

Re: Baseline Habitat Survey for Ells Farm

Survey extent and method

Site description and habitats

Habitat	Description

Habitat Photographs

Habitat	Photograph
	



Plant species lists

Strategic significance

Habitat Condition

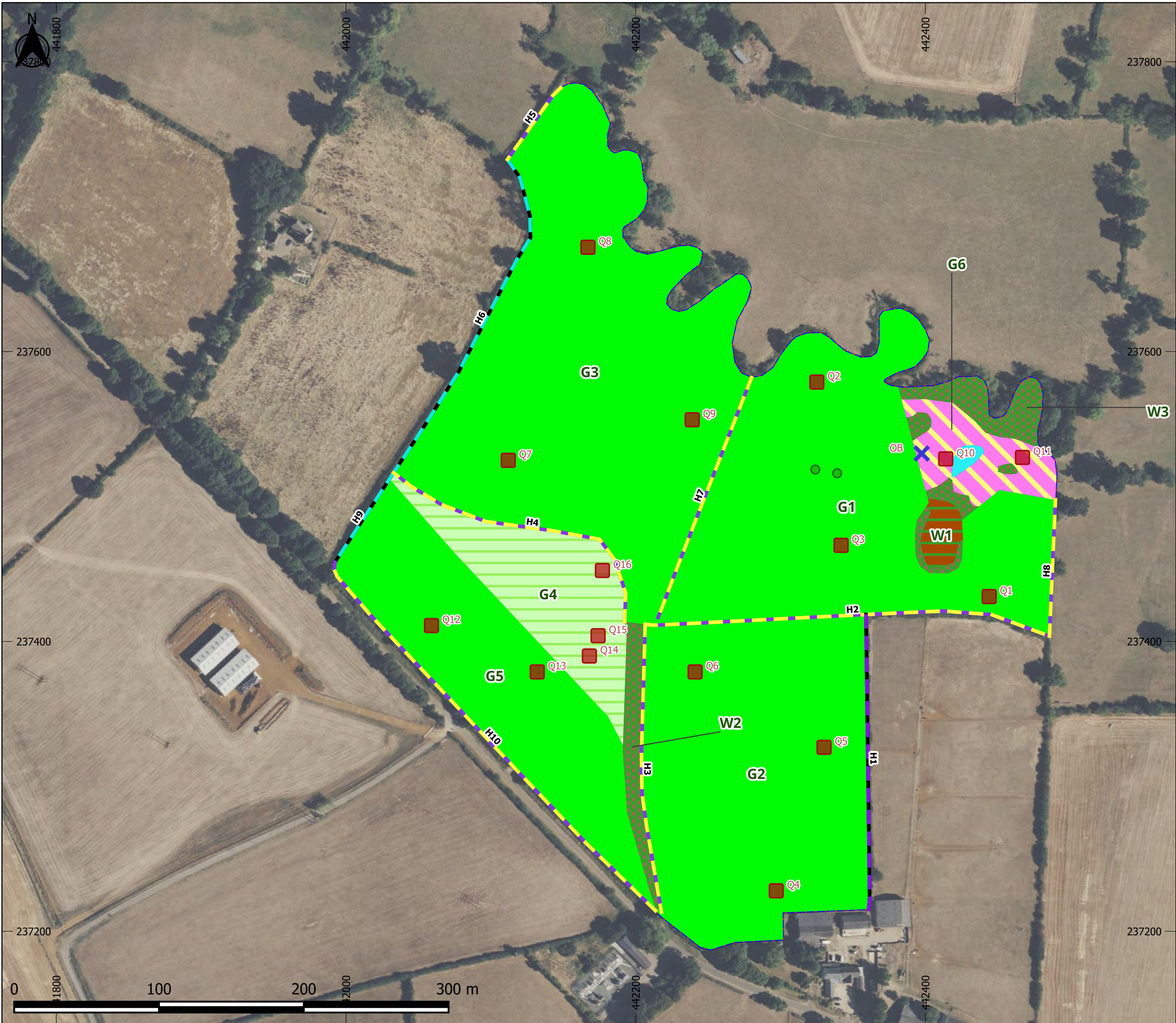
Habitat	Condition	Justification

Baseline BNG Results

81.32

16.63

Suggestions for habitat creation or enhancement



- Legend
- Site boundary
 - Survey boundary
 - Trees
 - Quadrat
 - orange balsam (*Impatiens capensis*)
 - Native Hedgerow (h2NE5)
 - Native Hedgerow with trees (h2NE4)
 - Native Species Rich Hedgerow (h2NE2)
 - Native Species Rich Hedgerow with trees (h2NE1)
 - Fens (upland and lowland)
 - Lowland mixed deciduous woodland
 - Modified grassland
 - Other neutral grassland
 - Other woodland; broadleaved
 - Ponds (Priority Habitat)

