BLUES

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HELCOM BLUES – Activity 2.4

17th January 2023

Naturhistoriska riksmuseet

HELCOM

Overview of Task A2.4 – harbour porpoise

Task	Deliverables
Subtask 2.4.1.	Improved harmonisation between HELCOM and OSPAR regarding indicators on abundance
Subtask 2.4.2.	Assessing trends in abundance for assessment of the Belt Sea population
Subtask 2.4.3.	Expert-based qualitative assessment of Baltic Proper population

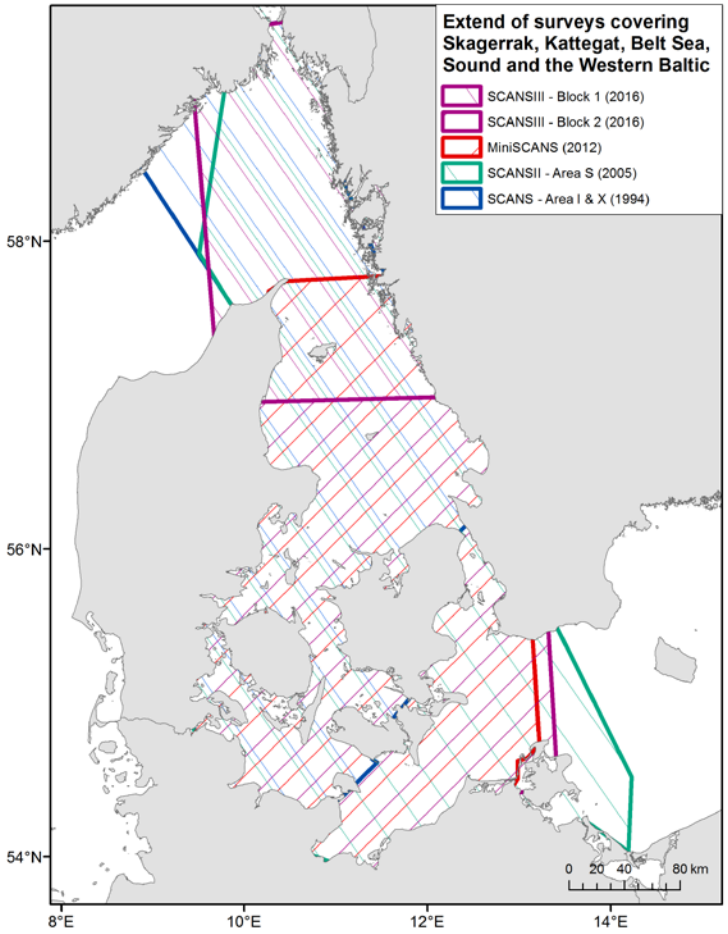
Results A2.4.1

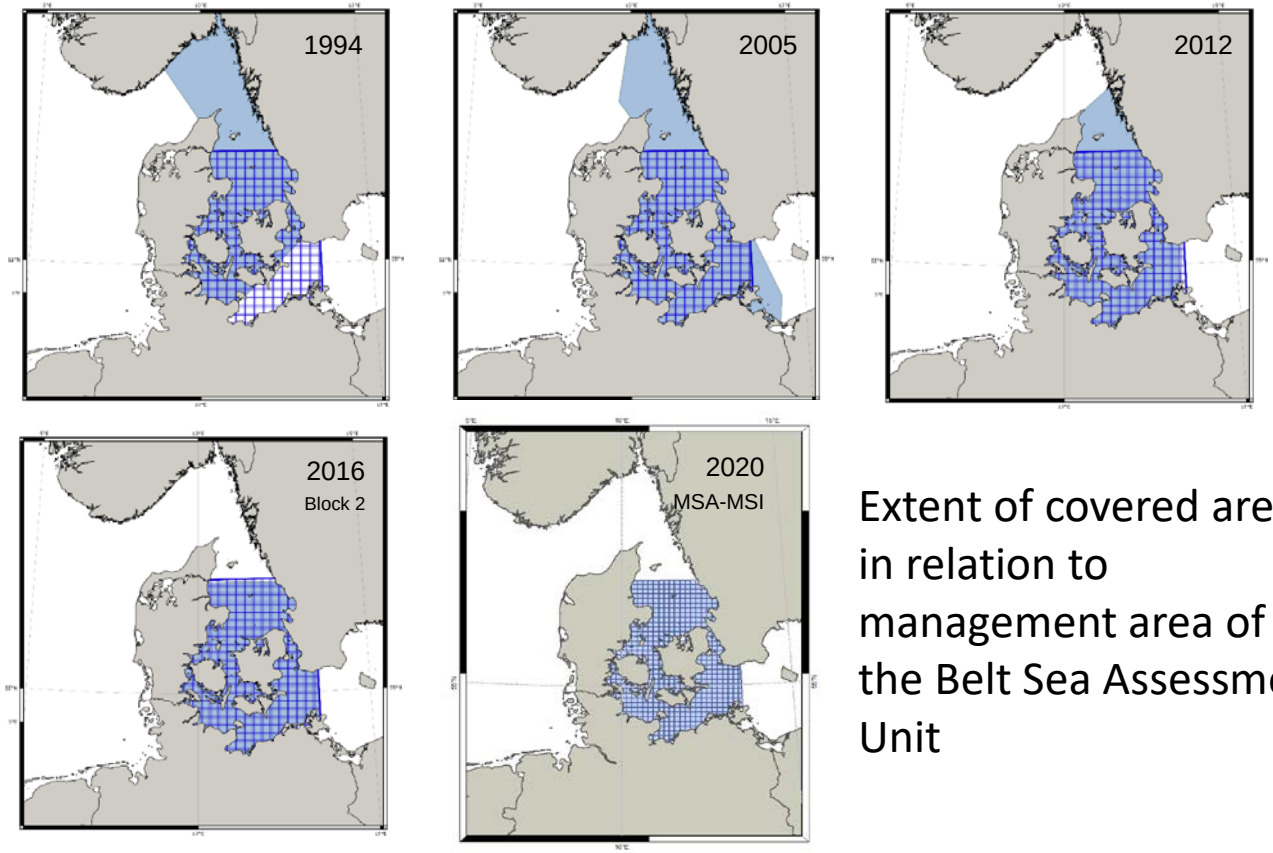
Aim: Improved harmonisation between HELCOM and OSPAR regarding indicators on abundance

- Workshop held on harmonisation between HELCOM and OSPAR in April 2021 – invited experts from HELCOM EG MAMA and OMMEG
- Outcomes:
  - Increased understanding of approaches/limitations across populations, and stronger chance for harmonisation of methods while still aiming for population-specific thresholds;
  - For the work presented here under HELCOM BLUES, it was discussed to trial different approaches to assess and evaluate trends of abundance for the harbour porpoise Belt Sea population
  - Report produced (HELCOM 2021)

