

The biodiversity metric 3.1: auditing and accounting for biodiversity

Condition assessment sheets (Excel format)

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[Taken from Biodiversity Metric 3.1: Auditing and accounting for biodiversity - Technical Supplement Part 1a (2022)]

The method for assessing habitat condition is split into three main steps, all of which are outlined in detail below:

- ⇒ STEP 1: Considerations before assessing condition
- ⇒ STEP 2: Choosing the right condition sheet
- ⇒ STEP 3: Using condition sheets

Step 1: Considerations before assessing condition

The following points must be considered **before** undertaking a condition assessment survey:

- a) Surveyors must have access to condition sheet pro formas (see **Tabs 1-25**) and the survey cover sheet during the survey (see **SURVEY COVER SHEET tab**). These may be either digital or hard copies.
- b) The habitat type of the parcel(s) to be assessed must be determined before consideration can be given to its condition as it enables the surveyor to select the correct condition sheet. See **HABITAT DEFINITIONS tab**
If habitat type cannot be accurately recorded, for example due to recent felling or intentional severe degradation, a condition assessment should not be undertaken. In this scenario, a habitat condition score of Good should be allocated to the habitat parcel as a precaution.
- c) The location and extent of the habitat parcel(s) to be assessed must be mapped (either on digital or paper maps). The extent of a habitat parcel may subsequently change if condition is found to vary within the parcel during the condition assessment.
- d) Each habitat parcel to be assessed must have been assigned a unique reference ID.

Step 2: Choosing the right condition sheet

See **SELECTING CONDITION SHEET tab** - The habitat types listed correspond to those found in the biodiversity metric 3.1 tool and indicates which condition sheet should be used for each habitat type. Some condition sheets are unique to a single habitat type, others cover a range of habitat types within the same broad habitat category.

How to use: Locate the relevant habitat type in column 1, then refer to column 2 to determine which habitat condition sheet should be used to assess that particular habitat type. Please note the following important points:

- Certain habitats are allocated a fixed condition score and do not need their condition to be assessed. These are marked '*No assessment required – condition fixed at 'Poor'*' for some Low distinctiveness habitats, or '*No assessment required – condition N/A*' for all Very Low distinctiveness habitats.
- Habitats descriptions in **bold** are Priority Habitats.

Step 3: Using condition sheets

The following instructions and points of clarification apply to most area-based habitat condition sheets.

Additional habitat-specific instructions for **Woodland** and **Lake** condition sheets are provided separately below.

NOTE: These do not include the condition assessment for **Rivers and Streams (including canals)** which is described in Part 1c of the Technical Supplement

- a) Complete one condition assessment (either digital or hard copy) per habitat parcel along with a survey cover sheet per survey day. The survey cover sheet is a suggested format only and can be adapted to suit the needs and preferences of the user, provided the same parameters are captured.
- b) The number of criteria varies between condition sheets. When using a condition sheet with fewer than the maximum of 13 criteria, 'N/A' should be entered against the additional criteria numbers.
- c) Some condition sheets employ '**essential**' criteria. These are criteria which must be passed for the habitat parcel to achieve Good condition. If applicable, such criteria must be highlighted when completing the condition sheet.
- d) Assess the habitat parcel against each condition assessment criterion for each indicator of condition, recording a result of 'pass' or 'fail' for each criterion assessed. Note that for woodland and intertidal habitats, assessing condition against each indicator will give a score of either 1, 2 or 3 (poor, moderate or good respectively). These scores are then summed and compared to the overall score thresholds for the habitat group and an overall assessment of condition is reached (see '**Using the Woodland and intertidal condition sheets**' below).
- e) During a condition assessment it may become apparent that a single habitat parcel contains areas of differing condition. A change in condition should trigger a new condition assessment, with the original parcel being split accordingly to ensure that each individual parcel comprises a contiguous area of habitat having the same type and condition.
- f) Habitat type should always be determined before commencing a condition assessment (see Step 1 above), but if a habitat parcel is failing all criteria it is possible that the habitat type has been recorded incorrectly and the wrong condition sheet is being used. Surveyors should refer to the **HABITAT DEFINITIONS tab** to check whether this is the case. The habitat should be recorded as the habitat best fit habitat listed in the biodiversity metric3.1.
- g) Most condition sheets list commonly encountered high risk species indicative of sub-optimal condition that are relevant to the habitat type(s) being assessed. The lists are not exhaustive and expert judgement by the ecological surveyor will be needed to assess whether other undesirable species are present. Any high-risk invasive species should be reported to the GB non-native species secretariat (link below).

[GB non-native species secretariat.](#)
- h) Once all applicable criteria have been assessed, assign a result of Good, Moderate or Poor based on the scoring instructions provided within the condition sheets. An interim score of Fairly Poor or Fairly Good should only be used in exceptional circumstances where a habitat does not fit the standard outcome of Good, Moderate or Poor. Justification for allocating an interim condition score must be provided within the notes/justification column of the condition assessment pro forma and within the biodiversity metric 3.1 tool assessors comments.
- i) Any relevant evidence for passing or failing against criteria, or for a particular score, should be captured within the habitat survey target notes or by taking photographs. Photographs and target notes should then be referenced within the notes/justification column of the condition assessment sheet.
- j) Any survey limitations must be detailed on the condition sheet. These may include areas of limited access or the survey being undertaken outside of the optimal survey season. If survey limitations prevent any criteria from being confidently and accurately assessed, then a precautionary approach is to be taken. For habitats other than woodland or intertidal habitats; if a definitive pass or fail cannot be assigned through baseline survey, assume the criterion is passed. For monitoring of post-development habitat condition a precautionary approach would be to assume fail (or 'poor' in the case of woodland and intertidal habitats) for any criteria which cannot be assessed due to survey limitations.
- k) The condition assessment survey is a good opportunity to identify any potential opportunities for habitat restoration or enhancement interventions. These should be noted within the 'Suggested enhancement interventions to improve condition score' section at the end of each condition sheet.

Using the Woodland and intertidal condition sheets

The Woodland condition sheet has been adapted from the Woodland Condition Survey developed by the England Woodland Biodiversity Group (EWBG)[1]. However, all information needed to complete a Woodland condition assessment for the purpose of Biodiversity Metric 3.1 apply to the Woodland and intertidal condition sheets, with the exception of Point B. Instead of allocating a pass or fail to each criterion, each of the 13 indicators in the Woodland condition sheet are allocated a score of 'good' (3 points) 'moderate' (2 points) or 'poor' (1 point). Once all 13 indicators have been scored, the points for each indicator are added to give a total score. The total score is translated into a condition assessment result as per Point G above. The assessments for intertidal habitats adopt a similar approach.

Using the Lake condition sheet

The Freshwater Biological Association's 'Habitat Naturalness Assessment' is used to assess the condition of lakes. Details of the methodology for assessing naturalness of lakes are available at:

<http://priorityhab.wpengine.com/contribute/>.

The average naturalness assessment scores for a lake are then converted into scores condition scores for use in Biodiversity Metric 3.1. Links to the key documents for undertaking a Habitat Naturalness Assessment, together with a conversion table for scores, are provided within the Lake condition sheet.

Printing hard copies of the condition sheets and survey cover sheet

Each sheet has been preformatted to make it easy to print off and use, however if you run into difficulties, below are some useful tips to ensure the hardcopy is printed in a useful format:

- a) Most of the condition sheets have been set to be printed on one sheet of A4 however if you require larger text and text boxes, this can be spread over as many pages as needed. To do this, simply select file - print - page setup - fit to 1 pages wide by as many pages tall as required.
- b) Most condition sheets print in portrait mode however they can be adjusted to landscape by selecting file - print - orientation - landscape, if needed

Who?

Condition assessments should be undertaken by an ecologist who is sufficiently skilled and experienced to identify and assess the condition of the habitat types used in this metric. They should be able to easily identify the positive and negative indicator species for the range of habitats likely to occur in a given geographic location at the time of year the survey is undertaken.

When?

Condition assessment surveys should be undertaken within the optimal survey season for habitats. For most habitats in the metric this is April to October inclusive. If a condition assessment survey is undertaken in sub-optimal survey season (November to March inclusive for most habitats) then a precautionary approach is to be taken when answering condition criteria (see Step 3 for details).

Links to definitions of habitats found in biodiversity metric 3.1:

[UK Habitat Classification System definitions](#)

[EUNIS Habitat definitions](#)

[Water Framework Directive Lakes Typologies](#)

KEY:

Italics denotes habitat name in Biodiversity metric 3.1 does not correspond exactly to that used in

BOLD denotes definition is specific to Biodiversity metric 3.1

Biodiversity metric 3.1 Broad Habitat	Biodiversity metric 3.1 Habitat	Classification where definition derived
Cropland	<i>Arable field margins cultivated annually</i>	UKHab
	<i>Arable field margins game bird mix</i>	UKHab
	<i>Arable field margins pollen & nectar</i>	UKHab
	<i>Arable field margins tussocky</i>	UKHab
	Cereal crops	UKHab
	Cereal crops other	UKHab
	Cereal crops winter stubble	UKHab
	Horticulture	UKHab
	Intensive orchards	UKHab
	Non-cereal crops	UKHab
	Temporary grass and clover leys	UKHab
Grassland	Traditional orchards	UKHab
	Bracken	UKHab
	Floodplain Wetland Mosaic (CFGM)	Definition based on Priority Habitat Inventory maps*
	Lowland calcareous grassland	UKHab
	Lowland dry acid grassland	UKHab

	Lowland meadows	UKHab
	Modified grassland	UKHab
	Other lowland acid grassland	UKHab
	Other neutral grassland	UKHab
	Tall herb communities	UKHab*
	Upland acid grassland	UKHab
	Upland calcareous grassland	UKHab
	Upland hay meadows	UKHab
Heathland and shrub	Blackthorn scrub	UKHab
	Bramble scrub	UKHab
	Gorse scrub	UKHab
	Hawthorn scrub	UKHab
	Hazel scrub	UKHab
	Lowland Heathland	UKHab
	Mixed scrub	UKHab
	Mountain heaths and willow scrub	UKHab
	Rhododendron scrub	UKHab
	Sea buckthorn scrub (Annex 1)	Use Habitats Directive Annex 1 definition - https://sac.jncc.gov.uk/habitat/H2160/ All other sea buckthorn scrub should be recorded as Sea buckthorn scrub (other)
	Sea buckthorn scrub (other)	UKHab
	Upland Heathland	UKHab
Lakes	Aquifer fed naturally fluctuating water bodies	UKHab
	<i>Ornamental lake or pond</i>	UKHab
	High alkalinity lakes	WFD Lakes typology
	Low alkalinity lakes	WFD Lakes typology
	Marl Lakes	WFD Lakes typology
	Moderate alkalinity lakes	WFD Lakes typology
	Peat Lakes	WFD Lakes typology
	Ponds (Priority Habitat)	UKHab
	Ponds (Non-Priority Habitat)	Ponds which do not meet either the definition of (i) priority habitat ponds or (ii) ornamental ponds
	Reservoirs	UKHab/WFD Lakes typology*
	<i>Temporary lakes, ponds and pools</i>	UKHab*
Sparsely vegetated land	Calaminarian grasslands	UKHab
	Coastal sand dunes	UKHab
	Coastal vegetated shingle	UKHab
	Ruderal/Ephemeral	UKHab
	Inland rock outcrop and scree habitats	UKHab
	Limestone pavement	UKHab
	Maritime cliff and slopes	UKHab
	Other inland rock and scree	UKHab
Urban	Allotments	UKHab

	Artificial unvegetated, unsealed surface	UKHab
	Bioswale	UKHab
	Brown roof	UKHab
	Built linear features	UKHab
	Cemeteries and churchyards	UKHab
	Developed land; sealed surface	UKHab
	Extensive green roof	UKHab
	Façade-bound green wall	UKHab
	Ground based green wall	UKHab
	Ground level planters	UKHab
	Intensive green roof	UKHab
	Introduced shrub	UKHab
	Open Mosaic Habitats on Previously Developed Land	UKHab
	Rain garden	UKHab
	Sand pit quarry or open cast mine	UKHab
	Urban Tree	Metric specific (see User Guide paragraph 7.1)
	Sustainable urban drainage feature	UKHab
	<i>Un-vegetated garden</i>	<i>UKHab</i>
	Vacant/derelict land/ bare ground	UKHab
	<i>Vegetated garden</i>	<i>UKHab</i>
Wetland	Blanket bog	UKHab
	Depressions on Peat substrates (H7150)	UKHab
	<i>Fens (upland and lowland)</i>	<i>UKHab</i>
	Lowland raised bog	UKHab
	<i>Wetland – Oceanic Valley Mire[1] (D2.1)</i>	<i>EUNIS</i>
	Purple moor grass and rush pastures	UKHab
	Reedbeds	UKHab
	Transition mires and quaking bogs (H7140)	UKHab
Woodland and forest	Felled	UKHab
	Lowland beech and yew woodland	UKHab
	Lowland mixed deciduous woodland	UKHab
	Native pine woodlands	UKHab
	Other coniferous woodland	UKHab
	Other Scot's Pine woodland	UKHab
	Other woodland; broadleaved	UKHab
	Other woodland; mixed	UKHab
	Upland birchwoods	UKHab
	Upland mixed ashwoods	UKHab
	Upland oakwood	UKHab
	Wet woodland	UKHab
	Wood-pasture and parkland	UKHab

