



---

<b>Document title</b>	Overview and draft summary on national conservation plans for species and biotopes categorized as threatened according to HELCOM 2013 Red List
<b>Code</b>	2N-3
<b>Category</b>	CMNT
<b>Agenda Item</b>	2N – Development and implementation of Recommendations
<b>Submission date</b>	17.10.2016
<b>Submitted by</b>	Secretariat
<b>Reference</b>	Outcome of STATE&CONSERVATION 4-2016, para 4N-13

---

### Background

As agreed at STATE&CONSERVATION 4-2016, the Secretariat has compiled information on national plans or measures for species and biotopes, and their threats, to support implementation of step 1 and 2 of the agreed action on 'Activities to support conservation of Baltic Sea species and biotopes/habitats categorized as threatened according to the HELCOM Red List' (see [document 2N-2, 4N-3, 4MA-1 Rev.1](#) to STATE & CONSERVATION 4-2016):

- Step 1) to make an inventory of existing measures that will contribute to the improved status of threatened species and biotopes/habitats and analyze if they are sufficient to improve the state of those species
- Step 2) based on this gap analysis; identify the need for new measures and for which new measures it could be suitable to consider joint measures (regional plans) or coordinated measures (coordination of national measures).

As a basis for the inventory, the Contracting Parties were asked to provide information on conservation, recovery or actions plans, or other relevant programmes and measures, for species and biotopes listed as threatened in the HELCOM 2013 Red List. An online meeting with State and Conservation contacts was held on 5 September 2016 to discuss the progress of work ([CONSERVATION PLANS 1-2016](#)). At the meeting, additional information needed from the Contracting Parties was identified.

This document provides a summary of the information provided by Denmark, Finland, Germany, Latvia, Lithuania, Poland and Sweden. It is a preliminary overview of existing conservation measures in the Baltic Sea region, primarily related to threatened species. Due to incomplete data and information it is not possible to draw conclusions on whether existing measures are sufficient or to what degree they are targeting the threats to the red listed species as identified in HELCOM 2013 Red List. Regarding biotopes, the information received is too limited to draw any conclusions, except that conservation measures directed towards biotopes are apparently limited.

The original information submitted by the Contracting Parties and additional supporting information is included in Attachments 1, 2, 3 and 4 to this document.

### Action requested

The Meeting is invited to:

- take note of the overview and consider how it can be used in the further development of conservation plans and measures for species and biotopes categorized as threatened in the HELCOM 2013 Red List,
- use the overview as a background to discuss and identify i.a.:
  - threatened species that are in particular need of additional conservation measures,
  - species for which it would be beneficial to take a regional or bilateral approach (e.g. development of region conservation plans or coordinated measures),

- measures that could support improvement of several threatened species (and biotopes),
  - species for which it is feasible to implement measures targeted at the specific species in question (e.g. restoration, restocking),
  - species and biotopes for the protection of which it would be beneficial to cooperate and follow-up with other established organizations.
- consider how approach used by Sweden could be further applied in HELCOM as included in Attachment 3.

To complete the overview, the Contracting Parties that have not yet done so are invited to:

1. **provide brief information on the type of measures included** in the reported plans, (to be added to Attachment 1, Sheet 'Original data', Column 'Measures included in the plan')
2. **inform if there are national conservation measures directed towards biotopes** which will also contribute to the conservation of specific threatened species (to be added to Attachment 2, Sheets on 'HUB biotopes' or 'Other classification schemes' as relevant).
3. **check the compilations made by the Secretariat**, especially regarding the species distribution and missing data. Please check that species distribution is marked correctly for your country, and substitute all question marks (pink cells) with either 'not present' or 'no measures' (to be made in Attachment 1, Sheets for 'Mammals', 'Birds', 'Fish', 'Macrophytes', 'Invertebrates').
4. **check the categorization of national plans**. Start by checking the Sheet labelled Categ\_problems which identifies specific issues with categorizing the reported information. If another categorization of the reported plans would be more suitable ('conservation measure', 'general protection', 'spatial protection' or 'under development'), make changes to Attachment 1, Sheet Original data\_categorized.

Use red font for all changes made and submit the updated information to the Secretariat ([ullali.zweifel@helcom.fi](mailto:ullali.zweifel@helcom.fi)).