Results A2.4.2

Aim: Assessing trends in abundance for assessment of the Belt Sea population

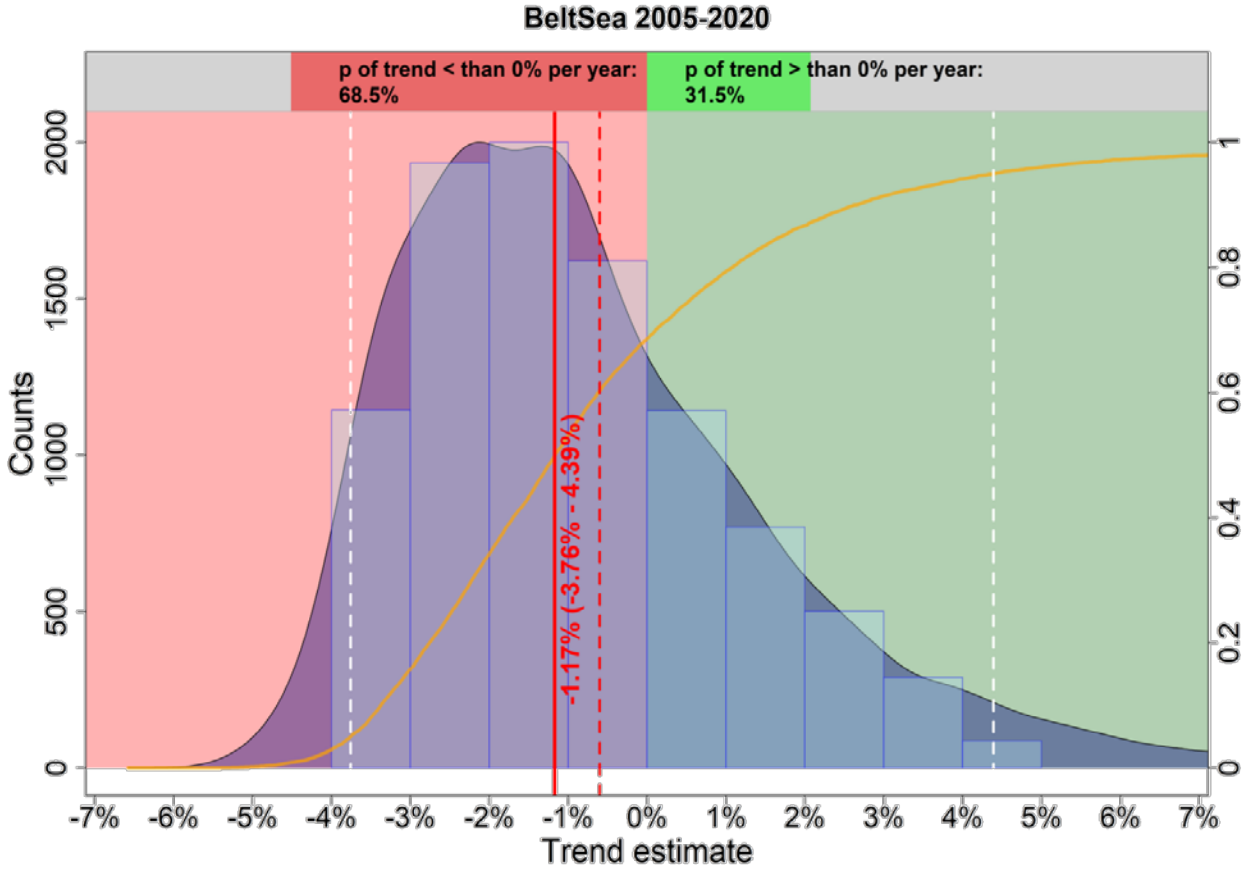




Extent of covered area in relation to management area of the Belt Sea Assessment Unit

Results A2.4.2

Aim: Assessing trends in abundance for assessment of the Belt Sea population



Trend: -1.17% p.a. (95% CI: -3.76% - 4.39%) with 68.5% probability for this (negative) trend;

