DTU Aqua
National Institute of Aquatic Resources

Esther D. Beukhof – Short CV

ORCID
0000-0002-0350-9596

Degrees
2019 – PhD, DTU Aqua, Technical University of Denmark
2016 – MSc Aquaculture and Marine Resource Management, Wageningen University & Research
2013 – BSc Biology, Wageningen University & Research

Positions
2023-present – Tenure track researcher, DTU Aqua, Technical University of Denmark
2022-2023 – Postdoc, DTU Aqua, Technical University of Denmark
2019-2022 – Ecological statistician, Wageningen Marine Research

Research area
My research focuses on the spatial and temporal distribution and drivers of marine fish and benthic communities, with a strong emphasis on sustainable human activities and ocean conservation. I have expertise in handling large datasets and utilizing advanced statistical modeling, including machine learning. I conduct stock assessments and provide scientific advice to policymakers and industry stakeholders. Currently, I am involved in national and international projects on fish distribution, biodiversity and the impacts of human and environmental factors on benthic communities, often in a leading or coordinating role.

Distinctions and awards
2018 – Third prize for best student presentation at the World Conference of Marine Biodiversity, Montreal
2016 – Graduated *cum laude* (with honour) from MSc program

Memberships of scientific committees (last 5 years)
WGWIDE – ICES Working Group on Widely Distributed Stocks
WKFBIT – ICES Working Group on Fisheries Benthic Impact and Trade-offs
STECF Expert Working Group on the assessment of balance between fleet capacity and fishing opportunities

Publications

Type of publication:	**Number**
Web of Science publications:	8
Citations:	309
h-index:	7
Other peer review publications:	0
Books:	0
Book chapters:	0
Reports:	24

International conferences (last 5 years)

Type of participation:	**Number**
Contributions as first author:	1
Invited:	0
Organizing role:	0

Evaluation tasks and reviews (last 5 years)
Fish and Fisheries, Journal of Fish Biology, Marine Ecology Progress Series, Biological Reviews, Marine Environmental Research

Advisory tasks (last 5 years)
- As stock assessor providing catch advice for blue whiting (2022-present) and North Sea horse mackerel (prior 2022)

- Memo on environmental effects of beam trawling to Ministry of Food, Agriculture and Fisheries (2024)
- MSFD assessment of Descriptor 4 and 6 criteria for the Danish national marine strategy, focussing on benthic biodiversity and food webs (2023)
- Evaluation of OSPAR Benthic Habitat indicators to Ministry of Environment (2022)

Educational tasks at academical level (last 5 years)
Contributed to and presented at workshop on trait-environment relationships as part of EU Horizon 2020 project FutureMARES (2021).

Supervision (ongoing or finished in the last 5 years)

	Principal/main supervisor	Co-supervisor
Other (MSc etc.)	0	2
PhD:	0	0
Postdoc:	0	N/A

Innovation activities (last 5 years)

	Number
Patents:	0

Collaboration with other stakeholders (within last 5 years)
Participated in several national and international projects and activities that include stakeholder input, such as ACTNOW, B-USEFUL, fishing industry and policy makers at the national ministry or European level.

Grants (competitive) (ongoing or finished within last 5 years)
- EU Horizon 2020:
    - Advancing understanding of Cumulative Impacts on European marine biodiversity, ecosystem functions and services for human wellbeing (ACTNOW) – work package lead
    - Shaping Ecosystem Based Fisheries Management (SEAwise) – task lead
- EHFAF:
    - Ecosystem-based spatial high-resolution tools for marine fisheries management (ECOSPACE) – project co-lead and work package lead
    - Mapping of seabed habitats and impacts of beam trawling and other demersal fisheries for spatial ecosystem-based management of the Jammer Bay (JAMBAY) – scientific coordinator and work package lead

Selected publications
McLaverty, C., **Beukhof, E. D.**, Bromhall, K., Dinesen, G. E., Erichsen, A. C., & Eigaard, O. R. (2024). The relative effects of bottom trawling, organic enrichment, and natural environmental factors on coastal seabed communities. Marine Pollution Bulletin, 209, 117169. https://doi.org/10.1016/j.marpolbul.2024.117169

Maureaud, A. A., Palacios-Abrantes, J., Kitchel, Z., Mannocci, L., Pinsky, M. L., Fredston, A., **Beukhof, E.**, Forrest, D. L., Frelat, R., Palomares, M. L. D., Pecuchet, L., Thorson, J. T., Van Denderen, P. D. & Mérigot, B. (2024). FISHGLOB_data: an integrated dataset of fish biodiversity sampled with scientific bottom-trawl surveys. Scientific data, 11(1), 24. https://doi.org/10.1038/s41597-023-02866-w

Bastardie, F., Brown, E. J., Andonegi, E., Arthur, R., **Beukhof, E.**, Depestele, J., Döring, R., Eigaard, O. R., García-Barón, I., Llope, M., Mendes, H., Piet, G. J., & Reid, D. (2021). A Review Characterizing 25 Ecosystem Challenges to Be Addressed by an Ecosystem Approach to Fisheries Management in Europe. Frontiers in Marine Science, 7, [629186]. https://doi.org/10.3389/fmars.2020.629186

Beukhof, E., Frelat, R., Pécuchet, L., Maureaud, A., Dencker, T. S., Sólmundsson, J., Punzón, A., Primicerio, R., Hidalgo, M., Möllmann, C., & Lindegren, M. (2019). Marine fish traits follow fast-slow continuum across oceans. Scientific Reports, 9, [17878]. https://doi.org/10.1038/s41598-019-53998-2

Beukhof, E., Dencker, T. S., Pécuchet, L., & Lindegren, M. (2019). Spatio-temporal variation in marine fish traits reveals community-wide responses to environmental change. Marine Ecology Progress Series, 610, 205-222. https://doi.org/10.3354/meps12826