BSG | ecology

OFFICE: OXFORD
T: 01865 883833
JOB REF: P23-643

PROJECT TITLE
ELLS FARM

DRAWING TITLE
Figure 1: Baseline Habitats

DATE: 07/09/2023
DRAWN: BH
CHECKED: ST
APPROVED: TF
SCALE: 1:2,500
VERSION:1.0

Copyright © BSG Ecology

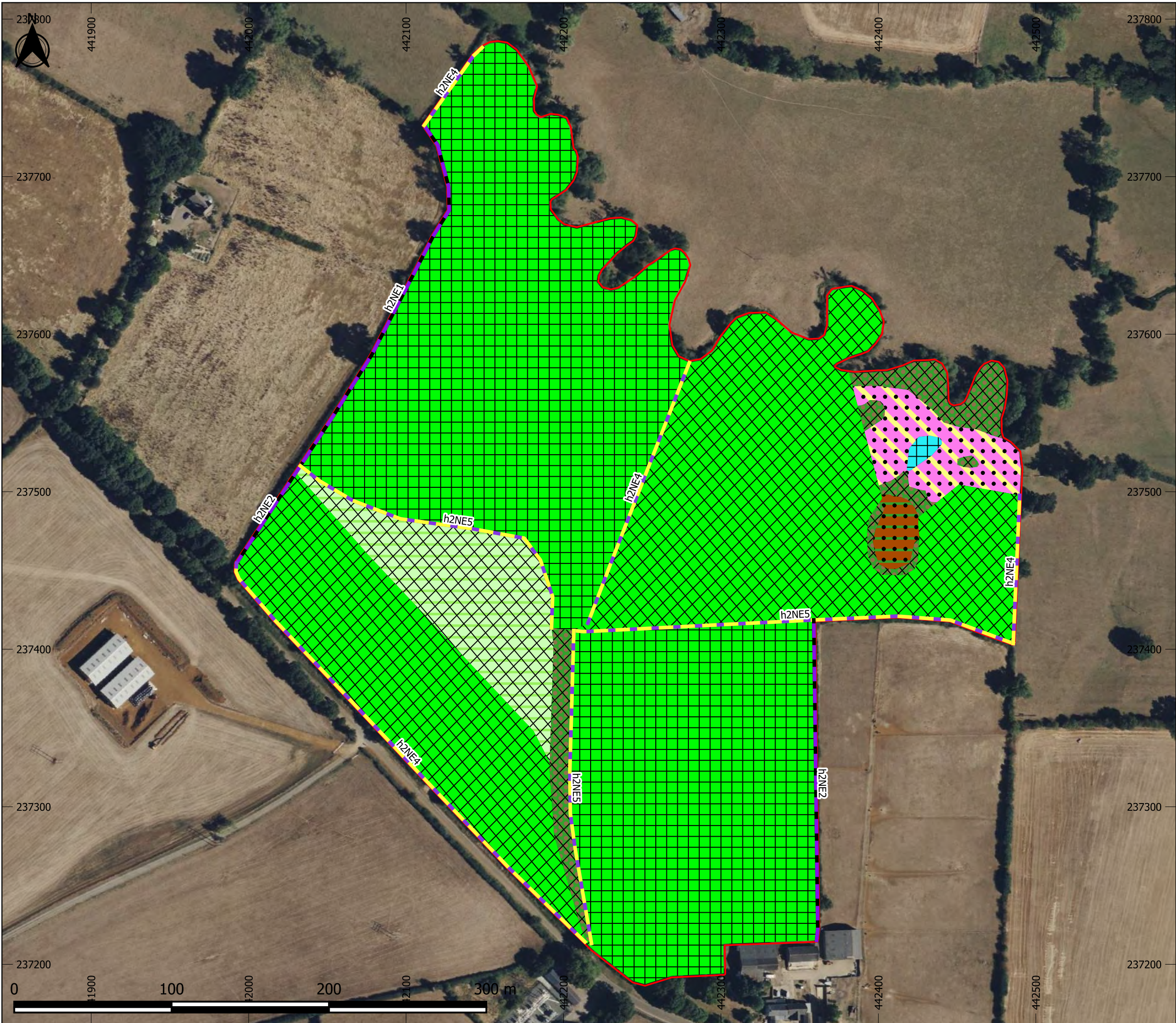
No dimensions are to be scaled from this drawing and are to be checked on site.
Area measurements for indicative purposes only.