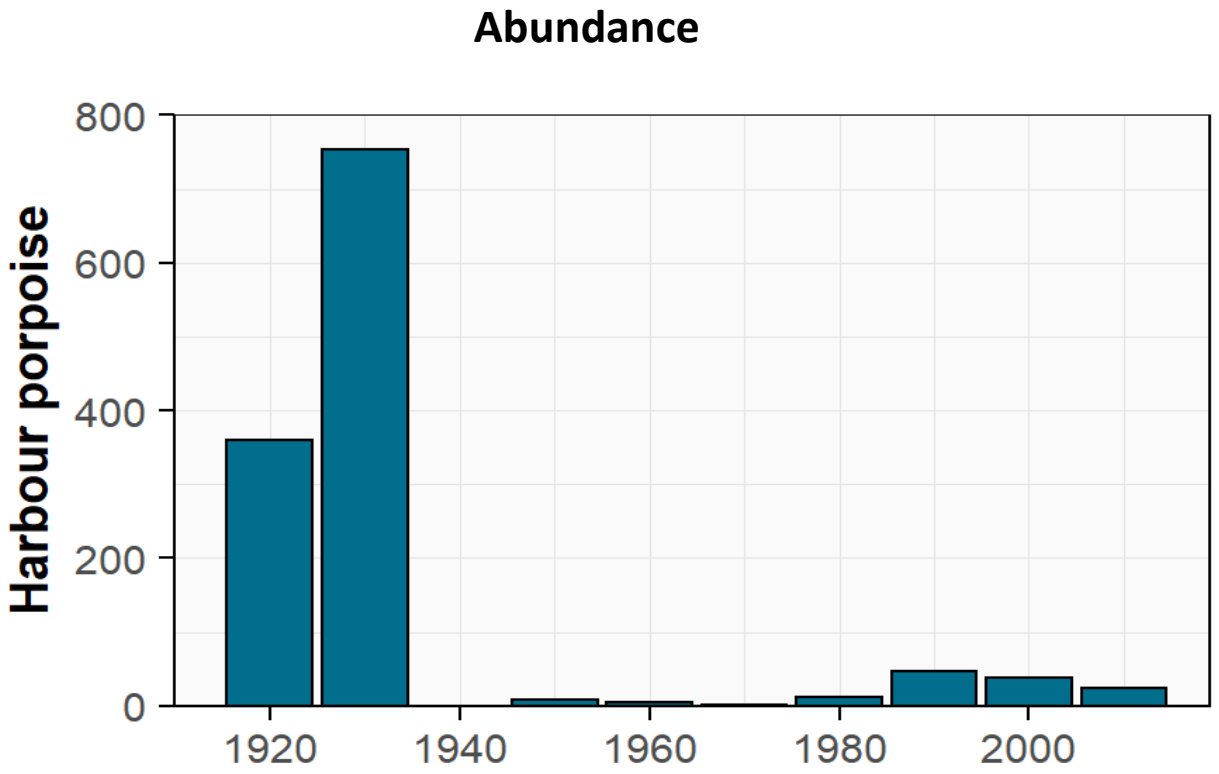
BUT associated with a wide credibility interval

HOWEVER data supported a decline with a higher probability compared to no decline

Results A2.4.3

Aim: Expert-based qualitative assessment of Baltic Proper population

- 281 new records located (789 total)
- Lower numbers of harbour porpoises observed over time (example from Polish waters)