Coastal lagoons	<i>Coastal lagoons</i>	<i>EUNIS</i>
Coastal saltmarsh	<i>Saltmarshes and saline reedbeds</i>	<i>EUNIS</i>
	<i>Artificial saltmarshes and saline reedbeds</i>	<i>Adapted from EUNIS -see table TS2-2</i>
Rocky shore	High energy littoral rock	EUNIS
	High energy littoral rock - on peat, clay or chalk	Subset of EUNIS habitat based on substrate
	Moderate energy littoral rock	EUNIS
	Moderate energy littoral rock - on peat, clay or chalk	Subset of EUNIS habitat based on substrate
	Low energy littoral rock	EUNIS
	Low energy littoral rock - on peat, clay or chalk	Subset of EUNIS habitat based on substrate
	Features of littoral rock	EUNIS
	Features of littoral rock - on peat, clay or chalk	Subset of EUNIS habitat based on substrate
Intertidal sediment	Littoral coarse sediment	EUNIS
	Littoral sand	EUNIS
	Littoral muddy sand	EUNIS
	Littoral mud	EUNIS
	Littoral mixed sediments	EUNIS
	Littoral seagrass	EUNIS
	Littoral seagrass on peat, clay or chalk	Subset of EUNIS habitat based on substrate
	Littoral biogenic reefs - Mussels	Subset of EUNIS habitat based on reef forming species
	Littoral biogenic reefs - Sabellaria	Subset of EUNIS habitat based on reef forming species
	Features of littoral sediment	EUNIS
	Artificial littoral coarse sediment	Adapted from EUNIS -see table TS2-2
	Artificial littoral muddy sand	Adapted from EUNIS -see table TS2-2
	Artificial littoral mud	Adapted from EUNIS -see table TS2-2
	Artificial littoral sand	Adapted from EUNIS -see table TS2-2
	Artificial littoral mixed sediments	Adapted from EUNIS -see table TS2-2
	Artificial littoral seagrass	Adapted from EUNIS -see table TS2-2
	Artificial littoral biogenic reefs	Adapted from EUNIS -see table TS2-2
Intertidal Hard Structures	Artificial hard structures	Adapted from EUNIS -see table TS2-2
	Artificial features of hard structures	Adapted from EUNIS -see table TS2-2
	Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)	Adapted from EUNIS -see table TS2-2
Hedgerows and Lines of Trees	Native Species Rich Hedgerow with trees - Associated with bank or ditch	Metric specific (see User Guide Box 8-2)

	Native Species Rich Hedgerow with trees	Metric specific (see User Guide Box 8-2)
	Native Species Rich Hedgerow - Associated with bank or ditch	Metric specific (see User Guide Box 8-2)
	Native Hedgerow with trees - Associated with bank or ditch	Metric specific (see User Guide Box 8-2)
	Native Species Rich Hedgerow	Metric specific (see User Guide Box 8-2)
	Native Hedgerow - Associated with bank or ditch	Metric specific (see User Guide Box 8-2)
	Native Hedgerow with trees	Metric specific (see User Guide Box 8-2)
	Line of Trees (Ecologically Valuable)	Metric specific (see User Guide Box 8-2)
	Line of Trees (Ecologically Valuable) - with Bank or Ditch	Metric specific (see User Guide Box 8-2)
	Native Hedgerow	Metric specific (see User Guide Box 8-2)
	Line of Trees	Metric specific (see User Guide Box 8-2)
	Line of Trees - Associated with bank or ditch	Metric specific (see User Guide Box 8-2)
	<i>Hedge Ornamental Non Native</i>	UKHab
Rivers and Streams	Priority Habitat	UKHab
	Other Rivers and Streams	UKHab
	Ditches	Metric specific (see User Guide paragraph 9.4)
	Canals	UKHab
	Culvert	From s.39 Flood and Water Management Act (2010): A covered channel or pipe designed to prevent the obstruction of a watercourse or drainage path by an artificial construction

1 source classification

UKHab/EUNIS name	Other definition/Notes
<i>Arable field margins cultivated annually with an annual flora</i>	
<i>Game bird mix strips and corners</i> <i>Game bird mix fields</i>	
<i>Arable field margins sown with wild flowers or a pollen and nectar mix</i>	
<i>Arable field margins sown with tussocky grasses</i>	
Cereal crops	
Other cereal crops	
Winter stubble	
Horticulture	
Intensive orchards	
Non-cereal crops	
Temporary grass and clover leys	
Traditional orchards	
Bracken	
Coastal and floodplain grazing marsh	*Where an area is included within the (soon to be published) “Floodplain Wetland Mosaic Habitat Inventory” as <u>extant habitat</u> OR included within the “Floodplain with <u>potential for restoration to Wetland Mosaic</u>” layer it should be recorded within the metric as FWM habitat. In these cases the ditches form an integral part of the habitat and should <u>not</u> be recorded separately as linear features in the Rivers & Streams part of the metric. If it is NOT included within either layer of the inventory it should be assessed, and entered into the metric, as the appropriate habitat (e.g. modified grassland, cereal crop, temporary lakes, ponds and pools). Any ditches should be recorded separately within the River and Streams part of the metric. Until this new inventory is published, you should use existing inventories for floodplain habitats, including the Coastal and Floodplain Grazing Marsh layer of the Priority Habitat Inventory (England) and any local habitat data. https://data.gov.uk/dataset/4b6ddab7-6c0f-4407-946e-d6499f19fcde/priority-habitat-inventory-england
Lowland calcareous grassland	
Lowland dry acid grassland	

Lowland meadows	
Modified grassland	
Other lowland acid grassland	
Other neutral grassland	
Tall herb communities (H6430)	*All Tall herb not meeting this definition should be recorded as "Other neutral grassland"
Upland acid grassland	
Upland calcareous grassland	
Upland hay meadows	
Blackthorn scrub	
Bramble scrub	
Gorse scrub	
Hawthorn scrub	
Hazel scrub	
Lowland Heathland	
Mixed scrub	
Mountain heaths and willow scrub	
Rhododendron scrub	
Dunes with sea buckthorn (H2160)	
Other sea buckthorn scrub	
Upland Heathland	
Aquifer fed naturally fluctuating water bodies	
<i>Artificial lake or pond</i>	
N/A	
N/A	
N/A	
N/A	
N/A	
Ponds (Priority Habitat)	
N/A	
Reservoir	*Some larger reservoirs are covered by the WFD Lakes typology
<i>Mediterranean temporary ponds (H3170)</i>	*All Temporary water bodies not meeting this definition should be recorded as the appropriate pond or lake habitat
Calaminarian grasslands	
Coastal sand dunes	
Coastal vegetated shingle	
Ruderal/Ephemeral	
Inland rock outcrop and scree habitats	
Limestone pavement	
Maritime cliff and slopes	
Other inland rock and scree	
Allotments	

Artificial unvegetated, unsealed surface	
Bioswale	
Brown roof	
Built linear features	
Cemetery	
Developed land; sealed surface	
Extensive green roof	
Façade-bound green wall	
Ground based green wall	
Ground level planters	
Intensive green roof	
Introduced shrub	
Open Mosaic Habitats on Previously Developed Land	
Rain garden	
Sand pit quarry or open cast mine	
N/A	
Sustainable urban drainage feature	
<i>Garden</i>	
Vacant/derelict land	
<i>Garden</i>	
Blanket bog	
Depressions on Peat substrates (H7150)	
<i>Lowland fens</i> <i>Upland flushes, fens and swamps</i>	
Lowland raised bog	
<i>Oceanic valley bog</i>	
Purple moor grass and rush pastures	
Reedbeds	
Transition mires and quaking bogs; lowland (H7140)	
Felled	
Lowland beech and yew woodland	
Lowland mixed deciduous woodland	
Native pine woodlands	
Other coniferous woodland	
Other Scot's Pine woodland	
Other woodland; broadleaved	
Other woodland; mixed	
Upland birchwoods	
Upland mixed ashwoods	
Upland oakwood	
Wet woodland	
Wood-pasture and parkland	

[illegible]

<i>Other hedgerows</i>	
Rivers (priority habitat)	
Other Rivers and Streams	
Ditch	Artificially created, linear water-conveyancing features that are less than 5 m wide and likely to retain water for more than 4 months of the year. Their hydraulic function is primarily for land drainage, and although partially or fully connected to a river system, they would not have been present without human intervention' <i>[Note: some heavily engineered ditches may actually be part of the river system (usually part of the headwater system). If there is uncertainty, consult historic maps, LIDAR data and riverine specialists]</i>
Canals	
N/A	

Habitat Type	Condition Sheet
Broad habitat type: Coastal lagoons	
Coastal lagoons - Coastal lagoons	Coastal Lagoons
Broad habitat type: Coastal saltmarsh	
Coastal saltmarsh - Coastal saltmarshes and saline reed beds	Coastal Saltmarsh
Coastal saltmarsh - Artificial coastal saltmarshes and saline reed beds	Coastal Saltmarsh
Broad habitat type: Cropland	
Cropland - Arable field margins cultivated annually	Condition Assessment N/A
Cropland - Arable field margins game bird mix	
Cropland - Arable field margins pollen & nectar	
Cropland - Arable field margins tussocky	
Cropland - Cereal crops	
Cropland - Cereal crops winter stubble	
Cropland - Horticulture	
Cropland - Intensive orchards	
Cropland - Non-cereal crops	
Cropland - Temporary grass and clover leys	
Broad habitat type: Grassland	
Grassland - Bracken	Condition Assessment N/A
Grassland - Floodplain wetland mosaic (Coastal and floodplain grazing marsh)	Use Wetland condition sheet (plus Ditch condition sheet for any ditches), unless associated with a priority species rich grassland sward, reedbed or fen, in which case record and assess as the relevant habitat type within the metric.
Grassland - Lowland calcareous grassland	Grassland Medium/High/Very High distinctiveness
Grassland - Lowland dry acid grassland	Grassland Medium/High/Very High distinctiveness
Grassland - Lowland meadows	Grassland Medium/High/Very High distinctiveness
Grassland - Modified grassland	Grassland Low distinctiveness
Grassland - Other lowland acid grassland	Grassland Medium/High/Very High distinctiveness
Grassland - Other neutral grassland	Grassland Medium/High/Very High distinctiveness
Grassland - Tall herb communities (H6430)	Grassland Medium/High/Very High distinctiveness
Grassland - Traditional orchards	Orchard
Grassland - Upland acid grassland	Grassland Medium/High/Very High distinctiveness
Grassland - Upland calcareous grassland	Grassland Medium/High/Very High distinctiveness
Grassland - Upland hay meadows	Grassland Medium/High/Very High distinctiveness
Broad habitat type: Heathland and scrub	
Heathland and shrub - Blackthorn scrub	Scrub
Heathland and shrub - Bramble scrub	Condition Assessment N/A
Heathland and shrub - Gorse scrub	Scrub
Heathland and shrub - Hawthorn scrub	Scrub
Heathland and shrub - Hazel scrub	Scrub
Heathland and shrub - Lowland heathland	Heathland
Heathland and shrub - Mixed scrub	Scrub
Heathland and shrub - Mountain heaths and willow scrub	Use Heathland condition sheet for Mountain heaths OR Scrub condition sheet for Willow scrub
Heathland and shrub - Rhododendron scrub	Condition Assessment N/A
Heathland and shrub - Sea buckthorn scrub (Annex 1)	Scrub
Heathland and shrub - Sea buckthorn scrub (other)	Condition Assessment N/A
Heathland and shrub - Upland heathland	Heathland
Broad habitat type: Hedgerows and lines of trees	
Hedgerows and lines of trees - Line of trees	Line of trees
Hedgerows and lines of trees - Line of trees - associated with bank or ditch	Line of trees
Hedgerows and lines of trees - Line of trees (ecologically valuable)	Line of trees
Hedgerows and lines of trees - Line of trees (ecologically valuable) - associated with bank or ditch	Line of trees
Hedgerows and lines of trees - Hedge ornamental non-native	Condition Assessment N/A
Hedgerows and lines of trees - Native hedgerow	Hedgerow
Hedgerows and lines of trees - Native hedgerow - associated with bank or ditch	Hedgerow
Hedgerows and lines of trees - Native hedgerow with trees	Hedgerow
Hedgerows and lines of trees - Native hedgerow with trees - associated with bank or ditch	Hedgerow
Hedgerows and lines of trees - Native species rich hedgerow	Hedgerow
Hedgerows and lines of trees - Native species rich hedgerow - associated with bank or ditch	Hedgerow
Hedgerows and lines of trees - Native species rich hedgerow with trees	Hedgerow
Hedgerows and lines of trees - Native species rich hedgerow with trees - associated with bank or ditch	Hedgerow
Broad habitat type: Intertidal hard structures	
Intertidal hard structures - Intertidal artificial hard structures	Intertidal hard structures
Intertidal hard structures - Intertidal artificial features of hard structures	Intertidal hard structures
Intertidal hard structures - Intertidal artificial hard structures with integrated greening of grey infrastructure (IGGI)	Intertidal hard structures
Broad habitat type: Intertidal Sediments	
Intertidal Sediment - Littoral coarse sediment	Intertidal sediment
Intertidal Sediment - Littoral sand	Intertidal sediment
Intertidal Sediment - Littoral muddy sand	Intertidal sediment