This drawing may contain: Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of His Majesty's Stationery Office © Crown Copyright 2023. All rights reserved. Reference number: 100048980

© Crown copyright and database rights 2023. Ordnance Survey Licence Number 100031673

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data



Legend

Native Hedgerow (h2NE5)

Native Hedgerow with trees (h2NE4)

Native Species Rich Hedgerow (h2NE2)

Native Species Rich Hedgerow with trees (h2NE1)

Fens (upland and lowland)

Lowland mixed deciduous woodland

Modified grassland

Other neutral grassland

Other woodland; broadleaved

Ponds (Priority Habitat)

Habitats Condition

Good

Moderate

Poor

Site boundary

BSG | ecology

OFFICE: OXFORD
T: 01865 883833
JOB REF: P23-643

PROJECT TITLE
ELLS FARM

DRAWING TITLE

DATE: 22/04/2024
DRAWN: SP
CHECKED: SP
APPROVED: SP
SCALE: 1:2,300
VERSION:1.0

Copyright © BSG Ecology

No dimensions are to be scaled from this drawing and are to be checked on site.
Area measurements for indicative purposes only.

This drawing may contain: Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of His Majesty's Stationery Office © Crown Copyright 2024. All rights reserved. Reference number: AC0000818663

Aerial Photography © Bing. Microsoft Bing Maps screen shot reprinted with permission from Microsoft Corporation.

Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)							
UK Habitat Classification (UKHab) Habitat Type(s)							
Grassland - Modified grassland							
Site name and location	Ellis Farm	2023	On-site or off-site	"			
Limitations (if applicable)	See report		Survey reference (if relating to a wider survey)	"			
Grid reference	"		Habitat parcel reference	"			
Habitat Description							
Sheep grazed modified grassland. G1, G2, G3, G5							
G1 G2 G3 G5							
ukhab - UK Habitat Classification							
Condition Assessment Criteria			Criterion passed (Yes or No)	Notes (such as justification)			
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (this may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.		X	✓	✓	X	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.		X	X	X	X	
C	Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.		✓	✓	✓	✓	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.		✓	✓	✓	✓	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .		✓	✓	✓	✓	
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.		✓	✓	✓	✓	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).		✓	✓	✓	✓	
Essential criterion achieved (Yes or No)							
Number of criteria passed							
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved #/					
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		✓	✓			
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)						
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	✓			✓		
Suggested enhancement interventions to improve condition score							
See report							
Footnotes							

Footnote 1 – Creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris*.

Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.

Footnote 3 – Assess this 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.

Footnote 4 – Wildlife and Countryside Act 1981 (as amended).

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)					
UK Habitat Classification (UKHab) Habitat Type(s)					
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Note Tall herb habitat that does not meet the Annex 1 definition should be recorded as 'Other neutral grassland'] [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland					
Site name and location	Ells farm 2023		On-site or off-site	✓	
Limitations (if applicable)	See report		Survey reference (if relating to a wider survey)	✓	
Grid reference	G		Habitat parcel reference	G 1	
Habitat Description					
Tussocky grassland with <i>Dactylis glomerata</i> - Areas G4 and G6.					
ukhab – UK Habitat Classification			G4 G6		
Condition Assessment Criteria			Criterion passed (Yes or No)		Notes (such as justification)
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.		X	X	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.		X	X	
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ¹ .		✓	✓	
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%.		✓	✓	