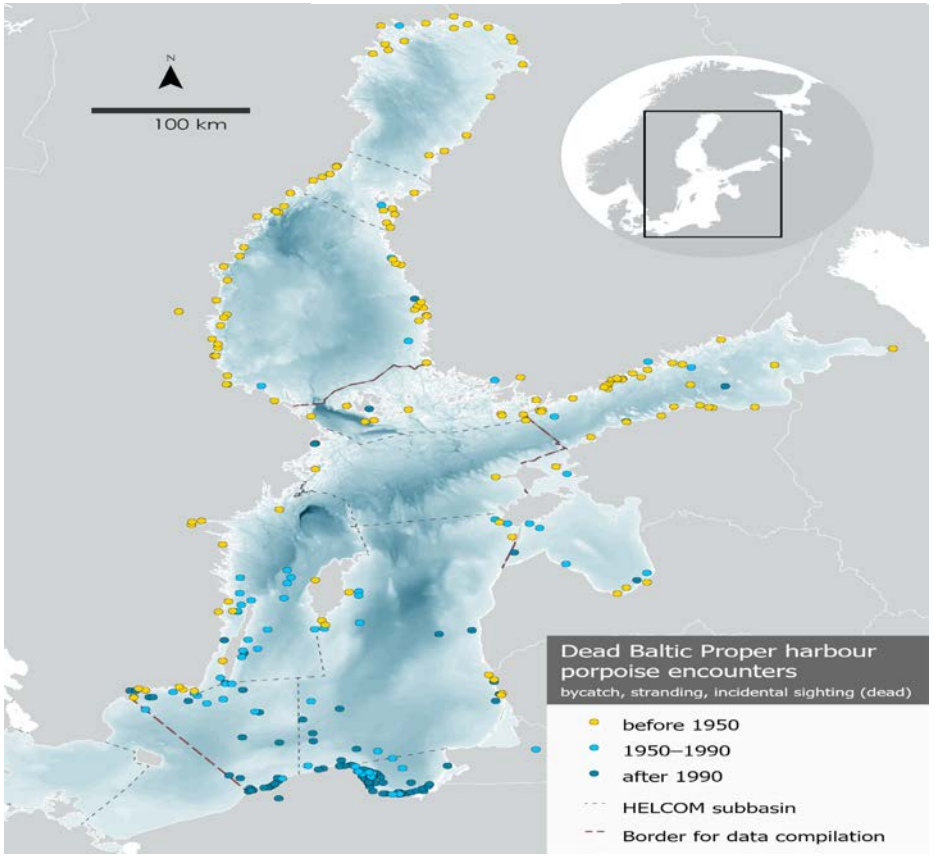


Results A2.4.3

Aim: Expert-based qualitative assessment of Baltic Proper population

- 281 new records located (789 total)
- Lower numbers of harbour porpoises observed over time (example from Polish waters)
- Far less records in recent years compared to historically, of reported dead animals the northern section of the historical range

