

Biodiversity Net Gain Assessment

Site Address:

Wychwood barn, Wychwood Lane, Brighton Road, Shermanbury, Horsham, West Sussex, RH13 8HE

Client:

John Hilden

Survey date:

19/05/2026

Project:

This report is prepared to inform a planning application with Horsham District Council. Erection of two dwellings in the alternative to permission granted under DC/25/0219 for Change of Use of Agricultural Building to residential (Use Class C3) to form 2no dwellinghouses.

BNG assessment methodology and legislation can be found in the Arbtech Supplement: **[BNG Methodology and Legislation – 2026.](#)**

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	Rachel Cole BSc (Hons), Graduate Ecologist	19/05/2026
Review	0.2	Elen Griffin BSc (Hons), MRSB	25/05/2026
Draft	0.3	Rachel Cole BSc (Hons), Graduate Ecologist	25/05/2026
Review	0.4	Kelly Clarke, Senior Ecologist	01/06/2026
Final	1	Rachel Cole BSc (Hons), Graduate Ecologist	01/06/2026

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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 centred at National Grid reference TQ 20776 18420 and has an area of approximately 0.69ha. The site comprises two agricultural buildings (B1 & B2), sparsely vegetated land, modified grassland, artificial unvegetated, unsealed surface and scattered trees.

The site is located within a predominantly rural landscape characterised by agricultural fields, scattered farmsteads, hedgerows and pockets of woodland. The surrounding landscape provides good ecological connectivity through linear vegetated features, including hedgerows, tree lines and field margins. The site is well-connected to nearby habitats via field margins, hedgerows and tree lines.

A total of 11 ponds are located within 500m of the site. While the site is not considered hydrologically active, dry ditches are present along the site boundaries, which may provide some limited ecological connectivity. Additionally, the River Adur is situated approximately 225m south of the site. The site is situated on 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:

- ❖ BNG statutory Metric – Wychwood barn, Wychwood Lane, Brighton Road, Shermanbury, Horsham, West Sussex RH13 8HE, v1, 47152974, 19.05.26 (Arbtech Consulting Ltd., 2026)
- ❖ PEAPRA - Wychwood barn, Wychwood Lane, Brighton Road, Shermanbury, Horsham, West Sussex RH13 8HE, v1, 47152974, 25.05.26 (Arbtech Consulting Ltd., 2026)

Executive Summary

- ❖ In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of **3.27** will need to be achieved. At present, there is a unit deficit of **0.88** units.
- ❖ There is good scope on site to achieve the required net gain by ways of enhancing the retained modified grassland to other neutral grassland in moderate condition (0.21724ha) which will generate a +11.05% gain and meet trading rules.
- ❖ 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.
- ❖ If such additional landscape provisions are considered unfeasible, off-site offsetting will be required. Specifically, 0.88 units (with 0.58 units of low distinctiveness habitat to satisfy trading rules) will need to be purchased from a suitable habitat bank.

Introduction

BNG Informative	
Habitat Degradation Statement	Date reflected by BNG calculations19th May 2026
	The baseline biodiversity value of the site is derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2026). As evident in the screenshots of satellite imagery obtained from Google Earth dated 14th May 2025 and 10th October 2018, the site does not appear to have undergone any degradation. The habitats on site, and therefore the biodiversity value of the site, is not considered to have undergone degradation since 30th January 2020.
	Historical imagery < 14 May 2025 > >  Historical imagery < 10 Oct 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 30th 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	The site was reviewed against the draft West Sussex Local Nature Recovery Strategy (LNRS) Local Habitat Map (publication pending at time of assessment).		
	Habitat	Baseline/post development	Justification
	Sparsely vegetated land	Low	The habitat does not fall within an adopted LNRS strategic area or identified priority habitat measure.
	Developed land; sealed surface	Low	The habitat does not fall within an adopted LNRS strategic area or identified priority habitat measure.
	Artificial unvegetated; unsealed surface	Low	The habitat does not fall within an adopted LNRS strategic area or identified priority habitat measure.
	Modified grassland	Low	The habitat does not fall within an adopted LNRS strategic area or identified priority habitat measure.
	Individual trees	Low	The habitat does not fall within an adopted LNRS strategic area or identified priority habitat measure.

