

**JIMAR, PFRP ANNUAL PROGRESS REPORT  
FY 2002**

**P.I. Name:** Pierre Kleiber and Hideki Nakano

**Project Proposal Title:** Incorporating Oceanographic Data in Stock Assessments of Blue Sharks and Other Species Incidentally Caught in the Hawai'i-based Longline Fishery

**Funding Agency:** Pelagic Fisheries Research Program

**Project Purpose and Indicative Results:** Improve habitat based standardization of longline effort by accounting for the affects of current shear and other oceanographic features on the depth distribution of longline hooks and the degree to which that distribution overlaps the depth distribution of particular fish species.

**Project Activities and Progress During FY 2002:** A proposed visit by Dr. Keisuke Mizuno was expanded into a workshop to consider the necessary information and possible approaches to including the affects of shear current in standardizing longline effort. The workshop met in Honolulu, May 8 to 10 and included the following scientists: Keisuke Mizuno, Pascal Bach, Hideki Nakano, David Foley, Ramzi Mirshak, Laurent Dagorn, Keith Bigelow, Shiham Adam, Christopher Boggs, Michael Hinton, Pierre Kleiber. Examples of current shear fields derived from the PFRP Oceanic Atlases project were considered as potential indices of longline shoaling. Also during the meeting an additional collaboration was launched to further define hooking depths of longline caught species by assembling time-depth recorder data, hook timer data, and observer reports on hook location.

Difficulty was encountered in hiring a computer specialist. It was a frustrating 6 month process, but Vikram Khurana is now on board. He is experienced with data base programming and will be helping to enhance access to Oracle data bases housed at Honlab and in designing a better way of organizing foreign data held in Honolulu as part of this and other collaborative projects.

**Planned Project Activities for FY 2003:** Work with the Oceanic Atlases project to further develop indices of longline shoaling, and test them as habitat variables in stock assessments of blue shark and other species.

Participate in collaboration on hooking depths with the Inter-American Tropical Tuna Commission, the National Research Institute for Far Seas Fisheries, and Institut Recherche pour le Developpement.

**Papers Published in Journals During FY 2002:** None.

**Other Papers, Reports, and Presentations During FY 2002:**

Presented summary to the 53<sup>rd</sup> Tuna Conference of deliberations at the May 8-10 workshop.

**Graduating Students with M.S. or Ph.D. Degrees During FY 2002:** None.

### Next Year's Budget:

Next year for this project will be Year 2 shown in the budget below. This is the budget included in the original proposal which was prepared approximately three years ago. No inflation factor has been applied as I do not know if there is provision for such.

	Year 1	<b>Year 2</b>	Year 3	Total
A. Personnel				
Salaries/Wages				
P. Kleiber, PI	\$0	<b>\$0</b>	\$0	
H. Nakano, PI	\$0	<b>\$0</b>	\$0	
Computer Specialist	\$45K	<b>\$46.5K</b>	\$48K	
Fringe Benefits(@30%)	\$13.5K	<b>\$14K</b>	\$14.4K	
Total	\$58.5K	<b>\$60.5K</b>	\$62.4K	\$181.4K
B. Travel				
Co-PI (30 days)	\$6K	<b>\$6K</b>	\$6K	
Visiting Scientist	\$3K			
Total	\$9K	<b>\$6K</b>	\$6K	\$21K
C. Indirect Costs				
JIMAR/PFRP (20.4%)	\$13.8K	<b>\$13.6K</b>	\$14.0K	\$41.3K
Total Budget	\$81.3K	<b>\$80.1K</b>	\$82.4K	\$243.7K