidence of habitat degradation had occurred from 26th September 2018 and 10th April 2025. There has been a loss in modified grassland, with the erection of buildings and addition of artificial unvegetated unsealed surface, and bare ground. The trees have been retained. Therefore, the baseline biodiversity value of the site is derived from assumptions inferred from historic satellite imagery (i.e. Google Earth). < Sep 26, 2018 > > 2005 2007 2012 2013 2015 2018  < Apr 10, 2025 > > 2005 2007 2012 2013 2015 2018 
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)	121 - Low Weald		
Strategic Significance	West Sussex Council (WSC) the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) for Horsham District Council, has yet to adopt a comprehensive LNRS. As advised by the WSC, the following documents from its adopted Local Plan (including Supplementary Planning Documents, SPDs), were used to determine strategic significance: ❖ Policies Map ❖ Horsham District Nature Recovery Network report		
	Habitat	Baseline / Post-Development	Justification
	Modified grassland	Baseline / Post-Development	Low Strategic Significance
	Scattered trees		
	Building	Post-Development	
	Artificial unvegetated unsealed surface		
Limitations			
The site had undergone degradation since January 2020 and therefore the baseline had to be calculated from historical imagery.			

Baseline

Baseline Biodiversity Value: On-Site**Area-Based Habitats (A-1)**

Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Modified Grassland	0.318	Historical imagery from 2018 shows that the majority of the site is formed of grassland. The PEAPRA (2026) states that this is modified grassland. Due to site degradation this is assessed as having good condition.	Good: passes 7 of 7 criteria including essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Rural Tree	Good: 0.1221	There are five scattered oak trees (<i>Quercus robur</i>) within the grassland, comprising 3 medium and 2 large size. Collectively, these trees were assessed as being in good condition. All five trees are mature.	Good: passes 5 of 6 criteria. 3no. medium 2no. large	

Baseline Biodiversity Value: On-Site**Water-Based Habitats (A-1)**

Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Ditch	0.06	There is a ditch running along the south boundary of the site through the modified grassland. The ditch appears to originate from water run-off from the modified grassland field in the east of the site. The ditch continues to run west offsite. There is no aquatic vegetation growth in the ditch, and the ditch is predominantly lined with detritus	Poor: passes 4 of 8 criteria. Assessed using the 'Ditch' habitat type condition sheet.	Low Strategic Significance

Post-Development

Post-Development Biodiversity Value: On-Site					
Area-Based Habitats					
	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Retained (A-1)	Modified grassland	0.13	Please see above.		
	Scattered trees	0.1221			
Created (A-2)	Modified grassland	0.106	Site degradation has occurred onsite transforming the site form modified grassland to a current bare ground, as seen in the PEAPRA (2026). This will be restored to modified grassland with the proposed development.	Good condition: Estimated to have a good condition and pass all criteria including essential criterion.	Low Strategic Significance
	Building	0.029	There are currently seven buildings onsite, found in the PEAPRA (2026), that have been erected since 2020. B1 is a settled mobile home with additional decking, B2 is a kennel, B3 and B5 are sheds, B4 is a shipping container and B6-B7 are stables. B3 will be demolished to facilitate the development, and another mobile home in the same footprint will be erected.	Habitat condition pre-determined as 'N/A' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	
	Artificial unvegetated unsealed surface	0.053	There is an artificial unvegetated, unsealed surface drive leading from the road to the west of the site towards the buildings in the centre of the site, this will extend to the new home.		
Enhanced (A-3)	N/A				

Post-Development Biodiversity Value: On-Site					
Water-Based Habitats					
	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Retained (A-1)	Ditch	0.06	Please see above.		
Created (A-2)	N/A				
Enhanced (A-3)					

