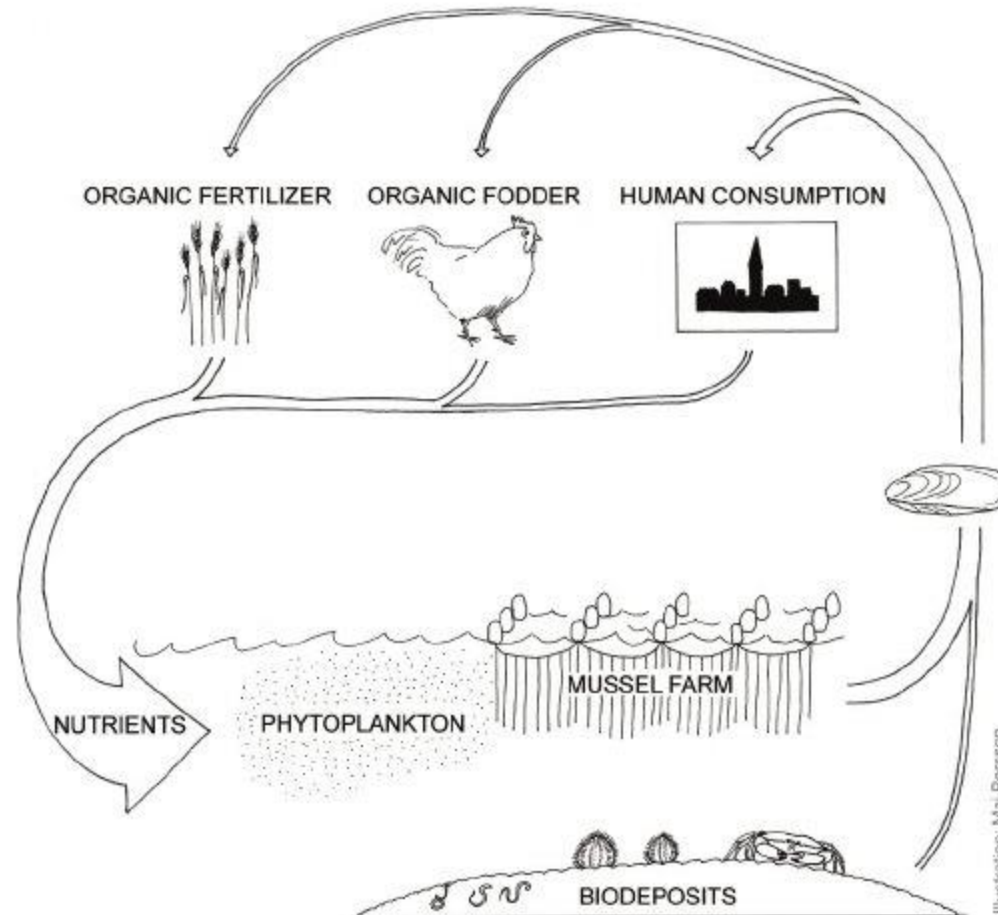


Stakeholder conference on mussel farming and water quality

Introduction by
Nardine Stybel (EUCC-D)

Rostock, 19.03.2019

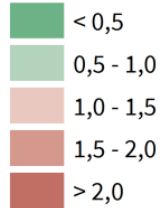
Mussel farming for water quality improvement



The Agro-Aqua recycling system of nutrients from sea to land, Odd Lindahl et al. 2005

