

# HELCOM work on harbour porpoise 2019-2020



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**16<sup>th</sup> Meeting of the Jastarnia Group,  
8-9 June 2020**

# HELCOM work on harbour porpoise in 2019-2020, Topics

- Amended Rec 17/2 on the protection of harbour porpoise
- Updating of the Baltic Sea Action Plan – several actions related to hb
- HELCOM Action Project WP1
- HELCOM-OSPAR WS on bycatch indicators
- HELCOM core indicators
- Marine mammal Key messages to Baltic Sea Climate Change Fact Sheet 2021
- EN-Noise activities

# Revised HELCOM Rec 17/2 [Link to the Rec](#)

## Protection of harbour porpoise in the Baltic Sea area

- Amended version adopted on 4 March 2020 by HELCOM 41-2020 (adopted originally in 1996)
- Differences to the original Rec:
  - Editorial changes including correct name of Jastarnia Plan; correct reference to CFP, updates (deletion of "by 2015" and "beginning in 2018")
  - HELCOM Red List classes for both populations and the population ranges added
  - A sentence outlining that WBBK population is in better state but still requires conservation due to high human pressure
  - Text modified to be more clear, e.g. recommendation for data collection on pressures, distribution, abundance, stock identities etc. were separated under individual points

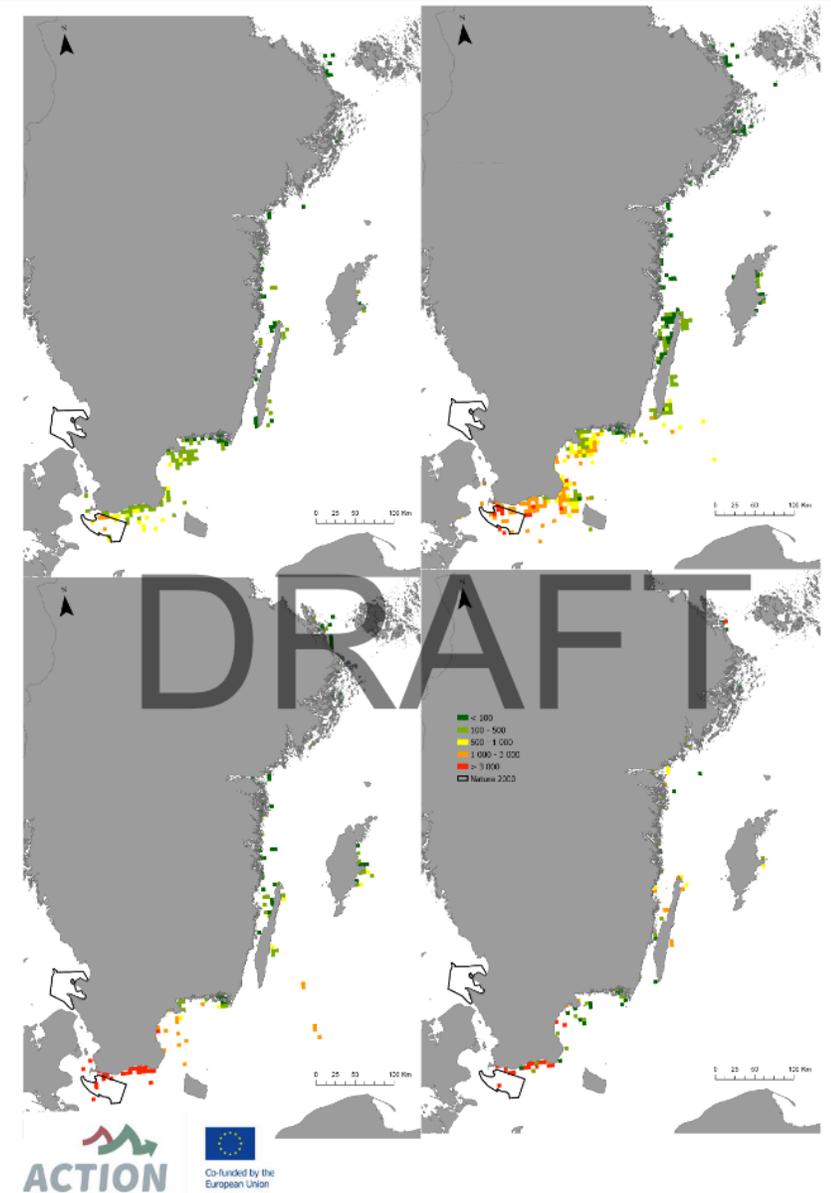
### Background:

