

Land off Salisbury View, Wiltshire BB1 9PJ

ASSESSMENT OF BIODIVERSITY NET GAIN

September 2025

ERAP (Consultant Ecologists) Ltd Reference: 2025-247

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Document Control

Survey Type:	Surveyors	Survey Date(s)
UK Habitat Classification Survey (including Condition Assessments of habitats)	Amy Sharples	21 st August 2025
MoRPh River Survey	Amy Sharples	21 st August 2025
Reporting	Personnel	Date
Author	Amy Sharples B.Sc. (Hons) M.Sc. ACIEEM Senior Ecologist	26 th August 2025
Signature(s)		
Checked by	Rebecca Bayley Graduate Ecologist	26 th August 2025
Revised and issued by	Amy Sharples	26 th August 2025
Report issued to	Persimmon (Lancashire)	
Version Number	3: 9 th September 2025 updated with new red line boundary	
Metric Version	Statutory Metric version 1.0.4 of the metric published 3 rd July 2025	

1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Persimmon (Lancashire) to carry out an assessment of Biodiversity Net Gain (BNG) of the land off Salesbury View, Wilpshire BB1 9PJ (hereafter the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 68886 31793.
- 1.1.2 The assessment was requested in connection with a planning application proposing the development of the site to residential housing.
- 1.1.3 This BNG assessment has been prepared to provide an assessment of the biodiversity value of the baseline of the site, an assessment of the value of post-development habitats based on the site proposals and landscape strategy, and provides guidance in relation to the requirements to attain a net gain in accordance with *Biodiversity Net Gain: Good Practice Principles for Development* (CIEEM, 2016).
- 1.1.4 This report also advises on how compliance with Chapter 15, paragraph 193(d) of the *National Planning Policy Framework* (Ministry of Housing, Communities & Local Government, 2024)¹ can be achieved, which states '*opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate*'.

1.2 Site Description

- 1.2.1 An aerial image of the site is appended at **Figure 1**.
- 1.2.2 The total site area is **5.0469 hectares²**.
- 1.2.3 The habitats present within the site are described and assessed in *2025-247 Land off Salesbury View, Wilpshire BB1 9PJ, Preliminary Ecological Appraisal* (ERAP (Consultant Ecologists) Ltd, 2025), hereafter referred to as the 'ecology report'.
- 1.2.4 A summary of the habitats present within the site is presented at **Section 3.1** of this report.

1.3 Proposed Development Description

- 1.3.1 The assessment has been requested to inform a planning application for residential development at the site. The proposals are presented at *P21-0362_EN_004_REV E_Landscape Masterplan 260825* (Pegasus Group, 2025), hereafter the 'proposals plan'.

1.4 Scope of Study

- 1.4.1 This report has been prepared to accompany a completed assessment of BNG using *The Statutory Biodiversity Metric Calculation Tool* (Natural England, 2023). The completed Microsoft Excel spreadsheet

¹ Hereafter the NPPF

² As measured by ERAP (Consultant Ecologists) Ltd; detail on the methods used to measure the area of the site are presented at **Section 2.0**. It has been considered suitable in this instance to measure the area habitats in hectares to four decimal places (i.e. to a m² level of accuracy).

assessment is presented as a separate document, named 'ERAP Ltd 2025-247 Statutory Metric, Salesbury View 09.09.25', hereafter referred to as the 'BNG Metric'.

- 1.4.2 It is intended that this report provides a transparent assessment to demonstrate the calculation of net gain, based on the reasonable parameters assumed for the proposals (refer to **Section 2.3**). This approach has been applied on a number of other sites ERAP (Consultant Ecologists) Ltd has assisted with and has been accepted by the relevant Local Planning Authorities (LPA) and their ecological advisors to enable a planning application to progress.

2.0 METHOD OF SURVEY

2.1 Habitat Assessment and Mapping

Baseline Habitats

- 2.1.1 A Phase 1 Habitat Survey including an assessment in accordance with the UKHab and condition assessments of the habitats present was carried out by Amy Sharples B.Sc. (Hons) M.Sc. ACIEEM on 21st August 2025. The weather was overcast with a light air (Beaufort scale 1) and 12°C.
- 2.1.2 On site habitat mapping was assisted via use of GPS technology and QField on-site mapping software, using ERSI world imagery and a site location plans as a baseplan.
- 2.1.3 Each of the habitats within the site has been assessed in accordance with the UKHab to determine each habitat type present. This has allowed a reliable classification of habitats in accordance with those used by the BNG Metric.
- 2.1.4 The UKHab has been designed to function at two scales: fine scale (25m² or 5 metres length) and large scale (400m² or 20m² length). It has been considered for the purposes of this survey (where the UKHab has been used to inform the BNG calculation of a relatively small area) that a finer scale of 5m² is appropriate for the classification of habitats.
- 2.1.5 A plan showing the baseline habitats present within the site in accordance with UKHab symbology is appended at **Figure 2**.
- 2.1.6 Condition Assessments for each of the habitats present within the site have been completed in accordance with *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology* (Natural England, November 2023) and are appended at **Section 7.2**.
- 2.1.7 A baseline assessment of Knotts Brook using the MoRPh River survey was completed whilst on site; Amy Sharples has completed the appropriate River Condition Assessment training for MoRPh Surveys for Biodiversity Net Gain. The predominant river width of the surveyed section of Knotts Brook is 5 metres. Module length was therefore set to 20 metres. The length of watercourse adjacent to the site boundary is 8 metres; 5 module lengths (i.e. 1 subreach) is 100 metres and therefore one subreach was required to inform the assessment.
- 2.1.8 The OS grid reference points for the reach start and end locations and the central point of each module are presented at **Table 2.1**.

