



University of California Delivers

Agricultural Experiment Station and Cooperative Extension Working for Californians

Improved marine stewardship from collaborative research

The Issue

The State of California is responsible for managing nearshore fish populations. Currently, the data to manage fisheries are collected across large areas, spanning hundreds of miles, but the local abundance of many species varies greatly along the coast. The lack of information specific to local areas means that some species are overfished and some are underutilized. Also, California is establishing marine protected areas (areas closed to some form of human use, such as fishing) along the California coast as a resource conservation and management tool. Resource managers have found that the effectiveness of marine protected areas (MPAs) has varied around the world, and is dependent upon the level of societal acceptance. As a policy tool, MPAs have been most successful in regions that have included stakeholders in the evaluation process.

What has ANR done?

UC Cooperative Extension advisor Richard Starr has teamed up with professor Dean Wendt of California Polytechnic State University, San Luis Obispo, and members of the fishing community to form a Collaborative Fisheries Research Program. The purpose of the program is to implement collaborative research and facilitate the co-management of marine resources. As part of this program, Starr and Wendt conducted workshops with stakeholders to develop standardized protocols for gathering data using commercial and recreational fishing vessels and gear. In the summer and fall of 2007 and 2008, these protocols were used to conduct baseline surveys of MPAs and corresponding reference sites. Over the course of this project, nearly 20,000 fishes were caught, identified to species, measured, tagged with external tags, and released. Scientific information obtained from this project included species and size composition, and catch rates. Information about fishes movements will come from recaptures of tagged fish.



Volunteer anglers catch lingcod for tagging.

The Payoff

Marine users are integral to the evaluation of new marine policy

As a result of this project, standardized monitoring protocols were created, implemented, reviewed, and endorsed by California fishing communities, academic scientists, resource managers, and members of non-governmental organizations. The protocols developed are sufficiently rigorous to enable the development of collaborative studies that can be used to estimate population trends along smaller sections of coastline than were previously possible, and to monitor MPAs across the state. In addition, this project demonstrated that fishermen and scientists can successfully collaborate to provide resource managers with accurate information, thus allowing members of industry to play an active role in the evaluation of marine policy.

Contact

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