Intertidal Sediment - Littoral mud	Intertidal sediment
Intertidal Sediment - Littoral mixed sediments	Intertidal sediment
Intertidal Sediment - Features of littoral sediment	Intertidal sediment
Intertidal Sediment - Artificial littoral coarse sediment	Intertidal sediment
Intertidal Sediment - Artificial littoral mixed sediments	Intertidal sediment
Intertidal Sediment - Artificial littoral mud	Intertidal sediment
Intertidal Sediment - Artificial littoral muddy sand	Intertidal sediment
Intertidal Sediment - Artificial littoral sand	Intertidal sediment
Intertidal sediment - Littoral seagrass	Intertidal seagrass
Intertidal sediment - Littoral seagrass - on peat, clay or chalk	Intertidal seagrass
Intertidal sediment - Artificial littoral seagrass	Intertidal seagrass
Intertidal Sediment - Littoral biogenic reefs - Mussels	Intertidal biogenic reefs
Intertidal Sediment - Littoral biogenic reefs - Sabellaria	Intertidal biogenic reefs
Intertidal Sediment - Artificial littoral biogenic reefs	Intertidal biogenic reefs
Broad habitat type: Lakes	
Lakes - Aquifer fed naturally fluctuating water bodies	Lakes
Lakes - High alkalinity lakes	Lakes
Lakes - Low alkalinity lakes	Lakes
Lakes - Marl lakes	Lakes
Lakes - Moderate alkalinity lakes	Lakes
Lakes - Ornamental lake or pond	Lakes OR Ponds
Lakes - Peat lakes	Lakes
Lakes - Ponds (Priority Habitat)	Ponds
Lakes - Ponds (non-Priority Habitat)	Ponds
Lakes - Reservoirs	Lakes
Lakes - Temporary lakes, ponds and pools [C1.6]	Use Lake condition sheet for Temporary lakes OR Pond condition sheet for Temporary ponds and pools
Broad habitat type: Rivers and streams	
Rivers and streams - Ditches	Ditches
Broad habitat type: Rocky shore	
Rocky shore - High energy littoral rock	Rocky shore
Rocky shore - Moderate energy littoral rock	Rocky shore
Rocky shore - Low energy littoral rock	Rocky shore
Rocky shore - Features of littoral rock	Rocky shore
Rocky Shore - Features of littoral rock - on peat, clay or chalk	Rocky shore
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore
Broad habitat type: Sparsely vegetated land	
Sparsely vegetated land - Calaminarian grasslands	Grassland
Sparsely vegetated land - Coastal sand dunes	Coastal
Sparsely vegetated land - Coastal vegetated shingle	Coastal
Sparsely vegetated land - Ruderal/ephemeral	Urban
Sparsely vegetated land - Inland rock outcrop and scree habitats	Sparsely vegetated land
Sparsely vegetated land - Limestone pavement	Limestone pavement
Sparsely vegetated land - Maritime cliff and slopes	Coastal
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land
Broad habitat type: Urban	
Urban - Allotments	Urban
Urban - Artificial unvegetated, unsealed surface	N/A - Other
Urban - Bioswale	Urban
Urban - Biodiverse green roof	Urban
Urban - Built linear features	N/A - Other
Urban - Cemeteries and churchyards	Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area, record and assess these as the relevant habitat type.
Urban - Developed land; sealed surface	N/A - Other
Urban - Façade-bound green wall	Urban
Urban - Ground based green wall	Urban
Urban - Ground level planters	Condition Assessment N/A
Urban - Intensive green roof	Urban
Urban - Introduced shrub	Condition Assessment N/A
Urban - Open mosaic habitats on previously developed land	Urban
Urban - Other green roof	Condition Assessment N/A
Urban - Rain garden	Urban
Urban - Actively worked sand pit, quarry or opencast mine	Condition Assessment N/A Note that this classification relates to non-vegetated working areas only. Mineral extraction sites can support a wide range of habitats, including ponds, heathland, grassland, sparsely vegetated land, bare ground, flushes and springs etc. These should be assessed separately using the relevant condition sheet.
Urban - Urban trees	Urban trees
Urban - Sustainable urban drainage feature	Urban
Urban - Un-vegetated garden	N/A - Other
Urban - Vacant/derelict land/ bare ground	Urban
Urban - Vegetated garden	Condition Assessment N/A
Broad habitat type: Wetland	

Wetland - Blanket bog	Wetland
Wetland - Depressions on peat substrates (H7150)	Wetland
Wetland - Fens (upland & lowland)	Wetland
Wetland - Lowland raised bog	Wetland
Wetland – Oceanic valley mire [1] (D2.1)	Wetland
Wetland - Purple moor grass and rush pastures	Wetland
Wetland - Reedbeds	Wetland
Wetland - Transition mires and quaking bogs (H7140)	Wetland
Broad habitat type: Woodland	
Woodland and forest - Felled	No assessment required - condition fixed at Good Note that this classification should only be used when the original habitat type of the felled woodland cannot be determined. If the habitat type of the felled woodland is known (either through data records, imagery or field survey) then the area should be entered into the metric as the relevant woodland type. In the absence of evidence to the contrary, the baseline condition for that area must be fixed at Good .

Survey cover sheet			
Date		Site name or location	
Weather conditions		Project/development name	
Surveyor name(s)		Onsite/offsite	
Metric 3.1 survey reference		Reason for assessment (if not baseline condition survey)	
Notes			

Condition Sheet: COASTAL Habitat Type**UKHab Habitat Type(s)**

Sparsely vegetated land - Coastal sand dunes

Sparsely vegetated land - Coastal vegetated shingle

Sparsely vegetated land - Maritime cliff and slopes

Habitat Description[See UKHab](#)

Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The vegetation composition is formed of native species typical of the relevant habitat and present in the typical successional stages, transitions and/or mosaics, at sufficient cover and frequency to meet the definition for the relevant habitat. NB - this criterion is essential for achieving good condition.		
2	Vegetation structure (sward height variation, zonation) is varied and not uniform.		
3	Naturally open ground or bare surfaces are present as part of a sequence of colonisation and succession.		
4	Coastal processes needed to support the habitat are functional and are not modified by hard engineering or other forms of negative intervention.		
5	The landform reflects the interaction of coastal processes and geology, and there is a varied topography present supporting the relevant range of habitat types.		

6	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). 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.		
7	Some scattered scrub (including bramble) may be present, but scrub should be less than 10% of area within the grassland/bare substrate matrix. Blocks of scrub or woodland, which might be desirable in their own right, should be classified and mapped separately.		
8	Water quality and quantity (e.g. seasonal fluctuations in dune slacks or seepages on cliff slopes) is sufficient to support the range of water-dependent parts of the habitat.		
Essential criterion 1 achieved (Y/N)			
Number of criteria passed			
Condition Assessment		Condition Assessment Score	Score Achieved x/✓
Passes 7 or 8 of 8 criteria including essential criterion 1		Good (3)	
Passes 5 or 6 of 8 criteria; OR Passes 7 of 8 criteria excluding essential criterion 1		Moderate (2)	
Passes 0, 1, 2, 3 or 4 of 8 criteria.		Poor (1)	
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1: General coastal species indicative of sub-optimal condition: 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>, bramble <i>Rubus fruticosus</i>, white willow <i>Salix alba</i> hybrids, garden plants. Grassland species indicative of sub-optimal condition: 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>, cow parsley <i>Anthriscus sylvestris</i>. Heathland species indicative of sub-optimal condition: bracken <i>Pteridium aquilinum</i>.			

Condition Sheet: COASTAL LAGOONS Habitat Type**EUNIS Habitat Type(s)**

Coastal lagoons

Site name/location		Onsite/offsite
Habitat's Central Grid reference		Unique polygon reference(s)
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)

Habitat Description

The following information should be recorded within the condition assessment proforma:

[The coastal lagoons EUNIS habitat description is available here:](https://eunis.eea.europa.eu/habitats/10007#:~:text=Lagoons%20are%20expanses%20of%20sh)

<https://eunis.eea.europa.eu/habitats/10007#:~:text=Lagoons%20are%20expanses%20of%20sh>

Habitat Attributes to Record

The following information should be recorded within the condition assessment proforma:

- Extent of lagoon water body¹
- Description of presence of typical communities and biotopes
- Description of species diversity and community composition²
- Salinity in parts per thousand (ppt)
- Presence and abundance of non-native species
- Observations on coastal process functioning and any human physical modifications present
- % cover of algal growths that could be attributed to nutrient enrichment
- Presence and density of non-natural structures and direct human impacts
- Assessment of litter
- Visual record of water clarity
- Observations of the functioning and state of the isolating barrier
- Observations of the functioning and state of the lagoon banks

Condition Assessment Criteria

Indicator	Good (3 points)	Moderate (2 points)
------------------	------------------------	----------------------------

1	Presence and abundance of invasive non-native species³	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote for list
2	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.
3	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area
4	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed 0.0036 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 et al and the link to the MSFD threshold value assessment ⁴ .	Following the MCS beach litter survey method the number of items of litter does not exceed 0.0078 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 et al and the link to the MSFD threshold value assessment ⁴ .

5	Salinity	Salinity is between 15 - 40 ppt	Salinity values are at the ends of range acceptable for lagoons measured in ppt
6	Isolating barrier	Fully functional and permitting tidal exchange	Slightly damaged but some water exchange still occurring
7	Physical damage of lagoon banks ⁵	No physical damage present	Only small isolated patches of physical damage present
8	Water clarity	Water is clear	Water clarity is reduced

Condition Assessment Result

TOTAL SCORE 18-24 (75-100%) = GOOD CONDITION

TOTAL SCORE 12-17 (50-75%) = MODERATE CONDITION

TOTAL SCORE 8-11 (0-50%) = POOR CONDITION

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - Examples of species adapted to lagoons can be found in the Bamber (2010): BAMB Commissioned Reports, Number 039. <http://publications.naturalengland.org.uk/publication/44>
For assessment of species characteristic of anoxic environment, e.g presence of Capitellid worm Committee website at <http://jncc.defra.gov.uk/page-2684>.

Footnote 2 - Abundances estimated using SACFOR scales details available here: <http://archive.jnc>

Use MSFD non-native species list for up to date list of species available here:
<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1518>

High risk species indicative of sub-optimal condition at time of publication include:

- *Ficopomatus enigmaticus* - Trumpet tube worm
- *Styela clava* - Asian tunicate; leathery sea squirt, club tunicate
- *Corella eumyota* - Orange-tipped sea squirt
- *Grateloupia turuturu* - Devil's tongue weed, gracie, red menace and red tide
- *Undaria pinnatifida* - Asian kelp, wakame
- *Schizoporella japonica* - Orange ripple bryozoan
- *Sargassum muticum* - Wire weed
- *Hemigrapsus sanguineus* - Asian shore crab

Please check for updates of high risk species

Footnote 3 - Please see Nelms et al (2017) for methodological details to identify litter m

Nelms, Coombes, Foster, Galloway, Godley, Lindeque & Witt (2017) Marine anthropoge data Science of The Total Environment, Volume 579, 1 February 2017, p. 1399-1409
<https://www.sciencedirect.com/science/article/pii/S0048969716325918?via%3Dihub>

The indicator thresholds for litter are based on the methods in Van Loon et al (2020), w Marine Strategy Framework Directive by the MSFD Technical Group on Marine Litter.

Van Loon, W., Hanke, G., Fleet, D., Werner, S., Barry, J., Strand, J., Eriksson, J., Galga D., 2020. A European Threshold Value and Assessment Method for Macro Litter on Coz 2020, ISBN 978-92-76-21444-1, doi:10.2760/54369, JRC121707
https://www.researchgate.net/publication/344340540_A_European_Threshold_Value_a

Footnote 4 - Sources of physical damage include: excessive poaching, damage from m

Footnote 5 - Sources of physical damage include: excessive poaching, damage from m

[illegible]

One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.		
Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.		
Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.		
Following the MCS beach litter survey method the number of items of litter exceeds 0.0078 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 et al and the link to the MSFD threshold value assessment ⁴ .		

