

Biodiversity Net Gain Assessment

Site Address:

4 Kingfisher Farm, West Chiltington Lane, Billingham, West Sussex, RH14 9DR

Client:

Adam Cornell

Survey date:

29th July 2025

Project:

This report is prepared to inform a planning application with Horsham District Council.

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	Anya White BSc, Consultant Ecologist	18/08/2025
Final	1.0	Anya White BSc, Consultant Ecologist	20/08/2025

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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 11655 26523 and has an area of approximately 1.109ha. The site is entirely developed land sealed surface, with a topping of large gravel. There are fences in between currently existing plots, which have temporary caravans on currently. However, this report is being conducted retrospectively, as grassland and scrub were removed and replaced with hardstanding prior to the baseline survey. It is located within a rural area with extensive open grassland and pockets of woodland in all directions. No protected or notable plant species were recorded during the survey.

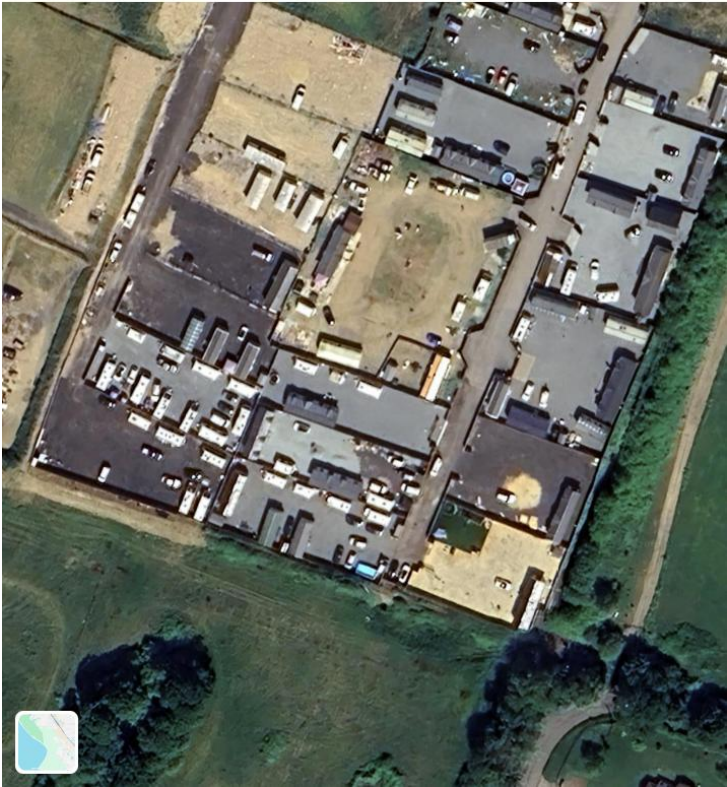
This report should be read in conjunction with the following documents:

- ❖ Statutory Metric - 4 Kingfisher Farm, RH14 9DR - V0.1 - 42801310 - 18-08-25 (Arbtech Consulting Ltd., 2025)
- ❖ 0179.LIB.XX.00.DR.LD.2100.D5
- ❖ Preliminary Ecological Appraisal (PEA) - 4 Kingfisher Farm, RH14 9DR - V0.1 - 42801310 - 18-08-25 (Arbtech Consulting Ltd., 2025)

Executive Summary

- ❖ The current landscaping proposal generates a net loss of area-based habitat units (-100%) and a net change of linear-based habitat units (00.00%). As such, the proposed development is not compliant with current legislation (Environment Act 2021) and planning policies (National Planning Policy Framework, 2024) as a minimum biodiversity net gain of +10% was not achieved for area-based habitat units.
- ❖ The trading conditions have not been satisfied for area-based units, neither for linear-based units as there is no change.