Water quality of the Baltic Sea

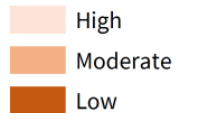
Eutrophication status



Not Assessed



CONFIDENCE



Not assessed

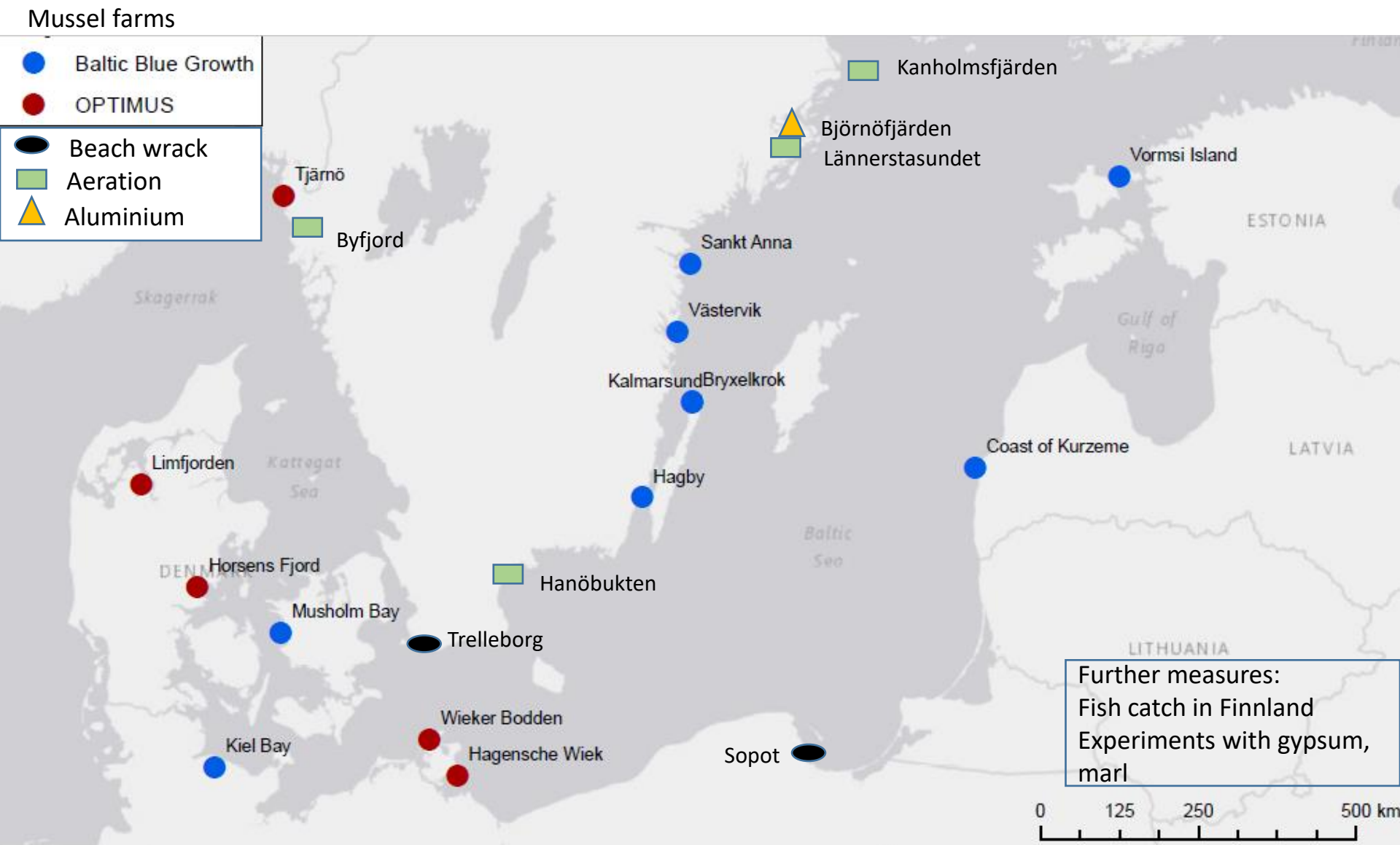
DK coastal waters: WFD overall status



150 km

Integrated status of eutrophication in the Baltic Sea 2011-2016

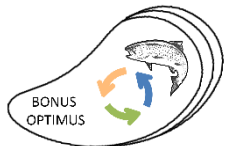
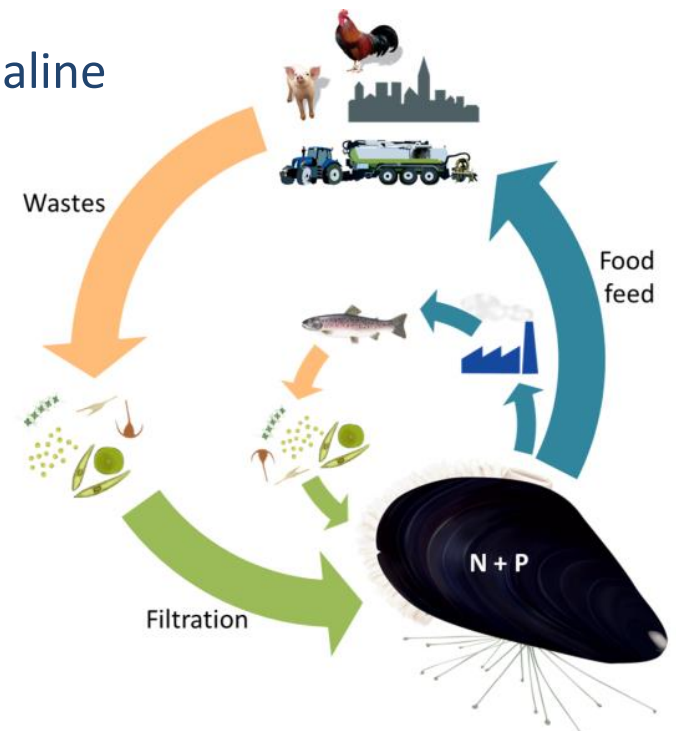
Trails for water quality improvements



