

Pelagic Fisheries Research Program

Final Announcement

Principal Investigators Workshop

December 5-7, 2000

Honolulu

What: Multidisciplinary meeting of scientists studying fisheries systems involving large pelagic animals in the Pacific.

Where: Imin Conference Center, Asia Room, on the campus of the University of Hawaii at Manoa.

When: December 5 – 7, 2000 at 8:30AM

Who should attend: Biologists, oceanographers, economists, fishery managers and anyone with an interest in the biology and fisheries for highly migratory fish.

The Pelagic Fisheries Research Program convenes occasional meetings of the scientists currently conducting PFRP sponsored research. The primary purpose of these meetings is to create avenues of collaboration among scientists from different disciplines. In order to place PFRP research in a wider context, the PI meetings are often organized around specific themes. Previous PI meeting have focused, for example, on genetic studies of population structure and on economic considerations for international tuna management.

The theme for the December PI meeting will be **“Exploitation, predation, and scales of spatial variability in pelagic fisheries”**. Large pelagic fish are highly dispersed in the ocean with typical population densities of only about one fish per square kilometer integrated over the upper mixed layer. Understanding of spatial pattern and scales of variability is one of the central issues in ecology in general and is critical for the success of fisheries targeting large pelagic fish in particular. These fisheries depend on exploitation of natural and man-made points of aggregation such as oceanographic fronts, seamounts, logs, and fish aggregation devices. More importantly perhaps our ability to estimate population size depends on the relationship between local abundance and the population as a whole.

Many PFRP projects in oceanography, biology, statistics and economics have touched either directly or indirectly on the subject of spatial variability. This emphasis will continue in several newly funded projects. In particular one critical new project will examine the relationship between feeding habits and aggregation, linking scales of spatial variability across trophic levels.

Three days have been reserved for the workshop. About half of the time will be devoted to presentations of PFRP projects and about half of the time will be devoted to discussion and to presentations from invited speakers relating to spatial variability and feeding of large pelagic fish. A preliminary program is attached below.

Attendance will be limited to about 50 people. Please contact Dodie Lau dlau@soest.hawaii.edu or John Sibert jsibert@soest.hawaii.edu of the PFRP for details, or consult the PFRP Web Site: <http://www.soest.hawaii.edu/PFRP/>

Pelagic Fisheries Research Program

12/4/00

Principal Investigators Meeting

December 5-7, 2000

Program Schedule

Time	Presenter		Title
Tuesday, December 5			
8:45	John	Sibert	Opening Remarks - Scales of Spatial Variability
9:00	Ujjayant	Chakravorty	Incorporating Migration in an Economic Model of the Hawaiian Fishery: A Conceptual Framework and Preliminary Results (2)
9:30	Paul	Dalzell	Hawaii Recreational Fisheries Database (2)
10:00	David	Kerstetter	Longlines and Highly Migratory Species: A Comparison of Closed Areas in the Northwest Atlantic and Central Pacific (2)
10:30			Break
11:00	Sam	Pooley	Recent Advances in Pelagic Fisheries Economics (1,2)
11:30	Khem Naresh	Sharma Pradhan	Analyzing the Technical and Economic Structure of Hawaii's Pelagic Fishery: Progress Report (1)
12:00	Ivar	Strand	Western Atlantic and Gulf of Mexico Longlining: A Synopsis of Economic Information related to Vessels and Vessel Movement (1)
12:30			Break
13:30	Michael	Musyl	Pop-Off Satellite Archival Tags to Chronicle the Survival and Movements of Blue Sharks following Release from Longline Gear (2)*
14:00	Richard	Brill	Use of PSATs to Follow the Movements and Survival of Sea Turtles Following Interactions with Pelagic Longline Gear (2)
14:30	Roger Melinda	Hill Braun	Failure to Report: The Animal or the Tag
15:00			Break
15:30	John	Hampton	Assessment of Pacific Yellowfin and Bigeye Stocks using a Length-Based, Age-Structured Modeling Framework (MULTIFAN-CL) (1) *
16:00	Donald Jeffrey George	Kobayashi Polovina Watters	A Comparison of Eastern Pacific Ocean Bigeye Tuna Abundance with CPUE and Size Structure in the Hawaii-Based Longline Fishery
Wednesday, December 6			
8:30	Russell David John	Brainard Foley Sibert	Development of Oceanographic Atlases for Fisheries and Resource Management of the Exclusive Economic Zones of the U.S. Pacific Islands (2) *
9:00	Patrick	Lehodey	Large Scale Variation in Prey Abundance * (presented by Sibert & Hampton)
9:30	Michael Jeffrey	Seki Polovina	An Assessment of Biological Responses to Mesoscale Oceanographic Processes (1)
10:00			Break
10:30	Jules	Jaffe	New Instrumentation for Measuring Time Varying Aggregation and the Incorporation of this Information into Models
11:00	David Kim	Itano Holland	Aggregation, Exploitation and Scales of Spatial Variability of Bigeye and Yellowfin Tuna in the Central Pacific: Application of "Dumb" Tag Technology (1)
11:30	Shiham	Adam	Exchange Rates and Size Specific Attrition of Yellowfin and Bigeye Tuna between Cross Seamount and Inshore FADs in Hawaii *
12:00			Break
13:00	Tim	Essington	Tunas in Space: Spatial Scales of Predator Prey Interactions in Large Ecosystems
13:30	John	Sibert	Estimates of Geolocation Errors and Population Movement Parameters for Bigeye Tuna using Archival Tags (1)
14:00	William A.	Walsh	Completed, Current, and Planned Work Related to Catch Histories of Fishes taken as Incidental Catch in the Hawaii-Based Longline Fishery (2)
14:30	Christopher	Moyes	Stress and Mortality in Fisheries Biology (2)
15:00			Break
15:30	Dan	Curran	Population Biology of Pacific Oceanic Sharks (1) *
16:00	Chris	Boggs	Investigation of Pelagic Fish Migration Patterns and Habitat Characteristics using Electronic Archival Tag Technology (1) *
Thursday, December 7			
8:30	Sara	Iverson	The Use of Fatty Acid Signatures to Understand Trophic Interactions and Marine Food Webs: Applications to Predatory Fish
9:00	Matt	Parry	The Trophic Ecology of Two Oceanic Squids in Hawaiian Waters (1)
9:30	Kim	Holland	Does Trophic Biology Underlie the Aggregation of Tunas at Seamounts and FADs? (2)
10:00			
		Notes	(1) Indicates on-going PFRP sponsored research
			(2) Indicates new PFRP sponsored research initiated in 2000
			* Indicates provisional title