

SOUTHWEST FISHERIES SCIENCE CENTER
THIRD QUARTER REPORT-FY 2001
For the Period April 1 - June 30, 2001

Submitted by: John Hunter, Division Director, Fisheries Resources Division

Title of Accomplishment/Milestone: Complete analysis of EFH for 13 U.S. West Coast highly migratory management unit species, with MUS shark life history summaries.

Current Status: Completed.

Background Information: The U.S. West Coast Highly Migratory Species (HMS) Fisheries Management Plan (FMP) is currently under development by the Pacific Fisheries Management Council. The Essential Fish Habitat (EFH) provision of the Magnuson-Stevens Act mandates that EFH be designated in the FMP for all major life stages of each management unit species within the U.S. Exclusive Economic Zone. As per NMFS guidelines, this task requires a thorough review and analysis of data on the current and historic stock size; geographic range, distribution, and density of each managed species; habitat requirements of each life stage, and information on growth, mortality and production within all habitat areas a MUS occupies, or formerly occupied.

Purpose of Activity: To fulfill the Magnuson-Stevens Act EFH mandate for identifying and describing EFH for MUS covered by the West Coast HMS FMP.

Description of Accomplishment and Significant Results: All designations were completed on schedule and received approval by the Council's Habitat Steering group in June 2001. Work entailed an extensive data and literature review for all species (274 references and data sources), plus selected new analyses. These included analyses of CPFV logbook data, driftnet fishery observer data, and commercial fishing vessel logbook data. Where feasible, analyses were conducted of distributional data to determine area occupied by 95% of observed catches by area and bottom topography. Distribution by sex and life stage/size was also analyzed for species for which data were available. Sea temperature structure in southern California Bight was examined in relation to distribution of the most tropical species within the southern EEZ. Thirty GIS maps were created with catch distributions and designated EFH plotted. Life history sections were completed for each of the 13 species, with subsections on general distribution, growth and development, trophic interactions, migrations, movement and stock structure, reproduction, vital rates and statistics, fishery utilization, and EFH for three life stages. Midway through the project, work expanded to include revising and re-writing all of the life history sections for the tunas, billfishes and dolphins as well as for the sharks.

Significance of Accomplishment: Marks completion of one of the major tasks assigned to the HMS FMP Development Team. Fulfills Magnuson-Stevens EFH mandate for the West Coast HMS FMP. Presents new unpublished information on species distribution

and habitat use by sex and life stage in West Coast EEZ. After official public review in fall 2001, the EFH appendix will be submitted for consideration as a Tech. Memo. for official documentation.

Problems: At times, some periodic computer hang-up problems tended to frustrate progress in constructing ArcView GIS maps (may be inherent in software).

Key Contact: Susan Smith (858-546-7070) and Rand Rasmussen (858-546-7184).