

## **JIMAR ANNUAL REPORT FOR FY 2010**

P.I./SPONSOR NAME: Keith Bigelow, Adam Langley and John Hampton

NOAA OFFICE (Of the primary technical contract): Pacific Islands Fisheries Science Center

PROJECT PROPOSAL TITLE: Fishery Dynamics in the Samoan Archipelago

FUNDING AGENCY: NOAA

NOAA GOAL (Check those that apply):

- ☒ To protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management
- ☐ To understand climate variability and change to enhance society's ability to plan and respond
- ☐ To serve society's needs for weather and water information
- ☐ To support the nation's commerce with information for safe, efficient, and environmentally sound transportation.
- ☐ Mission Support

**PURPOSE OF THE PROJECT** (One paragraph): The purpose of the project is to improve understanding of the dynamics of south Pacific albacore. Major objectives include: 1) to analyze the spatial and temporal dynamics and fishery interaction of longline fisheries within and around the American Samoa EEZ, 2) to compare albacore fishery dynamics in other Pacific Island Countries and Territories (PICTs) longline fisheries and 3) to improve the regional albacore stock assessment.

**PROGRESS DURING FY 2010** (One-two paragraphs, including a comparison of the actual accomplishments to the objectives established for the period, and the reasons for the slippage if established objectives were not met):

Objectives 1 and 2: Little progress was accomplished in FY2010 on objectives 1 and 2 as research in previous years concentrated on these objectives.

Objective 3:

A full south Pacific albacore stock assessment was conducted in 2008 and a comparative assessment was conducted in 2009. South Pacific albacore is the only WCPFC species that is assessed with standardized CPUE indices constructed with operational data. The 2009 CPUE standardization using operational level data represented an improvement in constructing relative abundance indices for south Pacific albacore, though there was concern that some Taiwan vessels had changed targeting from albacore to bigeye tuna since the late 1990's. Results from the assessment indicate that overfishing is not

occurring and that the stock is not in an overfished state. There is no indication that current levels of catch are not sustainable with regard to recruitment overfishing. However, current levels of fishing mortality may be affecting longline catch rates on adult albacore within domestic Pacific Island longline fisheries.

PLANS FOR THE NEXT FISCAL YEAR (One paragraph): Project completed and manuscripts will continue within the publication process.

LIST OF PAPERS PUBLISHED IN REFERRED JOURNALS DURING FY 2010, in the following format: (Author or authors with last name and initials, publication year: Article title. *Journal name*, volume, page range.) For example: Charney, J.G., and A. Eliassen, 1964: On the growth of the hurricane depression. *J. Atmos. Sci.*, 21, 68-75.

OTHER PAPERS, TECHNICAL REPORTS, ETC.:

K. Bigelow and S. Hoyle (2009). Standardized CPUE for distant-water fleets targeting South Pacific albacore. WCPFC-SC5-2009/SA-WP-5

Hoyle, S. and N. Davies (2009). Stock assessment of albacore tuna in the South Pacific Ocean. WCPFC-SC5-2009/SA-WP-6.

GRADUATES (Names of students graduating with MS or PhD degrees during FY 2010; Titles of their Thesis or Dissertation): None

AWARDS (List awards given to JIMAR employees or to the project itself during the period): None

PUBLICATION COUNT (Total count of publications for the reporting period and categorized by NOAA lead author and Institute (or subgrantee) lead author and whether it was peer-reviewed or non peer-reviewed (not including presentations): Two

	JI Lead Author	NOAA Lead Author	Other Lead Author
Peer Reviewed			
Non-Peer Reviewed		1	1

PERSONNEL (on Subcontracts):

For projects that awarded subcontracts in the fiscal year, please provide the number of supported postdocs and students from each subgrantee.

IMAGES AND CAPTIONS (We will also be including images for the annual report.

Please send two of your best high-resolution, color images (photo, graphic, schematic) as a **JPEG or TIFF (300 dpi)** with a caption for each image. If you do not have an electronic version of the image, a hardcopy version may be dropped off at the JIMAR office located in the Marine Sciences Building, Room 312):

- Caption 1:

- Caption 2:

ACRONYMS: Please provide the complete descriptions for any acronyms used in any areas of the report. For example: UH (University of Hawaii)