Introduction

BNG Informative		
Habitat Degradation Statement	Date reflected by BNG calculations	18 th August 2025
	The baseline biodiversity value of the site is not derived from the site as observed during the PEA field survey (Arbtech Consulting Ltd., 2025) as evidence of habitat degradation had occurred. Therefore, the baseline biodiversity value of the site is derived from assumptions inferred from historic satellite imagery (i.e. GoogleEarth).	
	Historical imagery < 16 Mar 2024 > >I  Historical imagery < 14 May 2025 > >I 	

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	Sussex County Council (SCC), the responsible authority for drafting the Local Nature Recovery Strategy (LNRS) for Horsham District Council, has yet to adopt a comprehensive LNRS. The following documents were used to determine strategic significance: ❖ Horsham District Council website ❖ Green Infrastructure Strategy and Guide (2024)		
	Habitat	Baseline / Post-Development	Justification
	Other neutral grassland	Medium	The Horsham District Council states 'Medium Strategic Significance (i.e., 'ecologically desirable but not in a local strategy' within the full statutory biodiversity metric only) should apply to all priority habitats as well as habitats with a biodiversity value greater than zero'.
	Mixed scrub	Medium	The Horsham District Council states 'Medium Strategic Significance (i.e., 'ecologically desirable but not in a local strategy' within the full statutory biodiversity metric only) should apply to all priority habitats as well as habitats with a biodiversity value greater than zero'.
	Native hedgerow	Medium	The Horsham District Council states 'Medium Strategic Significance (i.e., 'ecologically desirable but not in a local strategy' within the full statutory biodiversity metric only) should apply to all priority habitats as well as habitats with a biodiversity value greater than zero'.
	Developed land; sealed surface	Low	The Horsham District Council states 'Medium Strategic Significance (i.e., 'ecologically desirable but not in a local strategy' within the full statutory biodiversity metric only) should apply to all priority habitats as well as habitats with a biodiversity value greater than zero'.
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
Other neutral grassland	0.112	Aerial imagery of the site from 2024 shows the majority of the site is grassland. This habitat has been assumed as other neutral grassland, priority habitat.	Habitat condition pre-determined as 'Good' as detailed within the guidance for retrospective applications.	Medium Strategic Significance
Mixed scrub	0.997	Aerial imagery of the site from 2024 shows an area of scrub in the southeast corner of the site, which has been assumed to be mixed scrub.	Habitat condition pre-determined as 'Good' as detailed within the guidance for retrospective applications.	Medium Strategic Significance

Post-Development

Post-Development Biodiversity Value: On-Site

Area-Based Habitats

	Habitat	Area (ha)	Description	Condition Assessment	Strategic Significance
Created (A-2)	Developed land; sealed surface	1.109	The preliminary ecological survey of the site showed the site was entirely hardstanding, and no additional habitats are proposed as part of the development.	Habitat condition pre-determined as ' N/A ' as detailed within the Statutory Biodiversity Condition Assessment Supplement.	Low Strategic Significance

Post-Development Biodiversity Value: On-Site

Linear-Based Habitats

	Habitat	Length (km)	Description	Condition Assessment	Strategic Significance
Created (B-2)	Native hedgerow	0.67	There are native hedgerows proposed along the borders of the new plots.	Poor: More than five failures in total. Assessed using the 'Hedgerows' habitat type condition sheet.	Medium Strategic Significance

Change of Biodiversity Value

		Biodiversity Units		
		Area-Based	Linear-Based	Watercourse-Based
On-Site	Baseline	❖ 6.07	❖ 0.00	❖ N/A
	Post-Development	❖ 0.00	❖ 1.42	❖ N/A
	Net Change	-6.07	N/A	N/A
Overall Net Change		-100%	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 (-100%) and no net change of linear-based habitat units 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 areas of mixed scrub (medium distinctiveness) and other 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, 2024). In order to achieve a +10% biodiversity net gain for area-based habitats, a minimum area-based unit score of 6.68 will need to be achieved. At present, there is a unit deficit of 6.68 units. Of these units, 5.41 units must be of neutral grassland habitats and 0.66 units must be of mixed scrub 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 this assessment has been conducted retrospectively, therefore the habitats have already been removed and replaced with hardstanding. 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.

