A1.2_PT9: Seaweeds on moderately exposed shores

Summary

This intertidal rocky habitat in areas exposed to wave action is characterised by a calcareous turf and colonised by seaweeds on both horizontal and vertical surfaces. These seaweeds can form a dense cover with the fronds of the algae as well as overhangs, cracks and crevices in the rock providing a habitat for mollucs, amphipods, polychaetes and sponges. Little is known about potential pressures and threats to this habitat. Trampling and pollution have been identified as possible issues of concern but there is insufficient information to assess the significance of these threats or to identify specific management measures.

Synthesis

There is a lack of information on the extent of this habitat and on any trends in quantity or quality over the last 50 years. For the purposes of Red List assessment it 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	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

A1.2_PT9: Seaweeds on moderately exposed shores

No characteristic photographs currently available.

Habitat description

This habitat is a calcareous turf on areas of intertidal rock exposed to wave action. It includes the biotope characterised by *Chondracanthus acicularis* which occurs on horizontal and vertical surfaces where it forms an extremely dense herbaceous stratum together with other species such as *Chondracanthus teedei, Gelidium spinosum, Pterosiphonia complanata, Plocamium cartilagineum* and *Corallina elongata.*These help prevent desiccation during the emersion periods. The fronds of the algae also provide habitat for several polychaetes, amphipods and molluscs.

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. Indicators which have been

developed for the assessment of ecological quality of coastal water bodies for the Water Framework Directive (WFD) that are relevant to this habitat include a consideration of macroalgae species richness, proportions of different taxa of algae present, and the abundance and coverage of the rocky surfaces by typical species.

Characteristic species:

Corallina elongata, Chondracanthus acicularis, Ceramium spp.*, Laurencia* spp., *Haliptilon virgatum.* Several epibionts occur on *C. acicularis*, such as the bryozoans *Aetea anguina, Scrupocellaria reptans, Celleporella hyalina* and *Walkeria uva*, and the cnidarian *Laomedea flexuosa*. These species are also present on the thalli of *C. teedei*, together with *Fenestrulina malusii, Haplopoma bimucronatum* and *Beania mirabilis. H. bimucronatum* and the foraminifere *Miniacina miniacea* occur on *C. elongata*.

The encrusting stratum as well as the rock are perforated by several organisms while others occupy the existing cavities. These are mainly sponges: *Cliona celata, Pione vastifica* and *Stelletta hispida*, polychaetes: *Dipolydora cf. coeca* and *Dodecaceria concharum*, molluscs: *Lithophaga lithophaga*, *Rocellaria dubia*, and sipunculids: *Phascolosoma (Phascolosoma) granulatum* and *Aspidosiphon (Aspidosiphon) muelleri muelleri*. The fronds of the algae provide habitat for several polychaetes, amphipods and molluscs, from which *Barleeia unifasciata, Hiatella arctica, Musculus costulatus* and juveniles of *Mytilus galloprovincialis* are the commonest ones. The sponge *Hymeniacidon perlevis*, serpulid polychaetes such as *Spirorbis* sp. and *Spirobranchus* spp., and the cirriped *Balanus perforatus*, occur attached on the rock together with *C. acicularis*.

Classification

EUNIS (v1405):

Proposed new level 4 to accommodate level 5 seaweed units on moderately exposed eulittoral rock. A sub-habitat of ‘Moderate energy littoral rock’ (A1.2).

Annex 1:

1170 Reefs

MAES:

Marine - Marine inlets and transitional waters

Marine - Coastal

MSFD:

Littoral rock & biogenic reef

EUSeaMap:

Not mapped

IUCN:

12.1 Rocky shoreline

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

Unknown

Justification

Turfs are important features of warm temperate rocky shores but there is insufficient information to determine whether this habitat is an outstanding example of typical characteristics of this regional sea.

