

POSTDOCTORAL ASSOCIATE IN QUANTITATIVE FISHERIES

NOAA Northeast Fisheries Science Center, Woods Hole Laboratory

Northeast Climate Integrated Modeling to Meet Ocean Decision Challenges:
Evaluating climate effects on black sea bass and Atlantic cod stocks

Description: We are seeking a postdoctoral scientist to work on a 2-year project to investigate climate effects on Northeast US fish stocks. The successful candidate would be an active member of collaborators at Northeast Fisheries Science Center, the Gulf of Maine Research Institute, and Rutgers University. Research team members at the NEFSC that the successful applicant will be working with are Tim Miller, Jon Deroba, and Vince Saba. The research project will 1) evaluate management strategies under scenarios where distribution and productivity of populations are affected by climate and 2) evaluate climate effects on the dynamics of commercially important fish stocks in the Northeast United States.

Black sea bass and Gulf of Maine Atlantic cod are of primary interest for investigations of climate effects as they will be undergoing research track assessments in 2022 and 2023, respectively. Ongoing projects at the Northeast Fisheries Science Center have expanded a general state-space age-structured assessment framework (github.com/timjmillier/wham). The successful candidate for this position would further extend the model to allow relevant climate effects on the above stocks, apply this model to these stocks to evaluate evidence for climate effects, and evaluate the relative performance of models that account for climate effects using a management strategy evaluation framework. The post-doctoral collaborator will also lead publication of peer-review articles on this research and present the work at scientific and stock assessment working group meetings.

Qualifications: Minimum qualifications include a PhD in quantitative fisheries, statistics, applied mathematics, marine fisheries ecology, theoretical ecology, or a related field. Strong quantitative skills are required. Experience in quantitative modeling, stock assessment, population dynamics, statistics, and computer programming (R, Template Model Builder, AD Model Builder) are preferred. The successful candidate will be motivated and capable of working independently and collaboratively.

Location: The postdoc will be hosted by the NOAA Northeast Fisheries Science Center at the Woods Hole Laboratory in Woods Hole, MA. However, working remotely within the USA either initially or for the entire duration of the project is possible.

How to apply: E-mail a cover letter describing your interest in the position, a CV, and the names and contact information of two references to Stacey Hansen (stacey.hansen@saltwaterinc.com). Inquiries regarding the position are also welcome. Review of candidates will continue until the position is filled.