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
Sparsely vegetated land	0.24088	Areas of sparsely vegetated land were present across the site, comprising disturbed bare ground with patchy ruderal vegetation cover below 50%. The habitat appeared subject to previous disturbance and clearance, with localised rubble and waste materials evident throughout.	Moderate: passes 3 of 4 criteria.	Low Strategic Significance
Developed land, sealed surface (Buildings)	0.03051	There are two buildings on site, both of them are agricultural buildings.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Artificial unvegetated, unsealed surface	0.05963	Areas of unsealed surface are present in the form of a gravel pathway	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
Modified grassland	0.36024	Areas of modified grassland were present predominantly around the site margins and within less disturbed areas of the site. The habitat was dominated by common grass species with scattered ruderal herbs. The grassland was species-poor and appeared regularly disturbed, with limited structural diversity.	Poor: passes 4 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
Individual trees	0.1551	17 scattered trees were recorded across the site, comprising three mature ash and 14 mature Lawson cypress. The ash trees were all of a smaller stature, while the Lawson cypress varied from small to medium in height.	Good: passes 5 of 6 criteria. 3no. small (T1, T2, T3) Moderate: passes 4 of 6 criteria.	Low Strategic Significance

			6no. small (T6, T7, T8, T9, T11, T13, T14) 7no. medium (T4, T5, T10, T12, T15, T16, T17)	
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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 (Buildings)	0.01331	B1 is proposed to be retained, this will be converted to an area for parking.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Artificial unvegetated, unsealed surface	0.04878	Areas of unsealed surface are present in the form of a gravel pathway, to be retained.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Modified grassland	0.21724	Areas of modified grassland were present predominantly around the site margins and within less disturbed areas of the site. The habitat was dominated by common grass species with scattered ruderal herbs. The grassland was species-poor and appeared regularly disturbed, with limited structural diversity, this area is proposed to be retained.	Poor: passes 4 or 5 of 7 criteria excluding essential criterion A. Assessed using the 'Grasslands Low Distinctiveness' habitat type condition sheet.	Low Strategic Significance
	Individual trees	0.1551	17 scattered trees on site are proposed to be retained.	Good: passes 5 of 6 criteria. 3no. small (T1, T2, T3) Moderate: passes 4 of 6 criteria. 6no. small (T6, T7, T8, T9, T11, T13, T14) 7no. medium (T4, T5, T10, T12, T15, T16, T17)	Low Strategic Significance

Created (A-2)	Developed land; sealed surface	0.05523	Developed land is proposed on site, compromising of two dwellings and associated parking	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Vegetated garden	0.17375	All habitats within the curtilage of residential gardens are to be recorded as vegetated garden, as per the BNG user guide.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Artificial unvegetated, unsealed surface	0.01187	Areas of unsealed surface are present in the form of a gravel pathway, which appears to be extended for the proposed dwellings.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance
	Modified grassland	0.17103	The existing sparsely vegetated land will be regraded and seeded to create modified grassland as part of the proposed development.	Poor - The proposed modified grassland is anticipated to achieve poor condition due to the habitat comprising newly established grassland with limited species diversity and standard landscape management.	Low Strategic Significance
Enhanced (A-3)	N/A	N/A	N/A	N/A	N/A

Change of Biodiversity Value

		Biodiversity Units	
		Area-Based	Linear-Based
On-Site	Baseline	2.97	N/A
	Post-Development	2.39	N/A
	Net Change	-0.58	N/A
Overall Net Change		-19.64%	N/A

