Southwest Fisheries Science Center Honolulu Laboratory

National Marine Fisheries Service Southwest Fisheries Science Center Honolulu Laboratory Honolulu, HI 96822-2396

Laboratory Objectives

The Honolulu Laboratory (1) provides needed scientific information and expertise to the Western Pacific Regional Fishery Management Council in the preparation of Fishery Management Plans for resources in the U.S. Fishery Conservation Zone around Hawaii, American Samoa, and Guam in the central and western Pacific; (2) conducts studies to delineate and assess the nearshore marine resources of the Northwestern Hawaiian Islands and other island areas of direct interest to the United States; and (3) investigates the population dynamics and status of stocks, behavior and physiology, and the environmental influence on the ecology of the offshore pelagic species of commercial importance such as the tunas and billfishes.

Personnel

George W. Boehlert, Laboratory Director

- Jerry A. Wetherall, Chief, Pelagic Resources Investigation
- Jeffrey J. Polovina, Chief, Insular Resources Investigation
- William G. Gilmartin, Chief, Marine Mammals and Endangered Species Program
- Samuel G. Pooley, Chief, Fishery Management Research Program



Areas of Expertise

Physiology, behavior, bioenergetics, and ecology of pelagic fishes, particularly tunas; population dynamics and stock assessment of pelagic species, marine mammals, and endangered species; population dynamics and trophic interactions of nearshore marine fish and invertebrate complexes; biology, ecology, and life history of offshore pelagic fishes; and fishery economics.

Laboratory Features

The Honolulu Laboratory was built in 1950 on a site adjacent to the University of Hawaii on land deeded to the U.S. Government by the state of Hawaii. The Laboratory is located in the capitol of the state of Hawaii, on the island of Oahu, which is the hub of all activity in the state. Hawaii's mid-Pacific location makes the Honolulu Laboratory ideally situated to study the widely distributed, economically important species of large fishes such as the tunas and billfishes.

The Laboratory's Kewalo Research Facility includes a building of 10,800 square feet, which houses offices and laboratories tailored for various research activities, a machine shop, and storage areas. On the adjoining grounds is a saltwater well and aerating system that has the capacity to produce over 1,000 gallons per minute of highquality coral-filtered seawater. This seawater supplies various tanks, including a series of five 20,000-gallon circular pools that can be observed from a tower, a 200,000-gallon oceanarium, and specially designed experimental tanks of various sizes. These facilities are on a 0.98 acre area at the southeast entrance of Kewalo Basin, the base for the Hawaiian skipjack tuna fleet. The Kewalo Research Facility is the only research center in the world that is able to collect and maintain live tunas throughout the year for use in behavioral and physiological research. To

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investigate the nearshore and offshore pelagic fish resources, the NOAA ship *Townsend Cromwell* is presently assigned to the Honolulu Laboratory.

Laboratory History

The inception of the Honolulu Laboratory, first known as the Pacific Oceanic Fishery Investigations (POFI), can be traced to Public Law 329 (1947), which authorized the exploration, investigation, and development of highseas fisheries of the territories and island possessions of the United States in the tropical and subtropical Pacific Ocean and intervening seas. Funds for the Laboratory became available in July 1948 and, in August 1948, POFI was organized and a temporary headquarters office was established in San Francisco. In 1950 POFI moved into its nearly completed laboratory building, adjacent to the University of Hawaii in Honolulu's historic Manoa Valley.

The Laboratory was under the Fish and Wildlife Service in the Department of the Interior from 1948 to 1970. In 1970 the Laboratory came under the newly organized National Marine Fisheries Service, NOAA, in the Department of Commerce and, in 1971 it became a part of the Southwest Fisheries Science Center under the same organizational structure. During the course of its existence, the Honolulu Laboratory has operated the following research vessels: *Henry O'Malley, John*



Honolulu Laboratory.

R. Manning, Hugh M. Smith, Charles H. Gilbert, and Townsend Cromwell.

Cooperating Agencies

Hawaii's Division of Aquatic Resources, American Samoa's Office of Marine Resources, Guam's Division of Aquatic and Wildlife Resources, Fish and Wildlife Service, Western Pacific Regional Fishery Management Council, University of Hawaii, University of Guam, Bernice P. Bishop Museum, Oceanic Institute, Pacific Tuna Development Foundation, Indian Ocean Fisheries Commission, Indo-Pacific Fisheries Commission, South Pacific Commission, Far Seas Fisheries Research Laboratory (Japan), Commonwealth Scientific and Industrial Research Organization (Australia), Fisheries Research and Development Agency (Republic of Korea), and New Zealand Ministry of Agriculture and Fisheries.

George W. Boehlert