Table 2.1: Reach Start and End and Module Grid References

Location	OS Grid Reference
Subreach 1	
Reach start	SD 69009 31698
Reach end	SD 68960 31645
Module 1	SD 69010 31699
Module 2	SD 68997 31689
Module 3	SD 68982 31676
Module 4	SD 68972 31661
Module 5	SD 68960 31646

- 2.1.9 The total reach length (i.e. the length located between major tributaries or flow obstructions such as large weirs or dams) is 808 metres; the upstream and downstream grid references for the start and end points of the reach are SD 69347 31752 and SD 68709 31693 respectively.
- 2.1.10 The proposals plans have been used to determine the post development condition of Knotts Brook. Factors such as the proposed land use at the bank top habitats within 10 metres of the brook, the effects of habitat management (for example the removal of litter and control of invasive plant species), and the presence of any culverts, pipes or bridges have been considered when assessing the condition of the brook following the completion of the proposed development at the site.
- 2.1.11 All baseline data and proposed river condition data has been entered onto the Cartographer website to obtain baseline and post-development condition assessments for Knotts Brook.

Post-development Habitats

- 2.1.12 The post development habitats have been calculated using the proposals plan. This plan has been provided to ERAP (Consultant Ecologists) Ltd without spatial referencing; the plan has been inputted into QGIS and and georeferenced to ensure it is accurate in accordance with *ESRI World Imagery*.
- 2.1.13 A plan showing the proposed habitats in accordance with UKHab symbology is appended at **Figure 3**.

2.2 Survey and Reporting Limitations

- 2.2.1 All measurements have been either estimated whilst on site or measured using QGIS.

2.3 Evaluation Methods and Rules Applied

Habitats and Assessment

- 2.3.1 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Where suitable, the ecological value of the habitats present have been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).
- 2.3.2 QGIS has been used to calculate the total area / length of each baseline habitat present within the site and the area / length of the proposed habitats at the site.

2.3.3 Each habitat and individual trees have been assessed to determine whether they are ‘irreplaceable habitat’, defined in NPPF as ‘*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen*’. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2024) has also been referred to.

2.3.4 Existing individual trees have been measured using the Tree Helper provided within the BNG Metric.

Relevant Guidance

2.3.5 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration.

Strategic Significance

2.3.6 The site does not lie within a Local Nature Recovery Strategy area, nor does the site have any statutory or non-statutory designation for nature conservation. For these reasons a strategic significance of ‘Area / compensation not in local strategy / no local strategy’ has been applied at the BNG Metric for the habitat units and trees.

Assumptions

2.3.7 Reasonable assumptions have been made in relation to the condition assessments for the proposed habitats at the site; the proposed condition assessment for each habitat is appended at **Section 7.3**. Long-term management of the proposed habitats is required to secure the proposed condition.

3.0 SURVEY RESULTS

3.1 Site Description

3.1.1 Refer to **Figure 2**. The site is described in the ecology report as follows:

‘The site comprises fields of grazed / cut improved grassland with a section of unmanaged improved grassland at the northern area of the site, an area of woodland in the south, a hedgerow, a tree line and dry ditches. The site slopes upwards in a north-easterly direction.

The site boundaries are demarcated by fence lines and stone walls. Grazed improved grassland similar to the grassland within the site lies to the east of the site. Knotts Brook and further woodland lies adjacent to the south-eastern and southern site boundaries. Existing residential developments lie adjacent to the northern and western site boundaries.’

3.2 Assessment of Baseline Habitats

3.2.1 **Tables 3.1 to 3.4** provide a summary of the habitats present, their condition assessment result and their area within the site. Condition assessments for each habitat are appended at **Section 7.2**.

3.2.2 Note that as it is considered ephemeral ditches will support water for less than 4 months of the year, and have therefore (in accordance with BNG methodology) not been included in this assessment.

Table 3.1: Summary of Baseline Area Based Habitats within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Habitat Distinctiveness	Condition Assessment Result	Area (ha)
Habitat 1 Modified grassland	g4 modified grassland with the following secondary codes: 14 scattered rushes, 101 cattle grazed and 106 mown	Modified grassland	Low	Moderate	5.0131
Habitat 2 Woodland	w1g other broadleaved woodland	Other woodland; broadleaved	Medium	Poor	0.0338
Total:					5.0469

Table 3.2: Summary of Individual Trees within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Habitat Distinctiveness	Condition Assessment Result	Area (ha) ³
Habitat 3 Tree 1	secondary code 32 scattered trees within an area of g4 modified grassland.	Urban tree	Medium	Poor	0.0041
Total:					0.0041

Table 3.3: Summary of Baseline Hedgerow Habitats within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Habitat Distinctiveness	Condition Assessment Result	Length (km)
Habitat 4 Tree Line 1	w woodland and forest with the secondary code 33 line of trees	Line of trees	Low	Poor	0.137
Habitat 5 Hedgerow 1	h2a Hedgerow (Priority Habitat) with the following secondary codes: 524 invasive non-native and 612 fence	Native hedgerow	Low	Moderate	0.206
Total					0.343

Table 3.4: Summary of Baseline River Habitats within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Habitat Distinctiveness	Condition Assessment Result	Length (km)
Habitat 6 Knotts Brook	r2b other rivers and streams	Other rivers and streams	High	Moderate	0.008
Total					0.008

3.2.3 The baseline BNG score for the site is provided at **Section 5.0**.

³ Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

4.0 POST DEVELOPMENT HABITATS

4.1 Consideration of Mitigation Hierarchy and Target Condition Assessments

- 4.1.1 The site layout has been designed to retain the woodland at the southern area of the site and where feasible retains the line of trees.
- 4.1.2 Condition Assessments for each of the retained, enhanced and proposed habitats as specified on the landscape proposals are presented at **Section 7.3**. A long-term habitat management plan with an appropriate monitoring regime is required to secure the condition of these habitats in the long-term.