Salinity values are either hypersaline >40 ppt or hyposaline <15 ppt		
Not functioning. No water exchange occurring making the lagoon hyposaline.		
Evidence of significant physical damage		
Water is turbid and water clarity is poor (not just after heavy rain)		
Total Score		
Result Achieved		

3ER, RN (2010) Coastal saline lagoons and the Water Framework Directive. Natural England
1008.

ns, further information on the SACFOR scale can be found on the Joint Nature Conservation

cc.gov.uk/pdf/04_05_introduction.pdf

1–1 min–1 person–1.

enic litter on British beaches: A 10-year nationwide assessment using citizen science

hich is guidance developed within the Common Implementation Strategy for the

ani, F., Gräwe, D., Schulz, M., Vlachogianni, T., Press, M., Blidberg, E. & Walvoort,
astlines. EUR 30347 EN, Publications Office of the European Union, Luxembourg,

ind_Assessment_Method_for_Macro_Litter_on_Coastlines

achinery use, damaging management or public access activities.

achinery use, damaging management or public access activities.

Condition Sheet: COASTAL SALTMARSH Habitat Type**EUNIS Habitat Type(s)**

Coastal saltmarshes and saline reed beds

Artificial coastal saltmarshes and saline reed beds

Site name/location		Onsite/offsite
Habitat's Central Grid reference		Unique polygon reference(s)
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)

Habitat Description

The coastal saltmarsh EUNIS habitat description is available here: <https://mhc.jncc.gov.uk/biotopes/jnccmn>

Habitat Attributes to Record

The following information should be recorded within the condition assessment proforma:

- List of biological communities and species - including whether they are representative or characteristic of
- Observations on coastal process functioning and any human physical modifications present
- Observations on zonation and transitions to other habitats, including variations in vegetation structure/sw
- Observations of naturally open ground or bare surfaces such as creeks or pans being present in a mosaic w
- Presence and abundance of non-native species
- Assessment of litter
- % cover of algal growths that could be attributed to nutrient enrichment

Condition Assessment Criteria

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)
1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat

2	Presence and abundance of invasive non-native species²	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high risk species indicative of sub-optimal condition present, see foot note.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote for list.	One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. Elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.
4	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.
5	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed 0.0036 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ³ .	Following the MCS beach litter survey method the number of items of litter does not exceed 0.0078 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ³ .	Following the MCS beach litter survey method the number of items of litter exceeds 0.0078 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ³ .

6	Zonation and transition to other habitats³	Zonation of vegetation/communities is clear and continuous. Distribution of the feature and transition to other habitats, including associated transitional habitats, within the site is reflective of expected natural distribution seaward and landward	Up to 2 of the expected zones are absent or significantly impacted by human modification of the shoreline and transitions to other habitats are restricted in less than 20% of the habitat boundaries.	Zonation of vegetation/communities is not clearly visible or is significantly impacted by human modification of the shoreline. Or transitions to other habitats are restricted in more than 20% of the habitat boundaries.
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Total Score

Condition Assessment Result

TOTAL SCORE 14 - 18 (75-100%) = GOOD CONDITION

TOTAL SCORE 9 - 13 (50-75%) = MODERATE CONDITION

TOTAL SCORE 6 - 8 (0-50%) = POOR CONDITION

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - Assessment of grazing levels:

- light grazing - most of the standing crop is not removed
- moderate grazing - standing crop almost completely removed
- heavy grazing - height < 10 cm, all standing crop removed
- abandoned grazing – tall, matted vegetation, no standing crop removed

Footnote 2 - Abundances estimated using SACFOR scales details available here: <http://archive.jncc.gov.uk/pdf>

Use MSFD non-native species list for up to date list of species available here:

<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1518>

High risk undesirable species at time of publication include:

- *Hemigrapsus* spp. – Asian Shore crabs (*H. sanguineus*, *H. takanoi* or *H. penicillatus*)

Please check for updates of high risk species

Footnote 3 - Please see Nelms et al (2017) for methodological details to identify litter $\text{m}^{-1} \text{min}^{-1} \text{person}^{-1}$.

Nelms, Coombes, Foster, Galloway, Godley, Lindeque & Witt (2017) Marine anthropogenic litter on British b science data Science of The Total Environment, Volume 579, 1 February 2017, p. 1399-1409

<https://www.sciencedirect.com/science/article/pii/S0048969716325918?via%3Dihub>

The indicator thresholds for litter are based on the methods in Van Loon et al (2020), which is guidance deve the Marine Strategy Framework Directive by the MSFD Technical Group on Marine Litter.

Van Loon, W., Hanke, G., Fleet, D., Werner, S., Barry, J., Strand, J., Eriksson, J., Galgani, F., Gräwe, D., Schulz, D., 2020. A European Threshold Value and Assessment Method for Macro Litter on Coastlines. EUR 30347 E Luxembourg, 2020, ISBN 978-92-76-21444-1, doi:10.2760/54369, JRC121707

Footnote 4 - Vegetation zones can be described differently but these are the most likely to be found

1. Pioneer Open communities with one or more of the following – *Spartina* spp., *Salicornia* spp., *Asp* lowest neap tides. 290-c.600 submersions per year.

2. Low marsh (generally closed communities with at least *Puccinellia maritima* and *Atriplex portulac* by most tides.350-400 submergences per year) and middle marsh (generally closed communities w as low marsh species; Zone covered only by spring tides. 150 to 220 submergences per year)

4. High marsh Generally closed communities with one or more of the following – *Festuca rubra*, *Arn* marsh species. Zone covered only by highest spring tides. Minimum 25 submergences, maximum 1

5. Transition zone Vegetation intermediate between the high marsh and adjoining non-halophytic ar storm events, but can have salt spray influence from strong onshore winds.

Result Achieved	

f/04_05_introduction.pdf

reaches: A 10-year nationwide assessment using citizen

eloped within the Common Implementation Strategy for

M., Vlachogianni, T., Press, M., Blidberg, E. & Walvoort,
N, Publications Office of the European Union,

d (seaward to landward):
ter tripolium. Zone covered by all tides except the

roides as well as the previous species; zone covered
with Limonium spp. and/or Plantago maritima, as well

neria maritima, Elytrigia spp., as well as the middle
150 submergences per year.
reas. Zone covered only occasionally during extreme

Condition Sheet: DITCH Habitat Type			
UKHab Habitat Type(s)			
Rivers and streams - Ditches			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
Artificially created, linear water-conveyancing features that are less than 5 m wide and likely to retain water for more than 4 months of the year. Their hydraulic function is primarily for land drainage, and although partially or fully connected to a river system, they would not have been present without human intervention <i>[Note: some heavily engineered ditches may actually be part of the river system (usually part of the headwater system). If there is uncertainty, consult historic maps, LIDAR data and riverine specialists]</i>			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.		
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.		
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).		
4	A fringe of marginal vegetation is present along more than 75% of the ditch.		
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.		
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.		
7	Less than 10% of the ditch is heavily shaded.		
8	There is an absence of non-native plant and animal species ¹ .		
		Number of criteria passed	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 8 of 8 criteria	Good (3)		
Passes 6 or 7 of 8 criteria	Moderate (2)		
Passes 0, 1, 2, 3, 4 or 5 of 8 criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 - Any species included on the Water Framework Directive UKTAG GB High Impact Species List should be absent.			

- Frequently occurring non-native plant species include water fern *Azolla* spp., Australian swamp stonecrop *Crassula helmsii*, parrot's feather *Myriophyllum aquaticum*, floating pennywort *Hydrocotyle ranunculoides*, Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum* (on the bank).
- Frequently occurring non-native animals include signal crayfish *Pacifastacus leniusculus*, zebra mussels *Dreissena polymorpha*, killer shrimp *Dikerogammarus villosus*, demon shrimp *Dikerogammarus haemobaphes*, carp *Cyprinus carpio*.

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	Y	
2	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.	Y	
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
4	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.	N	
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	
6	Cover of bracken less than 20%.	Y	
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	N	
		Essential criterion 1 achieved (Y/N)	Y
		Number of criteria passed	3
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)		
Passes 4 or 5 of 7 criteria; OR Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)		
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)	Poor	
Suggested enhancement interventions to improve condition score			
Notes			

Condition Sheet: GRASSLAND Habitat Type (medium, high & very high distinctiveness)			
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"] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB - This criterion is essential for achieving moderate condition for non-acid grassland types only.		
2	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.		
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.		
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.		
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ 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.		
Additional Group (Non-acid types only)			

6	There are greater than 9 species per metre squared. NB - This criterion is essential for achieving good condition (non-acid grassland types only).		
Criterion 1 Achieved (Essential for good condition for non-acid grassland) (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Acid Grassland Types			
Passes 5 of 5 criteria	Good (3)		
Passes 3 or 4 of 5 criteria	Moderate (2)		
Passes 0, 1 or 2 of 5 criteria	Poor (1)		
Non-acid grassland Types			
Passes 5 of 6 criteria, including essential criterion 1 and 6.	Good (3)		
Passes 3 or 4 of 6 criteria, including essential criterion 1.	Moderate (2)		
Passes 0, 1, 2 criteria of 6 criteria; OR Passes 3 or 4 criteria excluding criterion 1 and 6	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 - 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> , cow parsley <i>Anthriscus sylvestris</i> .			

Condition Sheet: HEATHLAND Habitat Type			
UKHab Habitat Type(s)			
Heathland and shrub - Lowland heathland Heathland and shrub - Mountain heaths and willow scrub Heathland and shrub - Upland heathland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The appearance and composition of the vegetation closely matches characteristics of the specific heathland habitat type (see UKHab definition linked above). Indicator shrubs, grasses, herbs and lower plants for the specific heathland habitat type are very clearly and easily visible. NB - this criterion is essential for achieving good condition.		
2	There are at least two dwarf shrub species frequent, and cover of dwarf shrubs is between 25-75% for Lowland heathland, 50-75% for upland dry heath, or >20% for upland wet heath. NB - this criterion is essential for achieving good condition.		
3	All age classes (pioneer, degenerate and mature) present with at least 10% pioneer heather in the lowlands or at least 10% degenerate/mature in the uplands. NB - this criterion is essential for achieving good condition.		
4	Unshaded bare ground is between 1-10%. NB - this criterion is essential for achieving good condition.		
5	No signs disturbance of sensitive areas ¹ , including managed burns.		
6	No more than 33% of heather shoots should be grazed, or flowering heather plants are at least frequent in autumn.		
7	There is an absence of invasive non-native species listed on Schedule 9 of WCA, 1981, or shallon <i>Gaultheria shallon</i> , and there is less than 5% cover of bracken <i>Pteridium aquilinum</i> ² .		
8	Cover of scattered trees and/or scrub ³ should be less than 20% for upland heaths; less than 15% for lowland dry heaths; and less than 10% for lowland wet heaths.		
9	No signs of any damaging activities ⁴ or contamination to the habitat such as: artificial drains, peat extraction, silt, leachate or eutrophication.		
Essential criteria for achieving good condition 1-4 achieved (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓	
Passes 8 or 9 of 9 criteria including all essential criteria 1-4	Good (3)		
Passes 6 or 7 of 9 criteria; OR Passes 8 of 9 criteria excluding any of the essential criteria 1-4	Moderate (2)		
Passes 0, 1, 2, 3, 4 or 5 of 9 criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			

Notes

Footnote 1 - Sensitive areas definition:

- (a) Vegetation severely wind-clipped, mostly forming a mat less than 10 cm thick.
- (b) Areas where soils are thin and less than 5 cm deep.
- (c) Hill slopes greater than 1 in 2 (26°), and all the sides of gullies.
- (d) Ground with abundant, and/or an almost continuous carpet of sphagnum, bilberry, liverworts and/or lichens.
- (e) Areas with noticeably uneven structure, at a spatial scale of around 1 m² or less. The unevenness (e.g. more commonly found in very old heather stands) will relate to distinct, often large, spreading dwarf-shrub bushes. The dwarf-shrub canopy will not be completely continuous, and some of its upper surface may be twice as high as other parts. Layering is likely to be present and may be common.
- (f) Pools, wet hollows, hags and erosion gullies, and within 10 m of the edge of watercourses.

Footnote 2 - Cover of bracken *Pteridium aquilinum* may exceed 5% where there is an identified biodiversity benefit e.g. bracken beds in the South Pennines as nesting sites for Twite *Linaria flavirostris*.

Footnote 3 - N.B. Total *Ulex* spp. cover should be less than 50%, with common gorse *Ulex europaeus* less than 25% in the lowland heaths.

Footnote 4 - Damaging activities include: accidental or unmanaged fires, managed fires on wet heath, excessive poaching, damage from machinery use or storage, damaging levels of public access resulting in trampling and/or litter.