		Distinctiveness	Broad Habitat Group	Habitat	Units Required
Area-Based	Medium	Grassland	Other Neutral Grassland	5.41	
	Medium	Heathland and shrubs	Mixed scrub	0.66	
	Total			6.07	
Off-site compensation can be done by: ❖ creating the required habitats off-site (i.e. outside the red line boundary) <i>N.B. this will require a baseline ecological survey to determine the baseline value of the off-site parcel of land ideally within the curtilage of the LPA or within the same National Character Area (NCA), and the off-site land must be registered with the government;</i> ❖ purchasing biodiversity units from existing habitat banks <i>N.B. such habitat bank should ideally be within the curtilage of the LPA or within the same NCA; or</i> ❖ purchasing statutory biodiversity credits from the government <i>N.B. metric rules dictate if statutory credits are required, double the amount of credits will be required to compensate for a single unit deficit.</i> 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 should be of an appropriate distinctiveness to meet the trading rules of BNG.					
BNG Mitigation Hierarchy					
Offset	Compensation for area habitats will be sought offsite.				

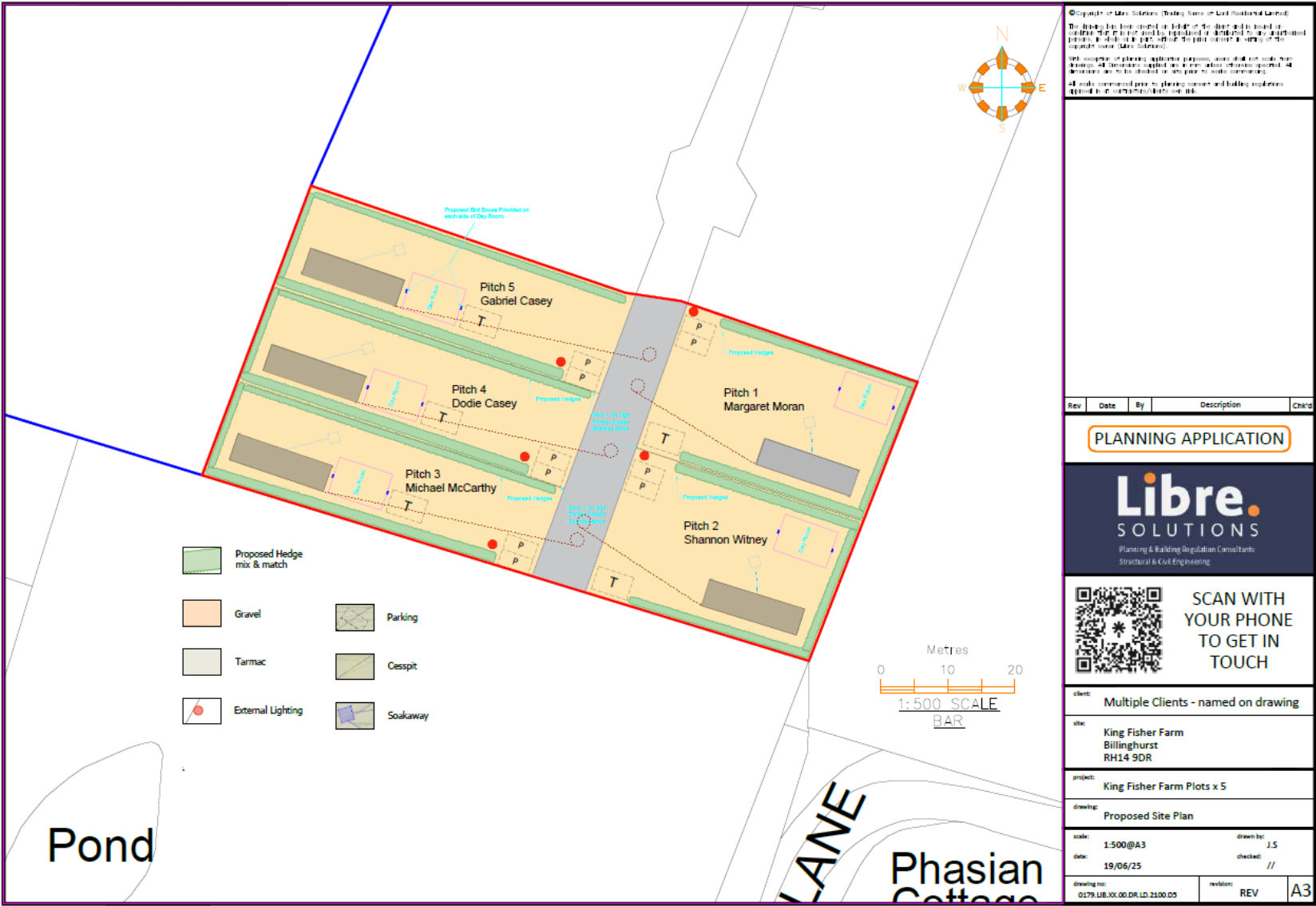
Appendix 1: Baseline Habitat Plan



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	-6.07
	Hedgerow units	1.42
	Watercourse units	0.00

Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	-100.00%
	Hedgerow units	N/A
	Watercourse units	0.00%

Total net gain achieved is less than target set ▲

0 baseline units - % cannot be calculated

Trading rules satisfied?	No - Check Trading Summaries ▲
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Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	6.07	6.68	6.68
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

Neutral Grassland; assessed using 'Grasslands Medium/High/Very High Distinctiveness' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relative to the specific habitat type. Note – this criterion is essential for achieving moderate or good condition for non-acid grassland types only.	Y	Assumed to pass as retrospective
B	Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Assumed to pass as retrospective
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	Assumed to pass as retrospective
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%.	Y	Assumed to pass as retrospective
E	Combined cover of species indicative of sub-optimal condition 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 (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Y	Assumed to pass as retrospective
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 2 and 4 cannot contribute towards this count). Note – this criterion is essential for achieving good condition for non-acid grassland types only.	Y	Assumed to pass as retrospective
Essential criterion for good condition achieved (for non-acid grassland) (Yes or No)		Y	
