NATIONAL REPORT DENMARK 2023

Signe Sveegaard & Line A. Kyhn Marine Mammal Section, Department for Bioscience, Aarhus University

Input from:

Lotte Kindt-Larsen, DTU Aqua

Jakob Tougaard, Aarhus University





JASTARNIA MEETING SIGNE SVEEGAARD 20-22 MARCH 2023 SENIOR ADVISOR



INCREASE INVOLVEMENT, AWARENESS AND COOPERATION

- Fjord&Belt in Kerteminde "Marine Tracker" app for porpoise detections
- Middelfart listening station, 2017 ongoing

<u>https://www.youtube.com/watch?v=aPOIRi9Ouls</u> and <u>https://bios.au.dk/forskningraadgivning/temasider/baelt-i-balance/</u>

hvaler.dk on Facebook - very active







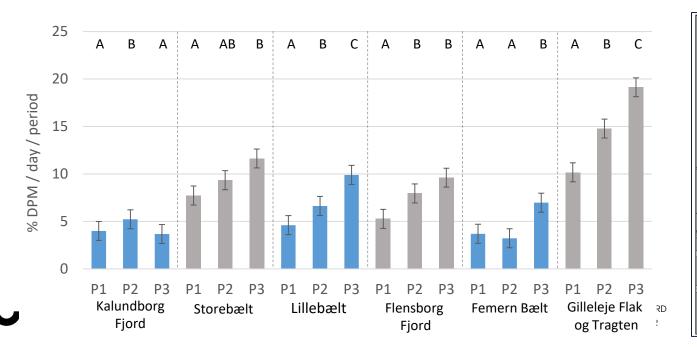
MONITOR AND ESTIMATE ABUNDANCE AND DISTRIBUTION

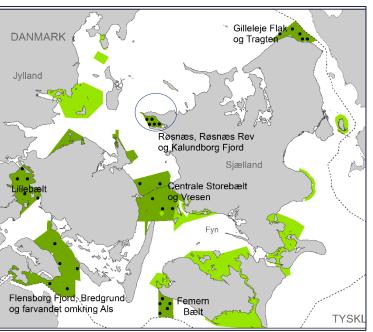
New results from national monitoring programs or large-scale surveys

Latest report is from 2020.

WBBK

- Rotation of PAM stations in SACs continues
- PAM results in all 6 N2000 shown a stabile or increase trend in detections since 2012.







MONITOR AND ESTIMATE ABUNDANCE AND DISTRIBUTION

New results from national monitoring programs or large-scale surveys

Latest report is from 2020.

WBBK

- Rotation of PAM stations in SACs continues
- PAM results in all 6 N2000 shown a stabile or increase trend in detections since 2012
- SCANS-IV in July 2022 High coverage in Belt Sea area

BALTIC PROPER

• PAM monitoring around Bornholm planned for 2023-2024 - hopefully part of SAMBAH-II



MONITOR AND ESTIMATE ABUNDANCE AND DISTRIBUTION

SAMBAH-II update

The SAMBAH II scientific steering group - weekly meetings in 2023

German BfN has funded study at CREEM:

Aim: a cheaper program with the same statistical weight.

Result: a suggestion from CREEM and a new lay-out based on the old SAMBAH grid. E.g. 1) one year monitoring and 2) varied density of PAM stations based on density of porpoises in SAMBAH I.

Danish EPA invited to a meeting (last week) between Baltic ministries:

Aim: to plan for a joint monitoring effort to get new abundance estimate.

Result: All participating countries were positive - now working towards a plan for a joint program. 3 countries could not participate. Hope: to deploy PAM stations Spring 2024. There is still a need to find additional funding to cover expenses.





MONITOR, ESTIMATE AND REDUCE BYCATCH

Bycatch monitoring

• CCTV- monitoring is now part of the Danish DCF monitoring, full year between 8-10 vessels.

Bycatch estimates

- Larsen et al. 2021. "Bycatch of marine mammals and seabirds Occurrence and mitigation", DTU Aqua Report no. 389-2021
- WGBYC has made allot of progress, and there is now numbers for DK and SE

Reduction of bycatch

• Only pingers, these are however used much more regular compared to earlier. However again the regulation is only for vessels >12m.

Ongoing projects of alternative gear

- DTU is making a trial using pot to see how much they catch over time. No results yet. But the fisher is very happy and wants to continue.
- PAL project lead by Germany. Danish part: study acoustic behaviour of naïve HPs to exposure to PAL pingers in real fishery. Field work in 2023 +2024.





MONITOR AND MITIGATE IMPACT OF UNDERWATER NOISE

Projects/research/monitoring in underwater noise and its impact on harbour porpoises?