4.2 Consideration of Proposed Habitats

- 4.2.1 The proposals plan demonstrates that 3.1186 hectares of the 5.0469 hectares site (i.e. 61.8%) will be developed to roads, housing and gardens, and the remaining 1.9283 hectares (38.2%) will comprise retained and created habitats as part of the Public Open Space (POS) at the site.
- 4.2.2 Of the 2.3614 hectares area to be developed it has been assumed that a 70/30 mix of developed land / residential gardens will be created; 1.6530 hectares of developed land and 0.7084 hectares of gardens have been inputted to the metric.
- 4.2.3 0.123 kilometres of Tree Line 1 will be retained.
- 4.2.4 The whole length of Knotts Brook adjacent to the site (0.751 kilometres) will be retained.
- 4.2.5 It has been assumed that the remaining open space will be modified grassland.

Table 4.1: Summary of Area-based Habitats to be Retained and Created at the Site

Habitat Type	BNG Equivalent Habitat	Habitat Distinctiveness	Target Condition	Area (ha)	Sub-totals (ha)
Retained Habitats					
Habitat 2	Other woodland; broadleaved	Medium	Poor	0.0338	0.0337
Proposed Habitats					
Habitat A Road	Developed land; sealed surface	V. low	N/A - Other	0.6275	
Habitat B Path	Developed land; sealed surface	V. low	N/A – Other	0.0159	
Habitat C LAP	Developed land; sealed surface	V. low	N/A – Other	0.0210	
Habitat D SUDs	Sustainable drainage system	Low	Moderate	0.0877	
Habitat E Substation	Developed land; sealed surface	V. low	N/A – Other	0.0051	
Habitat F Development	Developed land; sealed surface	V. low	N/A – Other	1.6530	
Habitat G Gardens	Vegetated garden	Low	Condition assessment N/A	0.7084	

Habitat H Woodland mix	Other woodland; broadleaved	Medium	Poor	0.2565	
Habitat I Scrub	Mixed scrub	Medium	Moderate	0.3174	
Habitat J Wildflower	Other neutral grassland	Medium	Moderate	0.9793	
Habitat K Modified grassland	Modified grassland	Low	Moderate	0.3314	
Habitat L Introduced shrub	Introduced shrub	Low	Condition assessment t N/A	0.0100	
Total					5.0132
					5.0469

Table 4.2: Summary of Individual Trees to be Created at the Site

Habitat Reference	BNG Habitat Equivalent	Habitat Distinctiveness	Target Condition	Area (ha) ⁴
Proposed Habitats				
Habitat M New trees (106)	Urban tree	Medium	Moderate	0.4316
Total				0.4136

Table 4.3: Summary of Hedgerow Habitats to be Retained and Created at the Site

Habitat Type	BNG Equivalent Habitat	Habitat Distinctiveness	Target Condition	Length (km)	Sub-totals (km)
Retained Habitats					
Habitat 4: Tree Line 1	Line of trees	Low	Poor	0.123	<i>0.123</i>
Proposed Habitats					
Habitat N Native hedgerow	Species-rich native hedgerow	Medium	Moderate	0.583	
Habitat O Ornamental hedgerow	Non-native and ornamental hedgerow	V. Low	Poor	0.137	<i>0.720</i>
Total					0.843

Table 4.4: Summary of River Habitats to be Retained at the Site

Habitat Type	BNG Equivalent Habitat	Habitat Distinctiveness	Target Condition	Length (km)
Retained Habitats				
Habitat 6: Knotts Brook	Other rivers and streams	High	Moderate	0.008
Total				0.008

⁴ Small urban trees have a diameter at breast height (DBH) of up to 30cm, medium urban trees have a DBH of 30 to 60cm, large urban trees have a DBH of 60 to 90cm and very large trees have DBH of more than 90cm. Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

5.0 HEADLINE RESULTS, EVALUATION AND CONCLUSION

5.1 The headline results of the BNG Metric are presented at **Table 5.1**.

Table 5.1: Results of Statutory Biodiversity Metric Calculation Tool

On-site Baseline	Habitat units	20.24	
	Hedgerow units	1.10	
	Watercourse units	0.10	
On-site Post Intervention	Habitat units	13.74	
	Hedgerow units	4.28	
	Watercourse units	0.10	
On-site net change (units % percentage)	Habitat units	-6.50	-32.10%
	Hedgerow units	3.18	289.91%
	Watercourse units	0.00	0.00%
Combined Net Unit Change	Habitat units	-6.50	
	Hedgerow units	3.18	
	Watercourse units	0.00	
Total Net Unit Change	Habitat units	-6.50	
	Hedgerow units	3.18	
	Watercourse units	0.00	
Total Net % Change	Habitat units	-32.10%	
	Hedgerow units	289.91%	
	Watercourse units	0.00%	

Trading Rules Satisfied?	NO
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Unit Type	Target	Baseline Units	Units Required	Unit Deficit	Comment
Habitat units	10%	20.24	22.26	8.52	
Hedgerow units	10%	1.10	1.21	0.00	No additional hedgerow units required to meet target
Watercourse units	10%	0.10	0.11	0.01	

5.2 A net gain for area-based habitats is not demonstrated by the BNG Metric, despite the calculation assuming a realistic maximum of medium distinctiveness habitats and the proposals being in accordance with the mitigation hierarchy.

