

Epibenthic macrocommunity on Baltic infralittoral sand

Summary

This habitat is poorly study. It is a benthic habitat in the photic zone where the predominant substrate is sand, characterised by epibenthic communities on Baltic infralittoral sand. Although no perennial attached vegetation is present, perennial unattached algae or annual algae may occur. Threats and pressures are unknown at present and no conservation or management measures have been specifically identified for this habitat.

Synthesis

This habitat was not evaluated by HELCOM in the 2013 Red List Habitat Assessments. There remains insufficient information to make an assessment therefore it is considered to be Data Deficient for both the EU 28 and EU 28+ at the present time.

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

Epibenthic macrocommunity on Baltic infralittoral sand

Description

No characteristic photographs of this habitat currently available.

Habitat description

This is a Baltic Sea benthic habitat in the photic zone where at least 90% of the substrate is sand according to the HELCOM HUB classification. No perennial attached vegetation is present but perennial unattached algae or annual algae may occur and cover more than 10% of the substrate. The habitat could occur across all salinity regimes in the Baltic and in areas moderately exposed to currents or wave action.

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:

Insufficiently studied to list characteristic species at the present time.

Classification

EUNIS:

The closest correspondence in EUNIS (2004) level 4 is A5.21 Sublittoral sand in low or reduced salinity.

Annex 1:

The relationship between HUB biotopes and Annex 1 habitats has not yet been mapped by HELCOM, however this habitat may occur in the following Annex 1 habitats:

1110 Sandbanks slightly covered all the time

1130 Estuaries

1160 Large shallow inlets and bays

1650 Boreal Baltic narrow inlets

MAES:

Marine - Marine inlets and transitional waters

Marine - Coastal

MSFD:

Shallow sublittoral sand

EUSEaMap:

Shallow sands

IUCN:

9.4 Subtidal Sandy

Other relationships:

Level 5 of the HELCOM HUB classification (2013):

AA.J1V Baltic photic sand characterised by mixed epibenthic macrocommunity.