- National noise moniting stations continued
- TANGO, ended / report published. Rerouting shipping lanes in the Kattegat effects on soundscape and ecosystem 2019-2021. Field work finished aug 2021. Analysis ongoing. Collaboration with SNM and FOI (Swedish Defence Research Agency).
- SATURN, 2021-2025. Impacts of disturbances on marine populations the importance of animal movements and energetics. Tagging of porpoises.
- BLUES. Led by Estonia (TalTech) provided underwater noise mapping of the Baltic for HOLAS 3. Report should be available.

Measures and mitigations

• New guidelines for pile driving from the Energy Agency in place (2022): News: 1) auditory weighting and 2) threshold for behaviour.





MONITOR AND ASSESS POPULATION HEALTH STATUS

Status of collection of dead porpoises:

Data from the 2021 Report of the National Contingency Plan (Charlotte Bie Thøstesen, Fimus)

- 274 dead harbour porpoises registered (264 stranded/10 known bycatch)
- 38 harbour porpoises was necropsied -> 10 known bycatch, 12 likely to be bycaught.
 1 harbour porpoise had a Salmonella infection in the liver. Nutritional status: 4 well-fed, 8 normal and 11 emaciated (not measured on all animals).
- No harbour porpoises from the Baltic Proper necropsied.
- Denmark has funding for dissecting 25 porpoises per year. The rest is good will.

Interesting cases to mention? 58% of the necropsied animals were bycaught.

Yearly reports from the Contingency Plan can be downloaded here https://fimus.dk/naturhistorie/beredskabet-for-havpattedyr/