- In 2017 it was identified by EG MAMA that an update to the Rec 17/2 is needed e.g. in order to distinguish between the two Baltic Sea porpoise populations and make any other necessary updates
- The following meetings have reviewed and provided input to the revised Recommendation: HELCOM SEAL 11-2017, STATE & CONSERVATION 8-2018, SEAL 12-2018, STATE & CONSERVATION 9-2018, STATE&CONSERVATION 10-2019, EG MAMA 13-2019 and STATE & CONSERVATION 11-2019.
- STATE & CONSERVATION 11-2019 endorsed the draft Recommendation and agreed to submit it to HOD 57-2019 for approval.
- HOD 57-2019 reviewed the revised Recommendation 17/2 and took note of comments to the Recommendation provided by WWF. The meeting agreed that the Secretariat will incorporate the changes and send the amended Recommendation for intersessional consideration by the experts by 31 January 2020, with the intention to submit it for HELCOM 41-2020 for adoption. Responses were received from DK, FI, DE and SE, who all supported including the proposed editorial amendments in the preamble, however concluded that point a) in the Recommendation should retain its original formulation.

# ACTION project, WP1



- WP1 By-catch: identifying high-risk areas for by-catch of mammals and birds, evaluating technical measures to reduce by-catch of harbour porpoise and estimating the effect and cost of these mitigation measures
- Lead by Denmark and Sweden
- Focus on southern Baltic Sea harbour porpoise (other areas included to the extent that data allows) and a number of bird species
- High risk area maps developed for harbour porpoise and birds



**Figure B.X.** Relative bycatch risk estimated as the probability of harbour porpoise detection during May 2011-April 2013 (data from Carlén *et al.*, 2018) multiplied by gillnet fishing effort reported to the Swedish Agency for Marine and Water Management for 2019; top left: Feb-Apr; top right: May-July; lower left: Aug-Oct (gillnet effort data after implementation of cod fishing ban); lower right: Jan (gillnet effort data before the cod fishing ban) and Nov-Dec (gillnet effort data after the cod fishing ban). The maps have been produced within the Helcom Action project (Kindt-Larsen *et al.*, 2020).

# Updating the Baltic Sea Action Plan, background

- BSAP: "to achieve a Baltic Sea in Good Environmental Status by **2021**"
- Process to identify possible new actions for the updated BSAP ongoing
- Synopses on potential new HELCOM actions received from Contracting Parties, international projects, HELCOM Observers and HELCOM 2020 Stakeholder Conference
- Technical review of biodiversity related synopses carried out by S&C in June
- BSAP UP workshop on biodiversity **31 August-2 September**: further deliberation and evaluation of the synopses will continue
- The outcome of the workshop will be presented to HELCOM Working groups that will continue the deliberation and formulation of new actions for the updated BSAP throughout 2020.
- Proposed list of measures presented to HOD 59-2020 for consideration.

# Updating the Baltic Sea Action Plan, new measures

## Synopsis on harbour porpoise:

- Mandatory use of Acoustic Deterrent Devices or other effective mitigation measures to minimize bycatch of the Baltic Sea harbour porpoise (*Phocoena phocoena*), submitted by CCB
- Collect representative data on by-catch of birds, mammals and non-targeted fish species on species level, submitted by BirdLife international and JWGBird
- Guidelines and regulation of the design and use of acoustic deterrent devices, submitted by EN Noise

# Updating the Baltic Sea Action Plan, old measures

Hb related measures to be shifted to the updated BSAP from the old one, **rephrased proposals**:

Protection of species:

- By [2022] at the latest, identify knowledge gaps and identify and determine high-risk areas for by-catch of **harbour porpoise**;
- An extensive action including the following aspects: Update the Red List Assessments by [2024], develop and implement ecologically relevant conservation plans, enforce compliance with the plans and regularly assess the effectiveness of other conservation measures

Impacts of fishing gears on threatened species:

- To update and harmonize the 2016 BALTFIMPA decision-support tool approach with ongoing initiatives e.g. in ICES on a seafloor assessment framework for the Baltic Sea. This tool should also provide options on how to reduce the possible negative impact of fisheries on conservation values in the most cost-effective way, including in marine protected areas