---

## Contents

Overview and draft summary on national conservation plans for threatened species and biotopes.....	4
Conservation of threatened species.....	4
Conservation of threatened biotopes .....	5
Overview of threats and pressure to threatened species.....	6
Consideration of the Swedish species approach.....	6
Group specific overviews.....	7
Fish.....	7
Mammals.....	9
Birds.....	10
Macrophytes.....	13
Invertebrate fauna.....	15

## Overview and draft summary on national conservation plans for threatened species and biotopes

### Conservation of threatened species

Information to this inventory was provided by Denmark, Finland, Germany, Latvia, Lithuania, Poland and Sweden. Very few of the reported plans are nationally labelled as 'conservation plans'. Any reported plan that includes relevant measures directed towards a specific species was therefore categorized as 'conservation measures'. Countries also reported on 'general protection' measures and 'spatial protection' which were categorized separately as well as plans 'under development' (Table 1). An overview of the results is presented in table 2 while the original reporting by countries and the categorization of the responses is provided in Attachment 1\_species.

**Table 1. Categorization of plans and measures reported by the Contracting Parties.**

Category	Definition	Example of country reporting
Conservation measures	Conservation plan or measures targeted for the species are in force.	1) Action plan for salmon and seatrout; 2) Catch of this species is prohibited in DK; 3) protected according to the Federal Decree on Protected Species (DE).
Spatial protection	HELCOM MPAs, Natura 2000 sites or similar designated for protecting this particular species. The sites must have a management plan in force (i.e. designated and managed) to be included in the category.	
General protection	General conservation plan or measures covering the species or its habitat are in force, but not targeted for the species in question.	1) No national conservation plan, but obligations due to OSPAR recommendation (SE); 2) No single species conservation plans but species is listed in Finnish National Action Plan for species protection (FI).
Under development	No conservation plan or measures are in force, but plan or measures are under development.	1) preliminary plans; 2) EU decision to be made.

According to this categorization, some sort of measures or protection, exists for 48 of the 69 threatened species in at least one country. In Table 2, measures categorized as 'conservation measures', 'general protection' or 'spatial conservation' have been summarized per species group.

Species which have no conservation plans or measures reported by any country are:

- Atlantic wolf-fish (*Anarhichas lupus*). Note that the species is only present in the waters of Denmark and Sweden.
- Harbour seal (Kalmarsund population; *Phoca vitulina*). Note that a plan is under development in Sweden which is the only country in which the species is present.
- Foxtail stonewort (*Lamprothamnium papulosum*).
- All invertebrates except Northern horse mussel (*Modiolus modiolus*), which is under general protection in Denmark and has a plan under development in Sweden, and Copenhagen cockle (*Parvicardium hauniense*), which is under general protection in Finland.

All threatened bird species have either conservation plans or are targeted by general protection in at least one country (Table 2), but overall the conservation measures for threatened birds species are limited (see overview for birds).

To get a full understanding of the coverage of plans and measures it has been attempted to clarify for which country the respective species is relevant to consider, i.e. if the species is present in the waters of the country. This has been indicated in Attachment 1 as well as the group specific overviews in this document.

It should be noted that the reporting of requested information on “conservation, recovery or actions plans, or other relevant programmes and measures” obviously differs between countries. Some countries have for example reported plans for fish required under the CFP while others have not, and existing management plans for seals have not been reported by all countries. It is also not clear what measures that are inherently taken when a species is nationally protected (e.g. prohibited activities). Thus, the overview needs to be complemented with missing information as well as information from all countries to give an accurate description of the existing conservation measures for Baltic Sea threatened species.

**Table 2. Summary of the categories conservation measures, spatial protection and general protection per species group and country as defined in Table 1.** Plans under development are not included. NA=Not applicable i.e. when there are no threatened species within the species group within the waters of the country concerned.

Species group	Tot number of threatened species within species group	Number of threatened species not protected in any country	DE	DK	EE	FI	LT	LV	PL	SE	RU
Birds	23	0	6	19	No data	10	4	0	0	21	No data
Fish	16	1	3	10	No data	5	5	3	4	7	No data
Invertebrates	19	17	0	1	No data	1	0	0	0	0	No data
Macrophytes	7	2	0	0	No data	5	NA	NA	NA	7	No data
Mammals	4	1	2	2	No data	2	1	0	1	2	No data
<b>Total</b>	<b>69</b>	<b>21</b>	<b>11</b>	<b>32</b>	No data	<b>23</b>	<b>10</b>	<b>3</b>	<b>5</b>	<b>37</b>	No data

### Conservation of threatened biotopes

No information on conservation measures was received for the 17 threatened HUB biotopes in the initial request for information. The inquiry was therefore expanded to cover also other habitats for which countries have any conservation plans or measures in place, regardless of classification typology. As a result, information was provided by Denmark, Finland, Germany and Sweden on 22 habitats, some of them overlapping partly. In addition Poland notified the Secretariat that they have no habitat protection in place. The habitats and detailed information on their conservation are provided in Attachment 2\_biotopes.