5.3 If net gain cannot be attained at the site in accordance with any future site proposals and the detailed landscape planting proposals then the following options are available (a combination of the approaches outlined below may be appropriate):

- A redesign of the site to minimise impacts and establish enhancement of retained areas where possible;
- Enhancement of off-site habitats to compensate for the loss of units associated with the proposed development; and
- Agreeing a biodiversity payment for the loss of habitat units associated with the site with a habitat bank or other similar provider.

- 5.4 Note that trading rules will still need to be satisfied even if an overall gain of 10% is attained⁵.
- 5.5 At this site it is advised that the following measures are also considered as part of the assessment of biodiversity net gain:
- Incorporation of opportunities for roosting bats at the new properties as, although the habitats are suitable for use by foraging bat species such as *Pipistrellus* species, there are no significant opportunities for roosting bats (particularly maternity roosts) at the site currently (this is considered to provide additionality);
 - Incorporation of opportunities for use by nesting birds at the developed site including in both the public open space by landscape planting and at the new properties. This includes a net increase in opportunities for specific species not currently able to breed at the site such as swift (a red-listed bird species⁶) and house sparrow and starling (both red listed and Priority Species) at the new properties;
 - Eradication / control of invasive plant species from the site; and
 - Preparation and implementation of a Landscape and Ecological Management Plan (or similar) to secure long-term management of the retained and created habitats in accordance with conservation targets and objectives.

⁵ Trading rules requirements:

Habitat Distinctiveness Category	Trading Rules Requirement
Low	Same distinctiveness or better habitat required
Medium	Same broad habitat or a higher distinctiveness category required
High	Same habitat required.
Very high	Same habitat required – bespoke compensation will be necessary.

⁶ In accordance with the BOCC: Birds of Conservation Concern (Stanbury, et al., 2021).

6.0 REFERENCES

- CIEEM, 2016. *Biodiversity Net Gain: Good Practice Principles for Development*, Winchester: CIEEM.
- CIEEM, 2018. *Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*, Winchester: Chartered Institute of Ecology and Environmental Management.
- DEFRA, 2024. *The Statutory Biodiversity Metric User Guide*, London: DEFRA.
- ERAP (Consultant Ecologists) Ltd, 2025. *2025-247 Land off Salesbury View, Wilpshire BB1 9PJ, Preliminary Ecological Appraisal*, Chorley: ERAP (Consultant Ecologists) Ltd.
- GOV.UK, 2024. *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*. [Online]
Available at: <https://www.gov.uk/government/publications/the-biodiversity-gain-requirements-irreplaceable-habitat-regulations-2024>
[Accessed 2025].
- Maddock, A (ed), 2008. *UK Biodiversity Action Plan: Priority Habitat Descriptions*. [Online]
Available at: <http://jncc.defra.gov.uk/page-5718>
- Ministry of Housing, Communities & Local Government, 2024. *National Planning Policy Framework*. London: H.M.S.O.
- Natural England, 2023. *The Statutory Biodiversity Metric Calculation Tool*. [Online]
Available at: <http://publications.naturalengland.org.uk/publication/6049804846366720>
[Accessed 2025].
- Natural England, November 2023. *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology*, Peterborough: Natural England.
- Pegasus Group, 2025. *P21-0362_EN_004_REV E_Landscape Masterplan 260825*, s.l.: Pegasus Group.
- Stace, C. A., 2010. *New Flora of the British Isles 3rd Edition*. Cambridge: Cambridge University Press.
- Stanbury, A. et al., 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds*, Issue 108, pp. 723-747.
- UKHab Ltd, 2023. *The UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>), Stockport: UKHab Ltd.