# Updating the Baltic Sea Action Plan, old measures

Hb related measures to be shifted to the updated BSAP from the old one, **rephrased proposals**:

By-catch:

- Invite the competent authorities, such as BALTFISH, to immediately, but no later than 2022, implement mitigation measures in the Baltic proper, in order for by-catch of **harbour porpoise** to be significantly reduced with the aim to reach by-catch rates close to zero.
- Continually test new by-catch mitigation measures, with evaluation of measures every 5 years starting in [2022], continually introduce new technical and operational by-catch mitigation measures, in cooperation with competent authorities and regularly update HELCOM questionnaire on trials of alternative fishing gears and fishing techniques.
- At the latest by [2023] enhance monitoring efforts for more reliable data on fishing effort, number of by-caught individuals and by-catch rates, as stipulated in the HELCOM Roadmap on collection of fisheries data in order to assess incidental bycatches and fisheries impact on benthic biotopes in the Baltic Sea and for the status of populations by [2025].
- Invite the competent authorities to implement operational **conservation measures for the Western Baltic population by [2024]** such as permanent and/or spatial-temporal closures for relevant fishing métiers in risk areas where technical mitigation measures are insufficient to reach conservation goals.
- Reduce the negative impacts of fishing activities on the marine ecosystem and to this end, support the development of fisheries management including technical measures to minimize unwanted by-catch of fish, birds and marine mammals and achieve the close to zero target for by-catch rates of relevant species, e.g. **harbour porpoise**
- Development and implementation of effective data collection for by-caught birds and mammals in line with the needs identified by ICES and the identified data-gaps outlined in the HELCOM Roadmap on fisheries data

MPAS:

- Ensure that by [2030] the HELCOM MPA network inter alia provides specific protection to species and biotopes listed as regionally threatened or near threatened in the HELCOM Red Lists.

# Core indicators related to harbour porpoise

## **Bycatch: Number of drowned mammals and waterbirds in fishing gear**

- leads DE - Sven Koschinski and Volker Dierschke (Birds), SE - Julia Carlström, PL (co-leads) - Katarzyna Kaminska and Tomasz Linkowski
- Under development based on the outcomes of the OSPAR-HELCOM incidental bycatch WS
- [Work Plan for future work on HELCOM indicators - bycatch](#)

## **Harbour porpoise abundance and distribution indicators**

- leads: SE - Julia Carlström and DE - Anita Giles
- Under development

## **Porpoise condition** indicators may be available for reproductive rate for HOLAS III

- [Work plan for future work on HELCOM indicators – marine mammals](#), outlining e.g. resources needed for the porpoise indicators to be included in HOLAS III

# OSPAR-HELCOM workshop to examine possibilities for developing indicators for incidental by-catch of birds and marine mammals



Petra Kääriä, HELCOM  
Tue 9 June 2020

[Link to outcome](#)

  
Baltic Marine Environment Protection Commission

# Bycatch indicator workshop, topics

- Data requirements, sources and monitoring
- Identifying areas of increased risk/low risk of incidental by-catch, some conclusions: fisheries data, in particular from small vessels and recreational fisheries need to be enhanced to a level that can support identification of high-risk areas; encourage utilisation of all data sources for reported dead animals to support ident. of high risk areas and overall status and occurrence of species
- Methodologies for indicator assessment, including threshold setting
- Marine mammals, some conclusions: fisheries effort from smaller vessels is critical to assess by-catch effectively, population parameters need to be improved to enable a full assessment of bycatch, trust building btw fisheries and by-catch monitoring is important to gain good data
- Seabirds
- Concluding remarks

Key conclusions and proposals by the WS provided for the topics, detailed discussion laid out in Annexes and separate technical reports

# Harbour porpoise work by EG MAMA

- EG MAMA 13-2019 (see [outcome](#)) held in September 2019
- Following topics considered under fixed Agenda Item 4 Baltic Sea Harbour Porpoise:
  - [Intersessional activities by the Harbour porpoise team](#), led by Julia Carlström and Anita Gilles
  - [Core indicators](#) (distribution and abundance, co-lead Julia Carlström and Anite Gilles)
  - [Monitoring, data collection and reporting](#) (HELCOM-ASCOBANS database)
  - [Management of harbour porpoise and human induced pressures](#) (national management plans, BSAP actions)
  - [Recommendation 17/2](#)
- Next meeting EG MAMA (14) to be held on 22-24 September 2020 (DK?)