In general the protection seems to be focusing on coastal habitats such as the estuaries and shallow bays. The underwater habitats which are protected include seagrass meadows, reefs and submarine structures made by leaking gases. The different typologies overlap partly, for example the Swedish habitat *Estuaries by the sea* overlaps with Habitats Directive Annex I habitats *Estuaries (1130)* and *Large shallow inlets and bays (1160)*. Another example is the habitat *Seagrass meadows and other marine macrophyte stands* reported to be protected by Germany, which overlaps with *Eelgrass meadows* reported by Sweden, which in turn overlaps with Habitats Directive Annex I habitats *Sandbanks which are slightly covered by sea water all the time (1110)*, *Estuaries (1130)* and *Large shallow inlets and bays (1160)*.

## Overview of threats and pressure to threatened species

As agreed at STATE & CONSERVATION 4-2016, information on the most common threats and pressures to threatened species in the Baltic Sea region according to HELCOM Species Information Sheets (SIS) has been compiled. These include, among others, pollution and fishery related issues (catch, by-catch, benthic trawling). Measures directed towards the underlying pressures would obviously improve the status of many threatened species and biotopes. Many of the common threats and pressures are however wide-spread (e.g. eutrophication, climate change) and measures to address these threats may not be suitable as part of conservation plans for specific species. More detailed information on threats per species groups are provided in the next sections and the detailed information provided in the HELCOM SIS, according to threat codes used under Article of the Habitats Directive, is included in Attachment 4\_Threats to species to this document.

Due to lack of information on specific conservation measures in the Contracting Parties, it is not possible to draw any conclusion on whether the most common threats are addressed through existing conservation measures.

No compilation of threats to biotopes have been made at this time.

### Table 3. Threats and pressures according to HELCOM SIS according to threat codes of the Habitats Directive.

Numbers are given as percent of threatened species within each species group. Threats associated with more than 50% of the species within each species group are marked in red.

Species Group (total number of species)	Agriculture	Mining, quarrying & energy production	Transportation and service infrastructure	Urbanisation	Use of living resources	Disturbance due to human activities	Pollution	Invasive and introduced species	Modification of national conditions	Natural processes	Climate change	Threats from outside EU territory or MS
<b>Fish (16)</b>			6		100		25	6	50		13	
<b>Mammals (4)</b>			25		100		100			25	25	
<b>Birds (23)</b>	22	52	43		65	26	70	65	17	13	26	48
<b>Macrophytes (7)</b>	71		100	71	57		100	43	100	71	29	
<b>Benthic invertebrates (19)</b>		16			47		68		11		21	

## Consideration of the Swedish species approach

As agreed at STATE & CONSERVATION 4-2016, Sweden has shared information on the national approach to define measures to identify the species which are most suitable for conservation measures i.e. those species for which concrete measures could improve the status of the species. The online meeting held on 5 September concluded that it is a feasible approach also for the continued work on conservation plans for HELCOM threatened species, if applied on the regional level. A simplified version of the table submitted by Sweden is included in 'Attachment 3\_SE approach' for HELCOM species. To continue according to this approach the information collected by Sweden needs to be reviewed and adjusted to the regional Baltic Sea scale.

## Group specific overviews

The original information submitted by Contracting Parties is included in 'Attachment 1\_species'. In the tables included in this section the following abbreviations are used:

<b>Conservation measures</b> – as defined Table 1	<b>CM</b>
<b>General protection</b> – as defined Table 1	<b>GP</b>
<b>Spatial protection</b> - as defined Table 1	<b>SP</b>
<b>Under development</b> - as defined Table 1	<b>UD</b>
<b>No measures</b> - According to HELCOM Red List 2013 distributions maps the species is present in the area of the country, but no conservation plans or measures exists as confirmed by national reporting.	<b>NM</b>
<b>Not present</b> - According to HELCOM Red List 2013 distributions maps the species is not present in the waters of this country.	-
<b>No measures?</b> - According to HELCOM Red List 2013 distributions maps the species is present in the area of this country, but no conservation plans or measures have been reported for the species. <b>Please check if this is correct.</b>	<b>??</b>

Codes form HELCOM red listed species are:

Regionally e Xtinct	RE
Criticallyendangered	CR
Endangered	EN
Vulnerable	VU

## Fish

Based on the information submitted by the Contracting Parties, the conservation of Red Listed fish species can be summarized as follows:

- 'Conservation measures' are reported for 6 of 16 red listed species (table 4):
  - *Acipenser oxyrinchus* (Americ Atlantic Sturgeon) (DE, LT),
  - *Gadus morhua* (Atlantic cod) (DK),
  - *Anguilla anguilla* (European eel) by all Countries reporting to this overview (DE, DK, FI, LT, LV, PL and SE). This is linked to the requirement to develop national management plans for eel under EC regulation No 1100/2007,
  - *Raja clavata* (Thornback ray) (DK). Note that the species is only present in the waters of DK and SE and that for SE 'General protection' is reported due to obligations under an OSPAR Recommendation,
  - *Salmo salar* (Salmon) (FI, LT, PL, SE),
  - *Salmo trutta* (FI, LT, PL, SE),
- 'Spatial protection' has not been reported by any country.
- *Coregonus maraena* (Whitefish) is an endangered species with distribution in the waters of all Contracting Parties according to the HELCOM Red List while only under 'general protection' by two countries (DK, FI) and with a plan under development in SE.
- Most common threats according to HELCOM Species Information Sheets (SIS) are related to fisheries and migration barriers (table 5),
- Few countries have reported specific measures included in the conservation measures. Examples: reports e.g. prohibited catch on *Coregonus maraena*, *Galeorhinus galeus*, *Lamna nasus*, *Raja clavata*, *Squalus acanthias*. FI and PL reports stocking of *Anguilla Anguilla*.

**Table 4. Reported plans and measures related to HELCOM Red Listed fish species.**

Note that Estonia and Russia has not reported information to this overview and that for these countries the table only includes information from species information sheets regarding presence of the species in the waters of the country.

Species name	scientific	English name	HELCOM 2013 Red List	DE	DK	EE	FI	LT	LV	PL	SE	RU
<i>Acipenser oxyrinchus</i>		American Atlantic sturgeon	RE	CM	RE	RE	RE	CM	RE	GP	RE	RE
<i>Dipturus batis</i>		Common skate	RE	RE	RE	RE	RE	RE	RE	RE	RE	RE
<i>Anguilla anguilla</i>		European eel	CR	CM	CM	??	CM	CM	CM	CM	CM	??
<i>Lamna nasus</i>		Porbeagle	CR	-	GP	-	-	-	-	-	GP	-
<i>Squalus acanthias</i>		Spurdog/spiny dogfish	CR	-	GP	-	-	-	-	-	GP	-
<i>Thymallus thymallus</i>		Grayling	CR	-	GP	??	UD	GP	-	-	UD	??
<i>Anarhichas lupus</i>		Atlantic wolf-fish	EN	-	??	-	-	-	-	-	NM	-
<i>Coregonus maraena</i>		Whitefish	EN	??	GP	??	GP	??	??	??	UD	??
<i>Molva molva</i>		Ling	EN	-	NM	-	-	-	-	-	NM	-
<i>Gadus morhua</i>		Atlantic cod	VU	??	CM	??	GP	??	??	UD	GP	??
<i>Galeorhinus galeus</i>		Tope shark	VU	-	GP	??	-	-	-	-	NM	??
<i>Merlangius merlangus</i>		Whiting	VU	??	NM	-	-	-	-	??	NM	-
<i>Petromyzon marinus</i>		Sea lamprey	VU	GP	??	-	-	-	-	??	UD	-
<i>Raja clavata</i>		Thornback ray	VU	-	CM	-	-	-	-	-	GP	-
<i>Salmo salar</i>		Salmon	VU	??	GP	??	CM	CM	GP	CM	CM	??
<i>Salmo trutta</i>		Trout	VU	??	GP	??	CM	CM	GP	CM	CM	??

**Table 5. Information on threats and pressures to Red Listed fish species according to the HELCOM Species Information Sheets (SIS). Most common specific threat is indicated within parenthesis. More detailed information is available in Attachment 4.**

Species name	scientific	Transport & service infrastructure	Use of living resources (catch and by-catch)	Pollution (eutrophication)	Invasive and introduced species	Modification of natural conditions (migration barriers)	Climate change
<i>Acipenser oxyrinchus</i>			X	X		X	
<i>Dipturus batis</i>			X				
<i>Anguilla anguilla</i>			X		X	X	
<i>Lamna nasus</i>			X				
<i>Squalus acanthias</i>			X			X	
<i>Thymallus thymallus</i>		X	X	X		X	X
<i>Anarhichas lupus</i>			X				
<i>Coregonus maraena</i>		z	X			X	
<i>Molva molva</i>			X				
<i>Gadus morhua</i>			X	X			X
<i>Galeorhinus galeus</i>			X				
<i>Merlangius merlangus</i>			X				
<i>Petromyzon marinus</i>			X	X		X	
<i>Raja clavata</i>			X				
<i>Salmo salar</i>			X			X	
<i>Salmo trutta</i>			X			X	



