

Fishery/MPA Integration Fellow

A central challenge of marine ecosystem-based management is the integration of marine protected areas (MPAs) with fisheries management outside protected area boundaries. The fact that MPAs and conventional fishing are not independent has been shown by 1) general mathematical analyses, 2) analyses of specific proposed MPA networks, and 3) empirical monitoring of MPAs. However, translating such scientific understanding of this interaction to management action is often limited. For example, independent management has occurred for California's Marine Life Protection Act (MLPA), which mandated the implementation of MPAs, and its Marine Life Management Act (MLMA), which mandated improved management of California fisheries, both passed in 1999.

The University of California, Davis and California Department of Fish and Wildlife seek an experienced post-doctoral researcher to develop innovative, quantitatively-driven approaches to the integrated management of MPAs and the fisheries outside of them, using California as a model system. These approaches should incorporate the modeling approaches to MPA assessment used in the MLPA decision-making process, and the conventional approaches to maintaining catch and sustainability in fishery management plans. They should also be consistent with the mandated adaptive management of California's MPAs. They should make use of the results of ongoing monitoring of MPAs, efforts by CDFW staff, and they may identify additional monitoring needs.

We seek a creative individual with a PhD in Ecology and Evolutionary Biology, Fisheries Science, Marine Science, or a related field and research expertise in at least one of: MPAs, ecosystem-based management, fisheries science, population dynamics, and spatial ecology. The individual will need to be interested in and have the ability to effectively work in interdisciplinary teams on cross-cutting issues. The work of the Postdoctoral Researcher will require proficiency in a programming language such as R or Python and data management. Given the focus and goals of the project and of the groups involved, we seek a person with experience and/or interest in both advancing scientific frontiers and addressing real-world challenges in sustainable ocean resource management.

The Postdoc will be hosted by a specific faculty sponsor(s)' lab at UC Davis. The Postdoc will be working collaboratively with both UC Davis faculty and the CDFW Program Manager that is responsible for co-leading the management of California's marine resources pursuant to the MLMA. This multi-faceted mentoring approach will provide opportunities for the Postdoc to develop innovative applied science approaches that will directly affect marine resource management decisions in California. In addition to frequent communication with faculty via remote meetings, the position includes a travel stipend that will support time at appropriate CDFW or partnering agency offices to ensure close integration with the large Statewide Monitoring Program community.