# EN CLIME key messages on marine mammals

- Baltic Sea Climate Change Fact Sheet 2021
- What is expected to happen:  
 “Changed prey distribution, quality and quantity as well as temperature and stratification will affect all the marine mammal species, but aggregate effects on abundance and distribution are unpredictable.”

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## Marine mammals

<div style="text-align: center; margin-bottom: 5px;"></div> <p><b>Description</b></p> <p>There are three resident seal species in the Baltic Sea: the ringed seal (<i>Pusa hispida</i>), the grey seal (<i>Halichoerus grypus</i>), and the harbour seal (<i>Phoca vitulina</i>). One cetacean occurs in the Baltic Sea, the harbour porpoise (<i>Phocoena phocoena</i>). Being at the top of the marine food web, these predators are sensitive to changes throughout the ecosystem that may be caused by climate change. Furthermore, the extent and quality of sea ice are important to the ice-breeding ringed seals and grey seals, while the rising sea levels will eliminate or diminish seal haulouts important for grey and harbour seal breeding and resting in the southern Baltic.</p>	<div style="text-align: center; margin-bottom: 5px;"></div> <p><b>Where is the change seen first? Is it already happening?</b></p> <p>The Baltic Sea ice cover and the length of the ice season have already been reduced. This will severely diminish breeding success of ringed seals, particularly in the southern areas and to a lesser extent, the breeding success of grey seals. Flooding of seal haul-outs will first occur in the southernmost Baltic, where relative sea level rises will be most severe and haul-out sites are mainly low banks of sand or shingle.</p>	<div style="text-align: center; margin-bottom: 5px;"></div> <p><b>What is expected to happen?</b></p> <p>Ringed seal breeding success will be negatively affected by climate change in terms of the reduced sea ice quantity, duration and quality and reduced snow cover for building pupping lairs (high confidence). Extirpation of the species in 1-3 of the southern (Gulf of Finland, the Archipelago Sea and Gulf of Riga) areas is probable. Grey seal breeding success will be negatively affected by climate change (high confidence). It is likely that the breeding distribution of the grey seal will be increasingly concentrated to land-breeding sites around the Baltic proper (Estonia, Sweden, Finland). Harbour seals will be negatively affected by climate change (high confidence). With the likely disappearance of seal haul-outs from the</p>
<div style="text-align: center; margin-bottom: 5px;"></div> <p><b>Other drivers</b></p> <p>As the southern Baltic ringed seal populations are small and not growing, they are vulnerable to extirpation, and further reductions in breeding habitat quality is likely to be felt quickly in these populations. Other factors accelerating the effects of climate warming on availability and quality of breeding ice are ice-breaking and active shipping routes during winter (e.g. Wilson et al 2017). These activities decrease the stability of the ice, advance the time of spring ice-break and diminish the available breeding area. Along with other anthropogenic disturbance, these activities impede and truncate the nursing</p>	<div style="text-align: center; margin-bottom: 5px;"></div> <p><b>Knowledge gaps</b></p> <p>Seal and porpoise foraging distribution and the relation of the former to haul-out sites is not well known. The requirement of ice habitat for successful breeding of ringed seals has not been sufficiently assessed. The land-breeding of grey seals is not surveyed yearly in most countries. Breeding success of the ringed seals in the Baltic in normal winters is poorly known, as the lairs in pack ice snow drifts are very rarely found.</p>	<div style="text-align: center; margin-bottom: 5px;"></div> <p><b>Policy relevance</b></p> <p>Currently, there are no direct actions to mitigate marine mammal distributional changes. The mitigation of all other known seal and harbour porpoise threats and pressures such as bycatch, prey availability, underwater noise and other disturbance is important for these stocks to recover, and for the ringed seals to compensate for the additional stress of a worsening breeding habitat. Artificial ringed seal lairs could be tested in the Baltic; they are in the research phase in Lake Saimaa. Minimizing human disturbance in breeding areas of all species can help their reproductive success. Temporal shipping restrictions may reduce</p>

# EN-Noise

- EN-Noise improving the HELCOM Draft Action Plan on noise
  - ACTION 9: Improve protection of areas, which have already been defined as important or critical habitats for noise sensitive species, by obligating the adoption of adequate operational and technical noise mitigation measures.
- Ongoing discussion on the establishment of threshold values for underwater noise, taking into consideration harbour porpoise in the Baltic Proper and impulsive noise

Thank you for your  
attention!