## Mammals

Based on the information submitted by the Contracting Parties, the conservation of Red Listed mammal species can be summarized as follows:

- Conservation measures are in place for 3 out of 4 red listed species (table 6):
  - *Phocoena phocoena* (Baltic Sea population) (Harbour porpoise) (DK, FI, LT, PL and SE). Further note that DE has reported 'general protection' and that the species is not present in the waters of EE, LV and RU.
  - *Phocoena phocoena* (Western Baltic subpopulation) (Harbour porpoise. (DK and SE). Further note 'general protection' in DE and 'not present' in the waters of other countries.
  - *Phoca hispida botnica* (Baltic ringed seal) (FI). The species is present in the waters of six additional countries according to the HELCOM RedList.
- Conservation measures are under development for Harbour seals (Kalmarsund population) in SE. The population is not present in waters of other countries.
- Denmark has reported that Harbour porpoise is indirectly protected by efforts to protect reefs.
- Most common threats according to HELCOM Species Information Sheets (SIS) are by-catch and pollution (table 7).
- Countries that have reported measures refers i.a. to the Jastarnia plan for Harbour porpoise, including the aim to reduce of by-cath.

**Table 6. Reported plans and measures related to HELCOM Red Listed mammal species.**

Note that Estonia and Russia has not reported information to this overview and that for these countries the table only includes information from species information sheets regarding presence of the species in the waters of the country.

Species scientific name	English name	HELCOM 2013 Red List	DE	DK	EE	FI	LT	LV	PL	SE	RU
<i>Phocoena phocoena</i> (Baltic Sea population)	Harbour porpoise	CR	GP	CM	-	CM	CM	-	CM	CM	-
<i>Phocoena phocoena</i> (Western Baltic subpop)	Harbour porpoise	VU	GP	CM	-	-	-	-	-	CM	-
<i>Phoca vitulina</i> (Kalmarsund population)	Harbour seal	VU	-	-	-	-	-	-	-	UD	-
<i>Phoca hispida botnica</i>	Baltic ringed seal	VU	-	-	??	CM	??	??	??	UD	??

**Table 7. Threats to HELCOM Red Listed mammal species according to HELCOM species information sheets.**

Most common specific threat is indicated within parenthesis.

Species scientific name	Transport & service infrastructure (shipping lanes)	Use of living resources (by-catch)	Pollution	Natural process (disease)	Climate change
<i>Phocoena phocoena</i> (Baltic Sea population)		X	X		
<i>Phocoena phocoena</i> (Western Baltic subpopulation)		X	X		
<i>Phoca vitulina</i> (Kalmarsund population)		X	X	X	
<i>Phoca hispida botnica</i>	X	X	X		X

The following commitments under the HELCOM Ministerial Declaration 2013 related to mammals are recalled:

- protect the ringed seal in the Gulf of Finland, whose population is severely depleted and faces extinction in this area, STRESSING that immediate action is needed to significantly reduce by-catch and to improve the understanding of the other direct threats on the seals, and URGE transboundary co-operation between Estonia, Finland and Russia to support achieving a viable population of ringed seals in the Gulf,
- take decisive action to work towards a favourable conservation status of the harbor porpoise based on implementation of the CMS ASCOBANS Jastarnia Plan for the harbor porpoise in the Baltic Sea, in particular by addressing the pressing problem of by-catch.

## Birds

Based on the information submitted by Contracting Parties, the conservation of Red Listed bird species can be summarized as follows:

- 4 out of 23 red listed bird species have conservation measures in place (table 8):
  - Kentish plover (SE),
  - Southern dunlin (DK, FI, SE),
  - Tarek sandpiper (FI),
  - *Philomachus pugnax* (Ruff) (DK, LT SE)
- ‘General protection’ is in place for the majority of threatened birds species in DK, FI and SE.
- In other countries, many threatened species do not have any reported conservation in measures.
- The threats according to HELCOM Species Information Sheets (SIS) are very diverse and stem from many different human activities (table 9).
- Few countries have reported specific measure. Examples: DK reports prohibition of hunting and collection of eggs from *Anser fabalis fabalis*, *Arenaria interpres*, *Calidris alpina schinzii*, *Cephus grylle arcticu*, *Charadrius alexandrinus*, *Gavia arctica*, *Gavia stellata*, *Hydroprogne caspia*, *Larus fuscus fuscus*, *Larus melanocephalus*, *Philomachus pugnax*, *Mergus serrator*, *Podiceps auritus*, *Podiceps grisegena*, *Rissa tridactyla*. FI reports measures to protect the nesting areas from disturbance and to keep the breeding habitats open for *Xenus cinereus*. LT reports restoration of degraded breeding habitats for *Philomachus pugnax*. DE reports predator management of *Calidris alpina schinzii* and *Philomachus pugnax*.

