

JIMAR/PFRP ANNUAL PROGRESS REPORT FY 2003

P.I. Name: William A. Walsh

Keith A. Bigelow

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. This will entail 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 will continue and expand 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 2003:

This project was funded in November 2002 and is in its preliminary stages. Since joining the project (in S.G. Pooley's stead), K.A. Bigelow has read and critiqued the proposal. Preparatory work has included collaboration with the NOAA Coast Watch/Hawaii Node and the NMFS Honolulu Laboratory ITS department regarding data acquisition and processing. Mr. David Foley (former Coast Watch manager), Mr. Lucas Moxey (current Coast Watch coordinator), and Mr. Richard Uyeda (current HL employee) have all contributed their time and expertise, which is gratefully acknowledged.

The initial analyses involve refitting generalized additive models (GAM's) to observer data in an effort to make them more meaningful and comprehensible. The data sets used are those corrected under the earlier project. The species of initial interest are blue marlin, mahimahi, and wahoo since these were part of the earlier project. Newly generated results (i.e., the refitted GAM's) are compared to those fitted previously to evaluate whether they represent improvements.

There have not been any specific problems per se. The status of this project reflects the dedication of efforts to completing some of the deliverables from the earlier project.

Plans for FY 2004:

The intentions for FY 04 are to develop the appropriate GAM's 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. 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 2003:

None

Meeting Presentations in FY 2003:

None

Academic Advisory Responsibilities and Activities:

None

Budgetary Requests:

The budget request for FY 2004 is appended.