7.0 APPENDIX: PHOTOGRAPHS, CONDITION ASSESSMENTS AND FIGURES

7.1 Photographs

Table 7.1: Photographs of the Site



Photo 1: Modified grassland



Photo 2: Modified grassland



Photo 3: Hedgerow 1



Photo 4: Tree Line 1

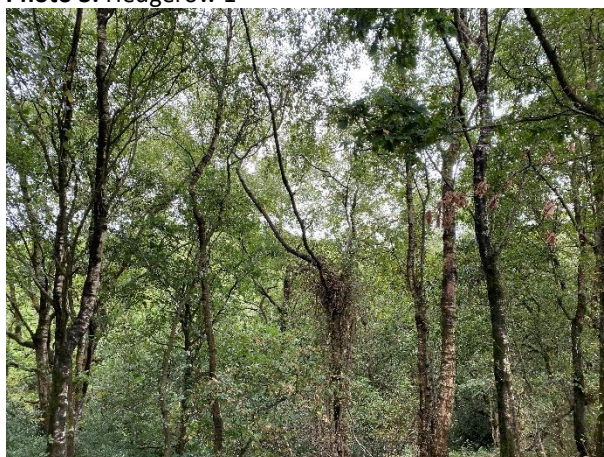


Photo 5: Woodland



Photo 6: Woodland



Photo 7: Knotts Brook

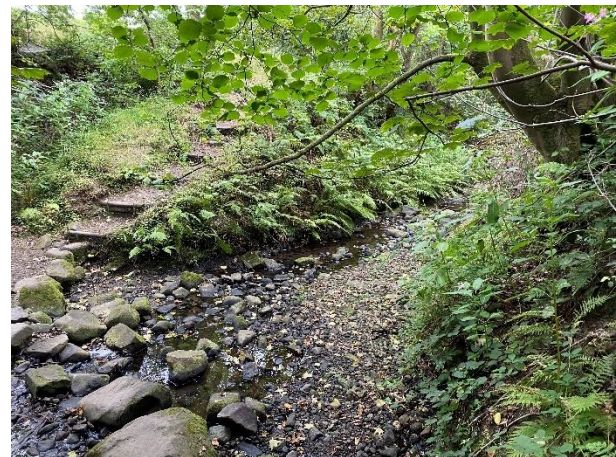


Photo 8: Knotts Brook

7.2 Condition Assessments of Baseline Habitats

Table 7.2: Condition Assessments for Habitat 1: Modified Grassland

Habitat Reference	A	B	C	D	E	F	G	Total No. of Criterion Passed	Condition Assessment Result ¹
Habitat 1: Modified grassland	Yes	No	Yes	No	Yes	Yes	Yes	5	Moderate
Good: Passes 6 or 7 criteria including essential criterion A									
Moderate: Passes 4 or 5 criteria including essential criterion A									
Poor: Passes 3 or fewer criteria OR passes 4 to 6 criteria, but failing criterion A									

Condition Assessment Criteria
A. There are 6 to 8 vascular plant species per m2 present, including at least 2 forbs (this may include those listed in below). 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 m2 (excluding those listed below), 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. <i>Plant Species:</i> 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>).
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
C. Any scrub present accounts for less than 20% of total grassland area (some scattered scrub such as Bramble may be present). Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.
D. Physical damage 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.
E. Cover of bare ground between 1% and 10%, including localised areas, for example, 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
F. Cover of Bracken less than 20%.
G. There is an absence of invasive non-native species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended). This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement

Table 7.3: Condition Assessments for Habitat 2: Woodland (Retained)

Habitat Reference	A	B	C	D	E	F	G	H	I	J	K	L	M	Total No. of Criterion Passed	Condition Assessment Result
Habitat 2: Woodland	1	3	1	2	3	3	1	3	1	1	1	1	2	23	Poor
Good (total score >32)															
Moderate (total score 26 to 32)															
Poor (total score 13 to 25)															
Indicator	Good (3 points)			Moderate (2 points)			Poor (1 point)								
A. Age distribution of trees. See EWBG method INDICATOR 1 for more information. If tree species is not a birch <i>Betula</i> sp., cherry (<i>Prunus</i> sp.) or <i>Sorbus</i> sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or <i>Sorbus</i> species; 0 - 20 years = Young; 21 - 60 years = Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees.	Three age classes present.			Two age classes present.			One age class present.								
B. Wild, domestic and feral herbivore damage. See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed.	No significant browsing damage evident in woodland.			Evidence of significant browsing pressure is present in 40% or less of whole woodland.			Evidence of significant browsing pressure is present in 40% or more of whole woodland.								
C. Invasive plant species. See EWBG method INDICATOR 3 for more information. Assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat has been split into parcels accordingly. Check for the presence of all plant species listed on Schedule 9 of the <i>Wildlife and Countryside Act 1981</i> (as amended), particularly the following invasive non-native species: American Skunk Cabbage, Indian Balsam, Japanese Knotweed, Cherry Laurel, Shalloon, Snowberry, Variegated Yellow-archangel, Rhododendron and Tree-of-heaven.	No invasive species present in woodland.			Rhododendron or cherry laurel not present, other invasive species <10% cover.			Rhododendron or cherry laurel present, or other invasive species >10% cover.								
D. Number of native tree species. See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the	Five or more native tree or shrub species found across woodland parcel.			Three to four native tree or shrub species found across woodland parcel.			None to two native tree or shrub species across woodland parcel.								

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
UK. Note a list of commonly found non-native tree species are also included and should be recorded if present.			
E. Cover of native tree and shrub species. See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs.	> 80% of canopy trees and >80% of understorey shrubs are native.	50-80% of canopy trees and 50-80% of understorey shrubs are native.	< 50% of canopy trees and <50% of understorey shrubs are native.
F. Open space within woodland. See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. Automatically 'Good' if woodland is less than 10 hectares, given the increased ratio of edge habitat to woodland where the woodland is less than 10ha.	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	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.
G. Woodland regeneration. See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening.	All three classes present in woodland; trees 4-7cm DBH, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.
H. Tree health. See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level.	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.
I. Vegetation and ground flora. See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this.	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
J. Woodland vertical structure. This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information.	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.
K. Veteran trees. See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK</i> (www.gov.uk).	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.
L. Amount of deadwood. See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm.	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, stubs and stumps or an abundance of small cavities.
M. Woodland disturbance. See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment and / or more than 20% of woodland area has damaged ground.

