

**HELCOM lists of threatened and/or declining
species and biotopes/habitats in the Baltic
Sea area**



Helsinki Commission

Baltic Marine Environment Protection Commission

Baltic Sea Environment Proceedings No. 113

**HELCOM lists of threatened and/or
declining species and biotopes/
habitats in the Baltic Sea area**

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Helsinki Commission
Baltic Marine Environment Protection Commission

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Cover photo: Baltic low salinity reef community (*Fucus serratus* – stands with *Gobius flavescens*) on top of *Adler Ground*
(photo BfN © Krause & Hübner)

For bibliographic purposes this document should be cited to as:
HELCOM 2006: HELCOM lists of threatened and/or declining species and biotopes/habitats in the Baltic Sea area
Baltic Sea Environmental Proceedings, No. 113.

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Layout: Hanna Paulomäki

ISSN

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Preface

Pressures on the Baltic marine environment from human activities have resulted in losses of sensitive marine habitats and reductions in populations, including many fish and marine mammal species, in several areas.



The first joint ministerial meeting of the Helsinki and OSPAR Commissions, held in Bremen 2003, decided to continue the efforts already begun in identifying species and habitats which are threatened and/or declining or in immediate need of protection, and to assess human activities adversely impacting biological diversity or certain species or habitats (HELCOM/OSPAR 2003). This publication of the HELCOM lists of threatened and/or declining species and biotopes/habitats is a first step in order to fulfil these commitments.

The German Federal Agency for Nature Conservation (BfN) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) organized and hosted an Expert Workshop from 1 to 3 March 2006 in Berlin to finalise the lists. The Workshop was co-chaired by Dieter

Boedeker and Henning von Nordheim (BfN, Germany). Species and biotopes/habitats were selected by international Baltic Sea experts who based their knowledge in most cases on national Red Lists. The evidence in support of those selections were examined by the Contracting Parties and the lists were adopted by HELCOM in December 2006.

In addition, the experts compiled draft fact sheets for most of the species and biotopes/habitats on the lists which can be viewed on and downloaded from the HELCOM website (http://www.helcom.fi/environment2/biodiv/endangered/en_GB/fact_sheets/).

Only species and biotopes/habitats which have a clear relation to the Baltic Sea marine area or depend on it are included on the lists. Widely distributed freshwater species or



biotopes/habitats are therefore generally not considered. Further information whether listed species and biotopes/habitats are threatened and/or declining is included in the fact sheets.

Introduction

The Baltic Sea shows a unique combination of marine and freshwater species adapted to the brackish conditions. The efficient protection of Baltic Sea biodiversity is one of the prerequisites for its marine ecosystems to be resilient and to be able to adapt to changing environmental conditions.

Article 15 of the Helsinki Convention on nature conservation and biodiversity urges the Contracting Parties to take all appropriate measures with respect to the Baltic Sea Area and its coastal ecosystems influenced by the Baltic Sea to conserve natural habitats and biological diversity and to protect ecological processes.

The 2007 HELCOM Baltic Sea Action Plan includes the goal to achieve the favourable status of marine biodiversity as well as ecological objectives such as “thriving and balanced communities of plants and animals” and “viable populations of species”.

The aim of the HELCOM lists of threatened and/or declining species and biotopes/



Figure 1. Baltic Sea regions covered by the HELCOM lists of threatened and/or declining species and biotopes/habitats in the Baltic Sea area .

habitats is to report on species and biotopes/ habitats which are in urgent need of protective measures. Whilst "Red Lists" usually represent an threat assessment of all species and/or habi-

Red lists and the present lists guide HELCOM and Contracting Parties in setting priorities for further work on marine conservation and protection of marine biodiversity. HELCOM has al-



Cottus gobio

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tats of a certain region and include also features with moderate protection urgency, the present lists can be used when elaborating more detailed red lists of all species in the Baltic Sea marine area and for an update of the HELCOM red list of biotopes (HELCOM 1998).

ready adopted the HELCOM red list of threatened and declining species of lampreys and fishes of the Baltic Sea (HELCOM 2007), and in the HELCOM red list of marine and coastal biotopes and biotope complexes of the Baltic Sea, Belt Sea and Kattegat (HELCOM 1998).

