

JIMAR – PFRP ANNUAL REPORT FOR FY 2006

P.I./Sponsor Name: Kim Holland

Project Proposal Title: Trophic Ecology and Structure-Associated Aggregation Behavior in Tuna

Funding Agency: NOAA

NOAA Goal (Check those that apply):

- To protect, restore, and manage the use of coastal and ocean resources through ecosystem-base 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

1. Purpose of the Project (one paragraph)

To investigate the behavior, aggregation dynamics and feeding habits of tuna when they are found in association with anchored buoys such as the fish aggregating device (FAD) network that is deployed around the Main Hawaiian Islands (MHI). Recent emphasis has been shifted to characterize the nature of these aggregations when they are associated with privately deployed buoys (pFADs).

2. Progress during FY 2006 (One-two paragraphs, including a comparison of the actual accomplishments to the objectives established for the period, and the reasons for slippage if established objectives were not met):

Analysis of inter-FAD movement data continued and resulted in the submission of a manuscript that is in the process of second review. Analysis (both gut contents and stable isotope techniques) of the feeding behavior of FAD-associated tunas resulted in publication of these data (Graham et al 2006). Acquisition of sample storage equipment and personnel training for data collection of pFAD-associated tuna was completed but activity was temporarily terminated due to an almost complete failure the 2005/06 pFAD fishing season.

3. Plans for the next fiscal year (one paragraph):

Existing data will continue to be analyzed and published and tagging and gut content experiments are planned for the next (2006/07) pFAD fishing season.

4. List of papers published in refereed journals during FY 2006.
A rapid ontogenetic shift in the diet of juvenile yellowfin tuna from Hawaii. Brittany S. Graham. Dean Grubbs. Kim Holland. Brian N. Popp. *Mar Biol. In Press*
5. Other papers, technical reports, meeting presentations, etc.
6. Graduates (Names of students graduating with MS or PhD degrees during FY 2006. Provide titles of their thesis or dissertation):
7. Awards (List awards given to JIMAR employees or to the project itself during the period):
8. Publication Count (Total count of publications for the reporting period and previous periods categorized by NOAA lead author and Institute (or subgrantee) lead author and whether it was peer-reviewed or non peer-reviewed (not including presentations):

	JI Lead Author			NOAA Lead Author			Other Lead Author		
	FY04	FY05	FY06	FY04	FY05	FY06	FY04	FY05	FY06
Peer-reviewed			1						
Non-peer reviewed									

9. Students and Post-docs (Number of students and post-docs that were associated with NOAA funded research. Please indicate if they received any NOAA funding. For institutes that award subcontracts, please include information from your subgrantees):
One doctoral student - NOAA funded
One Post-Doctoral Fellow
10. Personnel:
 - (i) Number of employees by job title and terminal degree that received more than 50% support from NOAA, including visiting scientists (this information is not required from subgrantees): One Fisheries Technician (BS)
 - (ii) Number of employees/students that received 100% of their funding from an OAR laboratory and/or are located within that laboratory.
 - (iii) Number of employees/students that were hired by NOAA during the past year:
11. Images and Captions. (JIMAR will be including images in the annual report. Please send two of your best high-resolution, color images (photo, graphic, schematic) as a JPEG or TIFF with a caption for each image. Hardcopies of images can be dropped off at the JIMAR office if no electronic versions are available.