E	<p>Combined cover of species indicative of sub-optimal condition² 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.</p> <p>If any invasive non-native plant species³ (as listed on Schedule 9 of WCA⁴) are present, this criterion is automatically failed.</p>	✓	✓	
Additional Criterion - must be assessed for all non-acid grassland types				
F	<p>There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count).</p> <p>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</p>	✗	✗	
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)				
Number of criteria passed				
Condition Assessment Result	Condition Assessment Score	Score Achieved x/		
Acid Grassland Types (Result out of 5 criteria)				
Passes 5 criteria	Good (3)			
Passes 3 or 4 criteria	Moderate (2)			
Passes 2 or fewer criteria	Poor (1)			
Non-acid grassland Types (Result out of 6 criteria)				
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)			
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)		✓	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	✓		
Suggested enhancement interventions to improve condition score				
<p>See report</p>				
Notes				
<p>Footnote 1 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover.</p> <p>Footnote 2 - Species indicative of sub-optimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>. There may be additional relevant species local to the region and or site.</p> <p>Footnote 3 – Assess this 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.</p> <p>Footnote 4 – Wildlife and Countryside Act 1981 (as amended).</p>				

Condition Sheet: WETLAND Habitat Type			
Habitat Type(s)			
Grassland - Floodplain wetland mosaic and CFGM - See the Biodiversity Metric 4.0 User Guide. Wetland - Blanket bog Wetland - Depression on peat substrates (H7150) Wetland - Fens (upland and lowland) Wetland - Lowland raised bog Wetland - Oceanic valley mire [1] (D2.1) Wetland - Purple moor grass and rush pastures Wetland - Reedbeds Wetland - Transition mires and quaking bogs (H7140)			
Habitat Description			
Grassy vegetation with <i>Phalaris arundinacea</i> around pond			
For Oceanic valley mires - see EUNIS			
See the Biodiversity Metric 4.0 User Guide for Floodplain wetland mosaic and coastal and floodplain grazing marsh (CFGM). For CFGM also see the below:			
Coastal and floodplain grazing marsh UK BAP Priority Habitat description			
Priority Habitat Inventory (England) - data.gov.uk			
All other wetland habitats - see UK Habitat Classification (UKHab):			
UKHab			
Site name and location	Ells farm 2023	On-site or off-site	✓
Limitations (if applicable)	See report	Survey reference (if relating to a wider survey)	✓
Grid reference	..	Habitat parcel reference	✓
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - must be assessed for all wetland habitat types:			
A	The water table is at, or near the surface throughout the year - this could be open water or saturation of soil at the surface. There is no artificial drainage, unless specifically to maintain water levels as specified above. Note - this criterion is essential for achieving Good condition.	X	
B	The parcel is a good representation of the wetland habitat type it has been identified as, based on its UKHab description - as in, the appearance and composition of the vegetation closely matches the characteristics of the specific habitat type. Indicator species for the specific wetland habitat type ¹ listed by UKHab are consistently present.	X	
C	The water supplies (groundwater, surface water and or rainwater) to the wetland are of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	✓	
D	Cover of scrub and scattered trees are less than 10%.	✓	
E	Cover of bare ground is less than 5%.	✓	
F	There is an absence of invasive non-native plant species ² (as listed on Schedule 9 of WCA ³) and species indicative of sub-optimal condition ⁴ make up less than 5% of ground cover.	✓	
Additional Criterion - must be assessed for Fen and Purple moor grass and rush pasture habitats only:			
G	No more than 25% of the habitat area has a continuous cover of litter (such as dead vegetation) preventing regeneration.	NA	
Additional Criterion - must be assessed for Bog habitats only:			