Lists

A: HELCOM list of threatened and/or declining species of the Baltic Sea area

B: HELCOM list of threatened and/or declining habitats/biotopes of the Baltic Sea area

A: HELCOM LIST OF THREATENED AND/OR DECLINING SPECIES OF THE BALTIC SEA AREA

		HELCOM REGIONS WHERE SPECIES IS PRESENT (X) OR PROBABLY EXTINCT (0)																			
		Bothnian Bay	The Quark	The Bothnian Sea	Åland Sea	Archipelago Sea	Gulf of Finland	Gulf of Riga	The Northern Baltic Proper	Western Gotland Basin	Eastern Gotland Sea	The Southern Baltic Proper	The Gulf of Gdansk	Bay of Mecklenburg	Kiel Bay	Little Belt	Great Belt	The Sound	Kattegat		
Scientific name	Common English name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Regions where under threat and/or in decline	Remarks
ALGAE																					
<i>Chara horrida</i>					x	x	x	x	x	x		x								D, E, F, H, I, K, M	
<i>Chara tomentosa</i>	Coral stonewort		x	x	x	x	x	x	x	x				x						F*	* Not threatened in Finland
<i>Chara braunii</i>	Braun's stonewort	x	x*	x**			x							0	x					A, B, C, F	*No observations in Finnish waters **No observations in Swedish waters
<i>Chara connivens</i>	Convergent stonewort				x			x	x					0	0					D, H	
<i>Lamprothamnium papulosum</i>	Foxtail stonewort													0		x	x	0	x	O, P, R	
Phaeophyceae																					
<i>Fucus serratus</i>	Serrated wrack												x		x	x	x	x	x	M, N	
<i>Fucus vesiculosus</i>	Bladder wrack		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	F*, L, N	* Not threatened in Finland
Rhodophyceae																					
<i>Furcellaria lumbricalis</i>	Black carrageen			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	L, M, N, J	
VASCULAR PLANTS																					
<i>Zostera marina</i>	Eelgrass				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	L, M, N, O, P, Q, R	
<i>Zostera noltii</i>	Dwarf eelgrass												x	x	x	x	x		x	M, N, R	
<i>Alisma wahlenbergii</i>		x	0	0			0													A	
<i>Hippuris tetraphylla</i>		x	?	?	0	0	0													A, B, C*	* Status not clear in Sweden ? No actual verifications (after 1950)

Scientific name	Common English name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Regions where under threat and/or in decline	Remarks
INVERTEBRATES																					
<i>Bivalvia</i>																					
<i>Cerastobyssum hauiense</i>	Thinshelled cockle											x	x	x		x	x	x	x	L, M, Q	
<i>Mya truncata</i>	Blunt gaper												x	x	x	x	x	x		M, Q, R	
<i>Crustacea</i>																					
<i>Monoporeia affinis</i>		x	x	x	x	x	x	x	x	x	x	x	x							F*, G, H, K	* Due to oxygen depletion
<i>Pontoporeia femorata</i>			x	x	x	x	x	x	x	x	x	x	x					x	x	M, F*, G, H	* Due to oxygen depletion
<i>Saduria entomon</i>	Skorv	x	x	x	x	x	x	x	x	x	x	x	x							K	
<i>Coleoptera</i>																					
<i>Macroplea pubipennis</i>		?	?	?	?	x	x													Throughout its range	? No actual observations exist
<i>Macroplea mutica</i>		x	x	x	x	x	x						x	x						Throughout its range*	* Not threatened in Finland
BIRDS																					
<i>Gavia arctica</i>	Black-throated Diver (wintering)				x	x		x	x	x	x	x	x	x	x	x	x	x	x	K, L	Annex I EC Birds Directive
<i>Gavia stellata</i>	Red-throated Diver (wintering)				x	x		x	x	x	x	x	x	x	x	x	x	x	x	K, L	Annex I EC Birds Directive
<i>Podiceps auritus</i>	Horned Grebe (wintering)											x	x	x						K, L	Annex I EC Birds Directive
<i>Tadorna tadorna</i>	Shelduck (breeding)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	K, L, M	
<i>Mergus serrator</i>	Red-breasted Merganser (breeding)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	G, M	
<i>Melanitta fusca</i>	Velvet Scoter (breeding)	x	x	x		x	x		x	x										E*	* Not threatened in Finland
<i>Polysitca stelleri</i>	Steller's Eider (wintering)				x	x			x	x	x	x								K	Annex I EC Birds Directive
<i>Larus fuscus fuscus</i>	Lesser Black-backed Gull (breeding)	x	x	x	x	x	x	x	x	x										A,B,C,D,E,F,G,H,I	
<i>Sterna albifrons</i>	Little Tern (breeding)	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x	A, E, G, I, J, K, L, M, N	Annex I EC Birds Directive
<i>Sterna caspia</i>	Caspian Tern (breeding)	x	x	x	x	x	x	x	x	x	x									A, B, C, D, E, F, G, H, I, K	Annex I EC Birds Directive
<i>Sterna sandvicensis</i>	Sandwich Tern								x	x	x	x	x	x	x	x	x	x	x	K, L, M, N	Annex I EC Birds Directive
<i>Cephus grylle</i>	Black Guillemot (breeding/wintering)		B	B	x	x	B	W	W	W	W	W								Breeding: B*, C*, D*, E*; Wintering: K	* Not threatened in Finland B: only breeding; W: only wintering
<i>Calidris alpina schinzii</i>	Dunlin (breeding)	x	x	x	x	x	x	x			x	x	x	x	x					A, B, C, D, E, F, K, L, M, N	

