

NATIONAL PROGRESS REPORT (SWEDEN)

Kylie Owen

ASCOBANS Jastarnia Group meeting
8-9 June 2020



Naturhistoriska
riksmuseet



LUND
UNIVERSITY



UPPSALA
UNIVERSITET



Swedish University of
Agricultural Sciences



NATIONAL
VETERINARY
INSTITUTE



UNIVERSITY OF
GOTHENBURG

Swedish Agency
for Marine and
Water Management

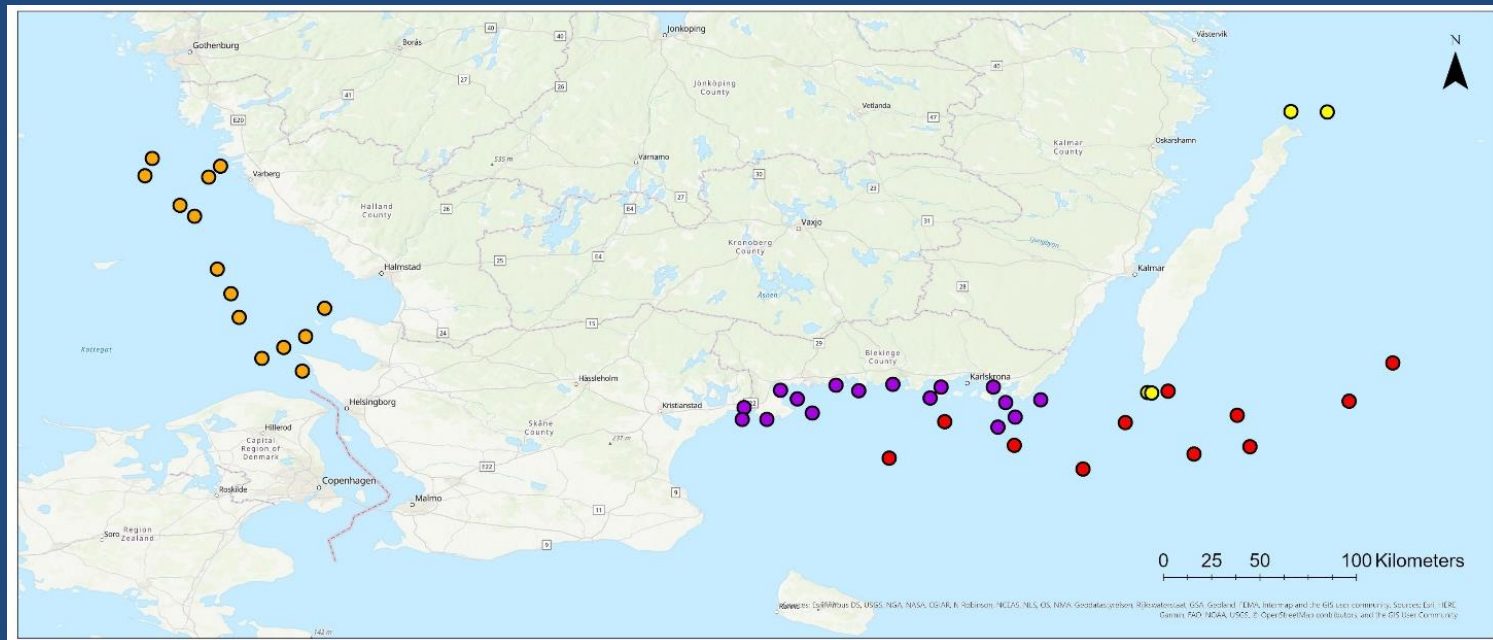
NATIONAL AND REGIONAL MONITORING PROGRAMS

National (SMNH)

- **Baltic Sea** since 2017
- **Kattegat Sea** May 2019

Regional (SMNH/counties):

- **Blekinge** since 2016
- **Öland** since April 2020



(Funded by SwAM)

CONSERVATION RESEARCH PROJECTS

Temporal trends analysis

- Comparison of 11 stations
 - SAMBAH (2011-2013)
 - National monitoring (2017-2020) (SMNH)
- Preliminary results: DPD in the Baltic may be increasing over time?

CONSERVATION RESEARCH PROJECTS

Temporal trends analysis

- Comparison of 11 stations
 - SAMBAH (2011-2013)
 - National monitoring (2017-2020) (SMNH)
- Preliminary results: DPD in the Baltic may be increasing over time?

