A3.35: Faunal communities on low energy marine Atlantic infralittoral rock

Summary

This habitat consists of turf-forming communities (predominantly animal, but sometimes algal dominated) on sheltered infralittoral rock in wave and tide-sheltered conditions and full salinity. It is vulnerable to increases in suspended sediment or turbidity levels which can affect filter feeding organisms, as well as to pollution from synthetic organic compounds and heavy metals, and physical damage due to abrasion from static fishing gears. In addition, increases in the wave exposure, either caused by coastal developments or climate change could also be a threat for all wave and tide- sheltered habitats.

Beneficial conservation measures include protection and regulation of fishing methods which damage, or disturb seabed communities as well as measures to maintain water quality, regulate dredging, coastal developments and the construction of hard coastal defence structures. Such measures may be promoted with Marine Protected Areas or integrated coastal zone management plans.

Synthesis

Detailed information on the abundance and extent of this habitat is lacking. Data on the quantity and quality of this habitat, including any historical or recent, trends across the region are unknown. For the purposes of Red List assessment this habitat is therefore considered to be Data Deficient for both the EU 28 and EU 28+.

Overall Category & Criteria								
EU 28 EU 28+								
Red List Category	led List Category Red List Criteria Red List Category Red List Criteria							
Data Deficient - Data Deficient -								

Sub-habitat types that may require further examination

None.

Habitat Type

Code and name

A3.35: Faunal communities on low energy marine Atlantic infralittoral rock

No characteristic photographs of this habitat are currently available.

Habitat description

This habitat is found in tide-sheltered conditions, supporting silty communities with *Laminaria hyperborea* and/or *Saccharina latissima*. It is distinguished by the presence of an abundance of turf-forming species, often animal-dominated, but can sometimes be characterised by algal turf with species such as *Codium elisabethae* and *Halopteris filicina* and coralline crusts.

Indicators of quality:

Both biotic and abiotic indicators have been used to describe marine habitat quality. These include: the presence of characteristic species as well as those which are sensitive to the pressures the habitat may face; water quality parameters; levels of exposure to particular pressure, and more integrated indices which describe habitat structure and function, such as trophic index, or successional stages

of development in habitats that have a natural cycle of change over time.

There are no commonly agreed indicators of quality for this habitat, although particular parameters may have been set in certain situations e.g. protected features within Natura 2000 sites, where reference values have been determined and applied on a location-specific basis.

Characteristic species:

This habitat has yet to be fully defined, so the characterising species, beyond those indicated above, have not been fully determined.

Classification

EUNIS (v1405):

Level 4. A sub-habitat of 'Atlantic infralittoral rock' (A3.3).

Annex 1:

1160 Large shallow inlets and bays

MAES:

Marine - Marine inlets and transitional waters

Marine - Coastal

MSFD:

Shallow sublittoral rock and biogenic reef

EUSeaMap:

Shallow photic rock or biogenic reef

IUCN:

9.2 subtidal rock and rocky reefs

Does the habitat type present an outstanding example of typical characteristics of one or more biogeographic regions?

Unknown

<u>Justification</u>

Geographic occurrence and trends

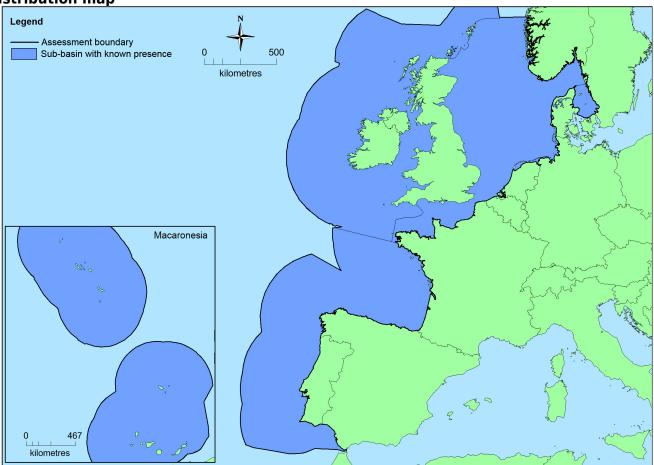
Region	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
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Region	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
North-East Atlantic	Bay of Biscay and the Iberian Coast: Present Celtic Seas: Present Kattegat: Present Greater North Sea: Present Macaronesia: Present	Unknown Km²	Unknown	Unknown

Extent of Occurrence, Area of Occupancy and habitat area

	Extent of Occurrence (EOO)	Area of Occupancy (AOO)	Current estimated Total Area	Comment
EU 28	Unknown Km²	Unknown	Unknown Km²	There is insufficient information for accurate calculation of EOO and AOO.
EU 28+	Unknown Km ²	Unknown	Unknown Km²	There is insufficient information for accurate calculation of EOO and AOO.





This map has been generated using EMODnet data from modelled/surveyed records for the North East Atlantic (and supplemented with expert opinion where applicable) (EMODnet 2010). There are insufficient data to provide a comprehensive and accurate map of the distribution of this habitat or for calculation of EOO and AOO.

