

Alexandros Kokkalis

Year of birth: 1982

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Degrees

BSc (Marine Science), University of the Aegean (2007). MSc (Mathematics in Bioscience), Technical University of Munich (2012). PhD, DTU Aqua, Technical University of Denmark (2016).

Positions

Visiting PhD student (secondment), CEES, University of Oslo (2013). PhD Student, DTU Aqua, Technical University of Denmark (2012-2016). Research Assistant, DTU Aqua, Technical University of Denmark (2014). Postdoc, DTU Aqua, Technical University of Denmark (2016-2017). Researcher, Section for Ecosystem based Marine Management, DTU Aqua, Technical University of Denmark (2017-present).

Research area

Development and maintaining of stock assessment methods: s6, a length-based data-limited method that requires only size-specific information from the catch and life-history parameters, and SPiCT, a fully stochastic surplus production model in continuous time that requires time series of catch and one or more biomass indices or effort. Spatio-temporal modeling of species distribution related to environmental conditions.

Memberships of scientific committees, 2016-present

Alternate member of ICES advisory committee (ACOM) for Denmark (2021-present). Member of ICES working groups that provide advice: WGNSSK (2017-present), WGMIXFISH (2020-present). Member of ICES working groups: WKLIFE (2013-present), WKMSYcat34 (2017), WKDLSSLS (2019-present, cochair since 2021).

Web of Science publications: 13. Citations: 126. h-index: 7. Reports: 20.

Evaluation tasks

Reviewer of 9 scientific articles for the journals: Fish and Fisheries, ICES Journal of Marine Science, Fisheries Research, Ecological Applications, and Fishery Bulletin.

Advisory tasks, 2016-present

Assessor and stock coordinator of three fish stocks in the North Sea. Mixed fisheries advice (member of ICES WGMIXFISH). ICES Benchmark meetings: WKDEM2020, WKFlatNSCS2020, WKGSS2020 (invited external expert), WKMSYSPICT (2021), IBPWEB (2021, chair), BWKMSYSPICT2022 (invited external expert). Participated in the Mediterranean assessment STECF working group (2017).

Educational tasks at academical level, 2016-present

DTU course <u>MSc</u>: Fisheries systems (contributor). Data-limited assessment organized and hosted by ICES.

Supervision, ongoing or finished in 2016 or later

PhD: Co-supervisor: Tobias K. Mildenberger & Berthe M.J. Vastenhoud.

Innovation activities, 2016-present

Developer and maintainer of stock assessment software packages, available as open source software and used internationally to provide scientific advice.

Collaboration with other stakeholders, 2016-present

Participated in several national and international projects that included stakeholder input: Keyfisher, Sustainable bycatch, ManDaLiS, FishHab2, Kystfisk3, MSE Tools, Probyfish, Ecoman, Econorth. Project coordinator of the EMFF projects Vesterhavsfisk and RoMA.

Grants (competitive), ongoing or finished in 2016 or later

EMFF: Investigating coastal fish stocks and fishery opportunities at the west coast of Denmark (Vesterhavsfisk) (coordinator).

EMFF: Robust management procedures and advice for data limited stocks (RoMA) (coordinator).

EMFF: Ecosystem based Management of fish stocks in the North Sea (ECOMAN) (PI).

EMFF: Nordsøen i forandring: fiskeri i et ændret økosystem (ECONORTH) (PI).

EMFF: Improving the management basis for danish data-limited fish stocks (ManDaLiS) (PI).

Selected publications

Kokkalis A, Thygesen UH, Nielsen A & Andersen KH (2015). Limits to the reliability of size-based fishing status estimation for data-poor stocks. Fisheries Research, 171, 4–11. DOI: 10.1016/j.fishres.2014.10.007.

Kokkalis A, Eikeset AM, Thygesen UH, Steingrund P & Andersen KH (2017). Estimating uncertainty of data limited stock assessments. ICES Journal of Marine Science, 74(1), 69-77. DOI: 10.1093/icesjms/fsw145.

Støttrup JG, **Kokkalis A**, Brown EJ, Olsen J, Andersen SK & Pedersen EM (2018). Harvesting geo-spatial data on coastal fish assemblages through coordinated citizen science. Fisheries research, 208: 86-96. DOI: 10.1016/j.fishres.2018.07.015.

Dinesen GE, Neuenfeldt S, **Kokkalis A** et al. (2019). Cod and climate: a systems approach for sustainable fisheries management of Atlantic cod (Gadus morhua) in coastal Danish waters. J Coast Conserv 23, 943–958. DOI: 10.1007/s11852-019-00711-0.

Mildenberger TK, Berg CW, Pedersen MW, **Kokkalis A** & Nielsen JR (2020). Time-variant productivity in biomass dynamic models on seasonal and long-term scales. ICES Journal of Marine Science, 77(1): 174-187. DOI: 10.1093/icesjms/fsz154.

Mildenberger, TK, Berg, CW, **Kokkalis, A**, Hordyk, AR, Wetzel, C, Jacobsen, NS, Punt, A E, & Nielsen, JR (2022). Implementing the precautionary approach into fisheries management: Biomass reference points and uncertainty buffers. Fish and Fisheries, 23(1), 73–92. DOI: 10.1111/faf.12599