BONUS OPTIMUS (2017-2020)

Aims to:

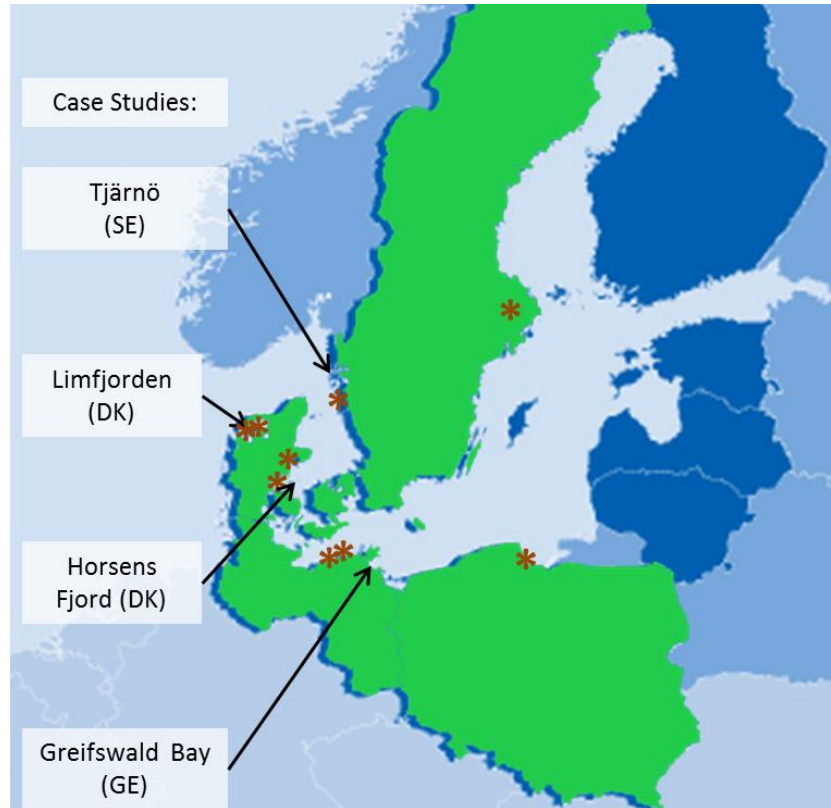
- provide robust evidence-based documentation of ecological, social and economic aspects of farmed mussel as a mitigation tool for eutrophication
- optimize aquaculture techniques and processing of farmed mussels to sustainable protein-rich feedstuff for fish
- test feasibility of mitigation mussel farms in low saline areas of the Baltic Sea



Working tasks

Mussel production capacity and costs optimization

- Test of settling material
- Monitoring of production volume and labour effort
- Production potential in GWB



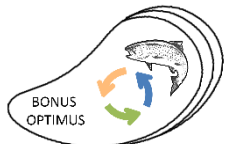
Talk by A.L. Buer

Environmental impacts of mussel mitigation culture

- Measurements of water clarity/ particle depletion
- Measurements of sediment chemistry
- Development of methods for mitigation of sediment impacts



