



At the Institute of Sea Fisheries, one of 14 institutes of the Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries, a three-year position of a

### **Postdoc researcher position**

is to be filled within the project SeaUseTip (Spatial and temporal analysis of tipping points of the socio-ecological system of the North Sea) starting at the 1<sup>st</sup> of March in 2019 (depending on approval of funding).

The Thünen Institute advises the Federal Ministry of Food and Agriculture (BMEL) regarding the implementation of the Common Fisheries Policy (CFP) and is actively involved in the implementation processes of the Marine Strategy Framework Directive (MSFD).

**SeaUseTip** is funded by the Federal Ministry of Education and Research (BMBF) and is a transdisciplinary research project, which aims to assess the vulnerability of the socio-ecological system (SES) of the North Sea to ecological tipping points. Emphasis lies on the SES in relation to key fisheries resources in the southern North Sea and the novel integration of economic, socio-cultural and ecological analyses. SeaUseTip will develop operational tools allowing a better understanding of the effectiveness of management measures.

The successful candidate will contribute to the development and implementation of an integrated spatio-temporal assessment framework which allows to explore the vulnerability of defined SES to ecological tipping points. This forms the scientific basis to evaluate management options and inform marine spatial planning. In addition, the candidate is expected to occasionally advise SeaUseTip PhD students, engage actively with SeaUseTip stakeholders, and contribute to the project coordination, dissemination and reporting.

#### **Detailed tasks**

- Compilation of physical, ecological and economic time series and spatial data of the North Sea in a project data base,
- Definition and operationalisation of indicators representing key components of pre-defined SES,
- Contribution to the operationalisation of a conceptual SES model with the help of Bayesian Belief Networks (BN),
- Combination of Bayesian Belief Network predictions with GIS to produce predictive maps,
- Development of stakeholder engagement processes to verify model results,
- Contribution to project management and coordination,
- Reporting, publication and communication of scientific results.

#### **Requirements**

- A PhD in Marine Biology, Fisheries Biology, integrated ecosystem assessment or comparable disciplines,
- Experience in data compilation and handling,
- Proficiency in the use of R and ArcGIS,
- Experience in applying Bayesian Belief Networks would be an asset,
- Excellent communication and writing skills in English and at least the willingness to learn German. A knowledge of the German language would be beneficial,
- Work experience in interdisciplinary research teams,

- Excellent communication skills and proven track record in publishing scientific results.

**We offer:**

- an exciting position in applied research which produces results of high public interest,
- intensive interdisciplinary and international cooperation.

Employment complies with the German wage agreement for the civil service sector (TVöD Bund), salary group E13 (if the personnel requirements are fulfilled). The Thünen Institute supports gender equality. Qualified female applicants are encouraged to apply. Handicapped applicants are especially considered if equally qualified for the job; a minimum of physical fitness, however, will be required.

Additional information is available from Dr. Vanessa Stelzenmüller ([vanessa.stelzenmueller@thuenen.de](mailto:vanessa.stelzenmueller@thuenen.de)), Institute of Sea Fisheries and Dr. Rabea Diekmann ([rabea.diekmann@thuenen.de](mailto:rabea.diekmann@thuenen.de)), Institute of Fisheries Ecology. Interested candidates should send their applications (including motivation letter, CV, list of publications, copies of relevant certificates, names and addresses of personal references) preferably via e-mail in one PDF file referring to "**SF-SeaUseTip Postdoc**" before 8<sup>th</sup> of February 2019 to the

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