

## JIMAR ANNUAL REPORT FOR FY 2008

P.I./SPONSOR NAME: Dr. Minling Pan, John Sibert

NOAA OFFICE (Of the primary technical contact): National Marine Fisheries Service,  
Pacific Islands Fisheries Science Center

PROJECT PROPOSAL TITLE: Economic Fieldwork on Pelagic Fisheries in Hawaii

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

PURPOSE OF THE PROJECT (One paragraph):

Project staff will complete the assessment and documentation on the patterns of adoption of new technology and the resulting effects on fishing productivity in the Hawaii-based longline fishery. Staff will also complete the analysis on the willingness to pay for different types of activities associated with spinner dolphin excursions in Hawaii. The results from these two studies will be included in manuscripts for publication.

PROGRESS DURING FY 2008:

For the first research project, entitled *The Fishing Technological Changes and Their Impacts on Fishing Capacity and Productivity*, staff members have completed the inventory of the possible changes in the longline fishing technology in the Hawaii longline fleet during in past 20 years. A statistical model has been designed to examine the impacts of the fishing technological changes on fishing productivity in the Hawaii longline fishery. A draft report, "The Impact of Fishing Technological Changes on Fishing Productivity and Capacity" by Minling Pan and Quang Nguyen, has been completed.

In addition, staff members conducted and completed the *Valuation of Spinner Dolphin Excursions* study. Through conjoint analysis, this study investigated the factors that

affect consumer's willingness to pay for spinner dolphin excursions. Staff completed a draft report titled "Valuation of Consumer Choices on Spinner Dolphin Excursions and the Implications on Spinner Dolphin Conservation in Hawaii" based on the study.

#### PLANS FOR THE NEXT FISCAL YEAR (One paragraph):

The remained balance of \$39K (of the total remained balance of \$87K in the project #658848, \$48K go to the blue marlin project) will be used to complete the two on-going studies reported above. Also, a study on the impact of the fuel price and fish price/demand on the Hawaii tuna industry will be initiated.

#### LIST OF PAPERS PUBLISHED IN REFERRED JOURNALS DURING FY 2008: none

#### OTHER PAPERS, TECHNICAL REPORTS, ETC.:

Katya Boehle. 2007. Market and Non-Market Valuation of Spinner Dolphins in Hawai'i, Thesis of Master of Science in Natural Resource and Environmental Management, August, 2007, University of Hawaii at Manoa.

Quang Nguyen. 2008. Choice of Remuneration Regime in Fisheries: The Case of the Hawaii Longline Fisheries. Dissertation Essay, University of Hawaii at Maona, graduated in August 2008.

Quang Nguyen. 2008. Do Fishermen Have Different Attitude Toward Risk? An Application of Prospect Theory to the Study of Vietnamese Fishers, Dissertation Essay, University of Hawaii at Maona, graduated in August 2008.

Quang Nguyen. 2008. An Alternative Model of Labor Supply: The Case of Hawaii Longline Fishery, Dissertation Essay, University of Hawaii at Maona, graduated in August 2008.

Minling Pan and Quang Nguyen. Working paper. Technological Changes and the Impact on Fishing Productivity - A Case Study of the Hawaii-based Longline Fishery.

Minling Pan, K. Boehle, L. Cox, and W. Hu. 2007 'Valuation of Consumer Choices on Spinner Dolphin Excursions in Hawaii', Presentation in the 2007 PFRP PI meeting, November 13-15, 2007, in the East-West conference center.

Minling Pan and Quang Nguyen. 2007. Technological Changes and the Impact on Fishing Productivity - A Case Study of the Hawaii-based Longline Fishery. Presentation in the department seminar of Natural Resources and Environmental Management (NREM), December 21, 2007, University of Hawaii at Manoa.

GRADUATES: none

AWARDS:

Quang Nguyen's paper (one of the three dissertation essays) "Do Fishermen Have Different Attitude Toward Risk? An Application of Prospect Theory to the Study of Vietnamese Fisher" was awarded as "Honorable Mentions" -- the IIFET 2008 Vietnam Best Student Paper Award

PUBLICATION COUNT: none

PERSONNEL: No subcontracts

IMAGES AND CAPTIONS: none