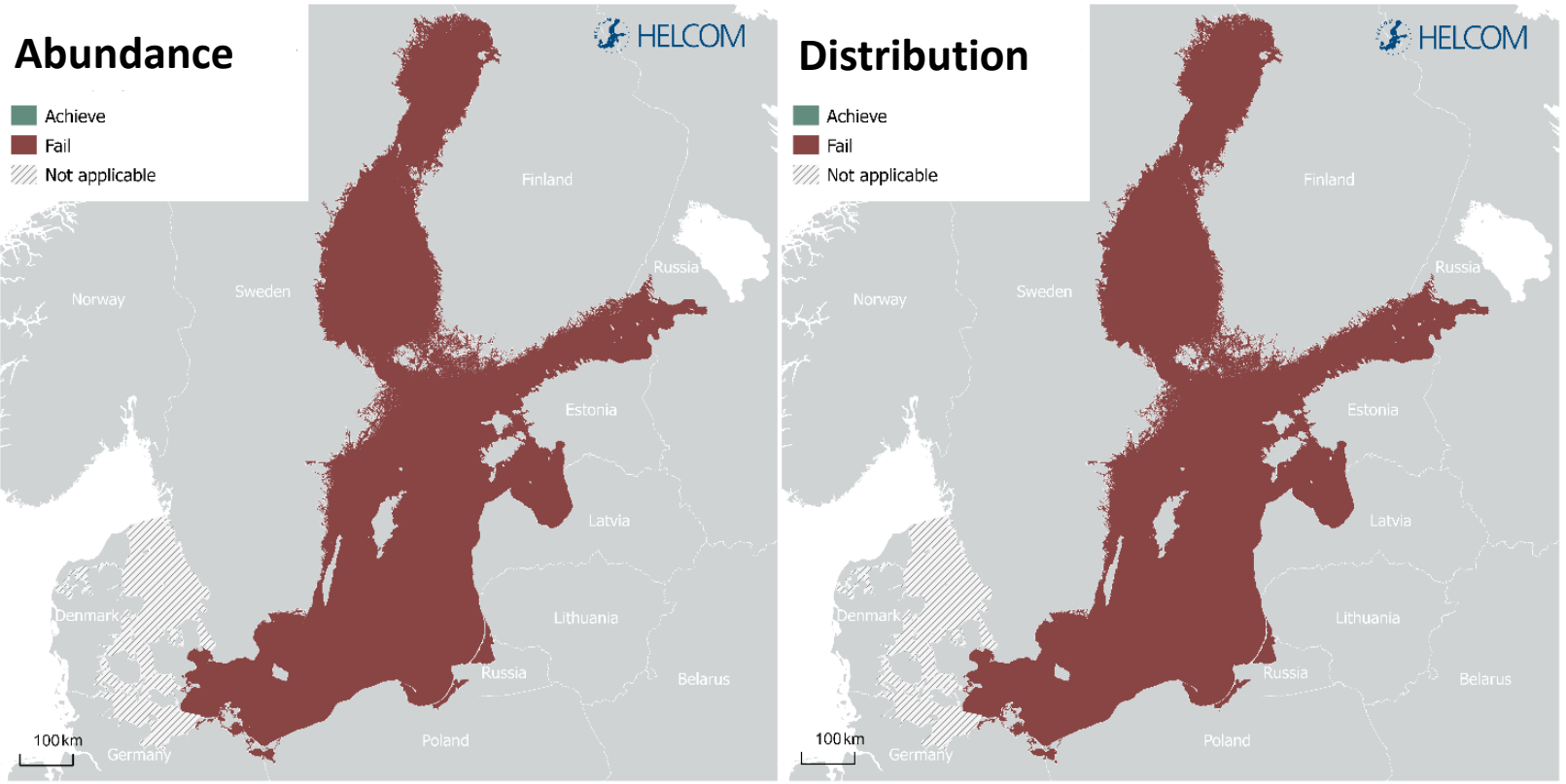
Distribution



Results A2.4.3

Aim: Expert-based qualitative assessment of Baltic Proper population

- 281 new records located (789 total)
- Abundance was likely an order of magnitude higher than currently based on historic sightings, and bycatch rate
- Historically, commonly distributed much further north than currently accepted range



Key message figure 1: Status qualitative assessment results based on evaluation of the abundance (left) and distribution (right) of the Baltic Proper harbour porpoise.

Results summary - harbour porpoise

Task	Deliverables	Results
Subtask 2.4.1.	Improved harmonisation between HELCOM and OSPAR regarding indicators on abundance	Increased discussion between expert groups allowed for increased efficiency in indicator development and future assessments
Subtask 2.4.2.	Assessing trends in abundance for assessment of the Belt Sea population	While no significant trend was detected, there was some indication of a decline in abundance of the Belt Sea population over time
Subtask 2.4.3.	Expert-based qualitative assessment of Baltic Proper population	The Baltic Proper population of harbour porpoises does **NOT** achieve GES for both abundance and distribution.

Key messages

- Key messages for **science**

  1) Thresholds used for indicators should be population-specific, considering available data, population dynamics, historical data, and existing pressures.

  2) Long-term datasets are needed to assess trends- the trend for the Belt Sea population was only able to be assessed with 4 data points over a short time period of 15 years, which is hard to put into context ecologically, as it does not cover three generations for the species.

  3) Reviews of old newspapers can provide useful data for data-deficient species/populations

- Key message for **policy makers**

  1) Harmonisation between RSC should be encouraged, as it allows for increased expert support, and reduces analyses and development time for required indicators