Number of criteria passed		6	
Condition Assessment Result		Condition Assessment Score	Score Achieved ✓
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)	
Passes 2 or fewer criteria OR Passes 3 or 4 criteria excluding criterion A and F		Poor (1)	

Mixed scrub; assessed using 'Scrub' habitat type condition sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)	Notes/Justification
A	The scrub is a good representation of the habitat type it has been identified as, based on its UKHab description (where in its natural range). The appearance and composition of the vegetation closely matches the characteristics of the specific scrub type. At least 80% of scrub is native, and there are at least three native woody species, with no single species comprising more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Y	Assumed to pass as retrospective
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	Y	Assumed to pass as retrospective
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Y	Assumed to pass as retrospective
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	Assumed to pass as retrospective
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Y	Assumed to pass as retrospective
Number of criteria passed			5
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	
Passes 5 criteria		Good (3)	Score Achieved ✓
Passes 3 or 4 criteria		Moderate (2)	✓
Passes 2 or fewer criteria		Poor (1)	

Appendix 5b: Post-Development Habitat Condition Assessment Sheets

Hedgerow; assessed using 'Hedgerow' habitat type condition sheet:

Hedgerow favourable condition attributes			
Attributes and functional groupings (A, B, C, & D)	Criteria (the minimum requirements for 'favourable condition')	Description	Criterion passed (Yes or No)
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	N
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	N
B2. Gap – hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness', but	Y

		are not subject to the >5 m criterion (as this is the typical size of a gate).	
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	N
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.	Y
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and recently introduced species	Recently introduced species refer to plant that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives.	Y
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	N
Condition categories for hedgerows without trees			
Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria in Table TS1-2	Weighting (score)	
Good	No more than 2 failures in total AND No more than 1 failure in any functional group	3	

Moderate	No more than 4 failures in total AND <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, and C2 = moderate condition)	2
Poor	Fails a total of more than 4 attributes OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1, and B2 = poor condition)	1
Score achieved:	Poor	