SAMBAH II

- Planning is ongoing (SwAM, SMNH, CCB, SLU Aqua, SLU Landscape)
- Michael Dähne presentation tomorrow



CONSERVATION RESEARCH PROJECTS

Population dynamics paper: Cervin et al. (in Review) (UGOT)

Methods:

- Somatic and demographic vital rates from 7 NS populations.
- Stochastic, individual-based population model, and performed a population viability analysis.

CONSERVATION RESEARCH PROJECTS

Population dynamics paper: Cervin et al. (in Review) (UGOT)

Methods:

- Somatic and demographic vital rates from 7 NS populations.
- Stochastic, individual-based population model, and performed a population viability analysis.

Results:

- The Baltic Proper harbour porpoise is viable without anthropogenic stressors.
- Even the lowest estimated bycatch leads to a population collapse to ≤ 50 animals over the next 100 years.
- Adult survival is of critical importance.

CONSERVATION RESEARCH PROJECTS

WWF funded project on the Baltic Natura 2000 site (CCB, SMNH, FOI):

The effect of seal safe pingers on seal depredation:

- Data collection is due to be finished this summer
- Analyses should be finished at the end of 2020.

CONSERVATION RESEARCH PROJECTS

WWF funded project on the Baltic Natura 2000 site (CCB, SMNH, FOI):

The effect of seal safe pingers on seal depredation:

- Data collection is due to be finished this summer
- Analyses should be finished at the end of 2020.

Started modelling the effects of windfarm construction on the Baltic Proper harbour porpoise; hoping to include pinger use effects.

CONSERVATION RESEARCH PROJECTS

WWF funded project on the Baltic Natura 2000 site (CCB, SMNH, FOI):

The effect of seal safe pingers on seal depredation:

- Data collection is due to be finished this summer
- Analyses should be finished at the end of 2020.

Started modelling the effects of windfarm construction on the Baltic Proper harbour porpoise; hoping to include pinger use effects.

Impact of noise on porpoise detection:

- Proxy for shipping noise influences porpoise detection rate
- Extent of the impact varies with season.

CONSERVATION RESEARCH PROJECTS

Harbour porpoise hunting from a bird's eye view (Stedt et al. 2019) (LU):

- Method: Drones to assess foraging behaviour



Photo: Bill Keener / Golden Gate Cetacean Research

CONSERVATION RESEARCH PROJECTS

Harbour porpoise hunting from a bird's eye view (Stedt et al. 2019) (LU):

- Method: Drones to assess foraging behaviour
- Results:
 - Switch between foraging strategies, including cooperative foraging
 - Confirms that porpoises spend considerable amounts of time and effort to capture their prey

CONSERVATION RESEARCH PROJECTS

Harbour porpoise hunting from a bird's eye view (Stedt et al. 2019) (LU):

- Method: Drones to assess foraging behaviour
- Results:
 - Switch between foraging strategies, including cooperative foraging
 - Confirms that porpoises spend considerable amounts of time and effort to capture their prey

