

**JIMAR/PFRP ANNUAL PROGRESS REPORT
FY 2004**

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Samuel G. Pooley ceased active involvement in this project upon assuming the directorship of the Honolulu Laboratory.

Project Title: Comparisons of Catch Rates for Target and Incidentally Taken Fishes in Widely Separated Areas of the Pacific Ocean

Funding Agency: NOAA/JIMAR

Project Purpose and Results:

This project is intended to elucidate variation across very broad spatial scales in catch per unit effort (CPUE) for several widely distributed Pacific fishes. The specific intention of this research is to determine whether, and if so, to what extent, intra- and interspecific CPUE for several species are correlated throughout the Pacific Ocean. The work entails analyses and comparisons of fish catch and operational data gathered by the Hawai'i Longline Observer Program of the National Marine Fisheries Service (NMFS), longline logbook records submitted by the Hawai'i-based fleet, data from mainland US fisheries and US possessions, and western Pacific fisheries. This work continues and expands upon an earlier Pelagic Fisheries Research Program project (Distributions, Histories, and Recent Catch Trends with Six Fish Taxa Taken as Incidental Catch by the Hawai'i-based Commercial Longline Fishery, by William A. Walsh and Samuel G. Pooley).

Progress during FY 2004:

This project was funded in November 2002 and is in its second year. There have not been any specific problems per se. This project exhibited progress in 2004 as a result of completion of deliverables from the earlier project. For example, the blue marlin data corrections conducted under the preceding project have revealed errors, and thereby yielded progress in the form of preliminary corrections applied to striped marlin and shortbill spearfish. These species of interest for this project are sometimes misidentified as blue marlin.

Plans for FY 2005:

The intentions for FY 05 are to update and finalize the preliminary GAM's that have been fitted for all of the species of interest identified in the proposal and then use these as comparison standards for the logbooks from the Hawaii-based longline fishery as well as those of other US fisheries. Observer and logbook data are now available for the 10-year from March 1994 (the founding of the observer program) through March 2004. The preliminary data correction work for this project can probably be combined with the remainder from the previous project, furthering both, in order to assess methodology and logbook accuracy from a comparative perspective. It should prove useful to determine whether incidentally-caught and targeted species exhibit different types of biases and assess whether the detailed and rather laborious efforts required to correct logbook data

with the incidentally-caught species are necessary with the targets. Prior experience has indicated that logbook data for the latter tend to be considerably more accurate than incidental catch data. Logbook data from Guam and American Samoa are available as ORACLE files in the Honolulu Laboratory data archives (these logbooks are similar to those in the Hawaii fishery). Data from California (1991-2001) are also available, although in three formats. In addition, preliminary discussions have been held with Mr. Tim Lawson, fisheries statistician with the Secretariat of the Pacific Community, and he has expressed interest in data comparisons.

Papers Published in FY 2004:

None

Meeting Presentations in FY 2004:

None

Academic Advisory Responsibilities and Activities:

None

Budgetary Requests:

This project will complete its scheduled duration in September 2004. No additional funds are requested.