

A5.22 Estuarine Pontic infralittoral sand

Summary

The habitat is present in the north-west Black Sea at the mouths of large rivers such as the Dniepro-Bugsky and the Danube. It is not present in the Sea of Marmara. Eutrophication is the main historic pressure on this habitat. Additional pressures include: coastal protection, sand extraction and chemical pollution. Conservation and management measures relevant to this habitat include: measures to maintain physical and biological integrity, improvement of water quality, pollution event response strategies and raised public awareness.

Synthesis

Detailed information on the abundance and extent of this habitat is lacking. Information on the quantity and quality of this habitat including historical or recent trends is unknown. For the purposes of Red List assessment this habitat is considered to be Data Deficient.

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

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There are currently no photographs of this habitat available.

Habitat description

Estuarine infralittoral sands in front of the large rivers in the north-west Black Sea form an important habitat type. The largest river estuaries in the Black Sea are the Dniepro-Bugsky estuary in Ukraine and the estuarine waters of the Danube pro-Delta in Romania. Here numerous individual river mouths form a transition between the Danube Delta and the Black Sea. Underwater hydraulic dunes in the 'Danube mouths' are an important feature in this area. These are areas with reduced salinity, infauna abundance/diversity, feeding grounds for juvenile fish, birds, a naturally mobile habitat. Smaller locations are the coastal zone of Kinburnskaya spit (Tendrovsky Bay), Grigorievsky, Tiligulsky, Berezansky, Kiziltakskiy estuaries.

Indicators of quality:

Biomass of infauna is one possible parameter that could be used to indicate quality of this habitat. At the mouth of Dniepro-Bugsky estuary average density of macrozoobenthos on sands is 80 ind/m², biomass – 11,28 g/ m², in the semi open estuaries with significant influence of the fresh waters the level of biomass of macrozoobenthos on the sands are higher (255 – 439,9 g/ m²) due to the distribution of bivalve mollusks.

Characteristic species:

Mostly euryhaline species: - *Gammarus marinus*, *Idothea tricuspidata*, *Dikerogammarus haemobaphes*, *Palaemon adspersus*, *Cerastoderma glaucum*, *Bittium reticulatum* are common. The biocenosis of sands with *Cerastoderma* and *Monodacna* is typical for Grigorievsky, Tiligulsky and Berezansky estuaries.

Classification

This habitat may be equivalent to, or broader than, or narrower than the habitats or ecosystems in the following typologies.

EUNIS (v1405):

Level 4. A sub-habitat of A5.2 - Shallow Sublittoral/infralittoral sand

Annex 1:

1110 Sandbanks slightly covered all the time

1130 Estuaries

MAES:

Marine- Marine inlets and transitional waters

Marine- Coastal

MSFD:

Shallow sublittoral sediment (coarse, sand, mud, mixed)

EUSeaMap:

Shallow coarse or mixed sediments

IUCN:

9.4 Subtidal sandy

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

Unknown

Justification

There is insufficient knowledge and information on this habitat to state whether it is an outstanding example of this biogeographic region.