Condition sheet: HEDGEROW Habitat Types				
UKHab Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Native species rich hedgerow Native species rich hedgerow - associated with bank or ditch Native species rich hedgerow with trees Native species rich hedgerow with trees - associated with bank or ditch				
Site name/Location		Onsite/offsite		
Habitat's central grid reference		Unique polygon reference(s)		
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		
Habitat Description				
See Table TS1-3 of the Technical Supplement.				
Condition Assessment Criteria				
A series of ten attributes, representing key physical characteristics, are used for this assessment. The attributes, and the minimum criteria for achieving a favourable condition in each, are defined. The attributes use similar favourable condition criteria to the Hedgerow Survey Handbook and the handbook is the recommended source of reference for assessing individual hedgerow attributes.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition'	Description	Condition Achieved (Y/N)	Notes/Justification
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).		
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice ⁴).		
B1. Gap - hedge base	Gap between ground and base of canopy <0.5 m for >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 (see page 65 of the Hedgerow Survey Handbook).		
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 hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.		
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.		
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Neophytes are plants that have naturalised in the UK since AD 1500. For information on neophytes see the JNCC website and for information on invasive non-native species see the GB Non-Native Secretariat website.		
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).		
Additional group - applicable to hedgerows with trees only				

E1. Tree age	At least one mature tree per 30m stretch of hedgerow. A mature tree is one that is at least 2/3 expected fully mature height for the species.	This criterion addresses if there are sufficient mature trees (within the scope of planning timescales) which are of higher value to biodiversity.		
E2. 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.		

Each attribute is assigned to one of five functional groups (A – E), as indicated in Table TS1-2 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 according to the approach set out in Table TS1-3.

The hedgerow condition assessment generates a weighting (score) ranging from 1-3, which is used within the biodiversity metric 3.1. The scores for each are set out in tables TS1-3 and TS1-4 below.

TABLE TS1-3: Hedgerow condition assessment and weighting

Condition categories for hedgerows without trees		
Category	Maximum number of attributes that can fail to meet ‘favourable condition’ criteria in Table TS1-2	Weighting (score)
Good	No more than 2 failures in total; AND No more than 1 in any functional group.	3
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).	2
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).	1
Score achieved:		
Condition categories for hedgerows with trees		
Category	Maximum number of attributes that can fail to meet ‘favourable condition’ criteria in Table TS1-2	Weighting (score)
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 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).	2
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).	1
Score achieved:		
Suggested enhancement interventions to improve condition score		

Condition Sheet: INTERTIDAL BIOGENIC REEFS Habitat Type**EUNIS Habitat Type(s)**

Littoral biogenic reefs

Artificial littoral biogenic reefs

Site name/location		Onsite/offsite	
Habitat's Central Grid reference		Unique polygon reference(s)	
Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)	

Habitat Description

The biotope description for this habitat type is available here: <https://mhc.jncc.gov.uk/biotopes/jnccmncr00000198>

Habitat Attributes to Record

The following information should be recorded within the condition assessment proforma:

- % cover of recognisable biogenic reef structures across the bed
- Distribution of the habitat seaward and landward limits and extent should be recorded
- Description of presence of typical communities and biotopes
- Description of species diversity and community composition
- Observations on coastal process functioning and any human physical modifications present
- Presence and abundance of non-native species
- % cover of algal growths that could be attributed to nutrient enrichment
- Presence and density of non-natural structures and direct human impacts
- Assessment of litter
- Is the habitat distribution constrained by human modification?

Condition Assessment Criteria

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)
1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat

2	Presence and abundance of invasive non-native species¹	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high-risk species indicative of sub-optimal condition present, see foot note.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high-risk species indicative of sub-optimal condition present, see footnote for list	One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high-risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.
4	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.

5	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed 0.0036 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter does not exceed 0.0078 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter exceeds 0.0078 m ⁻¹ min ⁻¹ person ⁻¹ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .
Total Score				
Condition Assessment Result				
TOTAL SCORE 12-15 (75-100%) = GOOD CONDITION				
TOTAL SCORE 8-11 (50-75%) = MODERATE CONDITION				
TOTAL SCORE 5-7 (0-50%) = POOR CONDITION				
Suggested enhancement interventions to improve condition score				
Notes				

Footnote 1 - Abundances estimated using SACFOR scales details available here: JNCC (No date) SACFOR abundance scales 1990 onwards [online]. Available from: <https://mhc.jncc.gov.uk/media/1009/sacfor.pdf>

Use Cefas non-native species list available here: STEBBING AND TIDBURY (2019). Collated new non-native species records. Available on: <https://data.cefas.co.uk/view/19992>.

Further information can be found on: UK Marine Monitoring and Assessment Strategy (UKMMAS) (No date) Non-indigenous species. Available on: <https://moat.cefas.co.uk/pressures-from-human-activities/non-indigenous-species/>

High risk species indicative of sub-optimal condition at time of publication include:

- *Didemnum vexillum* – Carpet sea squirt
- *Hemigrapsus* spp. – Asian Shore crabs (*H. sanguineus*, *H. takanoi* or *H. penicillatus*)

Please check for updates of high risk species

Footnote 2 - Please see Nelms et al (2017) for methodological details to identify litter $\text{m}^{-1} \text{min}^{-1} \text{person}^{-1}$.

Nelms, Coombes, Foster, Galloway, Godley, Lindeque & Witt (2017) Marine anthropogenic litter on British beaches: A data Science of The Total Environment, Volume 579, 1 February 2017, p. 1399-1409
<https://www.sciencedirect.com/science/article/pii/S0048969716325918?via%3Dihub>

The indicator thresholds for litter are based on the methods in Van Loon et al (2020), which is guidance developed with the Marine Strategy Framework Directive by the MSFD Technical Group on Marine Litter

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Result Achieved	

ale used for both littoral and sublittoral taxa from

ords for UK from 2003-2014 [online]. Cefas, UK. V1.

igenous species [online]. Available from:

10-year nationwide assessment using citizen science

thin the Common Implementation Strategy for the

Condition Sheet: INTERTIDAL HARD STRUCTURES Habitat Type**ARTIFICIAL Habitat Type(s)**

Intertidal artificial hard structures

Intertidal artificial features of hard structures

Intertidal artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)

Site name/location		Onsite/offsite	
Habitat's Central Grid		Unique polygon	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)	

Habitat Description

Artificial hard structures are man-made structures fulfilling a range of functions (e.g. coastal defences, port, harbour and n They can be made of various hard materials (artificial or natural rock, wood, plastics, metal) that would not normally be fo

Habitat Attributes to Record

The following information should be recorded within the condition assessment proforma:

- Description of presence of typical communities and biotopes
- Description of species diversity and community composition
- Presence and abundance of non-native species
- Observations on coastal process functioning and any human physical modifications present
- % cover of algal growths that could be attributed to nutrient enrichment
- WFD classification of overlying water
- Assessment of litter

Condition Assessment Criteria

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)
1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat.

2	Presence and abundance of invasive non-native species¹	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote for list.	One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.
4	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0036 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter exceeds $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .
5	Amount of colonisation	More than three different faunal and floral communities present.	Two or three different faunal/flora communities present.	One or no faunal/flora communities present.

Total Score

Condition Assessment Result

TOTAL SCORE 12-15 (75-100%) = GOOD CONDITION

TOTAL SCORE 8-11 (50-75%) = MODERATE CONDITION

TOTAL SCORE 5-7 (0-50%) = POOR CONDITION

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - Abundances estimated using SACFOR scales details available here: <https://mhc.jncc.gov.uk/media/1009/sacfor>

Use MSFD non-native species list for up to date list of species available here:
<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1518>

High risk undesirable species at time of publication include:

- *Didemnum vexillum* – Carpet sea squirt
- *Hemigrapsus spp.* – Asian Shore crabs (*H. sanguineus*, *H. takanoi* or *H. penicillatus*)
- *Ficopomatus enigmaticus* Trumpet tube worm
- *Corella eumyota* – Orange-tipped sea squirt
- *Grateloupia turuturu* – Devil's tongue weed, gracie, red menace and red tide
- *Schizoporella japonica* – Orange ripple bryozoan

Please check for updates of high risk species

Footnote 2 - Please see Nelms et al (2017) for methodological details to identify litter $\text{m}^{-1} \text{min}^{-1} \text{person}^{-1}$.

Nelms, Coombes, Foster, Galloway, Godley, Lindeque & Witt (2017) Marine anthropogenic litter on British beaches: A 10-year study. *Science of The Total Environment*, Volume 579, 1 February 2017, p. 1399-1409
<https://www.sciencedirect.com/science/article/pii/S0048969716325918?via%3Dihub>

The indicator thresholds for litter are based on the methods in Van Loon et al (2020), which is guidance developed within the MSFD Strategy Framework Directive by the MSFD Technical Group on Marine Litter.

Van Loon, W., Hanke, G., Fleet, D., Werner, S., Barry, J., Strand, J., Eriksson, J., Galgani, F., Gräwe, D., Schulz, M., Vlachogiannis, A. (2020) European Threshold Value and Assessment Method for Macro Litter on Coastlines. EUR 30347 EN, Publications Office of the European Union, Luxembourg, 21444-1, doi:10.2760/54369, JRC121707

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Result Achieved	

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year nationwide assessment using citizen science data

the Common Implementation Strategy for the Marine

nni, T., Press, M., Blidberg, E. & Walvoort, D., 2020. A
1e European Union, Luxembourg, 2020, ISBN 978-92-76-

Condition Sheet: INTERTIDAL SEAGRASS Habitat Type**UKHab Habitat Type(s)**

Intertidal sediment - Littoral seagrass

Intertidal sediment - Littoral seagrass - on peat, clay or chalk

Intertidal sediment - Artificial littoral seagrass

Site name/location		Onsite/offsite	
Habitat's Central Grid		Unique polygon	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)	

Habitat Description

The littoral seagrass JNCC biotope description is available here: <https://mhc.jncc.gov.uk/biotopes/jnccmncr00001525>

Habitat Attributes to Record

The following information should be recorded within the condition assessment proforma:

- % cover of seagrass across the bed
- Distribution of the seagrass landward, seaward and extent should be recorded
- Description of presence of typical communities and biotopes
- Description of species diversity and community composition
- Observations on coastal process functioning and any human physical modifications present
- Presence and abundance of non-native species
- % cover of algal growths that could be attributed to nutrient enrichment
- WFD classification of overlying water
- Presence and density of non-natural structures and direct human impacts
- Assessment of litter
- Evidence of visible rhizomes

Condition Assessment Criteria

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
1 Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat

2	Presence and abundance of invasive non-native species¹	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high risk species indicative of sub-optimal condition present, see foot note.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote for list	One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.
4	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.
5	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0036 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter exceeds $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .

Total Score
Condition Assessment Result
TOTAL SCORE 12-15 (75-100%) = GOOD CONDITION
TOTAL SCORE 8 - 11 (50-75%) = MODERATE CONDITION
TOTAL SCORE 5-7 (0-50%) = POOR CONDITION
Suggested enhancement interventions to improve condition score
Notes
*essential attribute the habitat overall cannot score higher than it does for this attribute. Footnote 1 - Abundances estimated using SACFOR scales details available here: https://mhc.jncc.gov.uk/media/1009/sacfor Use MSFD non-native species list for up to date list of species available here: https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1518 High risk undesirable species at time of publication include: • <i>Didemnum vexillum</i> – Carpet sea squirt • <i>Hemigrapsus spp.</i> – Asian Shore crabs (<i>H. sanguineus</i>, <i>H. takanoi</i> or <i>H. penicillatus</i>) • <i>Eriocheir sinensis</i> – Chinese mitten crab Please check for updates of high risk species Footnote 2 - Please see Nelms et al (2017) for methodological details to identify litter $\text{m}^{-1} \text{min}^{-1} \text{person}^{-1}$. Nelms, Coombes, Foster, Galloway, Godley, Lindeque & Witt (2017) Marine anthropogenic litter on British beaches: A 10-year study. <i>Science of The Total Environment</i>, Volume 579, 1 February 2017, p. 1399-1409 https://www.sciencedirect.com/science/article/pii/S0048969716325918?via%3Dihub The indicator thresholds for litter are based on the methods in Van Loon et al (2020), which is guidance developed within the MSFD Strategy Framework Directive by the MSFD Technical Group on Marine Litter. Van Loon, W., Hanke, G., Fleet, D., Werner, S., Barry, J., Strand, J., Eriksson, J., Galgani, F., Gräwe, D., Schulz, M., Vlachogiannis, I. (2020) European Threshold Value and Assessment Method for Macro Litter on Coastlines. EUR 30347 EN, Publications Office of the European Union, Luxembourg, 21444-1, doi:10.2760/54369, JRC121707

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Result Achieved
or.pdf ear nationwide assessment using citizen science data he Common Implementation Strategy for the Marine ini, T., Press, M., Blidberg, E. & Walvoort, D., 2020. A e European Union, Luxembourg, 2020, ISBN 978-92-76-

Condition Sheet: INTERTIDAL SEDIMENT Habitat Type**EUNIS Habitat Type(s)**

Littoral coarse sediment
 Littoral sand
 Littoral muddy sand
 Littoral mud
 Littoral mixed sediments
 Features of littoral sediment
 Artificial littoral coarse sediment
 Artificial littoral mixed sediments
 Artificial littoral mud
 Artificial littoral muddy sand
 Artificial littoral sand

Site name/location		Onsite/offsite	
Habitat's Central Grid		Unique polygon	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)	

Habitat Description

The littoral sediment EUNIS habitat description is available here: <https://eunis.eea.europa.eu/habitats/425>

Habitat Attributes to Record

The following information should be recorded within the habitat description:

- Description of sediment character
- Description of presence of typical communities and biotopes
- Description of species diversity and community composition
- Observations on coastal process functioning and any human physical modifications present
- Observations on transitions to other habitats
- Assessment of litter
- % cover of algal growths that could be attributed to nutrient enrichment
- WFD classification of overlying water
- Description of zonation

Condition Assessment Criteria

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)
------------------	------------------------	----------------------------	-----------------------

1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting more than 25% of the habitat
2	Presence and abundance of invasive non-native species¹	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote for list.	One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.	Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.
4	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.

