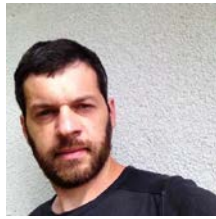


PERSONAL INFORMATION

Francois Bastardie



📍 Skydebanegade 25, 3th, Copenhagen, 1709 V, Denmark

✉ fga@aqua.dtu.dk

Sex Male | Date of birth 08/05/1977 | Nationality French

POSITION

Mixed Fisheries & Economics Expert

WORK EXPERIENCE

Since 2007

Senior Research Scientist

DTU Aqua, Technical University of Denmark, DK-2800 Kgs. Lyngby, Denmark

- Senior Scientist, Advisor and Method Developer in the DTU Fisheries Management Strategic Research Area including Impact Evaluation, Bioeconomic analysis and Benchmarking

2005-2007

Research Scientist

IFREMER, Unité Ecologie et Modèles pour l'Halieutique (EMH), IFREMER, Nantes, France

- Model Developer of Fisheries Dynamics, Management Strategy Evaluation for Mixed and Spatial fisheries, Fisheries Stock Advice duties

EDUCATION AND TRAINING

2000-2004

Ph.D. in Biological Science

Université de Rennes I, Centre National de la Recherche Scientifique (CNRS Rennes), Institut National pour la Recherche Agronomique (INRA Avignon), France

- Spatial data analysis & Quantitative ecology
- Agent-based modelling & Decision-making analysis

2000

M.Sc. in Population Genetics and Eco-Ethology

Université de Rennes I, France

PERSONAL SKILLS

Mother tongue

French

Other languages

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2

Job-related skills

North Sea, Baltic Sea, Western Mediterranean Sea, Black Sea. Risk and impact assessment, management strategy evaluation tools and spatial models for fisheries management toward the ecosystem approach to fisheries management, with special focus on developing spatial impact assessment tool that can be used to evaluate the consequences of fisheries displacement on the sustainability and economy of fisheries and marine ecosystems.

Data analyses and model integration for maritime spatial planning, policy and integrated coastal zone management. Contribution to the coordination and integration of different spatial activities in marine areas and to the reduction of potential inefficient management and use of space in accordance with the aims of the EU MSPD and other Directives (e.g., HD, MSFD).

Fisheries management and bio-economic approaches within the EU CFP, scenario evaluation through simulation, dynamic coupling of fisheries-based models with ecosystem models.

Publications Scientific, Technical and Economic Committee for Fisheries (STECF) participations & reports

STECF EWG 18-13 Fishing Effort Regime for Demersal Fisheries in the Med.

STECF 18-05 Economic Impact of Mixed Fisheries Options

STECF EWG 16-20 Bio-economic Methodology

STECF FDI 15-08 Fisheries Dependent Data

STECF-12-06 Evaluation of fishing effort regimes in European waters

STECF 12-04 North Sea and Kattegat scoping for mixed fisheries

STECF EWG 11-15 Multi-annual management plans

STECF SGMOS 10-03 Development of the Ecosystem Approach to Fisheries Management in European seas

International Council for the Exploration of the Sea (ICES) participations & reports

WGFBIT Working Group on Fisheries Benthic Impact and Trade-offs

WGECON Working Group on Economics

WKBENTH/WKTRADE Workshop on Regional Benthic Pressure

WGSFD Working Group on Spatial Fisheries Data

WGBFAS Working Group on Baltic Fisheries Stock Assessment

WGIAB Working Group on Integrated Assessment

Regional and National Bodies

Participations to HELCOM FISH Group on ecosystem-based sustainable Fisheries, HELCOM IN-BENTHIC Network on benthic habitat monitoring, Participations to WKS for HOLAS " State of the Baltic Sea – Second HELCOM holistic assessment 2011-2016"

Writing Notes for the Danish Foreign Affairs and Danish Food & Environment Ministries

Peer Reviewed Publications (Since 2012)

Amoroso, RO, Pitcher, CR, Rijnsdorp, AD, McConnaughey, RA, Parma, AM, Suuronen, P, Eigaard, OR, Bastardie, F, Hintzen, NT, et al. 2018, 'Bottom trawl fishing footprints on the world's continental shelves' Proceedings of the National Academy of Sciences of the United States of America. DOI: 10.1073/pnas.1802379115

Dinesen, GE, Rathje, IW, Højrup, M, Bastardie, F, Larsen, F, Sørensen, TK, Hoffmann, E & Eigaard, OR 2018, 'Individual transferable quotas, does one size fit all?: Sustainability analysis of an alternative model for quota allocation in a small-scale coastal fishery' Marine Policy, vol 88, pp. 23-31. DOI: 10.1016/j.marpol.2017.10.038

Bigné, M, Nielsen, JR, Bastardie, F 2018 'Opening the Norway pout box: will it change the ecological impacts of the North Sea Norway pout fishery? ICES Journal of Marine Science., DOI: <https://doi.org/10.1093/icesjms/tsy121>.