How much of the current distribution of the habitat type lies within the EU 28?

Unknown.

Trends in quantity

The trends in quantity of this habitat are unknown.

• Average current trend in quantity (extent)

EU 28: Unknown EU 28+: Unknown

• Does the habitat type have a small natural range following regression?

Unknown Justification

There are insufficient data on this habitat to determine natural range.

• Does the habitat have a small natural range by reason of its intrinsically restricted area?

Unknown *Justification*

There are insufficient data on this habitat to determine natural range.

Trends in quality

The trends in quality of this habitat are unknown.

Average current trend in quality

EU 28: Unknown EU 28+: Unknown

Pressures and threats

There are few specific studies of this habitat however, animal-dominated communities of sheltered infralittoral rock in wave and tide- sheltered conditions and full salinity are vulnerable to damage and deterioration from a number of pressures and threats. These include increases in suspended sediment or turbidity levels which can affect filter feeding organisms, pollution from synthetic organic compounds and heavy metals, with larval stages of some species being particularly sensitive, and physical damage due to abrasion from static fishing gears. Increase in the wave exposure could also be a threat for wave and tide-sheltered habitats in general.

List of pressures and threats

Biological resource use other than agriculture & forestry

Fishing and harvesting aquatic resources
Professional active fishing

Pollution

Pollution to surface waters (limnic, terrestrial, marine & brackish) Marine water pollution

Natural System modifications

Human induced changes in hydraulic conditions

Modification of hydrographic functioning, general

Modification of water flow (tidal & marine currents)

Wave exposure changes

Climate change

Changes in abiotic conditions
Wave exposure changes

Conservation and management

Management of marine activities will be important to control factors leading to the decline of quantity and quality of this habitat. Marine Protected Areas and integrated coastal zone management which can include spatial planning measures and limits on land claim and other activities that alter the tidal regime are examples of beneficial measures. Others are the regulation of the construction of hard coastal defence structures and the maintenance of water quality improvement programmes to reduce the risk of chemical contamination, as well as measures to reduce the impact of climate change and sea level rise.

List of conservation and management needs

Measures related to wetland, freshwater and coastal habitats

Restoring/Improving water quality

Measures related to spatial planning

Other spatial measures Establish protected areas/sites

Conservation status

Annex 1:

1160: MATL U2, MMAC FV

When severely damaged, does the habitat retain the capacity to recover its typical character and functionality?

Unknown.

Effort required

Red List Assessment

Criterion A: Reduction in quantity

Criterion A	A1	A2a	A2b	А3	
EU 28	unknown %	unknown %	unknown %	unknown %	
EU 28+	unknown %	unknown %	unknown %	unknown %	

There is insufficient information to determine any overall trends in quantity of this habitat in the North East Atlantic. This habitat has been assessed as Data Deficient under criterion A.

Criterion B: Restricted geographic distribution

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Criterion B		B1			B2				B3
Criterion b	EOO	a	b	С	A00	a	b	С	CO
EU 28	unknown Km²	Unknown	Unknown	unknown	unknown	Unknown	Unknown	unknown	unknown
EU 28+	unknown Km²	Unknown	Unknown	unknown	unknown	Unknown	Unknown	unknown	unknown

Significant shortcomings in available mapping data mean that reliable figures for EOO and AOO cannot be derived at the present time. There is also a lack of information on trends. This habitat has therefore been assessed as Data Deficient under criterion B.

Criterion C and D: Reduction in abiotic and/or biotic quality

Criteria	C/	D1	C/	D2	C/D3		
C/D	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity	
EU 28	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %	
EU 28+	unknown %	unknown %	unknown %	Unknown %	unknown %	unknown %	

	C	1	C	2	C3		
Criterion C	Extent affected	Relative Extent Relative severity affected severity		Extent affected	Relative severity		
EU 28	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %	
EU 28+	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %	

	D1		I	D2	D3		
Criterion D	Extent affected			Relative severity	Extent affected	Relative severity	
EU 28	unknown %	unknown%	n% unknown % unknown%		unknownnown %	unknown%	
EU 28+	unknown %	unknown%	unknown %	unknown%	unknown %	unknown%	

Experts consider there to be insufficient data on which to assess criteria C/D.

Criterion E: Quantitative analysis to evaluate risk of habitat collapse

Criterion E	Probability of collapse
EU 28	unknown
EU 28+	unknown

There is no quantitative analysis available to estimate the probability of collapse of this habitat type.

Overall assessment "Balance sheet" for EU 28 and EU 28+

	A1	A2a	A2b	A3	B1	B2	В3	C/D1	C/D2	C/D3	C1	C2	C3	D1	D2	D3	Е
EU28	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD
EU28+	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD

Overall Category & Criteria								
EU 28 EU 28+								
Red List Category	Red List Criteria	Red List Category	Red List Criteria					
Data Deficient - Data Deficient -								

Confidence in the assessment

Low (mainly based on uncertain or indirect information, inferred and suspected data values, and/or limited expert knowledge)

Assessors

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Contributors

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Date of assessment

25/08/2005

Date of review

15/01/2016

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