H	Sphagnum moss <i>Sphagnum</i> spp. and cottongrasses <i>Eriophorum</i> spp. are at least Frequent ⁵ . Cover of ericaceous dwarf shrubs ⁶ is less than 75%.	NA	
Additional Criterion - must be assessed for Reedbed habitats only:			
I	The reedbed has a diverse structure with between 60 and 80% reeds <i>Phragmites australis</i> . Other areas may include open water (at least 10%), species-rich fen and or wet woodland.	NA	
Additional Criterion - must be assessed for Floodplain wetland mosaic and CFGM only:			
J	All ditches recorded within the habitat achieve Good condition as assessed using the Ditch condition sheet. Note – do not record ditches which are part of the floodplain wetland mosaic and CFGM within the Watercourse module.	NA	
Essential criterion achieved (required for Good condition) Yes or No:			
Number of criteria passed			
Condition Assessment Result		Condition Assessment Score	Score Achieved */
Results for habitats requiring assessment of 6 criteria (Depression on peat substrates (H7150) and Oceanic valley mire [1] (D2.1)):			
•Passes 5 or 6 core criteria, including criterion A.		Good (3)	
•Passes 3 or 4 core criteria; OR •Passes 5 core criteria but fails criterion A.		Moderate (2)	✓
•Passes 2 or fewer core criteria.		Poor (1)	
Results for habitats requiring assessment of 7 criteria - core criteria and additional criterion specified for habitat type (all habitat types except Depression on peat substrates (H7150) and Oceanic valley mire [1] (D2.1)):			
•Passes 5 or 6 core criteria including criterion A; AND •Passes additional criterion G, H, I or J (choose the one specified for the habitat type).		Good (3)	
•Passes 4 or 5 of 7 criteria; OR •Passes 6 of 7 criteria but fails criterion A or additional criterion G, H, I or J (choose the one specified for the habitat type).		Moderate (2)	
•Passes 3 or fewer criteria.		Poor (1)	
Suggested enhancement interventions to improve condition score			
See report			

Condition Sheet: WOODLAND Habitat Type							
UK Habitat Classification (UKHab) Habitat Type(s)							
Woodland and forest - Lowland beech and yew woodland Woodland and forest - Lowland mixed deciduous woodland Woodland and forest - Native pine woodlands Woodland and forest - Other coniferous woodland Woodland and forest - Other Scot's pine woodland Woodland and forest - Other woodland; broadleaved Woodland and forest - Other woodland; mixed Woodland and forest - Upland birchwoods Woodland and forest - Upland mixed ashwoods Woodland and forest - Upland oakwood Woodland and forest - Wet woodland							
Habitat Description							
W1 - Woodland remnant with several mature ash + oak W2 - Semi-mature plantation woodland on bank between southern fields. Beech + cherry. W3 - Young plantation woodland towards pond + river Alder, goat willow,							
ukhab – UK Habitat Classification							
This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here:							
Woodland Wildlife Toolkit (sylva.org.uk)							
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.							
Site name and location	Ellis Farm 2023		On-site or off-site	✓			
Limitations (if applicable)	See report		Survey reference (if relating to a wider survey)	✓			
Grid reference	✓		Habitat parcel reference	W1 W2 W3			
Condition Assessment Criteria							
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator			Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	2	1	
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in 40% or less of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	3	3	3	
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron Rhododendron ponticum or cherry laurel Prunus laurocerasus not present, other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ >10% cover.	3	3	3	
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	2	2	

W1 W2 W3

E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .	3	2	3	
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁷ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁷ .	3	3	3	
G	Woodland regeneration	All three classes present in woodland ⁸ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	1	1	
H	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback ⁹ .	11% to 25% mortality and/or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present ⁹ .	3	3	3	
I	Vegetation and ground flora	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.	1	1	1	
J	Woodland vertical structure	Three or more storeys across all survey plots or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	3	2	1	
K	Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	1	1	
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	2	1	1	
M	Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area and or less than 20% of woodland area has damaged ground ¹⁴ .	More than 1 hectare of nutrient enrichment and or more than 20% of woodland area has damaged ground ¹⁴ .	1	1	1	

Total Score (out of a possible 39) 39 1 24

Condition Assessment Result	Condition Assessment Score	Result Achieved
Total score >32 (33 to 39)	Good (3)	W1 W2 W3
Total score 26 to 32	Moderate (2)	
Total score <26 (13 to 25)	Poor (1)	

Suggested enhancement interventions to improve condition score

W1 = Moderate
W2 = Poor
W3 = Poor

See report

Condition Sheet: POND Habitat Type			
Habitat Type(s)			
Lakes - Ponds (priority habitat) Lakes - Ponds (non-priority habitat) Lakes - Temporary lakes ponds and pools (H3170) [Use this condition sheet for Temporary ponds and pools, use Lake condition sheet for Temporary lakes] Lakes - Ornamental lake or pond [Use this condition sheet for Ornamental ponds, use Lake condition sheet for Ornamental lakes]			
Habitat Description			
ukhab – UK Habitat Classification			
For ponds (non-priority) – see the Biodiversity Metric 4.0 Technical Annex 2.			
Site name and location	Ells farm 2023	On-site or off-site	“
Limitations (if applicable)	See report	Survey reference (if relating to a wider survey)	“
Grid reference	“	Habitat parcel reference	“
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - applicable to all ponds (woodland¹ and non-woodland):			
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	✓	
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	✓	
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	✓	
D	The pond is not artificially connected to other waterbodies, e.g. agricultural ditches or artificial pipework.	✓	
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams ² , pumps or pipework.	✓	
F	There is an absence of listed non-native plant and animal species ³ .	✓	
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	✓	
Additional Criteria - must be assessed for all non-woodland ponds:			