Results, Discussion, and Next Steps

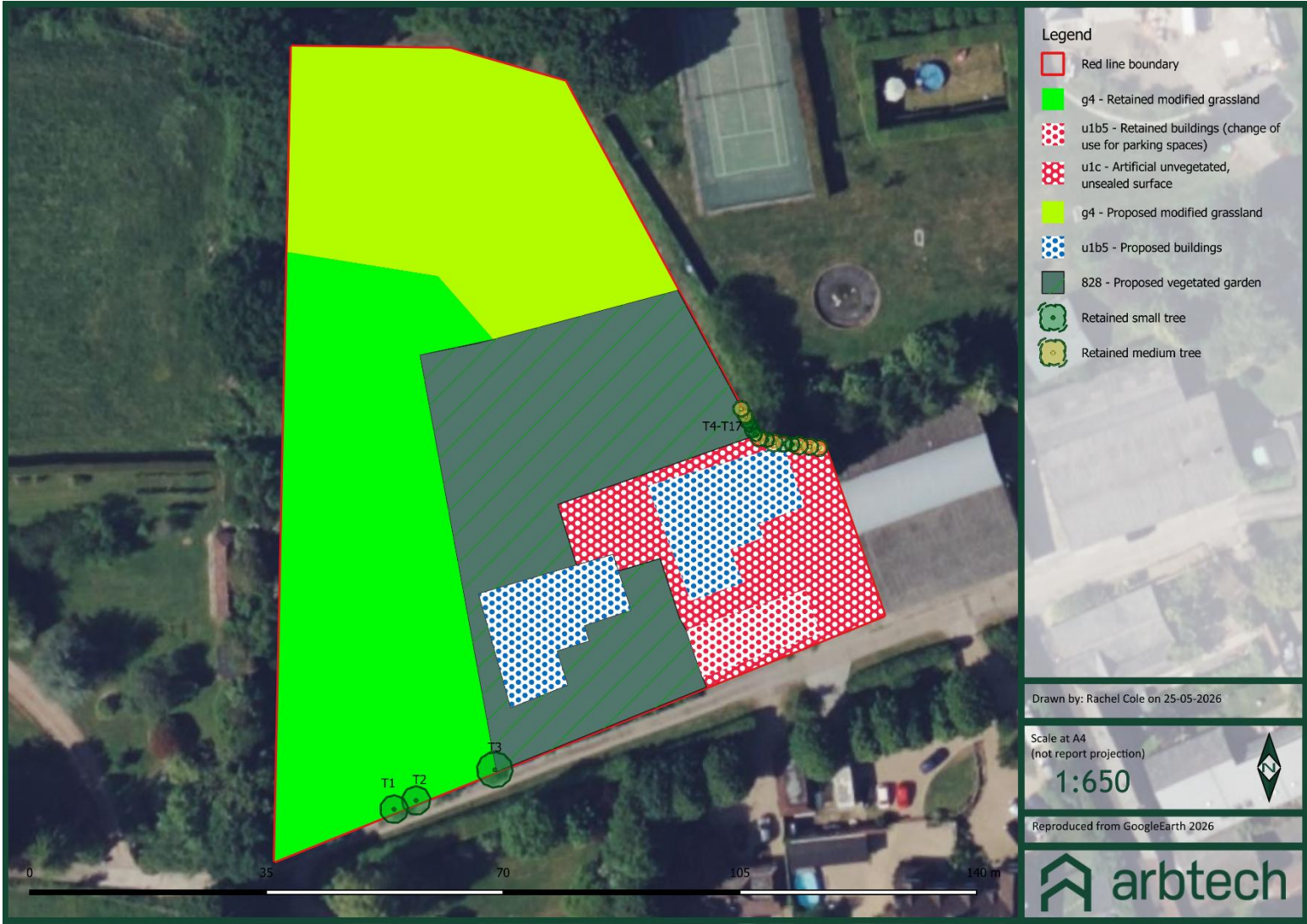
BNG Informative	
Results	The current proposal generates a net loss of area-based habitat units (-19.64%) with unmet trading rules. In line with the Statutory Biodiversity Metric User Guide (2024), any loss of a habitat must be replaced on a like-for-like or like-for-better principle. At present, trading conditions are not satisfied for the loss of 0.96 units of sparsely vegetated land. 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, 2024). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 3.27 will need to be achieved. At present, there is a unit deficit of 0.88 units, in order to satisfy the trading rules, 0.58 units of low distinctiveness habitat will be required 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 good scope on site to achieve the required net gain. 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. Preliminary calculations indicate the required net gain can be achieved within the site's boundaries: ❖ Enhancement of the retained modified grassland (0.21724ha) to moderate condition other neutral grassland will generate a +11.05% gain and satisfy trading rules. If such additional landscape provisions are considered unfeasible, off-site offsetting will be required. Specifically, 0.88 units (with 0.58 units of low distinctiveness habitat to satisfy trading rules) will need to be purchased from a suitable habitat bank.
Policy Requirements	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 majority of existing habitats on site have been retained within the development layout, with no loss of irreplaceable habitats.
Minimisation	Habitat loss has been minimised by restricting the footprint of access and hardstanding to the smallest practicable area.
Mitigation	No enhancements have been proposed however there is good scope on site to achieve this.
Offset	Should on-site mitigation be insufficient to achieve the required biodiversity net gain, off-site compensation or statutory biodiversity credits would be secured as a last resort.

Appendix 1: Baseline Habitat Plan



Appendix 2: Post-Development Habitat Plan



Appendix 3: Proposed Development Plan



Appendix 4: Headline BNG Results

FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-0.58	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-19.64%	Total net gain achieved is less than target set ▲
	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%	2.97	3.27	0.88
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional hedgerow units required to meet target ✓

No additional watercourse units required to meet target ✓

Appendix 5a: Baseline Habitat Condition Assessment Sheets

Sparsely vegetated land (u1f) condition assessment.

	Criteria Description	Criteria Passed?
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Y
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area.	Y
B O N U S	There is a complete absence of invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement).	Y
		Total 3/4
	Condition moderate due to passing 3 of 4 criteria.	

Modified grassland (g4) condition assessment.

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs (these may include Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>). 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 m2 (excluding those listed in the previous sentence), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland.	N
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.	Y
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.	Y
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.	Y
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	N
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 5/7
	Condition poor due to passing 5 of 7 criteria. Essential criteria (A) not met; condition capped at poor.	

Scattered trees (T1, T2, T3) condition assessment.

	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.	

Scattered trees (T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17) condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	N
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 4/6
	Condition moderate due to passing 4 of 6 criteria.	

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Modified grassland (g4) condition assessment.

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs (these may include Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>). 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 m2 (excluding those listed in the previous sentence), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland.	N
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.	Y
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.	Y
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.	Y
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	Y
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 6/7
	Condition poor due to passing 6 of 7 criteria. Essential criteria (A) not met; condition capped at poor.	