Table 7.4: Condition Assessments for Habitat 3: Tree 1

Tree Reference	Species	A	B	C	D	E	F	Size Category	Total No. of Criterion Passed	Condition Assessment Result
Habitat 3: Tree 1	Apple	No	Yes	Yes	Yes	Yes	Yes	Small	5	Good
Good: Passes 5 or 6 criteria										
Moderate: Passes 3 or 4 criteria										
Poor: Passes 2 or fewer criteria										

Condition Assessment Criteria
A. The tree is a native species (or more than 70% within the block are native species)
B. Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.
C. The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from: <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk). Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E.
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.
E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.
F. More than 20% of the tree canopy area is oversailing vegetation beneath

Table 7.5: Condition Assessments for Habitat 4: Tree Line 1 (Retained)

Condition Assessment Criteria	Tree Line 1
A. More than 70% of trees are native species.	Yes
B. Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5m wide.	No
C. One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	No
D. There is an undisturbed naturally-vegetated strip of at least 6m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice ² .	No
E. At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes
Good: passes 5 criteria	-
Moderate: passes 3 or 4 criteria	-
Poor: passes 0, 1 or 2 criteria	Yes
Additional information / definitions:	
Footnote 1 – DEFRA (2007) Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).	
Footnote 2 – Where ancient and veteran trees are present, see gov.uk standing advice on ancient and veteran trees. Available from <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk)	

Table 7.6: Condition Assessments for Habitat 5: Hedgerow 1

Habitat Reference	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	Total No. of Group Failures	Total No. of Criteria Failures	Condition Assessment Result
Habitat 5: Hedgerow 1	Yes	No	Yes	No	Yes	No	No	Yes	-	-	0	4	Moderate
Hedgerows Without Trees							Hedgerows With Trees						
Good: No more than 2 failures in total; AND no more than 1 in any functional group.							Good: No more than 2 failures in total; AND no more than 1 failure in any functional group.						
Moderate: No more than 4 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).							Moderate: No more than 5 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition).						
Poor: Fails a total of more than 4 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).							Poor: Fails a total of more than 5 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).						
Condition Assessment Criteria													
A1. Height: >1.5m 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 4 years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).							A2. Width: >1.5m 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 4 years (if undertaken according to good practice)						
B1. Gap - hedge base. Gap between ground and base of canopy is less than 0.5m, for more than 90% of length (unless line of trees). 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 (e.g. a Hazel dominated hedgerow or where the hedgerow is affected by shading from other vegetation such as woodland, see page 65 of <i>Hedgerow Survey Handbook</i>).							B2. Gap - hedge canopy continuity. Gaps make up less than 10% of total length and no canopy gaps are greater than 5m. Gates and access points are not subject to the greater than 5m criterion. 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 are not subject to the greater than 5 m criterion (as this is the typical size of a gate).						
C1. Undisturbed ground and perennial vegetation.							C2. Nutrient-enriched perennial vegetation. Plant species indicative of nutrient enrichment of soils do not dominate more than 20% cover of the ground area of undisturbed ground.						

Condition Assessment Criteria	
More than 1m width ground with perennial herbaceous vegetation for more than 90% of the hedgerow length, as measured from outer edge of the hedgerow, and is present on at least 1 side of the hedgerow. 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.	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.
D1. Invasive and neophyte species. More than 90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species. Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.	D2. Current damage. More than 90% of the hedgerow or undisturbed ground is free of damaged 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).
Additional group – ONLY if trees are present	
E1. Tree Class There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient⁸), and there is on average at least one mature, ancient or veteran tree present per 20 to 50m of hedgerow. This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	E1. Tree health At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity. This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.

Table 7.7: Condition Assessments for Habitat 6: Knotts Brook (retained)

Site Name / Location		Land off Salesbury View, Wilpshire	Unique River Section Reference	2025-247 Salesbury View
GPS of Morph5		SD 68960 31646	River Section Length	8 metres
RCA River Type and Habitat Description for Full River Section (from Walkover Survey)				
D - Straight/sinuuous to plane bed, coarsest BO/BE, average GP, section of Knotts Brook adjacent to the southern site boundary.				
The Results of the 32 RCA indicators for Each River Section Are Provided Below with Notes to Explain Recommendations for the Whole Channel				
	RCA Index ID	RCA Index Name <i>Positive indicators are presented in green, and negative indicators are presented in red.</i>	RCA Indicator Values <i>-4 to 0, or 0 to 4. All values greater than 2 are highlighted in green. All values less than -2 are highlighted in red.</i>	Notes / Justification <i>Explanation (where significant) the influence of high/low RCA indices on overall river condition.</i>
Bank Top	B1	Vegetation structure	1.000	
	B2	Tree feature richness	0.000	
	B3	Water-related features	0.000	
	B4	NNIPS cover	-4.000	
	B5	Managed ground cover	0.000	
Bank Face	C1	Riparian vegetation structure	2.000	
	C2	Tree feature richness	0.000	
	C3	Natural bank profile extent	3.000	
	C4	Natural bank profile richness	1.000	
	C5	Natural bank material richness	1.000	
	C6	Bare sediment extent	1.000	
	C7	Artificial bank profile extent	0.000	
	C8	Reinforcement extent	0.000	
	C9	Reinforcement material severity	0.000	
	C10	NNIPS cover	-4.000	
Channel Margin	D1	Aquatic vegetation extent	0.000	
	D2	Aquatic morphotype richness	0.000	
	D3	Physical feature extent	1.000	
	D4	Physical feature richness	1.000	
	D5	Artificial features	0.000	
Channel Bed	E1	Aquatic morphotype richness	0.000	
	E2	Tree features richness	1.000	
	E3	Hydraulic features richness	1.000	
	E4	Natural features extent	1.000	
	E5	Natural features richness	0.000	
	E6	Material richness	3.000	
	E7	Siltation	0.000	
	E8	Reinforcement extent	0.000	
	E9	Reinforcement severity	0.000	
	E10	Artificial features severity	0.000	

	E11	NNIPS extent	0.000	
	E12	Filamentous algae extent	0.000	

River Condition Assessment	0.279	River Type and Class Bands	D - Straight/sinuuous to plane bed, coarsest BO/BE, average GP
River Shape Index	0.713	Is the River Channel Overdeep?	No
River Condition Final Class	Moderate	Is the RCA Final Class Modified?	No
<i>Summary of RCA Results (and Encroachment where applicable) with Recommendations for Improvements</i>			
No enhancements feasible.			