Change of Biodiversity Value

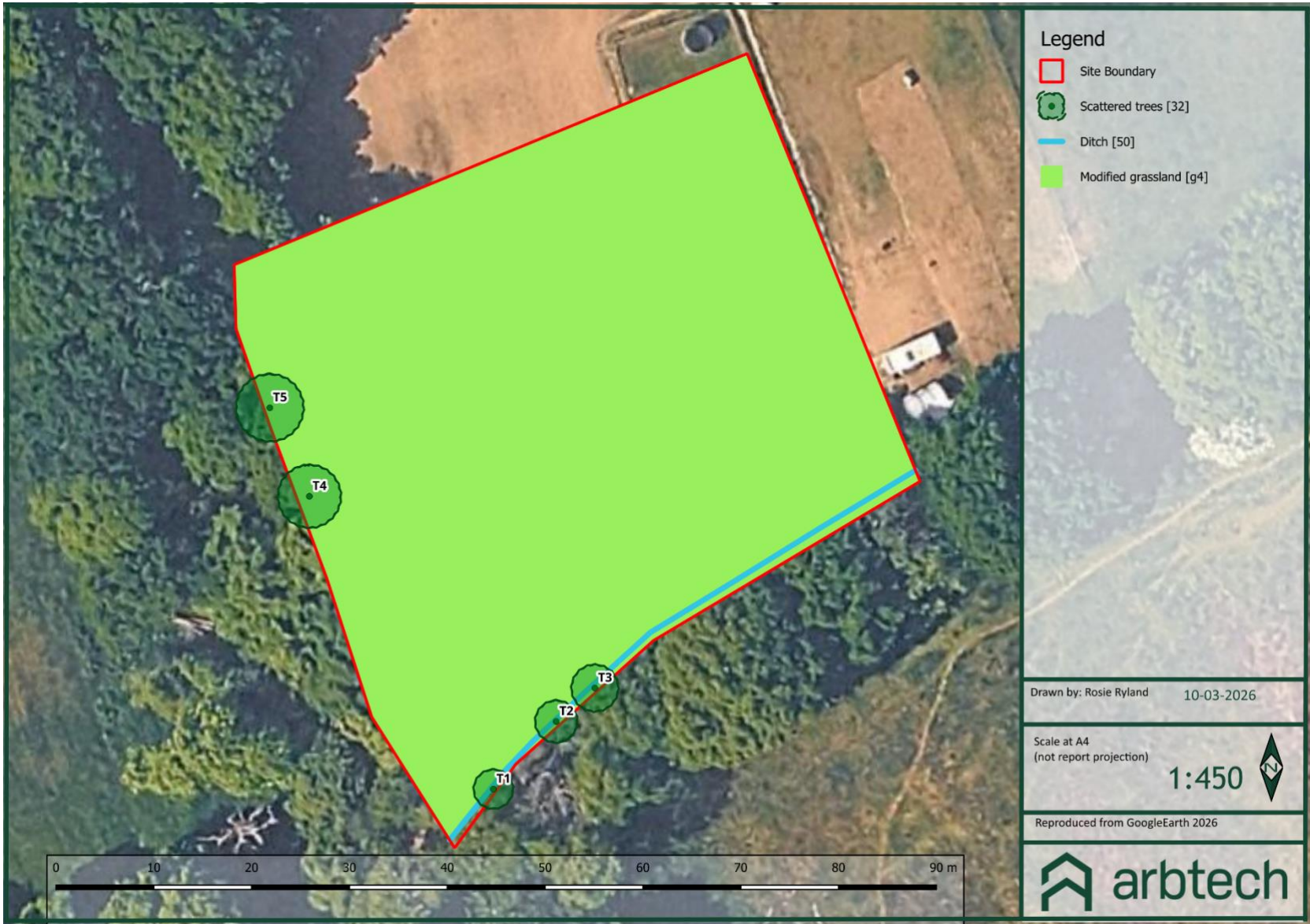
		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	3.37 ❖ Modified Grassland (1.91) ❖ Scattered trees (1.47)	N/A	0.24 ❖ Ditch (0.24)
	Post-Development	3.71 ❖ Scattered trees (1.65) ❖ Other neutral grassland (2.07) ❖ Building (0.00) ❖ Artificial unvegetated unsealed surface (0.00)		0.45 ❖ Ditch (0.)
	Net Change	+0.34		+0.21
	Off-Site	Baseline		N/A
Post-Development				
Net Change				
Overall Net Change		+10.13%		

