

Mette Møller Nielsen – Short CV

ORCID

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Degrees

- PhD, Aarhus University, Denmark (2015).
- MSc, Aarhus University, Denmark (2011).

Positions

- Senior Researcher, DTU Aqua, Technical University of Denmark (2020-present).
- Researcher, DTU Aqua, Technical University of Denmark (2017-2020).
- Postdoc, DTU Aqua, Technical University of Denmark (2015-2017).

Research area

- Sustainable utilization of marine resources, particularly marine vegetation. It encompasses seaweed cultivation and ecophysiology, particularly developing methods for sustainable production. Optimizing culture techniques for different seaweed species, including hatchery protocols, farm design, and site selection.
- Marine vegetation management - focus on coastal ecology and environmental risk assessments of fisheries, including mapping marine habitats like eelgrass and macroalgae, and modeling eelgrass distribution for effective management.

Publications

Type of publication:	Number
Web of Science publications:	20
Citations:	491
<i>h</i> -index:	10
Other peer review publications:	0
Books:	0
Book chapters:	0
Reports:	36

International conferences (last 5 years)

Type of participation:	Number
Contributions as first author:	2
Invited:	1
Organizing role:	0

Evaluation tasks and reviews (last 5 years)

- Reviewer for Algal Research (1)
- Reviewer for Aquaculture research (1)
- Reviewer for Journal of applied Research (2)
- Reviewer for ICES Journal of Marine Science (1)
- Reviewer for Research Funding Committee: Central Research Development Fund of the University of Bremen (1)

Advisory tasks (last 5 years)

- Providing scientific input to Ministry of Food, Agriculture and Fisheries of Denmark on environmental impact assessments of mussel, oyster and starfish fisheries in Natura 2000 sites.

Educational tasks at academical level (last 5 years)

- Teacher and co-responsible in a 3 week master summer course: Low trophic Aquaculture. (2024-)

Supervision (ongoing or finished in the last 5 years)

	Principal/main supervisor	Co-supervisor
Other (MSc etc.)	2	1
PhD:	2	0
Postdoc:	2	N/A

Innovation activities (last 5 years)

	Number
Patents:	0

- None

Collaboration with other stakeholders (within last 5 years)

- General collaboration with stakeholders in research projects e.g. coastal authorities, agency for food, environmental agency etc.

Grants (competitive) (ongoing or finished within last 5 years)

- EMFAF: Optimised growth and bioactivity in methane-reducing seaweed species (BioMeTa) (**coordinator**) 2024-2027
- IFD: Low Trophic Aquaculture – blue food for green transition (LTA BOOST) (**PI**). 2023-2027.
- H2020: UltFarms: Circular low trophic offshore aquaculture in wind farms and restoration of marine space. 2023-2026.
- GUDP: SMARTTang (2022-2026) (**PI**). 2022-2026.
- Velux: Danish seaweed resources – for food, feed and as a helping hand to the marine environment (Tang.nu) (**PI**). 2017-2021.
- EMFF: Development of cost-efficient tools for eelgrass monitoring in Natura 2000 sites (ÅleTEK) (**coordinator**). 2019-2023.
- EMFF: Knowledge base for management of harvesting of wild seaweed (VildTang) (**coordinator**).
- Ministry of Environment and Food: The Stone-reef project (PI). 2016-2020.
- CPH-Food: Danish Seaweed Lines (gracilaria-project) (PI). 2020-2021.
- DTU/NTNU: Investigations of hatchery techniques and cultivation systems for cost-effective production of valuable seaweeds. PhD project (Peter Søndergaard Schmedes) (supervisor). 2016-2020.

Selected publications

Sustainable anagement of Fucus beds – testing of UAV-assisted biomass mapping and evaluation of re-growth after harvest at individual and population level. Levinsen, J. U. G., Nielsen, M. M., Schmedes, P. S., Thomasberger, A., Rasmussen, M. B., Mikkelsen, S. E., Pedersen, M. F., Sloth, J. J., Søndergaard, J., Sørensen, A. S., Boderskov, T., & Bruhn, A. (2025). Journal of Applied Phycology, 37, 1493-1508.

Comparative Assessment of Five Machine Learning Algorithms for Supervised Object-Based Classification of Submerged Seagrass Beds Using High-Resolution UAS Imagery. Thomasberger, A., Nielsen, M. M., Flindt, M. R., Pawar, S., & Svane, N. (2023). Remote Sensing, 15(14), Article 3600.

Contribution of boulder reef habitats to oxygen dynamics of a shallow estuary. Staehr, P. A. U., Staehr, S. U., Tonetta, D., Høgslund, S., & Nielsen, M. M. (2022). Science of the Total Environment, 805, Article 150261.

Effects of seeding method, timing and site selection on the production and quality of sugar kelp, Saccharina latissima: A Danish case study. Boderskov, T., Nielsen, M. M., Rasmussen, M. B., Balsby, T. J. S., Macleod, A., Holdt, S. L., Sloth, J. J., & Bruhn, A. (2021). Algal Research, 53, Article 102160.

New hatchery methods for efficient spore use and seedling production of Palmaria palmata (dulse). Schmedes, P. S., & Nielsen, M. M. (2020). Journal of Applied Phycology, 32, 2183-2193.