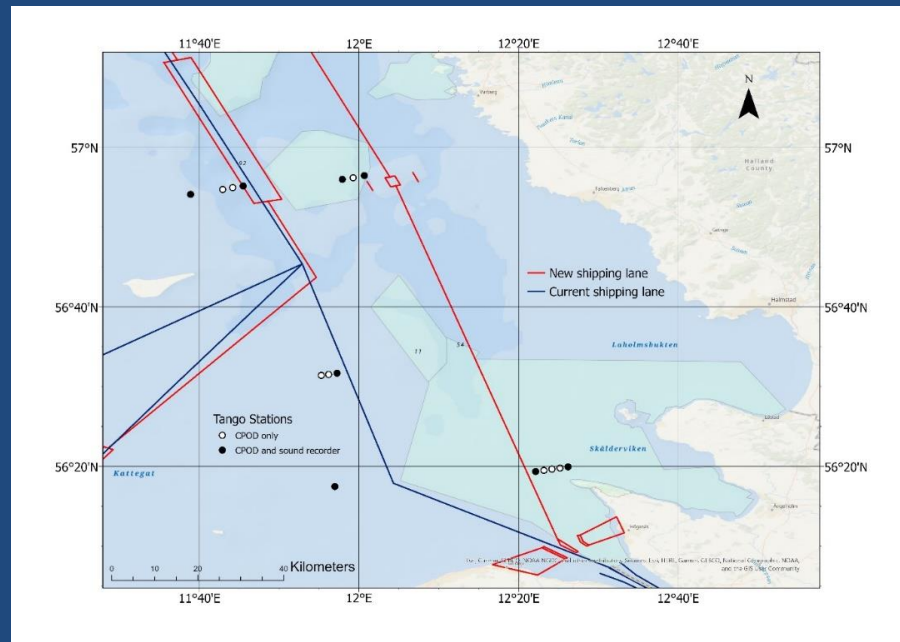
Miniscans

- Sweden co-funding survey and assisting where needed with planning.

CONSERVATION RESEARCH PROJECTS

TANGO STUDY (AU, FOI, SMNH, SLU Aqua):

- Impact of re-routing a major shipping lane (2019-2020)
- “Pre” data collection ongoing (change 1 July 2020)



BYCATCH PROJECTS

Niu (2019) Master's thesis (UU, SMNH):

- Analysis of a historical (1995-1997) onboard observer programme of bottom gillnet fishery data:
 - Soak time, string length and water depth largest impact
 - Bycatch rate unsustainable for WBBK and NS populations



Photo: Sara Königson

BYCATCH PROJECTS

Niu (2019) Master's thesis (UU, SMNH):

- Analysis of a historical (1995-1997) onboard observer programme of bottom gillnet fishery data:
 - Soak time, string length and water depth largest impact
 - Bycatch rate unsustainable for WBBK and NS populations

Ghost net removal

- MARELITT project: Action plan "*The Baltic Sea Blueprint*".
 - Mapping, retrieval, recycling, and prevention of ghost nets.



Photo: Sara Königson

BYCATCH PROJECTS

Niu (2019) Master's thesis (UU, SMNH):

- Analysis of a historical (1995-1997) onboard observer programme of bottom gillnet fishery data:
 - Soak time, string length and water depth largest impact
 - Bycatch rate unsustainable for WBBK and NS populations

Ghost net removal

- MARELITT project: Action plan "*The Baltic Sea Blueprint*".
 - Mapping, retrieval, recycling, and prevention of ghost nets.

Sara Königson (SLU): more at the end.



Photo: Sara Königson

REPORTING SCHEME & HEALTH ASSESSMENTS

- Updating a web-based reporting form for live and dead observations (SMNH, funded by SwAM)
- SMNH collects any information on all dead porpoises (some are collected for necropsy by SVA and SMNH (funded by SwAM))
- Health report by SVA and SMNH (Presentation by Aleksija Neimane tomorrow)



Photo: Solvin Zankl, https://ccb.se/wp-content/uploads/2015/03/Harbour_porpoise_15_webb-vers.pdf

OTHER ACTIONS

- Baltic Proper population listed as Critically Endangered (CR) on the Swedish Red List
- Updating of the monitoring program for National implementation of the Marine Strategic Framework Directive (SwAM).
- Finalising National Action Plan for harbour porpoises (SwAM, SMNH, SLU Aqua)



Photo: <https://hakuresearch.wordpress.com/research/completed-projects/ongoing-project/>

WORKING GROUPS

- ICES WGBYC (inc ADG) (SLU Aqua, SMNH)
- ICES special request (inc ADG) (SLU Aqua, SMNH) – Julia Carlström and Katarzyna Kamińska talk tomorrow
- ICES WGCATCH (SLU Aqua)
- ICES WGMME (SMNH)
- ASCOBANS JG, NSG (SLU Aqua, SMNH, SVA, SwAM)
- Development of HELCOM indicator on porpoise distribution and abundance (SMNH)
- HELCOM EGMAMA (SMNH)
- Joint OSPAR-HELCOM workshop developing indicators for incidental bycatch (Slu aqua)
- OSPAR MMEG (SMNH)
- FAO (SLU Aqua)
- STECF (SLU Aqua)



ACKNOWLEDGEMENTS



Naturhistoriska
riksmuseet



LUND
UNIVERSITY



UPPSALA
UNIVERSITET



Swedish University of
Agricultural Sciences



NATIONAL
VETERINARY
INSTITUTE



UNIVERSITY OF
GOTHENBURG

Swedish Agency
for Marine and
Water Management



Hand over to Sara Königson