Sköld, M, Göransson, P, Jonsson, P, Bastardie, F, Blomqvist, M, Agrenius, S, Hiddink, JG, Nilsson, HC & Bartolino, V 2018, 'Effects of chronic bottom trawling on soft-seafloor macrofauna in the Kattegat'

- Marine Ecology Progress Series, vol 586, pp. 41-55. DOI: 10.3354/meps12434
- Bastardie, F, Silviana, S, Bolognini, L, Fuga, F, Manfredi, C., Martinelli, M, Nielsen, JR, Santojanni, A, Scarcella, G, & Grati, F 2017. 'Spatial planning for fisheries in the Northern Adriatic: working towards viable and sustainable fishing'. *Ecosphere*, In Press. DOI: 10.1002/ecs2.1696
- Janssen, H, Bastardie, F, Eero, M, Hamon, K, Hinrichsen, HH, Marchal, P, Nielsen, JR, Pape, OL, Schulze, T, Simons, S, Teal, LR & Tidd, A 2017, 'Integration of fisheries into marine spatial planning: Quo vadis?' *Estuarine, Coastal and Shelf Science*. DOI: 10.1016/j.ecss.2017.01.003
- Hiddink, JG, Moranta, J, Balestrini, S, Sciberras, M, Cendrier, M, Bowyer, R, Kaiser, MJ, Sköld, M, Jonsson, P, Bastardie, F & Hinz, H 2016, 'Bottom trawling affects fish condition through changes in the ratio of prey availability to density of competitors' *Journal of Applied Ecology*, vol 53, no. Special Feature, pp. 1500-1510. DOI: 10.1111/1365-2664.12697
- Stelzenmüller, V, Diekmann, R, Bastardie, F, Schulze, T, Berkenhagen, J, Kloppmann, M, Krause, G, Pogoda, B, Buck, BH & Kraus, G 2016, 'Co-location of passive gear fisheries in offshore wind farms in the German EEZ of the North Sea: A first socio-economic scoping' *Journal of Environmental Management*, vol 183, pp. 794-805. DOI: 10.1016/j.jenvman.2016.08.027
- Bastardie, F, Nielsen, JR, Eero, M, Fuga, F & Rindorf, A 2016, 'Effects of changes in stock productivity and mixing on sustainable fishing and economic viability' *ICES Journal of Marine Science*. DOI: 10.1093/icesjms/fsw083
- Eigaard, OR, Bastardie, F, Breen, M, Dinesen, GE, Hintzen, NT, Lafargue, P, Mortensen, LO, Nielsen, JR, Nilson, HC, O'Neil, FG, Polet, H, Reid, DG, Sala, A, Sköld, M, Smith, C, Sørensen, TK, Tully, O, Zenging, M & Rijnsdorp, AD 2016, 'Estimating seabed pressure from demersal trawls, seines, and dredges based on gear design and dimensions' *ICES Journal of Marine Science*, vol 73, no. Suppl. 1, pp. 27-43. DOI: 10.1093/icesjms/fsv099
- Hornborg, S, Jonsson, P, Sköld, M, Ulmestrand, M, Valentinsson, D, Eigaard, OR, Feekings, JP, Nielsen, JR, Bastardie, F & Lövgren, J 2016, 'New policies may call for new approaches: the case of the Swedish Norway lobster (*Nephrops norvegicus*) fisheries in the Kattegat and Skagerrak' *ICES Journal of Marine Science*. DOI: 10.1093/icesjms/fsw153
- Eigaard, OR, Bastardie, F, Hinzen, NT, Buhl-Mortensen, L, Mortensen, PB, Catarino, R, Dinesen, GE, Egekvist, J, Fock, H, Geitner, K, Gerritsen, H, González, MM, Jonsson, P, Kavadas, S, Laffargue, P, Lundy, M, Gonzalez-Mirelis, G, Nielsen, JR, Papadopoulou, N, Posen, PE, Pulcinella, J, Russo, T, Sala, A, Silva, C, Smith, CJ, Vanelslander, B & Rijnsdorp, AD 2016, 'The footprint of bottom trawling in European waters: distribution, intensity, and seabed integrity' *ICES Journal of Marine Science*. DOI: 10.1093/icesjms/fsw194
- Rijnsdorp, AD, Bastardie, F, Bolam, SG, Buhl-Mortensen, L, Eigaard, OR, Hamon, K, Hiddink, JG, Hintzen, NT, Ivanovic, A, Kenny, A, Laffargue, A, Nielsen, JR, O'Neill, FG, Polet, H, Sala, A, Smith, C, van Denderen, PD, Kooten, TV & Zenging, M 2016, 'Towards a framework for the quantitative assessment of trawling impact on the seabed and benthic ecosystem' *ICES Journal of Marine Science*, vol 73, no. Suppl. 1, pp. 127-138. DOI: 10.1093/icesjms/fsv207
- 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*, vol 72, no. 3, pp. 824-840. DOI: 10.1093/icesjms/fsu215
- Nielsen, JR, Kristensen, K, Lewy, P & Bastardie, F 2014, 'A statistical model for estimation of fish density including correlation in size, space, time and between species from research survey data' *P L o S One*, vol 9, no. 6, e99151. DOI: 10.1371/journal.pone.0099151
- Bastardie, F, Nielsen, JR & Miethe, 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*, vol 71, no. 3, pp. 366-386. DOI: 10.1139/cjfas-2013-0126
- Miethe, T, Bastardie, F, Dorrien, CV & Nielsen, JR 2014, 'Impact assessment of a fisheries closure with effort and landings spatial analyses: A case study in the Western Baltic Sea' *Fisheries Research*, vol 157, pp. 170-179. DOI: 10.1016/j.fishres.2014.04.004
- 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*, vol 143, pp. 119-130. DOI: 10.1016/j.fishres.2013.01.018
- Nielsen, JR, Lundgren, B, Kristensen, K & Bastardie, F 2013, 'Localisation of nursery areas based on comparative analyses of the horizontal and vertical distribution patterns of juvenile Baltic cod (*Gadus morhua*)' *P L o S One*, vol 8, no. 8, pp. e70668. DOI: 10.1371/journal.pone.0070668
- Ulrich, C, Wilson, DCK, Nielsen, JR, Bastardie, F, Reeves, SA, Andersen, BS & Eigaard, OR 2012, 'Challenges and opportunities for fleet- and métier-based approaches for fisheries management under the European Common Fishery Policy' *Ocean & Coastal Management*, vol 70, pp. 38-47. DOI: 10.1016/j.ocecoaman.2012.06.002