5	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0036 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .	Following the MCS beach litter survey method the number of items of litter exceeds $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ² .
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Total Score

Condition Assessment Result

TOTAL SCORE 12-15 (75-100%) = GOOD CONDITION

TOTAL SCORE 8-11 (50-75%) = MODERATE CONDITION

TOTAL SCORE 5-7 (0-50%) = POOR CONDITION

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - Abundances estimated using SACFOR scales details available here: <https://mhc.jncc.gov.uk/media/1009/sacfor>

Use Cefas non-native species list available here: STEBBING AND TIDBURY (2019). Collated new non-native species records for
Available on: <https://data.cefas.co.uk/view/19992>.

Further information can be found on: UK Marine Monitoring and Assessment Strategy (UKMMAS) (No date) Non-indigenous species
<https://moat.cefas.co.uk/pressures-from-human-activities/non-indigenous-species/>

High risk species indicative of sub-optimal condition at time of publication include:

High risk undesirable species at time of publication include:

Intertidal coarse sediment A2.1:

- *Ficopomatus enigmaticus* Trumpet tube worm
- *Styela clava* Asian tunicate; leathery sea squirt, club tunicate
- *Corella eumyota* Orange-tipped sea squirt
- *Grateloupia turuturu* Devil's tongue weed, gracie, red menace and red tide

Footnote 2 - Please see Nelms et al (2017) for methodological details to identify litter m⁻¹ min⁻¹ person⁻¹.

Nelms, Coombes, Foster, Galloway, Godley, Lindeque & Witt (2017) Marine anthropogenic litter on British beaches: A 10-year data Science of The Total Environment, Volume 579, 1 February 2017, p. 1399-1409
<https://www.sciencedirect.com/science/article/pii/S0048969716325918?via%3Dihub>

The indicator thresholds for litter are based on the methods in Van Loon et al (2020), which is guidance developed within the Marine Strategy Framework Directive by the MSFD Technical Group on Marine Litter.

Van Loon, W., Hanke, G., Fleet, D., Werner, S., Barry, J., Strand, J., Eriksson, J., Galgani, F., Gräwe, D., Schulz, M., Vlachogianni, A. A European Threshold Value and Assessment Method for Macro Litter on Coastlines. EUR 30347 EN, Publications Office of the European Union, Luxembourg, 2020. 92-76-21444-1, doi:10.2760/54369, JRC121707
[https://www.researchgate.net/publication/344340540_A_European_Threshold_Value_and_Assessment_Method_for_Mac](https://www.researchgate.net/publication/344340540_A_European_Threshold_Value_and_Assessment_Method_for_Macro_Litter_on_Coastlines)

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ni, T., Press, M., Blidberg, E. & Walvoort, D., 2020.
he European Union, Luxembourg, 2020, ISBN 978-

cro_Litter_on_Coastlines

Condition Sheet: LAKE Habitat Type**UKHab Habitat Type(s)**

Lakes - Aquifer fed naturally fluctuating waterbodies

Lakes - High alkalinity lakes

Lakes - Low alkalinity lakes

Lakes - Marl lakes

Lakes - Moderate alkalinity lakes

Lakes - Peat lakes

Lakes - Reservoirs

Lakes - Temporary lakes, ponds and pools [Use this condition sheet for Temporary lakes, or use Pond condition sheet for Ponds]

Site name/location

Central grid reference of habitat

Limitations (if applicable)

Habitat Description

See Water Framework Directive (WFD) lakes typologies:

[http://wfd.uk.org/sites/default/files/Media/Characterisation of the water environment/Lakes typology_Final_010604](http://wfd.uk.org/sites/default/files/Media/Characterisation%20of%20the%20water%20environment/Lakes%20typology_Final_010604.pdf)

Other than for 'Aquifer fed naturally fluctuating waterbodies', 'Reservoirs' and 'Temporary lakes, ponds and pools' - F

[UKHab](#)

Condition Assessment Criteria

The Freshwater Biological Association 'Habitat Naturalness Assessment' is used to assess the condition of lakes. Scores (naturalness) are averaged to generate an overall 'habitat naturalness assessment score' which can then be translated into a condition rating. There are other elements considered in the lake naturalness assessment but these are not included when calculating the naturalness score.

Details of the methodology for assessing naturalness of lakes are available at:

<http://priorityhab.wpengine.com/contribute/>

The key documents are:

[Lake naturalness assessment – guidance document \(PDF\)](#)

[Annex I – Printable lake naturalness survey form to use in field \(PDF\)](#)

[Annex II – Physical naturalness photographs \(PDF\)](#)

[Annex III – Hydrological naturalness photographs \(PDF\)](#)

[Annex IV – Chemical naturalness photographs \(PDF\)](#)

[Annex V – Plant functional group photographs \(PDF\)](#)

[Annex VI – Further species recording \(PDF\)](#)

We encourage recording of data on lakes on the Freshwater Biological Association 'Habitat Naturalness Assessment' <http://priorityhab.wpengine.com/contribute/>

Average 'Habitat Naturalness Assessment' Class	Condition Assessment Score
1 Natural	Good (3)
2	Fairly good (2.5)
3	Moderate (2)
4	Fairly poor (1.5)
5 Least natural	Poor (1)
Suggested enhancement interventions to improve condition score	

at for Temporary ponds and pools]

Onsite/offsite	
Unique polygon reference	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	

[4.pdf](#)

For these see:

es for four attributes (physical, hydrological, chemical, and biological
d into a condition score for use in Biodiversity Metric 3.0 (see below).
g the condition assessment score.

website portal:

Score Achieved

Condition Sheet: LIMESTONE PAVEMENT Habitat Type	
UKHab Habitat Type(s)	
Sparsely vegetated land - Limestone pavement	
Site name/location	
Central grid reference of	
Limitations (if applicable)	
Habitat Description	
See UKHab	
Condition Assessment Criteria	
1	Cover of typical emergent pavement flora and clint-top vegetation should account for at least 25% of total vegetation cover (i.e. excluding bare rock).
2	Cover of species indicative of sub-optimal condition less than 1%.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition ¹ make up less than 5% of vegetated ground cover.
4	Less than 25% of live leaves (broadleaved plants), fronds (ferns) or shoots (dwarf shrubs) show signs of grazing or browsing.
5	There should be no evidence of damage to the pavement surface.
Condition Assessment Result	Condition Assessment Score
Passes 5 of 5 criteria	Good (3)
Passes 4 of 5 criteria	Moderate (2)
Passes 0, 1, 2 or 3 of 5 criteria	Poor (1)
Suggested enhancement interventions to improve condition score	
Notes	

Footnote 1 - Species considered undesirable for this habitat type include: per
dog's-tail *Cynosurus cristatus*, bramble *Rubus fruticosus*, creeping thistle *Cirsi
dock *Rumex obtusifolius*, common ragwort *Jacobaea vulgaris*, common nettle*

Onsite/offsite	
Unique polygon reference	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	

Condition Achieved (Y/N)	Notes/Justification
Number of criteria passed	
Score Achieved x/✓	

ennial rye grass *Lolium perenne*, false oat-grass *Arrhenatherum elatius*, crested
ium arvense, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved
: *Urtica dioica*, other pernicious perennial species.

Condition Sheet: LINE OF TREES Habitat Type**UKHab Habitat Type(s)**

Line of trees

Line of trees – associated with bank or ditch

Line of trees (ecologically valuable)

Line of trees (ecologically valuable) – associated with bank or ditch

Site name/location		Onsite/offsite
Central grid reference of habitat		Unique polygon reference
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)

Habitat Description

See Chapter 8 of User Guide for definition.

Condition Assessment Criteria		Condition Achieved (Y/N)
1	More than 70% of trees are native species.	
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	
3	Includes one or more mature ¹ or veteran ² tree.	

4	There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other anthropogenic operations.	
5	At least 95% of the 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.	
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓
Passes 5 of 5 criteria	Good (3)	
Passes 3 or 4 of 5 criteria	Moderate (2)	
Passes 0, 1 or 2 of 5 criteria	Poor (1)	
Suggested enhancement interventions to improve condition score		
Notes		

Footnote 1 - A mature tree in this context is one that is at least 2/3 expected fully mature height for the species.

Footnote 2 - All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as cultural and heritage value. Veteran trees can be classified if they have four out of the five following features:

1. Rot sites associated with wounds which are decaying >400 cm²;
 2. Holes and water pockets in the trunk and mature crown >5 cm diameter;
 3. Dead branches or stems >15 cm diameter;
 4. Any hollowing in the trunk or major limbs;
-

[illegible]

The diagram consists of a vertical stack of five rectangular blocks. The top three blocks are white, and the bottom two are gray. A vertical line is on the left, and a horizontal line is at the bottom.

ch as branch death and hollowing. These features contribute to its biodiversity,

Condition Sheet: ORCHARD Habitat Type**UKHab Habitat Type****Grassland - Traditional orchard**

Site name/location	
Central grid reference of habitat	
Limitations (if applicable)	

Habitat Description

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[See UKHab](#)**Condition Assessment Criteria**

1	Presence of ancient ¹ and / or veteran ² trees. NB - this criterion is essential for achieving good condition.
2	Less than 5% of fruit trees are smothered by scrub. Small patches of dense scrub and/or scattered scrub growing between trees can be beneficial to biodiversity, however these should occupy less than 10% of ground cover.
3	There is evidence of formative and/or restorative pruning to maintain longevity of trees.
4	Presence of standing and/or fallen dead wood: all mature trees have standing or fallen branches, stems and stumps greater than 10 cm diameter associated with them.
5	At least 95% of the trees are free from damage caused by humans or animals e.g. browsing, bark stripping or rubbing on non-adjusted ties.
6	Sward height is varied (between 5 cm and 30 cm) and small patches of bare ground are present creating structural diversity. Up to 10% cover of patches of tall herb vegetation may be present.
7	Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.
8	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species of sub-optimal condition ³ make up less than 10% of ground cover.

Essential criterion 1 achieved**Condition Assessment Result****Condition Assessment Score**

Passes 6, 7 or 8 of 8 criteria, including essential criterion 1	Good (3)
Passes 4 or 5 of 8 criteria; OR Passes 6 or 7 of 8 criteria, excluding essential criterion 1	Moderate (2)
Passes 0, 1, 2 or 3 of 8 criteria	Poor (1)

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - Ancient trees are exceptionally valuable. Attributes can include: its great age in comparison with biodiversity value as a result of significant wood decay and the habitat created from the ageing process; or Ancient trees can be classified using the following girth guide at 1.5 m from the ground:

- >2.5m for field maple, rowan, yew, birch, holly and other smaller tree species;
- >4m for oaks, ash, Scot's pine, alder;
- >4.5m for sycamore, lime, horse chestnut, sweet chestnut, elm species, poplar species, beech, willow

Footnote 2 - All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may have features contribute to its biodiversity, cultural and heritage value. Veteran trees can be classified if they have:

1. Rot sites associated with wounds which are decaying >400 cm²;
2. Holes and water pockets in the trunk and mature crown >5 cm diameter;
3. Dead branches or stems >15 cm diameter;
4. Any hollowing in the trunk or major limbs;
5. Fruit bodies of fungi known to cause wood decay.

Footnote 3 - Species considered undesirable for this habitat type include: creeping thistle *Cirsium arvense*, *obtusifolius*, common nettle *Urtica dioica*.