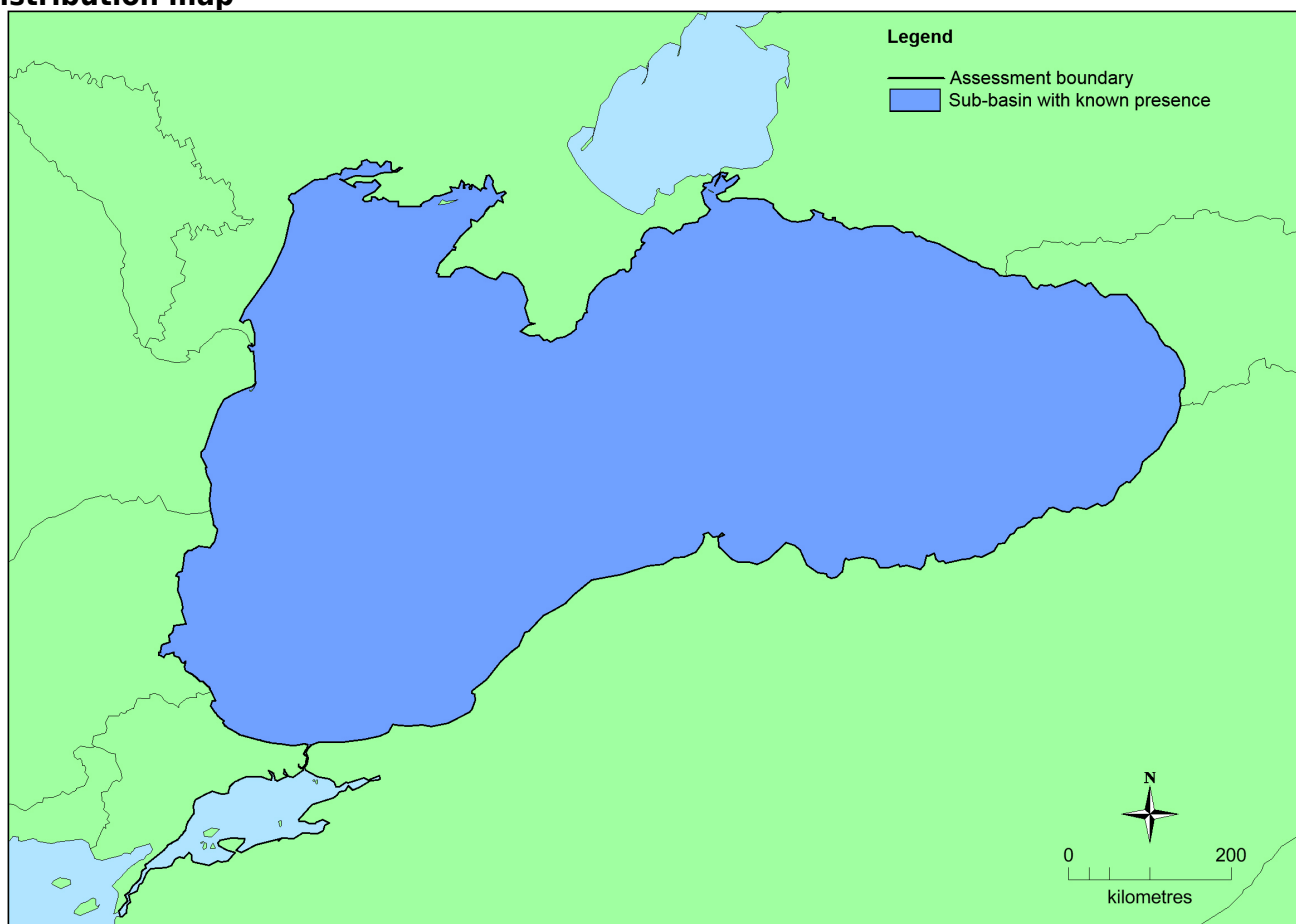
Geographic occurrence and trends

Region	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
<i>Black Sea</i>	Black Sea: 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	The habitat is known to occur in the Black Sea but there is insufficient data to accurately calculate EOO and AOO.
EU 28+	Unknown Km ²	Unknown	Unknown Km ²	The habitat is known to occur in the Black Sea but there is insufficient data to accurately calculate EOO and AOO.

Distribution map



There is insufficient data to produce a map of the distribution of this habitat.

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

It is unknown how much of this habitat is hosted by the EU28 in the Black Sea.

Trends in quantity

There is insufficient data to accurately assess changes in quantity of the habitat

- 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

The habitat is known to occur in the Black Sea but there is insufficient data to accurately calculate EOO

and AOO. There is insufficient data to accurately assess whether the habitat has undergone a significant decline (>25% of extent) in the last 50 years.

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

Unknown

Justification

There is insufficient data and knowledge on this habitat to state whether it has a small natural range by reason of an intrinsically restricted area.

Trends in quality

There is insufficient data to accurately assess changes in quality of the habitat

- Average current trend in quality

EU 28: Unknown

EU 28+: Unknown

Pressures and threats

Estuarine infralittoral sands in front of the large rivers in the north-west Black Sea form an important habitat type. The largest river estuaries in the Black Sea are the Dniepro-Bugsky estuary in Ukraine and the estuarine waters of the Danube pro-Delta in Romania. Here numerous individual river mouths form a transition between the Danube Delta and the Black Sea. Underwater hydraulic dunes in the 'Danube mouths' are an important feature in this area. These are areas with reduced salinity, infauna abundance/diversity, feeding grounds for juvenile fish, birds, a naturally mobile habitat. Smaller locations are the coastal zone of Kinburnskaya spit (Tendrovsky Bay), Grigorievsky, Tiligulsky, Berezansky, Kiziltakskiy estuaries.

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List of pressures and threats

Pollution

Nutrient enrichment (N, P, organic matter)

Input of contaminants (synthetic substances, non-synthetic substances, radionuclides) - diffuse sources, point sources, acute events

Natural System modifications

Human induced changes in hydraulic conditions

Removal of sediments (mud...)

Extraction of sea-floor and subsoil minerals (e.g. sand, gravel, rock, oil, gas)

Conservation and management

Conservation and management measures which would benefit this habitat include implementing measures to maintain physical and biological integrity, including control and regulation of discharges to the marine environment, improvement of water quality management outside EU member states, coastal development controls, contingency plans to be followed in the event of a major pollution incident, raised public awareness of ecological value and vulnerability of the habitat.

List of conservation and management needs

Measures related to marine habitats

Other marine-related measures

Measures related to spatial planning

Establish protected areas/sites

Measures related to urban areas, industry, energy and transport

Other measures

Conservation status

Annex 1:

1130: MBLS U1

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

There is insufficient data and knowledge of this habitat to assess its capacity to recover

Effort required

10 years
Unknown

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 data on changes in quantity of this habitat to undertake an assessment using 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

The precise extent of the habitat is unknown. Therefore there is insufficient data to produce EOO and AOO

figures.

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 to conduct an assessment using 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
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. Beal, G. Komakhidze, D. Micu, V. Mihneva, N. Milchakova, B. Yokes

Contributors

S. Beal, G. Komakhidze, D. Korolesova, D. Micu, V. Mihneva, N. Milchakova, K. Vera, B. Yokes

Reviewers

S. Gubbay

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