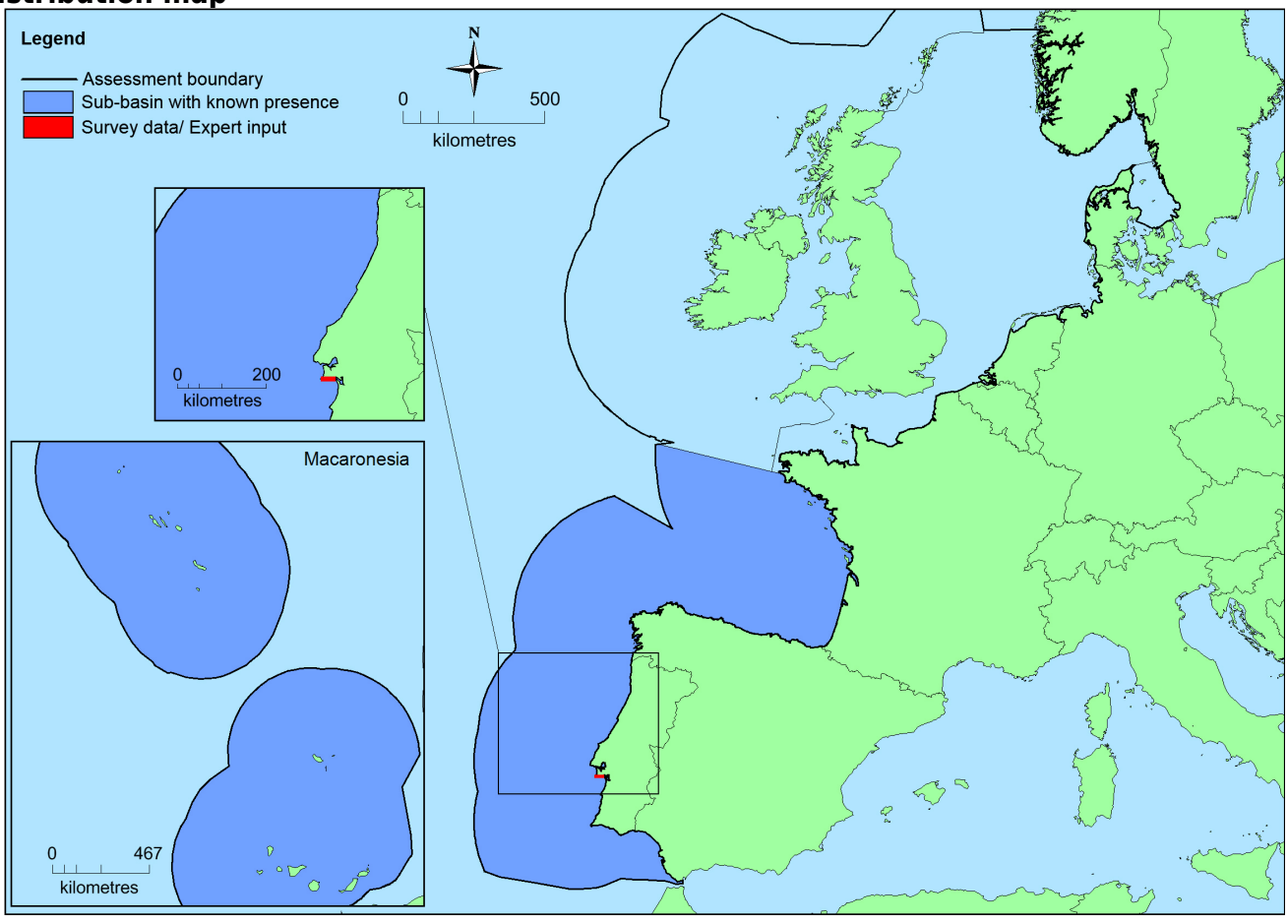
Geographic occurrence and trends

Region	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
North-East Atlantic	Bay of Biscay and the Iberian Coast: Present Macaronesia: Present	Unknown Km^2	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 Km^2	unknown	unknown Km^2	Insufficient records for reliable estimate.
EU 28+	unknown Km^2	unknown	unknown Km^2	Insufficient records for reliable estimate.

Distribution map



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

Local and/or seasonal factors often exert a substantial influence on intertidal habitats making it difficult to distinguish any long-term trend across the region. This is complicated further because differences between localities are often linked to differences in geographical latitude and, therefore, to differences in climatic traits like temperature.There is insufficient data on which to make an assessment of historical, recent or future trends in quantity of this habitat at the present time.

- 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
  This habitat is present on the mainland coast of Portugal. It is believed to occur around the Azores. If that is the case it does not have a small natural range however no data are currently available to confirm this distribution.
- Does the habitat have a small natural range by reason of its intrinsically restricted area?
  Unknown
  Justification
  This habitat is present on the mainland coast of Portugal. It is believed to occur around the Azores. If that is the case it does not have a small natural range however no data are currently available to confirm this distribution.

Trends in quality

Local and/or seasonal factors often exert a substantial influence on intertidal habitats making it difficult to distinguish any long-term trend across the region. This is complicated further because differences between localities are often linked to differences in geographical latitude and, therefore, to differences in climatic traits like temperature. There is insufficient data on which to make an assessment of historical, recent or future trends in quality of this habitat at the present time.

- Average current trend in quality
  EU 28: Unknown
  EU 28+: Unknown

Pressures and threats

There are few studies on the pressures and threats to this habitat. Trampling and pollution have been identified as potential threats but there is insufficient information to assess the significance of these threats at the present time.

List of pressures and threats

-

Conservation and management

No specific management measures have been identified for this habitat due to a lack of information on

potential pressures and threats.

List of conservation and management needs

-

Conservation status

Annex 1:

1170: 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	A3
EU 28	unknown %	unknown %	unknown %	unknown %
EU 28+	unknown %	unknown %	unknown %	unknown %

There is insufficient information to determine any trends in quanitity of this habitat. This habitat is therefore assessed as Data Deficient under criterion A for both the EU 28 and EU 28+.

Criterion B: Restricted geographic distribution

Criterion B	B1				B2				B3
	EOO	a	b	c	AOO	a	b	c	
EU 28	Unknown Km^2	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
EU 28+	Unknown Km^2	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

This habitat most probably has a large range occuring along the mainland coast of South West Portugal as well as in the Macaronesian islands of the Azores but records from the Azores and other Macaronesian islands are currently lacking. 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/D	C/D1		C/D2		C/D3	
	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 %

Criterion C	C1		C2		C3	
	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 %

Criterion D	D1		D2		D3	
	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%

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.

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

	A1	A2a	A2b	A3	B1	B2	B3	C/D1	C/D2	C/D3	C1	C2	C3	D1	D2	D3	E
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

S. Gubbay.

Contributors

North East Atlantic Working Group: N. Sanders, N. Dankers, J. Forde, K. Fürhaupter, S. Gubbay, R. Haroun Tabraue, F.Otero-Ferrer, G. Saunders and H. Tyler-Walters.

Reviewers

S.Beal.

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30/10/2015

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14/12/15

References

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