

Short CV – Anna Rindorf

Degrees

- BSc, Business Administration - Organisation change and innovation (HD-O), CBS, Denmark (2013).
- PhD, University of Copenhagen, Denmark (2004).
- MSc, University of Copenhagen, Denmark (1998).

Positions

- Head of Section for Ecosystem based Marine Management, DTU Aqua, Technical University of Denmark (2013-present).
- Research Scientist, Danish Institute for Fisheries Research (DIFRES)/DTU Aqua, (2004-2009 as Scientist and 2009-2012 as Senior Scientist).
- PhD Student, University of Copenhagen, Denmark (1999-2003).
- Research Assistant, DIFRES, Denmark (1998-1999).

Research area

My work is centred around detecting ecosystem changes linked to human impacts and setting management reference points and advice to achieve strategic and tactical ecosystem objectives. My work on setting and advising on ecosystem objectives includes work on MSY and related objectives, indicators for pelagic ecosystems, predator and prey condition indicators, species distribution indicators and measures of natural mortality. I have made it a specific focus to ensure that the indicators are feasible in a cooperative management setting to operationalise ecosystem based fisheries management. Among the ecosystem changes I have investigated are changes in predator-prey interactions, spatial distribution of fish, fishing mortality and growth of commercially exploited fish stocks in the North Sea focusing on their link to fishing pressure and biophysical characteristics including stock density.

Memberships of scientific committees, 2011-present

Selected Working Groups chaired: ICES WG on Ecosystem Effects of Fisheries (2012-, Chair 2014-2016), ICES WG on Multispecies Assessment (2008-present, Co-chair 2009-2012), Baltic Multispecies Assessments (2013, Chair), considering the basis for FMSY ranges for all stocks (2014-2015, Chair), review of the 2010 Commission Decision on criteria and methodological standards on good environmental status of marine waters; Descriptor 4 Foodwebs I and II (2014-2015, Chair), methods to aggregate species within species groups for the assessment of GES D1 (2016, Chair).

Review, 2011-present

Reviewer for Can J Fish Aquat Sci, ICES J Mar Sci, Mar Ecol-Prog Ser, Fish Oceanogr, J Fish Biol, Marine Biology, Fish and Fisheries, etc. (total of 50+) and Assistant editor, J Fish Biol (2011-2014).

Peer reviewed publications: 33. **Reports:** >10. **International conferences:** 5.

Advisory tasks, 2011-present

Stock assessment and national and international advice for North Sea and Skagerrak sandeel and sprat, multispecies advice, ecosystem and MSFD advice, dialogue meetings and briefings to the Danish Fishermen's Associations, Advisory Councils, DGMARE, European Parliament members and Ministry of Environment and Food of Denmark.

Educational tasks, 2011-present

Lectures in fisheries biology, stock assessment, fish population dynamics, food selection, and ecosystem modelling.

Supervision, 2011-present

PhD students: 2 (Co-supervisor). **Master students:** 1 (Main Supervisor).

Grants, 2011-present

Multinational projects only: Developing Fisheries Management Indicators and Targets (DEFINEIT) (2009-2012, Coordinator); Maximising Yield of Fisheries while Balancing Ecosystem to Economic and Social Concerns (MYFISH) (2012-2016, Coordinator).

Research collaboration with stakeholders, 2011-present

The cooperation with both public agencies and interest groups is an important topic in my work, in particular around sandeel, sprat and cod research, MSY and the ecosystem approach to fisheries management. I have had numerous meetings with industry, NGOs, managers and policymakers, to ensure that science and scientific advice remains relevant and feasible in a practical management setting.

Five selected publications

Rindorf A, Dichmont CM, Levin PS, Mace P, Pascoe S, Prellezo R, Punt AE, Reid DG, Stephenson R, Ulrich C, Vinther M. (2016). Food for thought: pretty good multispecies yield. *ICES Journal of Marine Science*. p.fsw071.

Engelhard GH, Peck MA, Rindorf A, Smout SC, van Deurs M, Raab K, Andersen KH, Garthe S, Lauerburg RA, Scott F, Brunel T. (2014). Forage fish, their fisheries, and their predators: who drives whom? *ICES Journal of Marine Science*. 71(1), 90-104. <http://dx.doi.org/10.1093/icesjms/fst087>

Rindorf A, Lewy P. (2012). Estimating the relationship between abundance and distribution. *Canadian Journal of Fisheries and Aquatic Sciences*. 69(2), 382-397. <http://dx.doi.org/10.1139/F2011-153>

Jensen H, Rindorf A, Wright PJ, Mosegaard H. (2011). Inferring the location and scale of mixing between habitat areas of lesser sandeel through information from the fishery. *ICES Journal of Marine Science*. 68(1) 43-51, <http://dx.doi.org/10.1093/icesjms/fsq154>

Rindorf A, Lewy P (2006). Warm, windy winters drive cod north and homing of spawners keeps them there. *Journal of Applied Ecology*. 43(3), 445-453. <http://dx.doi.org/10.1111/j.1365-2664.2006.01161.x>