UF UNIVERSITY of FLORIDA
Institute of Food and Agricultural Sciences

NATURE COAST BIOLOGICAL STATION

Position: Postdoctoral Associate in Marine Ecosystem Modeling
Location: Hybrid-remote at University of Florida, Gainesville, FL
Salary: $50,000-$60,000, commensurate with experience
Apply By: Open until filled
Start Date: As soon as possible
Direct Link: https://explore.jobs.ufl.edu/en-us/job/530061

Description: We are seeking a highly motivated post-doctoral researcher to develop ecosystem models and analyses to support fisheries management decisions. Join a growing lab, where we develop advanced population and ecosystem models to address real-world challenges in fisheries and natural resource management. Our work is highly quantitative and applied, and seeks to understand how fish stocks and marine ecosystems respond to fishing and environmental change. In doing so, we aim to bridge the gap between ecosystem science, stock assessment, and management, while also advancing ecological theories and concepts. We hope to recruit postdoctoral associates and students with broad interests in marine ecology, ecosystem modeling, fisheries stock assessment, food web ecology, species distribution modeling, applied mathematics, and fisheries management.

The postdoctoral associate will have the opportunity to work on one or more high-profile projects, including: assessing ecosystem impacts of red tides on the West Florida Shelf; developing spatially explicit models to support management of Atlantic menhaden; investigating declines in reef fish abundance in the U.S. South Atlantic region; and coupling marine ecosystem models with ocean climate models. The successful candidate will grow their professional network by working within a diverse, multidisciplinary group of collaborators consisting of marine ecosystem modelers, ecologists, stock assessment scientists, physical oceanographers, biogeochemical modelers, fisheries monitoring program leaders, federal and state fisheries managers, and commercial/recreational fishery stakeholders. The postdoctoral associate will also have the opportunity to help recruit and mentor graduate students. Funding is available for 5 years.

Responsibilities: We invite applicants for a full-time postdoctoral associate to be held at the University of Florida's Nature Coast Biological Station, with offices located on UF's main campus in Gainesville and on the Gulf of Mexico in Cedar Key. Hybrid work locations can be accommodated. Responsibilities of the postdoctoral associate may include, but are not limited to, analyzing large datasets on fish, habitat, and water quality; updating and maintaining existing ecosystem models; developing new models and statistical analyses; developing web applications (rShiny); maintaining code through Github; presenting results at management meetings and professional conferences; mentoring graduate students; data management; and preparing scientific publications, grant reports, and outreach materials.

Minimum Qualifications:

- A Doctorate degree (PhD) in an environmental science such as marine science, fisheries, ecology, oceanography, or related fields.

- Interest in fisheries ecology, marine ecosystem modeling, species distribution modeling, and mathematical modeling with applications to natural resource management.
- Ability to work both independently and collaboratively to meet project deliverables.
- Must be proficient in R.
- Written and oral communication skills, demonstrated by publications in peer-reviewed journals and presentations at professional conferences.
- A commitment to foster inclusion and working relationships with colleagues from diverse backgrounds, cultures, nationalities, and identities.

Preferred Qualifications:

- Knowledge and experience with ecosystem and food web models, fish population dynamic models and stock assessment, species distribution models, and geospatial analysis of large fisheries and environmental datasets
- Experience working in collaborative, multidisciplinary projects and interacting with resource managers.
- Experience with the Ecopath and Ecosim software is preferred.
- Experience developing R shiny apps and open science tools (GitHub).
- Experience in linear and non-linear modeling (GLMs, GAMs), spatial-temporal data analysis, and analysis of gridded spatial data.
- Familiarity with the Gulf of Mexico marine ecosystem.
- Experience in project management and leading interdisciplinary research teams.

Salary: Salary is commensurate with experience, with annual increases each year for satisfactory performance. Paid leave is accrued at a rate of 5 hours bi-weekly for vacation, sickness, or injury. Benefits include optional retirement, health, dental, vision, and disability insurance.

Start Date: Negotiable, as soon as possible.

Application Requirements: To apply, please provide a cover letter, CV, and contact information of three references. Applications will be accepted and reviewed as they are received, until the position is filled. For additional questions please email David Chagaris, dchagaris@ufl.edu.