Onsite/offsite	
Unique polygon reference	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	

Condition Achieved (Y/N)	Notes/Justification
hieved (required for good condition Y/N)	
Number of criteria passed	
Score Achieved x/✓	

with other trees of the same species; size, especially very wide trunk; condition; and cultural and heritage value. Very few trees of any species become ancient.

rs, other pines and exotics.

not be very old, but it has decay features, such as branch death and hollowing. These have four out of the five following features:

, spear thistle *Cirsium vulgare*, curled dock *Rumex crispus*, broad-leaved dock *Rumex*

Condition Sheet: POND Habitat Type**UKHab Habitat Type(s)****Lakes - Ponds (priority habitat)****Lakes - Ponds (non-priority habitat)****Lakes - Temporary lakes, ponds and pools** [Use this condition sheet for Temporary ponds and pool**Lakes - Ornamental lake or pond** [Use this condition sheet for Ornamental ponds, use Lake conditi**Site name/location****Central grid reference of habitat****Limitations (if applicable)****Habitat Description**[See UKHab](#)

Other than for non-priority ponds, which are those which do not meet either the definition of (i) pr

Condition Assessment Criteria**CORE CRITERIA - applicable to all ponds (woodland¹ and non-woodland):**

- | | |
|---|---|
| 1 | 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. |
| 2 | There is semi-natural habitat (i.e. moderate distinctiveness or above) for at least 10 m from the pond edge. |
| 3 | Less than 10% of the pond is covered with duckweed or filamentous algae. |
| 4 | The pond is not artificially connected to other waterbodies, either via streams, ditches or artificial pipework. |
| 5 | Pond water levels should be able to fluctuate naturally throughout the year. No obvious dams, pumps or pipework. |
| 6 | There is an absence of non-native plant and animal species ² . |
| 7 | 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 - only applicable to non-woodland ponds:

- | | |
|---|--|
| 8 | In non-woodland ponds, plants, be they emergent, submerged or floating (excluding duckweeds) ³ , should cover at least 50% of the pond area that is less than 3 m deep. |
|---|--|

9	The surface of non-woodland ponds is no more than 50% shaded by woody bankside species.
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Condition Assessment Result	Condition Assessment Score
If 8 criteria assessed (woodland ponds):	
Passes 7 of 7 criteria	Good (3)
Passes 5 or 6 of 7 criteria	Moderate (2)
Passes 0, 1, 2, 3 or 4 of 7 criteria	Poor (1)
If 10 criteria assessed (non-woodland ponds):	
Passes 9 of 9 criteria	Good (3)
Passes 6, 7 or 8 of 9	Moderate (2)
Passes 0, 1, 2, 3, 4 or 5 of 9 criteria	Poor (1)

Suggested enhancement interventions to improve condition score	
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Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.

Footnote 2 - Any species included on the [Water Framework Directive UKTAG GB High Impact Species](#)

- Frequently occurring non-native plant species include water fern *Azolla spp.*, Australian swamp st *Hydrocotyle ranunculoides* and Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum m*
- Frequently occurring non-native animals include signal crayfish *Pacifastacus leniusculus*, zebra m *Dikerogammarus haemobaphes*, carp *Cyprinus carpio*.

~~**Footnote 3** - If the pond is seasonal (i.e. dries out in most summers) then emergent species alone a~~

Is, use Lake condition sheet for Temporary lakes]
ion sheet for Ornamental lakes]

Onsite/offsite	
Unique polygon reference	
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	

riority habitat ponds or (ii) ornamental ponds

Condition Achieved (Y/N)	Notes/Justification

Number of criteria passed	
Score Achieved x/✓	

ies List should be absent.

tonecrop *Crassula helmsii*, parrot’s feather *Myriophyllum aquaticum*, floating pennywort *antegazzianum* (on the bank).

ussels *Dreissena polymorpha*, killer shrimp *Dikerogammarus villosus*, demon shrimp

are likely to be found

Condition Sheet: ROCKY SHORE Habitat Type**EUNIS Habitat Type(s)**

Rocky shore - High energy littoral rock

Rocky shore - Moderate energy littoral rock

Rocky shore - Low energy littoral rock

Rocky shore - Features of littoral rock

Rocky shore - High energy littoral rock - on peat, clay or chalk

Rocky shore - Moderate energy littoral rock - on peat, clay or chalk

Rocky shore - Low energy littoral rock - on peat, clay or chalk

Rocky shore - Features of littoral rock - on peat, clay or chalk

Site name/location		Onsite/offsite
Habitat's Central Grid reference		Unique polygon reference(s)
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		Limitations (if applicable)

Habitat Description[Use EUNIS littoral rock habitat description](#)**Habitat Attributes to Record**

The following information should be recorded within the habitat description:

- Description of presence of typical communities and biotopes
- Description of species diversity and community composition
- Observations on coastal process functioning and any human physical modifications present
- Presence and abundance of non-native species
- % cover of algal growths that could be attributed to nutrient enrichment
- Presence and density of non-natural structures and direct human impacts
- Assessment of litter
- Habitat zonation¹
- WED classification of overlying water

Condition Assessment Criteria

Indicator		Good (3 points)	Moderate (2 point)
1	Coastal processes	Coastal processes are functioning naturally. No evidence of human physical modifications which are clearly impacting the habitat.	Artificial structures present e.g. groynes that are impeding the natural movement of sediments or water, affecting up to 25% of the habitat.

2	Presence and abundance of invasive non-native species²	Not more than 1 invasive non-native species is present at a level of occasional on the SACFOR scale or occupying more than 1% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote.	No invasive non-native species are present above 'Frequent' on the SACFOR scale or they occupy between 1-10% of the habitat. No high risk species indicative of sub-optimal condition present, see footnote for list.
3	Water Quality	No visual evidence of pollution. There are no nuisance algal growths that are likely to be attributable to nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September	Visual evidence of low to moderate levels of pollution. elevated algal growth with increases in cover that may indicate nutrient enrichment. Seasonality of the assessment should be considered, peak bloom time is July – September.
4	Non-natural structures and direct human impacts	No evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars) or they occupy <1% of the habitat area.	Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying up to 10% of the habitat area.
5	Litter (when examining a beach strandline /mean high water line or intertidal rocky shore)	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0036 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to up to 21 items per person per 100m per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ³ .	Following the MCS beach litter survey method the number of items of litter does not exceed $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to between 20 and 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ³ .

Condition Assessment Result

TOTAL SCORE 12-15 (75-100%) = GOOD CONDITION

TOTAL SCORE 8-11 (50-75%) = MODERATE CONDITION

TOTAL SCORE 5-7 (0-50%) = POOR CONDITION

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - The rocky shore macroalgal index enables an assessment of the condition of the rocky Species List for the Macroalgae Tool: WFD (2012) Practitioners Guide to the Opportunistic Macroalg

Available from:

<https://www.wfduk.org/sites/default/files/Media/Environmental%20standards/Annex%2015%20T0tool.pdf>

Footnote 2 - Abundances estimated using SACFOR scales details available here: <https://mhc.jncc.gov>

High risk species indicative of sub-optimal condition at time of publication include:

- *Didemnum vexillum* – Carpet sea squirt
- *Hemigrapsus* spp. – Asian Shore crabs (*H. sanguineus*, *H. takanoi* or *H. penicillatus*)
- *Corella eumyota* – Orange-tipped sea squirt
- *Grateloupia turuturu* – Devil's tongue weed, gracie, red menace and red tide
- *Schizoporella japonica* – Orange ripple bryozoan

Please check for updates of high risk species

Footnote 3 - Please see Nelms et al (2017) for methodological details to identify litter m⁻¹ min⁻¹ p NELMS, S.E. ET AL. (2017) Marine anthropogenic litter on British beaches: A 10-year nationwide assessment Available from: Marine anthropogenic litter on British beaches: A 10-year nationwide assessment u:

The indicator thresholds for litter are based on the methods in Van Loon et al (2020), which is guidance Framework Directive by the MSFD Technical Group on Marine Litter.

VAN LOON, W. ET AL. (2020). A European Threshold Value and Assessment Method for Macro Litter [online] Available from:(PDF) A European Threshold Value and Assessment Method for Macro Litter

[illegible]

One or more invasive non-native species are present at an 'Abundant' level on the SACFOR scale, they occupy more than 10% of the habitat or a high risk species indicative of sub-optimal condition is present – GBNNSS should be notified, see footnote for details.		
Visual evidence of high algal growth that is indicative of nutrient enrichment. Signs of eutrophication that would impede bird feeding. Seasonality of the assessment should be considered, peak bloom time is July – September.		
Some evidence of impacts from direct human activities (including pontoons, moorings, boats, crab tiles, bait digging or anchoring scars), occupying over >10% of the habitat area.		
Following the MCS beach litter survey method the number of items of litter exceeds $0.0078 \text{ m}^{-1} \text{ min}^{-1} \text{ person}^{-1}$ equivalent to more than 47 items of litter per 100m survey per person per hour. See Nelms 2017 <i>et al</i> and the link to the MSFD threshold value assessment ³ .		
Total Score		

[illegible]

Condition Sheet: SCRUB Habitat Type			
UKHab Habitat Type			
Heathland and shrub - Blackthorn scrub Heathland and shrub - Gorse scrub Heathland and shrub - Hawthorn scrub Heathland and shrub - Hazel scrub Heathland and shrub - Mixed scrub Heathland and shrub - Sea buckthorn scrub (Annex 1)			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
See UKHab For sea buckthorn scrub see: Habitats Directive Annex 1 definition			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be up to 100% cover).		
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.		

3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.		
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).		
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.		
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 5 of 5 criteria	Good (3)		
Passes 3 or 4 of 5 criteria	Moderate (2)		
Passes 0, 1 or 2 of 5 criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 - Species indicative of sub-optimal condition for this habitat type include: tree-of-heaven <i>Alianthus altissima</i> , holm oak <i>Quercus ilex</i> , turkey oak <i>Quercus cerris</i> , creeping thistle <i>Cirsium arvense</i> , common nettle <i>Urtica dioica</i> , cherry laurel <i>Prunus laurocerasus</i> , snowberry <i>Symphoricarpos</i> spp., buddleia <i>Buddleja</i> spp., cotoneaster <i>Cotoneaster</i> spp., Spanish bluebell <i>Hyacinthoides hispanica</i> (or hybrids).			

Condition Sheet: SPARSELY VEGETATED LAND Habitat Type**UKHab Habitat Type(s)****Sparsely vegetated land - Inland rock outcrop and scree habitats****Sparsely vegetated land - Other inland rock and scree**

Site name/location		Onsite/offsite
Central grid reference of habitat		Unique polygon reference
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)

Habitat Description[See UKHab](#)

Condition Assessment Criteria		Condition Achieved (Y/N)
1	The appearance and composition of the vegetation closely matches characteristics of the specific sparsely vegetated habitat type (see UKHab definition linked above). Indicator species for the specific sparsely vegetated habitat type are very clearly and easily visible.	
2	Cover of bracken, scrub and trees less than 25%.	
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition ¹ make up less than 5% of vegetated ground cover.	

4	Vegetation cover of vascular and non-vascular plants between 5 and 50%.	
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓
Passes 4 of 4 criteria	Good (3)	
Passes 3 of 4 criteria	Moderate (2)	
Passes 0, 1, or 2 of 4 criteria	Poor (1)	
Suggested enhancement interventions to improve condition score		
Notes		
Footnote 1 - Species indicative of sub-optimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , d <i>vulgaris</i> , common nettle <i>Urtica dioica</i> .		

[illegible]

locks *Rumex* spp., brambles *Rubus* spp., common ragwort *Jacobaea*

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral			
Urban – Allotments			
Urban – Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type]			
Urban - Bioswale			
Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type]			
Urban - Façade-bound green wall			
Urban - Ground based green wall			
Urban - Intensive green roof			
Urban - Open mosaic habitats on previously developed land			
Urban - Rain garden			
Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water]			
Urban - Vacant / derelict land / bare ground			
Site name/location		Onsite/offsite	
Central grid reference of		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types:			
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.		
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.		
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).		
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be open water		
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		
4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.		
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
If 3 criteria assessed:			
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3	Good (3)		
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)		
• Passes 0 or 1 of 3 core criteria	Poor (1)		
If 4 criteria assessed:			
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b	Good (3)		
• Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)		
• Passes 0 or 1 of 4 criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1: For Biodiverse green roofs only - experience has shown that a range of sedums species (native, naturalised, and non-native) support wildflowers during hot periods. Therefore, for Criteria 2 a Biodiverse green roof can have non-native sedums and still achieve Good condition.			
Footnote 2: For Criteria 3 – For green roof habitat types only - Buddleja davidii 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.			