Scientific name	Common English name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Regions where under threat and/or in decline	Remarks
FISHES AND LAMPREYS																					
<i>Lampetra fluviatilis</i>	River lamprey	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	K, L, M, N, O, P, Q, R	Annexes II and V EC Habitats Directive
<i>Petromyzon marinus</i>	Sea lamprey	x*	x*	x*	x*	x*	x*	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range except I	Annexes II and V EC Habitats Directive * Occurring temporally in Finnish waters
<i>Lamna nasus</i>	Porbeagle									x	x	x	x	x	x	x	x	x	x	Throughout its range	
<i>Scyliorhinus canicula</i>	Small-spotted catshark																		x	R	
<i>Squalus acanthias</i>	Dog shark												x	x	x	x	x	x	x	Throughout its range	
<i>Amblyraja radiata</i>	Thorny skate														x	x	x	x	x	Throughout its range	
<i>Dipturus batis</i>	Skate														x	x	x	x	x	Throughout its range	
<i>Raja montagui</i>	Spotted ray																		x	R	
<i>Acipenser oxyrinchus</i>	Baltic sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Very likely almost extinct throughout its range	1996 one female sturgeon was caught in Estonian waters. Re-establishment programmes and measures in process
<i>Acipenser sturio</i>	Atlantic sturgeon																		0	Extinct	Annexes II and IV EC Habitats Directive, extinct at present
<i>Anguilla anguilla</i>	European eel	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	
<i>Alosa alosa</i>	Allis shad									x	x	x	x	x	x	x	x	x	x	Throughout its range	Annexes II and V EC Habitats Directive
<i>Alosa fallax</i>	Twaite shad	x*	x*	x*	x*	x*	x*	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	Annexes II and V EC Habitats Directive * Occurs in Finnish waters occasionally
<i>Clupea harengus subsp.</i>	Autumn-spawning herring		x	x	x	x	x				x	x	x	x	x	x	x			J, K, L, M, N, O, P	
<i>Gobitis taenia</i>	Spined loach						x	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	Annex II EC Habitats Directive, Finnish population is excluded
<i>Salmo salar</i>	Atlantic salmon	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	Annexes II and V EC Habitats Directive only for freshwater habitats
<i>Coregonus sp.</i>	White fish/houting (anadromous forms)		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	The taxonomy of whitefish populations in the Baltic Sea is scientifically discussed in the fact sheets
<i>Syngnathus acus</i>	Great pipefish																		x	R	
<i>Gadus morhua</i>	Cod						x	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	
<i>Pollachius pollachius</i>	Pollack							x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	
<i>Cottus gobio</i>	Miller's thumb	x	x	x	x	x	x	x	x	x	x	x	x	x						F-M	Annex II EC Habitats Directive, Finnish population is excluded. Not threatened in Finland and Sweden
<i>Lumpenus lampretaeformis</i>	Snake blenny						x	x	x	x	x	x	x	x	x	x	x	x	x	F*, G, H, I, J, K, L, M, N, O, P, Q	* In Finland lack of data. In Sweden data other than from Skagerrak and Kattegat are old (before 1950)
<i>Sebastes viviparus</i>	Small redfish																		x	R	

