JIMAR ANNUAL REPORT FOR FY 2011

P.I. NAME: Kevin Weng

NOAA OFFICE (Of the primary technical contact): PIFSC

NOAA SPONSOR NAME: Sam Pooley

PROJECT PROPOSAL TITLE: Biology and Habitat Use of Monchong (*Eumegistis illustris*) at Cross Seamount, 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.

☐ Mission Support

PURPOSE OF THE PROJECT (One paragraph):

Monchong is a generic local name given to two deep water pomfret species; the sickle pomfret, *Taractichthys steindachneri*, and the lustrous pomfret, *Eumegistis illustris*. The sickle pomfret is a common incidental catch in pelagic longline fisheries throughout the North Pacific. The lustrous pomfret exhibits fidelity towards deep slope or seamount habitats and are generally caught by short-line or handline. Both monchong species are valued by Hawaii seafood wholesale and processing firms who have successfully promoted it in the fresh market and restaurant trade. These species have become an increasingly important component of local Hawaii fisheries in terms of commercial fishery landings and sales in recent years. In the case of the lustrous pomfret, most of the catch occurs at Cross Seamount, a smallish seamount 8 km in diameter at the summit located 290 km south of Honolulu. Concerns over the sustainability of current pomfret removal rates with respect to recruitment from this limiting habitat have prompted the Western Pacific Regional Fishery Management Council, in coordination with PIFSC, to launch an investigation into expanding knowledge of pomfret life history and ecology. This monchong study will occur in conjunction with the Hawaii Tuna Tagging Project 2, a PFRP-funded project that is an integrated component of a Pacific wide tuna tagging and assessment program being
implemented by the Secretariat of the Pacific Community, Pacific Tuna Tagging Project (PTTP). Tagging programs are widely recognized as important tools for understanding the population dynamics, dispersal patterns and fisheries interactions of fish populations and produce additional data inputs necessary to improve stock assessments and predictive models.

**PROGRESS DURING FY 2011 (One-two paragraphs):**
Include a comparison of the actual accomplishments to the objectives established for the period, along with reasons for the slippage if established objectives were not met.

Cruise to Cross Seamount conducted aboard FV Hoku, Captain Bruce Fukuda, April 2011. During this cruise we recovered the acoustic listening stations, downloaded data, replaced batteries, and redeployed them. In addition, 19 monchong were tagged using acoustic transmitters. During the same cruise, 500 bigeye tuna were tagged with plastic dart tags, contributing to the related project “Hawaii Tuna Tagging Project 2”.

During three cruises in 2010 we had tagged 15 monchong with acoustic transmitters. Twelve of these fish were recorded on the listening array (downloaded April 2011). Three fish showed a large number of detections (between 6000 and 55000 detections), revealing greatest residency in the center of the seamount plateau, with the greatest number of movements between stations on the eastern half of the plateau. Fish tended to move in a clockwise direction around the plateau.

**PLANS FOR THE NEXT FISCAL YEAR (One paragraph):**
Further tagging of monchong using acoustic and conventional tags. Retrieval and download of the VR2 acoustic monitoring array at cross seamount. In addition, we will deploy archival tags, such that detailed records will be obtained in the event that fish are recaptured.

**LIST OF PAPERS PUBLISHED IN REFERRED JOURNALS DURING FY 2011**
**OTHER PAPERS, TECHNICAL REPORTS, ETC.**
**PUBLICATION COUNT**
*complete excel attachment (JIMAR publications request)*

None

**GRADUATES:**
*Names of students graduating with MS or PhD degrees during FY 2011; Titles of their Thesis or Dissertation*

none
**AWARDS:**
Name of JIMAR employees or project receiving award during the period, and Name of award

none

**PERSONNEL (on Subcontracts):**
For projects that awarded subcontracts in the fiscal year, please provide the number of supported postdocs and students from each subgrantee.

One graduate student supported

**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)