dsø/Skagerrak Populatione

3-4 marsvir

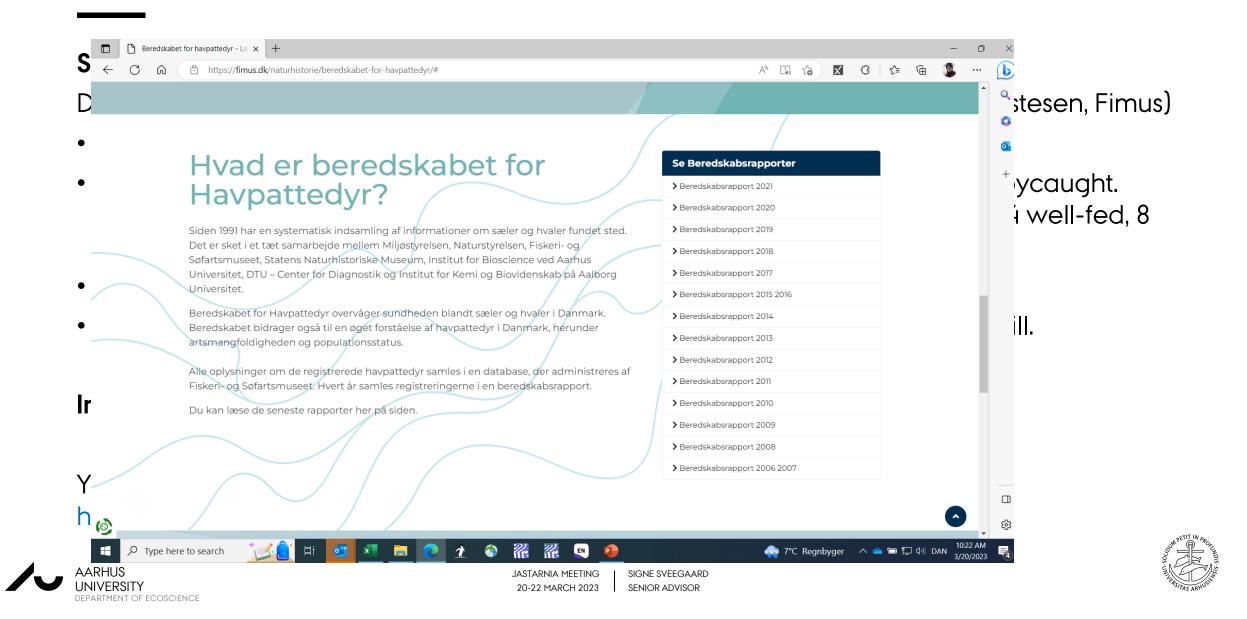
marsvir

19-20 marsvi

Bælthavs Populationen

122 marsvin (Phocoena phoco

MONITOR AND ASSESS POPULATION HEALTH STATUS

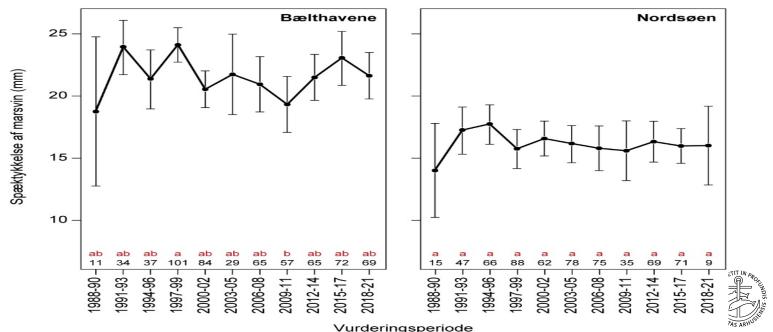


MONITOR AND ASSESS POPULATION HEALTH STATUS

Kyhn. L.A., Beest, F.V. & Galatius, A. 2022. Spæktykkelse hos tre danske havpattedyr 2019-2021. Overvågning udført for Miljøstyrelsen. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi, 42 s. - Teknisk rapport nr. 253

http://dce2.au.dk/pub/TR253.pdf

Working on a project analysing harbour porpoises for PCBs





INVESTIGATE HABITAT USE AND PROTECT IMPORTANT AREAS

Projects/Research on porpoise distribution or habitat use?

Belt Sea: several EIA assessment studies using PAM in Kattegat 2020 – 2022, Results confirm known distribution.

Baltic Sea: "Energi Island Bornholm , 3 GW wind farms" Assessment in 2021-2023. PAM and aerial surveys.







INVESTIGATE HABITAT USE AND PROTECT IMPORTANT AREAS

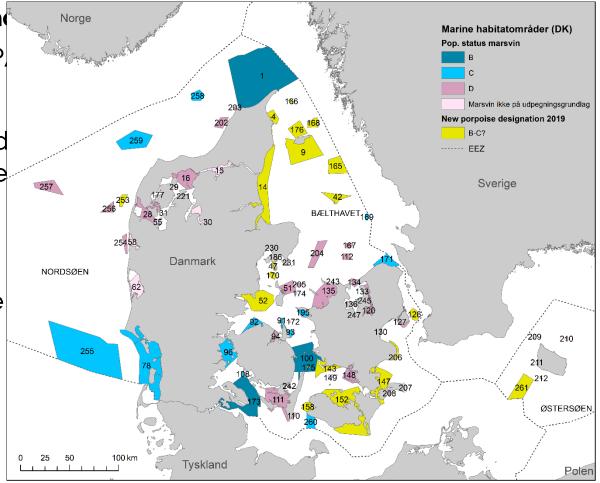
Projects/Research on porpoise distribution or he

Belt Sea: several EIA assessment studies using P. known distribution.

Baltic Sea: "Energi Island Bornholm , 3 GW wind Assessment in 2021-2023. PAM and aerial surve

New protected areas designated for harbour porpoises?

In 2020, 20 new N2000 sites were added to the existing 16 sites.





SIGNE SVEEGAARD SENIOR ADVISOR



INVESTIGATE HABITAT USE AND PROTECT IMPORTANT AREAS

Projects/Research on porpoise distribution or h

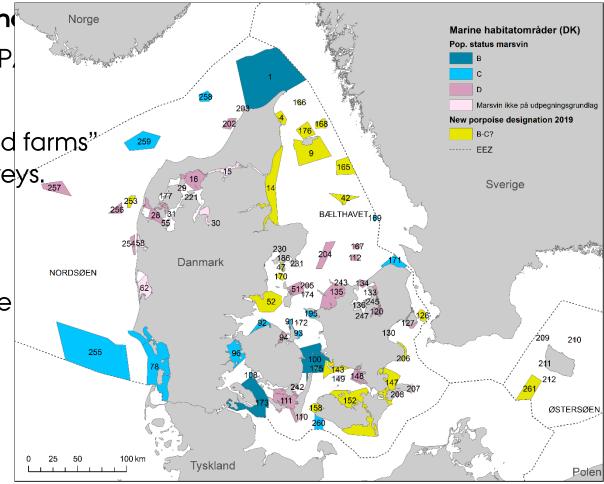
Belt Sea: several EIA assessment studies using P known distribution.

Baltic Sea: "Energi Island Bornholm , 3 GW wind farms" Assessment in 2021-2023. PAM and aerial surveys.

New protected areas designated for harbour porpoises?

In 2020, 20 new N2000 sites were added to the existing 16 sites.

Conservation measures and/or management plans in place for existing areas? No





SIGNE SVEEGAARD IASTARNIA MEETING 20-22 MARCH 2023

SENIOR ADVISOR