**Table 8. Reported plans and measures related to HELCOM Red Listed bird species.**

Note that Estonia and Russia has not reported information to this overview and that for these countries the table only includes information from species information sheets regarding presence of the species in the waters of the country. b= breeding population, w=wintering population

Species scientific name	English name	HELCOM 2013 Red List	DE	DK	EE	FI	LT	LV	PL	SE	RU
<i>Gelochelidon nilotica</i> (b)	Gull-billed tern	RE	GP	RE	RE	RE	RE	RE	RE	RE	RE
<i>Charadrius ale Xandrinus</i> (b)	Kentish plover	CR	GP	GP	-	-	-	-	-	CM	-
<i>Gavia arctica</i> (w)	Black-throated diver	CR	??	GP	??	-	-	??	??	GP	??
<i>Gavia stellata</i> (w)	Red-throated diver	CR	??	GP	??	-	??	??	??	GP	??
<i>Anser fabalis fabalis</i> (w)	Taiga bean goose	EN	??	SP+	-	-	-	-	??	GP	-
<i>Calidris alpina schinzii</i> (b)	Southern dunlin	EN	GP	CM	??	CM	UD	??	??	CM	??

Species scientific name	English name	HELCOM 2013 Red List	DE	DK	EE	FI	LT	LV	PL	SE	RU
<i>Clangula hyemalis</i> (w)	Long-tailed duck	EN	??	GP	??	-	SP	??	??	UD	??
<i>Larus melanocephalus</i> (b)	Mediterranean gull	EN	??	SP+	-	-	-	-	??	GP	-
<i>Melanitta fusca</i> (w EN, b VU)	Velvet scoter	EN	??	SP+	??	GP	SP	??	??	GP	??
<i>Melanitta nigra</i> (w)	Common scoter	EN	??	SP+	??	-	??	??	??	GP	??
<i>Podiceps grisegena</i> (w)	Red-necked grebe	EN	GP	GP	-	-	-	-	??	GP	-
<i>Polysticta stelleri</i> (w)	Steller's eider	EN	-	-	??	GP	SP	-	-	GP	-
<i>Rissa tridactyla</i> (b EN, w VU)	Black-legged kittiwake	EN	-	GP	-	-	-	-	-	GP	-
<i>Somateria mollissima</i> (w EN, b VU)	Common eider	EN	??	SP+	??	GP	??	??	??	GP	??
<i>Xenus cinereus</i> (b)	Terek sandpiper	EN	-	-	-	CM	-	??	-	-	??
<i>Arenaria interpres</i> (b)	Ruddy turnstone	VU	-	GP	??	NM	-	-	-	GP	??
<i>Aythya marila</i> (b)	Greater scaup	VU	??	-	??	GP	-	-	-	GP	??
<i>Cephus grylle arcticus</i> (w)	Black guillemot	VU	??	SP+	??	-	??	??	??	GP	??
<i>Hydroprogne caspia</i> (b)	Caspian tern	VU	??	GP	??	GP	-	-	-	GP	??
<i>Larus fuscus fuscus</i> (b)	Lesser black-backed gull	VU	-	GP	??	NM	-	-	-	GP	??
<i>Mergus serrator</i> (w)	Red-breasted merganser	VU	??	SP+	??	GP	??	??	??	GP	??
<i>Philomachus pugnax</i> X (b)	Ruff	VU	GP	CM	??	GP	CM	??	??	CM	??
<i>Podiceps auritus</i> (b VU,w NT)	Slavonian grebe	VU	GP	GP	??	GP	-	??	-	GP	??

**Table 9. Threats and pressure to HELCOM Red Listed bird species according to HELCOM species information sheets.** Most common specific threat is indicated within parenthesis. More detailed information is available in Attachment 4.