Condition Sheet: URBAN TREES Habitat Type		
UKHab Habitat Type(s)		
Urban - Urban tree		
Site name/location		Onsite/offsite
Central grid reference of habitat		Unique polygon reference
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)
Habitat Description		
Covers the following topographical formations most commonly found in urban areas¹: Individual Trees: Young trees over 75mm in diameter measured at 1.5m from ground level and individual semi-mature and mature trees of significant size whose canopies are not touching but that are in close proximity to other trees. Perimeter Blocks: Groups or stands of trees within and around boundaries of land, former field boundary trees incorporated into developments, individual trees continuously Linear Blocks: Lines of trees along streets, highways, railways and canals whose canopies may or may not overlap continuously.		
Condition Assessment Criteria		Condition Achieved (Y/N)
1	The tree is a native species(or more than 70% within the block are native species).	Y
2	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).	N
3	The tree is mature ² or veteran ³ (or more than 50% within the block are mature ² or veteran ³).	N

4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	Y
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	Y
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	N
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓
Passes 5 or 6 of 6 criteria	Good (3)	
Passes 3 or 4 of 6 criteria	Moderate (2)	Moderate
Passes 0, 1 or 2 of 6 criteria	Poor (1)	
Suggested enhancement interventions to improve condition score		
Notes		

Footnote 1 - This covers all trees in artificial urban habitats such as private gardens, private land, institutional land and land used for transport function. in urban areas can under the right conditions provide a large range of habitat opportunities, supporting lichens, invertebrates and birds. Tree planting introduced non-native species into towns and cities. In the context of biodiversity native species are the preferred option. However, non-native tree species richness particularly in relation to providing a seasonal food source for nectar feeders and other invertebrates as well as supporting vertebrates that feed. Examples are early and late flowering species of *Prunus* and aphids on varieties of *Acer* providing food for species higher up the food chain. The species intensity and type of management they are subject to will determine the biodiversity value of the trees in question. Trees in urban areas provide opportunities to colonise, increasing connectivity and contributing to biodiversity critical mass between already established patches or sites. This is especially so where there are native species

Footnote 2 - A mature tree in this context is one that is at least 2/3 expected fully mature height for the species.

Footnote 3 - All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as decay, which contribute to its biodiversity, cultural and heritage value. Veteran trees can be classified if they have four out of the five following features:

1. Rot sites associated with wounds which are decaying >400cm²;
2. Holes and water pockets in the trunk and mature crown >5 cm diameter;
3. Dead branches or stems >15 cm diameter;
4. Any hollowing in the trunk or major limbs;
5. Fruit bodies of fungi known to cause wood decay.

[illegible]

3

s; roads, streets, canals, rail, footpaths etc. Trees
n urban areas has for over two hundred years also
ecies can contribute positively to biodiversity
ed on species that are hosted by non-native trees.
of trees (native or non-native) together with the
tunistic sites for biodiversity to colonise and re-
transport corridors are populated with mixed

n as branch death and hollowing. These features

Condition Sheet: WETLAND Habitat Type

Grassland - Floodplain wetland mosaic (CFDM) [Use this condition sheet (plus ditch condition sheet for any ditches) unless associated with a species rich grassland sward (meeting the definition of a priority habitat), wetland or fen, in which case record and assess as the relevant habitat type within the metric (plus Ditch condition sheet for any ditches).

Wetland - Blanket bog

Wetland - Deposition on peat substrates (H7150)

Wetland - Fen (light and lowland)

Wetland - Lowland raised bog

Wetland - Oceanic valley mire (1) (D2.1)

Wetland - Purple moor grass and rush pastures

Wetland - Reeds/beds

Wetland - Transition mires and quaking bogs (H7140)

Site name/location

Central grid reference of habitat

Limitations (if applicable)

Ditch (ditch)

Unique polygon reference

Metric 3.1 survey reference (if condition assessment of this polygon relates to a water habitat survey)

Habitat Description

For [Coastal valley mire – see EUNIS](#)

Floodplain wetland mosaic (CFDM) - Where an area is included within the (soon to be published) 'Floodplain wetland mosaic Habitat Inventory' as extent habitat OR included within the 'Floodplain with potential for restoration to Wetland Mosaic' layer it should be recorded separately as linear features in the Rivers & Streams part of the metric.
In these cases the ditches form an integral part of the habitat and should not be recorded separately as linear features in the Rivers & Streams part of the metric.
If it is NOT included within either layer of the inventory it should be assessed, and entered into the metric, as the appropriate habitat (e.g. modified grassland, cereal crop, temporary lakes, ponds and pools). Any ditches should be recorded separately within the River and Streams part of the metric.
(Add this new inventory is published, you should use existing inventories for floodplain habitats, including the Coastal and Floodplain Grazing Marsh layer of the Priority Habitat Inventory (England) and any local habitat data.
For all other wetland habitats - See UKHab

Condition Assessment Criteria

Condition Achieved (Y/N)

Notes/Justification

CORE CRITERIA - **Applies to all wetland habitat types:**

1

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.
NB - This criterion is essential for achieving good condition.

2

The appearance and composition of the vegetation closely matches characteristics of the specific wetland habitat type (see UKHab definition linked above). Indicator species for the specific wetland habitat type(s) are very clearly and easily visible.

3

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.

4

Cover of scrub and scattered trees less than 30%.

5

Cover of bare ground less than 5%.

6

There is an absence of invasive non-native species (as listed on Schedule 8 of WCA, 1982) and species indicative of sub-optimal condition* make up less than 5% of ground cover.

ADDITIONAL CRITERION - only applicable to Fen and Purple moor grass and rush pasture habitat type:

7a

No more than 25% of the fen area has a continuous cover of litter (i.e. dead vegetation) preventing regeneration.

ADDITIONAL CRITERION - only applicable to Bog habitat type:

7b

Sphagnum and cotton-grasses are at least frequent. Cover of ericaceous dwarf-shrubs* is less than 75%.

ADDITIONAL CRITERION - only applicable to Reeds/beds habitat type:

7c

The reeds/beds has a diverse structure with between 60 and 80% reeds. Other areas may include open water (at least 20%), spongy-rich fen and/or wet woodland.

ADDITIONAL CRITERION - only applicable to Floodplain wetland mosaic (CFDM) habitat type:

7d

All ditches recorded within the habitat achieve Good condition as assessed using the Ditch condition sheet.

Essential criterion 1 achieved (required for good condition Y/N).

Condition Assessment Result

Condition Assessment Score

Number of criteria passed

Score Achieved x 100

IF 6 CRITERIA ACHIEVED

• Passes 5 or 6 of 6 core criteria, INCLUDING essential core criterion 1

Good (3)

• Passes 3 or 4 of 6 core criteria, OR

• Passes 5 of 6 core criteria EXCLUDING essential core criterion 1

Moderate (2)

• Passes 0, 1 or 2 of 6 core criteria

Poor (1)

IF 7 CRITERIA ACHIEVED

• Passes 5 or 6 of 6 core criteria, INCLUDING essential core criterion 1, AND

• Passes additional criterion 7a, 7b, 7c OR 7d where applicable

Good (3)

Passes 4 or 5 of 7 criteria, OR

• Passes 6 of 7 criteria EXCLUDING either essential core criterion 1 or additional criterion 7a, 7b, 7c OR 7d

Moderate (2)

• Passes 0, 1, 2 or 3 of 7 criteria

Poor (1)

Recorded in the National Vegetation Inventory by the National Vegetation Inventory

Notes

Footnote 1 - For fens, specify what fen type is present - alkaline, neutral, acidic/eutrophic, mesotrophic, oligotrophic.

Footnote 2 - Species considered undesirable for this habitat type include: creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, common nettle *Urtica dioica*, docks *Rumex* spp., cherry laurel *Prunus laurocerasus*, common ragwort *Jacobaea vulgaris*.

Footnote 3 - Ericaceous dwarf shrubs include: crowberry *Empetrum nigrum*, cranberry *Vaccinium vitis-idaea*, cranberry *Vaccinium vitis-idaea*, heather *Calluna vulgaris*, cross-leaved heath *Erica tetralix*, bog rosemary *Andromeda polifolia*, bog myrtle *Myrica gale*.

Condition Sheet: WOODLAND Habitat Type						
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						
Site name/location			Onsite/offsite			
Habitat's Central Grid			Unique polygon			
Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)			Limitations (if applicable)			
Habitat Description						
See UKHab This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: https://woodlandwildlifetoolkit.sylva.org.uk/assess						
Condition Assessment Criteria						
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes/Justification	
1 Age distribution of trees ¹	Three age classes present	Two age classes present	One age class present	1		
2 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	Evidence of significant browsing pressure is present in 40% or more of whole woodland	3		
3 Invasive plant species ³	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	2		
4 Number of native tree species	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	2		
5 Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	< 50% of canopy trees and <50% of understory shrubs are native	2		

6	Open space within woodland ⁴	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	2	
7	Woodland regeneration ⁵	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	1	
8	Tree health	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	2	
9	Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	1	
10	Woodland vertical structure ⁶	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	1	
11	Veteran trees ⁷	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1	
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1	
13	Woodland disturbance ⁸	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	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	2	

Total Score

21

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

Suggested enhancement interventions to improve condition score

Notes

All footnotes below refer to the EWBG woodland condition assessment methodology: EWBG (No date). Assessing your Woodland's Condition [online]. Available from: Woodland Wildlife Toolkit (sylva.org.uk)

Footnote 1 - See EWBG method INDICATOR 1 for more information. If tree species is not a birch, cherry or Sorbus: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 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.

Footnote 2 - 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.

Footnote 3 - See EWBG method INDICATOR 3 for more information. Check for presence of the following invasive non-native species: American skunk cabbage *Lysichiton americanus*; Himalayan balsam *Impatiens glandulifera*; Japanese knotweed *Fallopia japonica*; Cherry Laurel *Prunus laurocerasus*; Shalloon *Gaultheria shallon*; Snowberry *Symphoricarpos albus*; Variegated yellow archangel *Lamiasstrum galeobdolon* subsp. *argentatum*; and Rhododendron *Rhododendron ponticum*.

Footnote 4 - 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 (e.g. glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (e.g. tarmac, buildings, rivers). Area is at least 10m wide with less than 20% covered by shrubs or trees.

Footnote 5 - 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, the regeneration indicator is gathers additional information by considering regeneration potential i.e. if seedlings, saplings and young trees are all present that means natural regeneration processes are happening.

Footnote 6 - See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level.

Footnote 7 - This indicator is looking 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.

Footnote 8 - See EWBG method INDICATOR 12 for more information. All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. Veteran trees can be classified if they have four out of the five following features:

1. Rot sites associated with wounds which are decaying >400 cm²;
2. Holes and water pockets in the trunk and mature crown >5 cm diameter;
3. Dead branches or stems >15 cm diameter;
4. Any hollowing in the trunk or major limbs;
5. Fruit bodies of fungi known to cause wood decay.

Footnote 9 - See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery or animal poaching; litter.

Condition Sheet: WOOD-PASTURE & PARKLAND Habitat Type			
UKHab Habitat Type(s)			
Woodland and forest - Wood-pasture and parkland			
Site name/location		Onsite/offsite	
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
See UKHab			
Condition Assessment Criteria		Condition Achieved (V/N)	Notes/Justification
1	Presence of ancient ¹ and / or veteran ² trees.		
2	Trees are of a range of different ages to ensure replacement. Three age classes are present and must include at least one of the following: mature ³ , late-mature ⁴ , ancient or veteran trees.		
3	Presence of standing and / or fallen deadwood: • Wood-pasture - All ancient and veteran trees have standing deadwood, large dead branches, stems and stumps associated with them. • Parkland - 80% of ancient and veteran trees have standing deadwood, large dead branches, stems and stumps associated with them.		
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities, livestock or wild animals, or pests or diseases (e.g. no evidence of poaching, nettles, ground compaction, bare ground under trees or grazing damage to bark and roots).		
5	Ground cover comprises semi-natural grassland or heathland.		
6	Grassland or heathland habitat is subject to an appropriate management regime: • Grassland - 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. • Heathland - There is a range of age classes of heather present, with the following proportions: pioneer heather 10-40%, building/mature heather 20-80%, degenerate heather <30% and dead heather <10%.		
		Number of criteria passed	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 of 6 criteria	Good (3)		
Passes 4 or 5 of 6 criteria	Moderate (2)		
Passes 0, 1, 2 or 3 of 6 criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			

Notes
Footnote 1 - Ancient trees are exceptionally valuable. Attributes can include: its great age in comparison with other trees of the same species; size, especially very wide trunk; condition; biodiversity value as a result of significant wood decay and the habitat created from the ageing process; and cultural and heritage value. Very few trees of any species become ancient. Ancient trees can be classified using the following girth guide at 1.5 m from the ground: • >2.5 m for field maple, rowan, yew, birch, holly and other smaller tree species; • >4 m for oaks, ash, Scot's pine, alder; • >4.5 m for sycamore, lime, horse chestnut, sweet chestnut, elm species, poplar species, beech, willows, other pines and exotics. Footnote 2 - All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. Veteran trees can be classified if they have four out of the five following features: 1. Rot sites associated with wounds which are decaying >400 cm²; 2. Holes and water pockets in the trunk and mature crown >5 cm diameter; 3. Dead branches or stems >15 cm diameter; 4. Any hollowing in the trunk or major limbs; 5. Fruit bodies of fungi known to cause wood decay. Footnote 3 - Mature trees are close to their full height and crown size, these dimensions being determined by species and site factors. Late-mature trees are still close to their full height and crown size while main-stem diameter (which by now is large) increases more slowly.