7.1 Condition Assessments of Retained, Enhanced and Created Habitats

Table 7.8: Condition Assessments for Habitat D: SUDs

Habitat Reference	A	B	C	E1	E2	Total No. of Criterion Passed	Condition Assessment Result
Habitat D: SUDs	Yes	Yes	Yes	Yes	Yes	5	Moderate
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):							
Good - Passes all 3 core criteria; AND meets the requirements for Good condition within criterion C; AND Passes all additional criteria relevant to specific habitat type (Group D or Group E).							
Moderate - Passes 3 or 4 criteria; OR Passes 5 criteria but does not meet the requirements for Good condition within criterion C.							
Poor - Passes 2 or fewer of 5 criteria.							

Condition Assessment Criteria
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.
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.
C. Invasive non-native plant species listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement <i>Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).</i> Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website: Home » NNSS (nonnativespecies.org) and Natural England Access to Evidence page should also be checked for up-to-date information: Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk). <i>For green roof habitat types only</i> – Buddleia (<i>Buddleja davidii</i>) should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years.
Additional Criteria – only applicable to Bioswale and SUDS
E1. Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife. Professional judgement is used. Sources of information about non-native species that are not detrimental to native wildlife can be found on the GBNNSS website: Alternative plants » NNSS (nonnativespecies.org).
E2. The vegetation is comprised of plant species suited to wetland or riparian situations.

Table 7.9: Condition Assessments for Habitat H: Woodland Mix

Habitat Reference	A	B	C	D	E	F	G	H	I	J	K	L	M	Total Score	Condition Assessment Result
Habitat H: Woodland mix	1	2	3	2	2	3	1	3	1	1	1	1	2	23	Poor
Good (total score >32)															
Moderate (total score 26 to 32)															
Poor (total score 13 to 25)															

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
A. Age distribution of trees. See EWBG method INDICATOR 1 for more information. If tree species is not a birch <i>Betula</i> sp., cherry (<i>Prunus</i> sp.) or <i>Sorbus</i> sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or <i>Sorbus</i> species; 0 - 20 years = Young; 21 - 60 years = Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees.	Three age classes present.	Two age classes present.	One age class present.
B. Wild, domestic and feral herbivore damage. See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed.	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in 40% or less of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.
C. Invasive plant species. See EWBG method INDICATOR 3 for more information. Assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat has been split into parcels accordingly. Check for the presence of all plant species listed on Schedule 9 of the <i>Wildlife and Countryside Act 1981</i> (as amended), particularly the following invasive non-native species: American Skunk Cabbage, Indian Balsam, Japanese Knotweed, Cherry Laurel, Shalloon, Snowberry, Variegated Yellow-archangel, Rhododendron and Tree-of-heaven.	No invasive species present in woodland.	Rhododendron or cherry laurel not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species >10% cover.
D. Number of native tree species. See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	None to two native tree or shrub species across woodland parcel.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
UK. Note a list of commonly found non-native tree species are also included and should be recorded if present.			
E. Cover of native tree and shrub species. See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs.	> 80% of canopy trees and >80% of understorey shrubs are native.	50-80% of canopy trees and 50-80% of understorey shrubs are native.	< 50% of canopy trees and <50% of understorey shrubs are native.
F. Open space within woodland. See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. Automatically 'Good' if woodland is less than 10 hectares, given the increased ratio of edge habitat to woodland where the woodland is less than 10ha.	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	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.
G. Woodland regeneration. See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening.	All three classes present in woodland; trees 4-7cm DBH, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.
H. Tree health. See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level.	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.
I. Vegetation and ground flora. See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this.	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
J. Woodland vertical structure. This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information.	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.
K. Veteran trees. See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK</i> (www.gov.uk).	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.
L. Amount of deadwood. See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm.	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, stubs and stumps or an abundance of small cavities.
M. Woodland disturbance. See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment and / or more than 20% of woodland area has damaged ground.

Table 7.10: Condition Assessments for Habitat I: Scrub

Habitat Reference	A	B	C	D	E	Total No. of Criterion Passed	Condition Assessment Result
Habitat I: Scrub	Yes	No	Yes	Yes	No	3	Moderate
							Good: passes 5 criteria
							Moderate: passes 3 or 4 criteria
							Poor: passes 2 or fewer criteria

Condition Assessment Criteria
A. The scrub is a good representation of the habitat type – the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). Professional judgement should be used alongside the UKHab description. 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. Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) <i>Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed.</i> [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).
B. Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present. See gov.uk standing advice on ancient and veteran species. Available from <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk).
C. There is an absence of invasive non-native plant species⁴ (as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended)) and species indicative of sub-optimal condition⁶ make up less than 5% of ground cover. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, the habitat is split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.
D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.
E. There are clearings, glades or rides present within the scrub, providing sheltered edges.