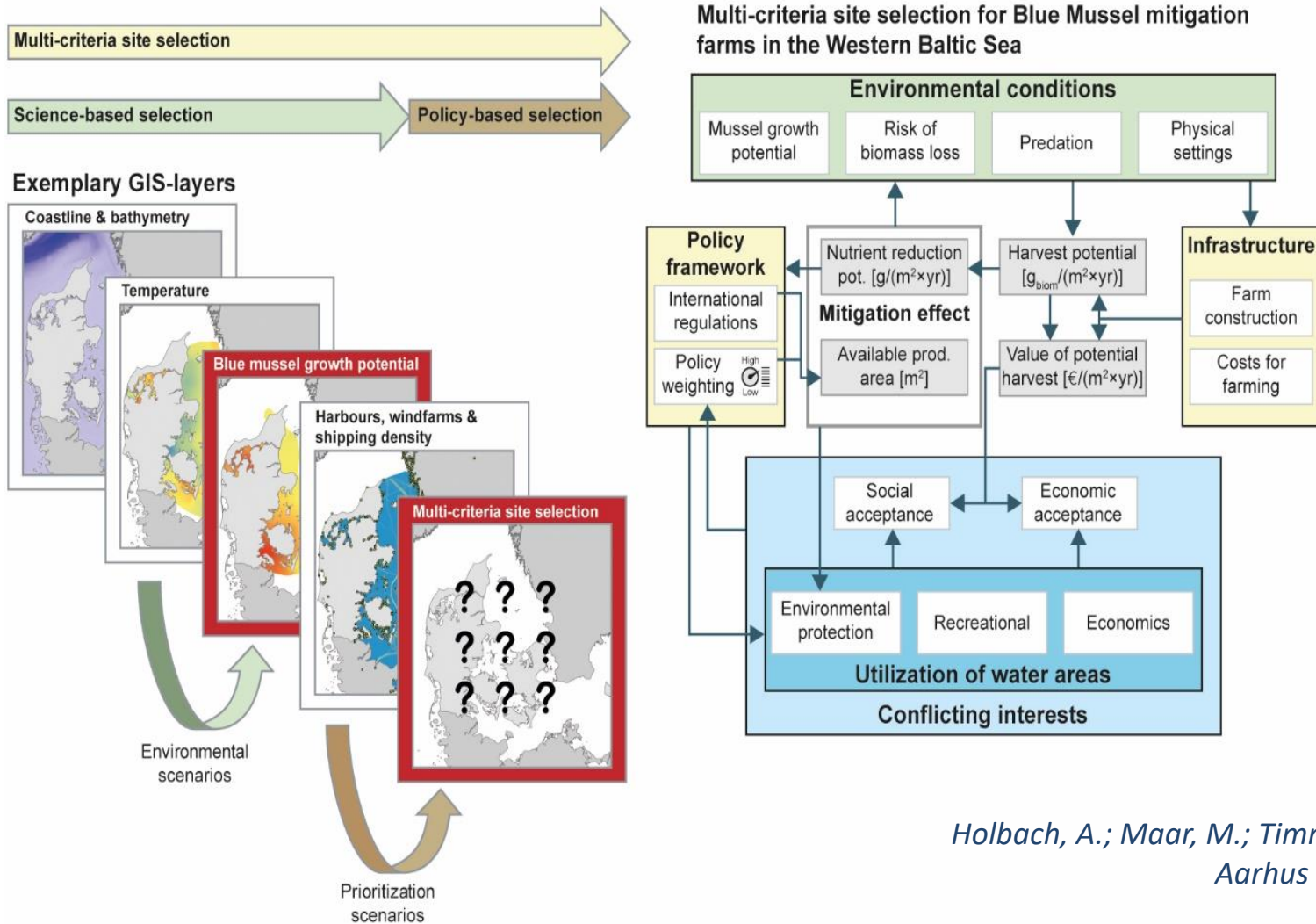
Ecosystem-Modelling



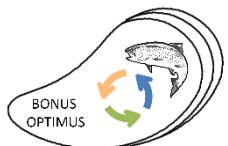
BONUS

SCIENCE FOR A BETTER FUTURE OF THE BALTIC SEA REGION

Multi-criteria site selection of mussel farming for MSP

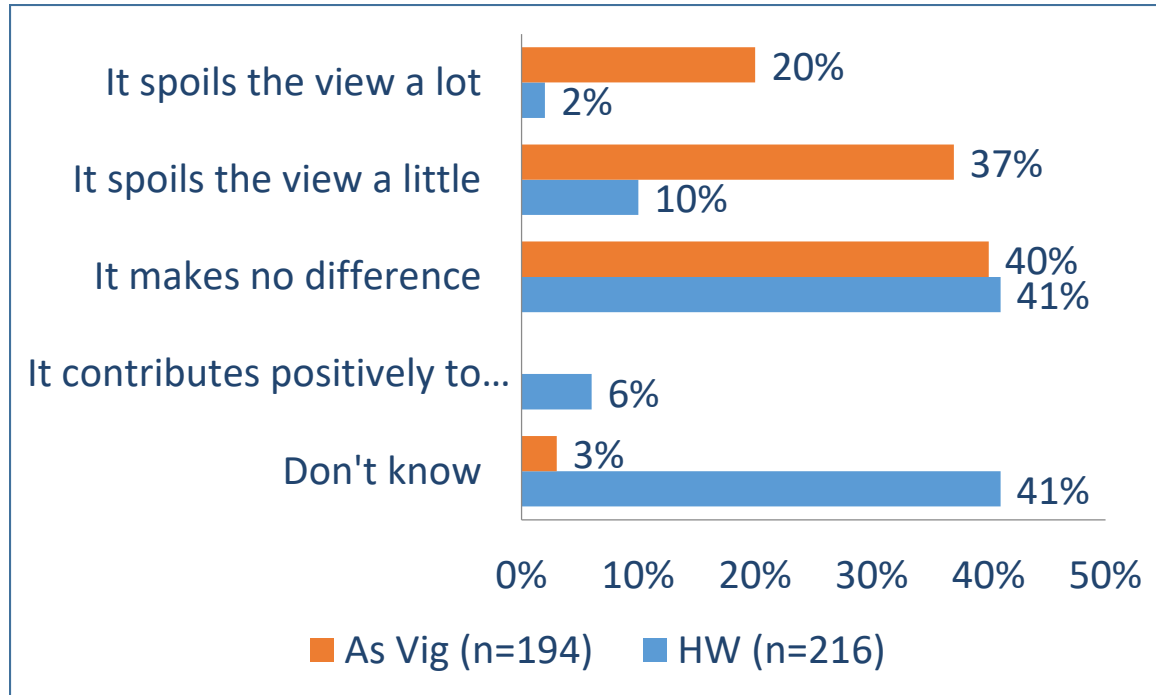


Holbach, A.; Maar, M.; Timmerman, K.; Göke, C.
Aarhus University, Denmark



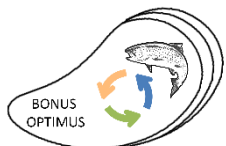
Social acceptance of the mitigation concept

In your opinion, how is the view over Hagensche Wiek/As Vig affected by mussel?



*Petersen, L., Stybel, N., Posern, M.
Aarhus University, Denmark & EUCC-D*

→ Guidelines of how to mediate social acceptance on mussel mitigation cultures



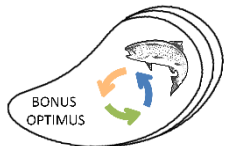
Economic feasibility & value of mussel mitigating cultures

- cost-efficient techniques for processing of mussel meal
- tests of mussel meal in fish feed



- analysis of the cost effectiveness of mussel farming
- exploration of alternative policies for payments of ecosystem services
- socio-economic potentials of improved water transparency

Talk by M. Inacio



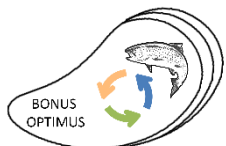
More from BONUS OPTIMUS

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[Researchgate/OPTIMUS](#)

Coastal & Marine
magazine 1-2019

- **Danish Technical University, National Institute of Aquatic Resources;**
Coordinator: Prof. Jens Kjerulf Petersen
- Aarhus University, Denmark
- Leibniz-Institute for Baltic Sea Research Warnemünde, Germany
- EUCC – The Coastal Union Germany, Germany
- Swedish University of Agricultural Sciences, Sweden
- University of Gothenburg, Sweden