Species scientific name	Agriculture (lack of grazing)	Mining, energy production (wind energy, sand & gravel extraction)	Transport (shipping lanes, construction)	Use of living resources (hunting, by-catch)	Disturbance from human activities (recreational activities)	Pollution (oil spills)	Invasive and introduced species	Modification of national conditions	Natural processes	Climate change	Threats outside EU territory (MS)
<i>Gelochelidon nilotica</i>	X				X		X				
<i>Charadrius alexandrinus</i>					X		X				
<i>Gavia arctica</i>		X	X			X					
<i>Gavia stellata</i>		X	X	X		X					
<i>Anser fabalis fabalis</i>	X	X		X	X		X	X			X
<i>Calidris alpina schinzii</i>	X						X	X		X	X
<i>Clangula hyemalis</i>		X	X	X		X					
<i>Larus melanocephalus</i>							X				
<i>Melanitta fusca</i>		X	X	X		X					
<i>Melanitta fusca</i>					X	X	X	X			
<i>Melanitta nigra</i>		X	X	X		X					X
<i>Podiceps grisegena</i>		X	X	X		X					
<i>Polysticta stelleri</i>			X	X		X	X				
<i>Rissa tridactyla</i>		X		X		X				X	
<i>Rissa tridactyla</i>		X		X		X				X	
<i>Somateria mollissima</i>		X	X	X	X	X					X
<i>Somateria mollissima</i>							X		X	X	
<i>Xenus cinereus</i>							X				X
<i>Arenaria interpres</i>	X						X		X		X
<i>Aythya marila</i>				X		X	X				X
<i>Cephus grylle arcticus</i>		X	X	X		X					
<i>Hydroprogne caspia</i>							X			X	X
<i>Larus fuscus fuscus</i>				X	X	X	X		X		X
<i>Mergus serrator</i>		X	X	X		X					
<i>Philomachus pugnax</i>	X						X	X		X	X
<i>Podiceps auritus</i>				X		X	X				X

## Macrophytes

Based on the information submitted by the Contracting Parties, the conservation of Red Listed macrophytes species can be summarized as follows:

- The Red Listed macrophytes have relatively a limited distribution in the Baltic Sea, mainly occurring in the waters of Finland and Sweden.
- Conservation measures are in place for 3 out of 7 the red listed macrophytes (table 10):
  - *Hippuris tetraphylla* (Fourleaf Mare's Tail) (SE). The only other country in which the species is present in national waters is FI that has reported 'general protection' of the species.
  - *Pericaria foliosa* (SE)
  - *Alisma wahlenbergii* (SE)
- The threats according to HELCOM Species Information Sheets (SIS) are diverse and stem from many different human activities (table 11).
- Restoration measures are mentioned by Finland.

**Table 10. Reported plans and measures related to HELCOM Red Listed macrophyte species.**

Note that Estonia and Russia has not reported information to this overview and that for these countries the table only includes information from species information sheets regarding presence of the species in the waters of the country.

Species scientific name	English name	HELCOM 2013 Red List	DE	DK	EE	FI	LT	LV	PL	SE	RU
<i>Hippuris tetraphylla</i>	Fourleaf Mare's Tail	EN	-	-	-	GP	-	-	-	CM	-
<i>Lamprothamnium papulosum</i>	Foxtail stonewort	EN	??	??	-	-	-	-	-	UD	-
<i>Pericaria foliosa</i>		EN	-	-	-	GP	-	-	-	CM	??
<i>Alisma wahlenbergii</i>		VU	-	-	-	GP	-	-	-	CM	??
<i>Chara braunii</i>	Braun's stonewort	VU	-	-	-	GP	-	-	-	UD	-
<i>Nitella hyalina</i>	Many-branched stonewort	VU	-	-	-	GP	-	-	-	UD	-
<i>Zostera noltii</i>	Dwarf eelgrass	VU	??	??	-	-	-	-	-	UD	-

**Table 11. Threats and pressures to HELCOM Red Listed macrophyte species according to HELCOM species information sheets.** Most common specific threat is indicated within parenthesis. More detailed information is available in Attachment 4.

Species scientific name	Agriculture (lack of grazing)	Roads, railroads and paths (shipping lanes)	Urbanisation, residential & commercial development	Use of living resources (aquaculture)	Disturbances due to human activities (nautical sports)	Pollution (eutrophication)	Invasive and introduced species	Modification of natural conditions (dredging)	Natural process (competition flora)	Climate change
<i>Hippuris tetraphylla</i>	X	X				X		X	X	
<i>Lamprothamnium papulosum</i>		X	X	X	X	X	X	X		X
<i>Persicaria foliosa</i>	X	X	X			X		X	X	
<i>Alisma wahlenbergii</i>	X	X	X			X		X	X	
<i>Chara braunii</i>	X	X	X		X	X		X	X	
<i>Nitella hyalina</i>	X	X			X	X	X	X	X	
<i>Zostera noltii</i>		X	X	X	X	X	X	X		X