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

Unknown

Justification

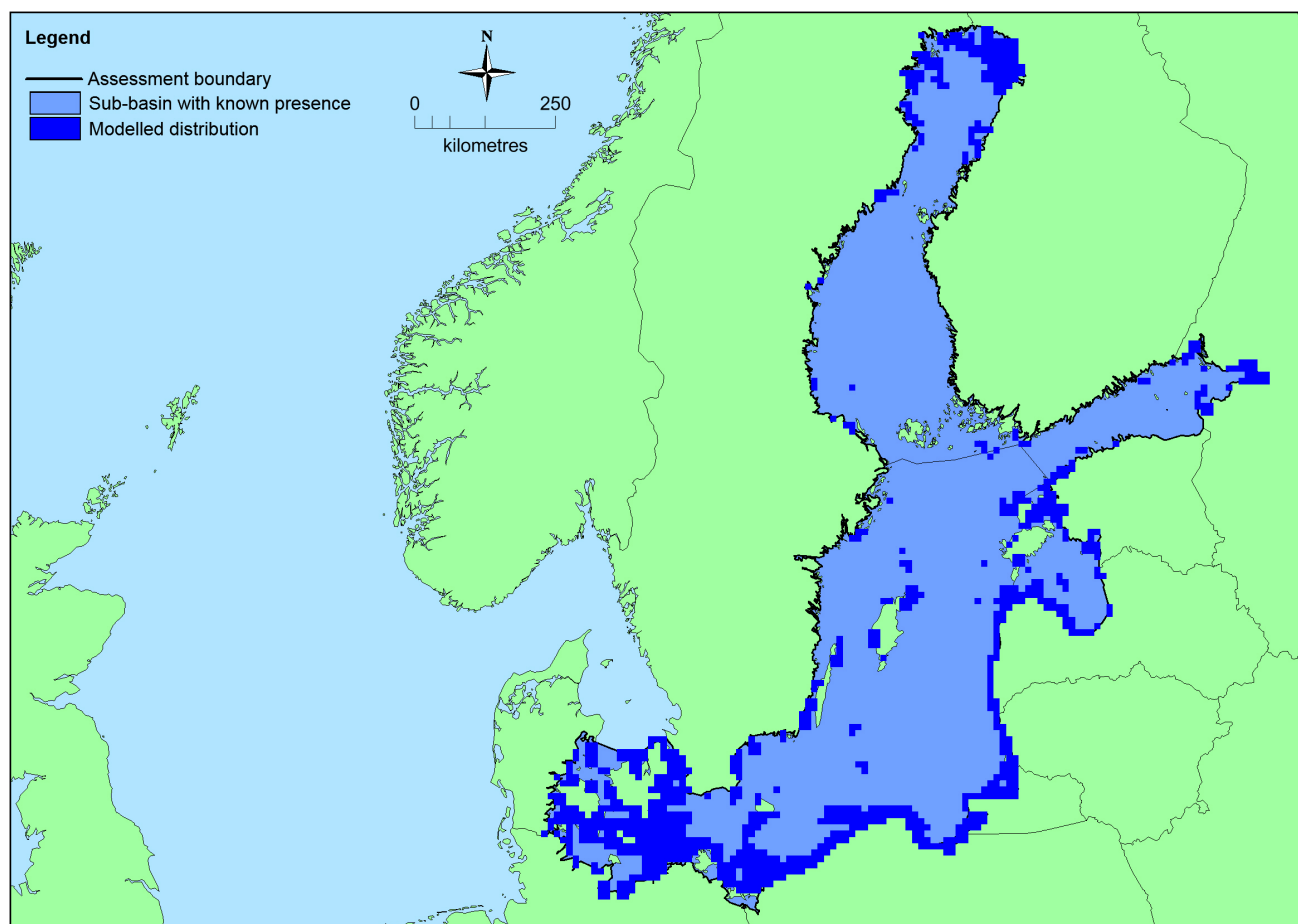
Geographic occurrence and trends

Region	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
<i>Baltic Sea</i>	Baltic Proper: Present Belt Sea: Present Gulf of Bothnia: Present Gulf of Finland: Present The Sound: Present Gulf of Riga: 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
<i>EU 28</i>	Unknown Km ²	Unknown	Unknown Km ²	
<i>EU 28+</i>	Unknown Km ²	Unknown	Unknown Km ²	

Distribution map



There are insufficient data to provide a comprehensive and accurate map of the distribution of this habitat. This map has therefore been generated using the modelled data available on EMODnet for EUNIS level 3 habitats in the Baltic Sea (EMODnet, 2010). This means it indicates potential areas in which this habitat may occur, not the actual distribution of this EUNIS level 4 habitat. EOO and AOO cannot be calculated at the present time.

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

This habitat is believed to be present in the EU 28+ (Russia) however the percentage is unknown.

Trends in quantity

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

Trends in quality

Unknown

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

Pressures and threats

No pressures and threats have been specifically identified for this habitat.

List of pressures and threats

-

Conservation and management

No specific conservation and management measures have been identified for this habitat.

List of conservation and management needs

-

Conservation status

Annex 1:

1110: MBAL U1

1130: MBAL U2

1160: MBAL U2

1650: MBAL U2

HELCOM (2013) assessments:

1110 VU C1

1130 CR C1

1160 VU C1

1650 VU C1

This habitat was not evaluated by HELCOM in the 2013 Red List Assessment.

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 %

Experts considered there to be insufficient data on which to assess Criterion A.

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

Lack of data means that EOO or AOO cannot be calculated or estimated at the present time although as the habitat is considered likely to be present in all the Baltic Sea sub-basins the EOO may exceed 50,000km².

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 considered 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 that estimates the probability of collapse of this habitat type.

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

Overall Category & 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

HELCOM RED LIST Biotope Expert Team 2013 and Baltic Sea Working Group for the European Red List of Habitats 2014 and 2015.

Reviewers

T.A. Haynes.

Date of assessment

09/07/2015

Date of review

21/12/15

References

HELCOM, 2013. *Red List of Baltic Sea underwater biotopes, habitats and biotope complexes*. Avellan, L. (Ed). Helsinki, Finland.