Nielsen, JR, Lambert, G, Bastardie, F, Sparholt, H & Vinther, M 2012, 'Do Norway pout (*Trisopterus esmarkii*) die from spawning stress?: Mortality of Norway pout in relation to growth, maturity and density in the North Sea, Skagerrak and Kattegat' ICES Journal of Marine Science, vol 69, no. 2, pp. 197-207. DOI: 10.1093/icesjms/fss001

Deporte, N, Ulrich, C, Mahévas, S, Demanèche, S & Bastardie, F 2012, 'Regional métier definition: A comparative investigation of statistical methods using a workflow applied to the international otter trawl fisheries in the North Sea' ICES Journal of Marine Science, vol 69, no. 2, pp. 331-342. DOI: 10.1093/icesjms/fsr197

Hintzen, NT, Bastardie, F, Beare, D, Piet, GJ, Ulrich, C, Deporte, N, Egekvist, J & Degel, H 2012, 'VMStools: Open-source software for the processing, analysis and visualization of fisheries logbook and VMS data' Fisheries Research, vol 115-116, pp. 31-43. DOI: 10.1016/j.fishres.2011.11.007

Recent International Projects

- Benthic ecosystem fisheries impact study (BENTHIS)
- New methodologies for an ecosystem approach to spatial and temporal management of fisheries and aquaculture in coastal areas (ECOAST)
- Eastern-western Baltic cod: Improved management based on stock discrimination of eastern and western Baltic cod
- Socio economic effects of management measures of the future CFP (SOCIOEC)
- Integrated management of agriculture, fishery, environment and economy – a strategic research alliance (MAFIA)
- Development of tools for logbook and VMS data analysis
- Fehmarn Belt science provision project: Fehmarn Belt fish and fisheries and related environmental investigations
- Development of fisheries with minimized emission of greenhouse gases
- Understanding the mechanisms of stock recovery (UNCOVER)
- Comparative evaluations of innovative solutions in European fisheries management (CEVIS)
- Operational evaluation tools for fisheries management options (EFIMAS)