Scientific name	Common English name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Regions where under threat and/or in decline	Remarks
MAMMALS																					
<i>Halichoerus grypus balticus</i>	Grey seal	x	x	x	x	x	x	x	x	x	x	x	x	x						J, K, L, M	Annexes II and V EC Habitats Directive
<i>Phoca vitulina vitulina</i>	Harbour (common) seal											x	x	x	x	x	x	x		K, L, M, N, O, P	Annexes II and V EC Habitats Directive
<i>Phoca hispida botnica</i>	Ringed seal	x	x	x	x	x	x	x	x											Throughout its range*	Annexes II and V EC Habitats Directive * Status unknown for Finnish parts of Gulf of Finland and Archipelago Sea, not threatened in Finnish parts of regions A, B, C, D
<i>Phocoena phocoena</i>	Harbour porpoise			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Throughout its range	Annexes II and V EC Habitats Directive

B: HELCOM LIST OF THREATENED AND/OR DECLINING HABITATS/BIOTOPES OF THE BALTIC SEA AREA

		HELCOM REGIONS WHERE BIOTOPE/HABITAT IS PRESENT (X). STATUS UNKNOWN (?)																			
		Bothnian Bay	The Quark	The Bothnian Sea	Åland Sea	Archipelago Sea	Gulf of Finland	Gulf of Riga	The Northern Baltic Proper	Western Gotland Basin	Eastern Gotland Sea	The Southern Baltic Proper	The Gulf of Gdansk	Bay of Mecklenburg	Kiel Bay	Little Belt	Great Belt	The Sound	Kattegat		
Name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	HELCOM Regions where the biotope/habitat is under threat and/or in decline	Remarks	
Offshore (deep) waters below the halocline	?	?	?	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	All where they occur		
Shell gravel bottoms											x	x	x	x	x	x	x	x	All where they occur		
Seagrass beds			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	C, F, G, H, J, K, L, Q, R	Annex I, EC Habitats Directive, codes 1110 and 1160	
Macrophyte meadows and beds	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	All where they occur	Annex I, EC Habitats Directive, codes 1110, 1130, 1150, 1160 and 1170	
Gravel bottoms with <i>Ophelia</i> species													x	x	x	x	x	x	All where they occur		
Sandbanks which are slightly covered by sea water all the time	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	K, L, M, N	Annex I, EC Habitats Directive, code 1110	
Estuaries	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	G, J, K, M, N	Annex I, EC Habitats Directive, code 1130	
Mudflats and sandflats not covered by seawater at low tide	x*	x*	x*	x*	x*	x*	x	x	x	x	x	x	x	x	x	x	x	x	A, B, C, D, H, I, J, K, L, M, N, P, Q, R	Annex I, EC Habitats Directive, code 1140 * Not in Finnish waters	
Coastal lagoons	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	All where they occur	Annex I, EC Habitats Directive, code 1150	
Large shallow inlets and bays	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	J, K, L, M, N	Annex I, EC Habitats Directive, code 1160	
Reefs	x*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	M, N, R	Annex I, EC Habitats Directive, code 1170 * Not observed in Finnish waters	
Submarine structures made by leaking gases (Bubbling Reefs)																		x	R	Annex I, EC Habitats Directive, code 1180	

Name	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	HELCOM Regions where the biotope/habitat is under threat and/or in decline	Remarks
Baltic esker islands with sandy, rocky and shingle beach vegetation and sublittoral vegetation	x*	x*	x	x	x	x		x			x								C, D, E, F, K	Annex I, EC Habitats Directive, code 1610 (only in the Boreal Biogeographic Region) * Not observed in Finnish waters
Boreal Baltic narrow inlets (Fjords)	x*	x*	x*	x	x	x		x	x		x								D-F, H, I, K	Annex I, EC Habitats Directive, code 1650 (only in the Boreal Biogeographic Region) * Not observed in Finnish waters
Maerl beds																		x	R	Listed in: OSPAR Initial List of Threatened and/or Declining Species and Habitats
Sea pens and burrowing megafauna communities																		x	R	Listed in: OSPAR Initial List of Threatened and/or Declining Species and Habitats

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