Table 7.11: Condition Assessments for Habitat J: Wildflower

Habitat Reference	A	B	C	D	E	F	Total No. of Criterion Passed	Condition Assessment Result
Habitat J: Wildflower	Yes	Yes	No	Yes	No	Yes	4	Moderate
Acid Grassland Types				Non-acid Grassland Types				
Good: passes 5 criteria				Good: passes 5 or 6 criteria, including essential criteria A and additional criterion F				
Moderate: passes 3 or 4 criteria				Moderate: passes 3 to 5 criteria, including essential criterion A				
Poor: passes 2 or fewer criteria				Poor: passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F				

Condition Assessment Criteria
A. The grassland is a good representation of the 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). Professional judgement should be used alongside the UKHab description. <i>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i>
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
C. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens. For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.
D. Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.
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 (species are listed below). If any invasive non-native plant species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended) are present, this criterion is automatically failed. This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. <i>Species indicative of sub-optimal condition for this habitat type include:</i> Creeping Thistle, Spear Thistle, Curled Dock, Broad-leaved Dock, Common Nettle, Creeping Buttercup, Greater Plantain, White Clover, Cow Parsley. There may be additional relevant species local to the region and / or site.
Additional Group – non-acid grassland types only
F. There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced at Criterion ‘E’ cannot contribute towards this count). <i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i>

Table 7.12: Condition Assessments for Habitat K: Modified Grassland

Habitat Reference	A	B	C	D	E	F	G	Total No. of Criterion Passed	Condition Assessment Result ¹
Habitat K: Modified grassland	Yes	No	Yes	Yes	No	Yes	Yes	5	Moderate
Good: Passes 6 or 7 criteria including essential criterion A									
Moderate: Passes 4 or 5 criteria including essential criterion A									
Poor: Passes 3 or fewer criteria OR passes 4 to 6 criteria, but failing criterion A									

Condition Assessment Criteria
A. There are 6 to 8 vascular plant species per m2 present, including at least 2 forbs (this may include those listed in below). 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 m2 (excluding those listed below), 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. <i>Plant Species:</i> 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>).
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
C. Any scrub present accounts for less than 20% of total grassland area (some scattered scrub such as Bramble may be present). Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.
D. Physical damage 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.
E. Cover of bare ground between 1% and 10%, including localised areas, for example, 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
F. Cover of Bracken less than 20%.
G. There is an absence of invasive non-native species as listed on Schedule 9 of <i>Wildlife and Countryside Act 1981</i> (as amended). This is assessed for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement

Table 7.13: Condition Assessments for Habitat M: New Trees

Tree Reference	A	B	C	D	E	F	Size Category	Total No. of Criterion Passed	Condition Assessment Result
Habitat M: New trees	Yes	Yes	No	Yes	No	Yes	Small	4	Moderate
									Good: Passes 5 or 6 criteria
									Moderate: Passes 3 or 4 criteria
									Poor: Passes 2 or fewer criteria

Condition Assessment Criteria
A. The tree is a native species (or more than 70% within the block are native species)
B. Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.
C. The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from: <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk). Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E.
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.
E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.
F. More than 20% of the tree canopy area is oversailing vegetation beneath

Table 7.14: Condition Assessments for Habitat N: Native Hedgerow

Habitat Reference	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	Total No. of Group Failures	Total No. of Criteria Failures	Condition Assessment Result
Habitat N: Native hedgerow	Yes	Yes	Yes	Yes	No	No	No	Yes	-	-	1	3	Moderate
Hedgerows Without Trees							Hedgerows With Trees						
Good: No more than 2 failures in total; AND no more than 1 in any functional group.							Good: No more than 2 failures in total; AND no more than 1 failure in any functional group.						
Moderate: No more than 4 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).							Moderate: No more than 5 failures in total; AND does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition).						
Poor: Fails a total of more than 4 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).							Poor: Fails a total of more than 5 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).						
Condition Assessment Criteria													
A1. Height: >1.5m 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 4 years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).							A2. Width: >1.5m 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 4 years (if undertaken according to good practice)						
B1. Gap - hedge base. Gap between ground and base of canopy is less than 0.5m, for more than 90% of length (unless line of trees). 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 (e.g. a Hazel dominated hedgerow or where the hedgerow is affected by shading from other vegetation such as woodland, see page 65 of <i>Hedgerow Survey Handbook</i> .							B2. Gap - hedge canopy continuity. Gaps make up less than 10% of total length and no canopy gaps are greater than 5m. Gates and access points are not subject to the greater than 5m criterion. 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 are not subject to the greater than 5 m criterion (as this is the typical size of a gate).						
C1. Undisturbed ground and perennial vegetation. More than 1m width ground with perennial herbaceous vegetation for more than 90% of the hedgerow length, as measured from outer edge of the hedgerow, and is present on at least 1 side of the hedgerow.							C2. Nutrient-enriched perennial vegetation. Plant species indicative of nutrient enrichment of soils do not dominate more than 20% cover of the ground area of undisturbed ground.						

Condition Assessment Criteria	
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.	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.
D1. Invasive and neophyte species. More than 90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species. Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.	D2. Current damage. More than 90% of the hedgerow or undisturbed ground is free of damaged 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).
Additional group – ONLY if trees are present	
E1. Tree Class There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient⁸), and there is on average at least one mature, ancient or veteran tree present per 20 to 50m of hedgerow. This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	E1. Tree health At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity. This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.

7.1.1 Habitat O: Ornamental hedgerow defaults to 'poor' condition.

7.2 Figures

Figure 1: Aerial Image of the Site



Figure 2: UKHab Plan of Baseline Habitats