  2) A lack of a statistically significant trend does not mean that the population is in good status

  3) The Baltic Proper population does not achieve GES, urgently needs an updated abundance estimate, and was historically distributed much wider than today

Use of results so far and in future

- HELCOM ➡ Development and update of core indicators, trend and qualitative evaluations
- HELCOM HOLAS 3 Thematic Assessment of Biodiversity
- BSAP Goal ➡ "Baltic Sea ecosystem is healthy and resilient"
- BSAP Ecological objective ➡ "Viable populations of all native species"
- BSAP ➡ action B33
- MSFD ➡ reporting on D1C2 and C4 and links to D4; Art. 8 Guidance
- Other relevant processes ➡ ASCOBANS

Data for harbour porpoise A2.4

This work was possible due to support from

- HELCOM/ HELCOM EG MAMA
- OSPAR / OMMEG
- HELCOM/ASCOBANS harbour porpoise database
- SCANS & MiniSCANS survey projects
- Contribution of information to the qualitative assessment: Carl C. Kinze, Signe Sveegaard, Ivar Jüssi, Aleksander Klauson, Elo Rasmann, Olli Louisa, Anja Gallus, Michael Dähne, Anita Gilles, Saulius Karalius, Aistė Kubiliūtė, Airita Brenča, Iwona Pawliczka, Irina Trukhanova.

Outputs

- HELCOM (2021) Outcome of the First Meeting of the HELCOM BLUES project on improved harmonisation between HELCOM and OSPAR regarding indicators for Harbour porpoise (HELCOM BLUES WS 2.4.1-2021)
- Gilles, A., Nachtsheim, N., Authier, M., Siebert, U. (2022) Report on HELCOM BLUES Subtask 2.4.2: Assessing trends in abundance for assessment of the Belt Sea population. University of Veterinary Medicine Hannover, Foundation. 18 pp.
- HELCOM (2022) Qualitative assessment of the abundance and distribution of the Baltic Proper harbour porpoise. HELCOM pre-core indicator report.
- HELCOM (2022) Abundance and population trends of harbour porpoises. HELCOM pre-core indicator report.

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Thank you!

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