## Invertebrate fauna

Based on the information submitted by the Contracting Parties, the conservation of Red Listed benthic invertebrates species can be summarized as follows:

- Red listed benthic invertebrate species are mainly distributed in the waters of DE, DK, SE (western Baltic Sea),
- There are no reported existing ‘conservation measures’ specifically targeting benthic invertebrate species.
- Spatial protection of *Modiolus modiolus* (Northern horse mussel) is reported by DK. Protection through efforts to protect reefs.
- Most common threats according to HELCOM Species Information Sheets (SIS) are benthic trawling and eutrophication.
- Countries have not reported any specific measures to conserve benthic invertebrates.

**Table 12. Reported plans and measures related to HELCOM Red Listed benthic invertebrate species.**

Note that Estonia and Russia has not reported information to this overview and that for these countries the table only includes information from species information sheets regarding presence of the species in the waters of the country.

Species name	scientific name	English name	HELCOM 2013 Red List	DE	DK	EE	FI	LT	LV	PL	SE	RU
<i>Haploops tenuis</i>			EN	-	??	-	-	-	-	-	-	-
<i>Abra prismatica</i>			VU	-	??	-	-	-	-	-	NM	-
<i>Atelecyclus rotundatus</i>		Circular crab/Old mans face crab	VU	-	??	-	-	-	-	-	NM	-
<i>Clelandella miliaris</i>			VU	-	??	-	-	-	-	-	NM	-
<i>Cliona celata</i>		Yellow boring sponge	VU	-	??	-	-	-	-	-	NM	-
<i>Deshayesorchestia deshayesii</i>			VU	??	??	-	-	-	-	??	NM	-
<i>Epitonium clathrus</i>		Common wentletrap/European wentletrap	VU	-	??	-	-	-	-	-	NM	-
<i>Haploops tubicola</i>			VU	-	??	-	-	-	-	-	NM	-
<i>Hippasteria phrygiana</i>		Rigid cushion star	VU	-	??	-	-	-	-	-	NM	-
<i>Hippolyte varians</i>		Chamaeleon prawn	VU	-	??	-	-	-	-	-	NM	-
<i>Lunatia pallida</i>		Pale moonsnail	VU	-	??	-	-	-	-	-	NM	-
<i>Macoma calcarea</i>		Chalky macoma	VU	??	??	??	-	??	??	??	NM	??
<i>Modiolus modiolus</i>		Northern horse mussel	VU	??	SP	-	-	-	-	-	UD	-
<i>Nucula nucleus</i>		Common nut clam	VU	??	??	-	-	-	-	-	NM	-
<i>Parvicardium hauniense</i>		Copenhagen cockle	VU	??	??	??	GP	??	??	??	NM	??
<i>Pelonaia corrugata</i>			VU	-	??	-	-	-	-	-	NM	-
<i>Scrobicularia plana</i>		Peppery furrow shell	VU	??	??	-	-	-	-	-	NM	-
<i>Solaster endeca</i>		Purple sun star	VU	-	??	-	-	-	-	-	NM	-
<i>Stomphia coccinea</i>		Spotted swimming anemone	VU	-	??	-	-	-	-	-	NM	-

**Table 13. Threats and pressures to HELCOM Red Listed invertebrate species according to HELCOM species information sheets.** Most common specific threat is indicated within parenthesis. More detailed information is available in Attachment 4.

Species scientific name	Mining, quarrying & energy production (wind energy)	Use of living resources (benthic demersal trawling)	Disturbances due to human activities	Pollution (eutrophication)	Modification of natural conditions	Climate change
<i>Haploops tenuis</i>						
<i>Abra prismatica</i>	X	X		X		
<i>Atelecyclus rotundatus</i>		X		X		
<i>Clelandella miliaris</i>				X		
<i>Cliona celata</i>	X	X		X		
<i>Deshayesorchestia deshayesii</i>			X		X	
<i>Epitonium clathrus</i>		X		X		
<i>Haploops tubicola</i>						
<i>Hippasteria phrygiana</i>		X		X		X
<i>Hippolyte varians</i>				X		
<i>Lunatia pallida</i>		X		X		
<i>Macoma calcarea</i>				X		
<i>Modiolus modiolus</i>	X	X		X		X
<i>Nucula nucleus</i>						
<i>Parvicardium hauniense</i>				X	X	
<i>Pelonaia corrugata</i>		X		X		
<i>Scrobicularia plana</i>						
<i>Solaster endeca</i>		X		X		X
<i>Stomphia coccinea</i>						X