- Institute of Oceanology of the Polish Academy of Sciences, Poland
- GRAIN Wood A/S, Denmark
- Hjarnø Havbrug A/S, Denmark



09:30	Gerald Schernewski <i>Leibniz-Institute for Baltic Sea Research Warnemuende</i>	Welcome
09:40	Nardine Stybel, EUCC – The Coastal Union Germany Efthalia Arvaniti, Submariner Network	Overview about projects BONUS OPTIMUS & BBG
10:00	Roland Lemcke <i>Ministry of Energy, Agriculture, the Environment, Nature and Digitalization Schleswig-Holstein</i>	Mussel farming in Schleswig-Holstein, current situation, research activities and gaps
10:25	Anna-Lucia Buer <i>Leibniz-Institute for Baltic Sea Research Warnemuende</i>	Mussel farming in Mecklenburg-Vorpommern - chances in low saline coastal waters
10:50	Per Dolmer <i>Orbicon A/S</i>	Mussel farming in Denmark – nutrient-catch cultures of blue mussels – example Mariager Fjord
11:15	Tim Staufenberg <i>Kiel Marine Farm</i>	Practical experiences of a small mussel farm
11:40		Discussion
12:15		Lunch + Possibility to work with ODSS (Operational Decision Support System)
13:15	Maria Posern, EUCC – The Coastal Union Germany	Combination of floating wetlands with mussel cultivation
13:40	N.N. <i>Federal State Institute of Agriculture and Fishery MV</i>	Planned IMTA Rostock
14:00	Joanna Przedzimirska <i>Maritime Institute in Gdansk</i>	Proposal of a harmonized approach on how to include mussel farms in the MSP process
14:25	Miguel Inacio <i>Leibniz-Institute for Baltic Sea Research Warnemuende</i>	Ecosystem services of mussel farming
14:50	Angela Schultz-Zehden <i>Submariner Network</i>	Ecosystem Service payments for mussel farms in the Baltic Sea
15:15		Final discussion