Results, Discussion, and Next Steps

BNG Informative	
Results	The landscaping proposal will be amended to generate a net gain of area-based habitat units (+10.13%) and a net gain of watercourse habitat units (+86.72%). As such, the proposed development will be compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024; Horsham District Nature Recovery Network, 2026) as a minimum biodiversity net gain of +10% was achieved for both area- and linear-based habitat units. All trading conditions will be satisfied.
Recommendations and Next Steps	There is good scope on site to achieve the required net gain. In order to achieve the required net gain in biodiversity as a result of the proposed development, the proposed plans must be amended accordingly to achieve a net gain on site. The following recommendations must be implemented on site: To account for the lost modified grassland onsite, remaining grassland onsite will be enhanced to a higher distinctiveness grassland such as other neutral grassland of good condition. By enhancing the remaining grassland onsite to other neutral grassland and creating other neutral grassland of moderate condition, a net gain of +4.82% is achieved. This also satisfies trading rules. If 13 small, UK native trees were planted and reached moderate condition, this would increase the net gain to 10.13%. If the ditch onsite was to be enhanced from a poor to moderate condition, this would achieve a net gain of 86.72% of water-based habitat units. This can be done by planting a fringe of aquatic marginal vegetation, and introducing emergent, submergent, and floating plants to the water. A net gain onsite is achievable, and a landscape or planting plan would need to be produced showing the improved grassland, ditch, and planting of trees. If this cannot be achieved, 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. Should these alterations be incorporated this BNG Assessment will need to be updated to accurately reflect the change in biodiversity value of the site pre- and post-development.

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.
BNG Mitigation Hierarchy	
Avoidance	The trees and some of the grassland on site are being retained.
Minimisation	
Mitigation	Changes to the plan to enhance achieve net gain onsite will be explored.
Offset	If net gain onsite cannot be achieved units will need to be obtained.

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

Hillybarn Farm RH11 0LF

Return to results menu

Headline Results

Scroll down for final results ↴

On-site baseline

Habitat units3.37

Hedgerow units0.00

Watercourse units0.24

On-site post-intervention

(Including habitat retention, creation & enhancement)

Habitat units3.71

Hedgerow units0.00

Watercourse units0.45

On-site net change

(units & percentage)

Habitat units0.3410.13%

Hedgerow units0.000.00%

Watercourse units0.2186.72%

Off-site baseline

Habitat units0.00

Hedgerow units0.00

Watercourse units0.00

Off-site post-intervention

(Including habitat retention, creation & enhancement)

Habitat units0.00

Hedgerow units0.00

Watercourse units0.00

Off-site net change

(units & percentage)

Habitat units0.000.00%

Hedgerow units0.000.00%

Watercourse units0.000.00%

Combined net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units0.34

Hedgerow units0.00

Watercourse units0.21

Spatial risk multiplier (SRM) deductions

Habitat units0.00

Hedgerow units0.00

Watercourse units0.00

FINAL RESULTS

Total net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units0.34

Hedgerow units0.00

Watercourse units0.21

Total net % change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units10.13%

Hedgerow units0.00%

Watercourse units86.72%

Trading rules satisfied?

Yes ✓

Unit Type

Target

Baseline Units

Units Required

Unit Deficit

Habitat units

10.00%

3.37

3.71

0.00

Hedgerow units

10.00%

0.00

0.00

0.00

Watercourse units

10.00%

0.24

0.26

0.00

No additional area habitat units required to meet target ✓

No additional hedgerow units required to meet target ✓

No additional watercourse units required to meet target ✓

Appendix 5a: Baseline 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.	Yes	
	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.		
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.	Yes	
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.	Yes	
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)			Yes
Number of criteria passed			7
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	3	
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
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).	Y
C	The tree is mature (or more than 50% within the block are mature).	Y
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.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	



Condition Sheet: DITCH Habitat Type

Condition Assessment Criteria		Criterion passed (Yes or No)
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Yes
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	No
C	There is less than 10% cover of filamentous algae and or duckweed <i>Lemna</i> spp. (these are signs of eutrophication).	Yes
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	No
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Yes
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	No
G	Less than 10% of the ditch is heavily shaded.	No
H	There is an absence of non-native plant and animal species ¹ .	Yes
Number of criteria passed		4
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved x/✓
Passes 8 criteria	Good (3)	
Passes 6 or 7 criteria	Moderate (2)	
Passes 5 or fewer criteria	Poor (1)	1

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.	Yes	
	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.		
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.	Yes	
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).	Yes	
	Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.		
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.	Yes	
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)			Yes
Number of criteria passed			7
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	3	
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)		