H	Emergent, submerged or floating plants (excluding duckweed) ⁴ cover at least 50% of the pond area which is less than 3 m deep.	✓	
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.	✓	
Number of criteria passed		7	
Condition Assessment Result		Condition Assessment Score	Score Achieved x/
Results for woodland ponds which require assessment of 7 core criteria			
Passes 7 criteria		Good (3)	✓
Passes 5 or 6 criteria		Moderate (2)	
Passes 4 or fewer criteria		Poor (1)	
Results for non-woodland ponds which require assessment of 9 criteria			
Passes 9 criteria		Good (3)	
Passes 6 to 8 criteria		Moderate (2)	
Passes 5 or fewer criteria		Poor (1)	
Suggested enhancement interventions to improve condition score			
See report			
<p>Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.</p> <p>Footnote 2 – This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i>.</p> <p>Footnote 3 - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:</p>			

Condition sheet: HEDGEROW Habitat Types														
Habitat Type														
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch														
Habitat Description														
Hedgerows H1 - H10														
See the Biodiversity Metric 4.0 User Guide Section 9. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.														
Site name and		Ellis farm 2023		On-site or off-site		.								
Limitations (if applicable)		See Report		Survey reference (if relating to a wider survey)		.								
Condition Assessment Criteria														
A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.														
Hedgerow favourable condition attributes														
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference											
			H1	H2	H3	H4	H5	H6	H7	H8	H9	H10		
			Grid reference											
Core groups - applicable to all hedgerow types				Criterion passed (Yes or No)								Notes (such as justification)		
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the 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).	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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 (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >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).	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	
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).	✓	X	X	✓	✓	✓	✓	✓	✓	✓	

Habitat type NSR NSP NSP NSP NSPT NSPT NSPT NSR

Condition ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

 M G M M P G M M G G

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 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 hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow 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.	X	X	✓	X	X	X	X	X	X	X	✓	✓	✓	✓	✓	✓	✓
C2.	Nutrient-enriched 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, does not exceed the 20% cover threshold.	X	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) 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 ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ 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 ⁷ .	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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 hedgerow cutting).	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Additional group - applicable to hedgerows with trees only

E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 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.	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	✓
E3.	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.	-	-	-	-	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees		
Category	Category Requirements	Metric 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:		
Condition categories for hedgerows with trees		
Category	Category Requirements	Metric score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 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:		

Suggested enhancement interventions to improve condition score

See report

Condition Sheet: INDIVIDUAL TREES Habitat Type																						
Habitat Type(s)																						
Individual trees – Urban trees																						
Individual trees – Rural trees																						
Complete a condition sheet for each tree or block of trees.																						
Please see separate Line of trees condition sheet for a line of Rural trees.																						
Habitat Description																						
Mature oaks in NE field																						
Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.																						
Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.																						
Site name and location		Ellis farm 2023		On-site or off-site		r																
				Survey reference (if relating to a wider survey)		s																
Limitations (if applicable)		See report		Habitat parcel reference																		
				<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																		
Grid reference																						
Condition Assessment Criteria				<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																		Notes (such as justification)
Criterion passed (Yes or No)																						
A	The tree is a native species (or at least 70% within the block are native species).			✓	✓																	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).			✓	✓																	
C	The tree is mature (or more than 50% within the block are mature).			✓	✓																	
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.			✓	✓																	
Number of criteria passed				6	6																	
Condition Assessment Result (out of 6 criteria)		Condition Assessment Score		Score Achieved x/✓																		
Passes 5 or 6 criteria		Good (3)		✓	✓																	

Passes 3 or 4 criteria	Moderate (2)												
Passes 2 or fewer criteria	Poor (1)												
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.													
Suggested enhancement interventions to improve condition score													
See report													