

# 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