

CV – Francois Bastardie

Year of birth: 1977

Degrees

Diploma (PhD), CNRS/University of Rennes1/INRA, France (2004).

Positions

- Research scientist, IFREMER, Nantes (2005-2007).
- Research scientist, Danish Institute of Fisheries Research (DIFRES)/National Institute of Aquatic Resources (DTU Aqua), Technical University of Denmark (2007-2011).
- Senior researcher, Section for Ecosystem-Based Fisheries Management, DTU Aqua (since 2011).

Research area

- Developing management strategy evaluation tools and fleet-based spatially explicit models for fisheries management toward the ecosystem approach to fisheries management. Developing scientific based quantitative methods and new models underlying these tools and frameworks.
- Scientific based fisheries management evaluation, fleet dynamics, bio-economic modelling, Fishery Library in R, long-term management plan evaluation, management strategy evaluation, scenario evaluation through simulation, marine spatial management (e.g. through evaluation of spatio-temporal fishing closures), population dynamics and fish stock assessment, vessel monitoring satellite data mining, individual-based models, spatial multi-fleet and multi-stock models, coupling of fisheries based models with ecosystem and stock models.

Memberships of scientific committees, 2006-present

ICES Assessment of the Eastern Baltic cod stocks (WGBFAS); ICES Coupling ecology to economic modelling (WGIMM); ICES Spatial Fisheries Data (WGSFD); ICES Fisheries Economics (WGECOM); ICES Bottom Fishing Impact (WGFBIT)

Review, 2011-present

Reviewer of manuscripts for ICES Journal of Marine Science, Canadian Journal of Fisheries and Aquatic Sciences, Fisheries Research, PlosONE, Journal of Fish Biology, Ecological Indicators, etc.

ISI journal publications: 44. **Non ISI journal publications:** 100. **Books:** 0. **Book chapters:** 1. **Citations G. Scholar:** 1517. **H-index:** 23. **Reports:** 7.

International conferences - Contributions as first author: >10. **Invited:** 3. **Organizing role:** 1.

Advisory tasks, 2011-present

- International, regional and national advise within ICES Benthic fisheries Impact assessment (WKFBI, WKTRADE, WGFBIT, etc.), EU STECF Fisheries, HELCOM Baltic Holistic Assessment, various EU DG-MARE requests and notes for National Ministries.

Grants, 2006-present

- Era-NET COFASP ECOAST (2016-2018; leader of Work packages)
- EU FP7: Benthic Ecosystem Fisheries Impact Studies (BENTHIS) (2012-2017; participant).
- EU FP7: Maximizing yield of fisheries while balancing ecosystem, economic and social concerns (MYFISH) (2012-2016; participant).
- EU FP7: Socio economic effects of management measures of the future CFP (SOCIOEC) (2011-2014; participant).
- Danish Strategic Research Council: Integrated management of agriculture, fishery, environment and economy (IMAGE) (2010-2015; participant).
- Eastern-western Baltic cod: Improved management based on stock discrimination of eastern and western Baltic cod (2011-2013; Participant)

Research collaboration with stakeholders, 2006-present

Web development of web-based questionnaires for fishermen (2011, Femern Belt Project). Developer and maintainer of the displace-project.org web site.

Consulting work for ASSAM (Agenzia Servizi Settore Agroalimentare delle Marche, Italy)

Other activities

Specific lectures to the DTU Aqua course "Fisheries Systems"; Developer and maintainer of various softwares on fisheries including the R vmstools package offering routines to process and map VMS and logbooks fishery data at the pan-European scale.

Selected publications

- Bastardie F, Angelini S, Bolognini L, Manfredi C, Martinelli M, Santojanni A, Scarcella G, Nielsen JR, Grati F (2017). Spatial planning for fisheries in the Northern Adriatic: working towards viable and sustainable fishing. *Ecosphere* 8(2) doi.10.1002/ecs2.1696
- Eigaard OR, Bastardie F, Hintzen N, Buhl-Mortensen L, Buhl-Mortensen P, Catarino R, Dinesen GE, et al. (2017). The footprint of bottom trawling in European waters: distribution, intensity and seabed integrity. *ICES J. Mar. Sci.* 74(3): 847-865.
- Bastardie F, Nielsen JR, Eero M, Fuga F, Rindorf A. (2017). Effects of changes in stock productivity and mixing on sustainable fishing and economic viability. *ICES Journal of Marine Science.* 72 (3): 824-840
- Rijnsdorp AD, Bastardie F, Bolam SG, Buhl-Mortensen L, Eigaard OR, Hamon K, Hiddink JG, et al. (2016). Towards a framework for the quantitative assessment of trawling impact on the seabed and benthic ecosystem. *ICES Journal of Marine Science.* 73(1), 127-138.
- Bastardie F, Nielsen JR, Eigaard OR, Fock HO, Jonsson P, Bartolino V. (2015). Competition for marine space: modelling the Baltic Sea fisheries and effort displacement under spatial restrictions. *ICES Journal of Marine Science.* 72(3), 824-840.
- Bastardie F, Nielsen JR, Mithé T. (2014). DISPLACE: a dynamic, individual-based model for spatial fishing planning and effort displacement - integrating underlying fish population models. *Canadian Journal of Fisheries and Aquatic Sciences.* 71(3), 366-386.
- Bastardie F, Nielsen JR, Andersen BS, Eigaard OR. (2013). Integrating individual trip planning in energy efficiency – Building decision tree models for Danish fisheries. *Fisheries Research.* 143, 119-130.