Part I

REPORTS, REVIEW, AND PUBLICATIONS

REPORT OF THE CALCOFI COMMITTEE

Participants in the CalCOFI program continue to study the fishery resources of the California Current. In 1987 the egg production method was again applied to examine the resurgence of the sardine. Sardine surveys extended from Point Conception to the Mexican border and out to about 75 miles. The spawning biomass estimate was approximately double the 1986 estimate, and the California Department of Fish and Game (CDFG) again permitted a 1000-ton sardine quota. The season opened on January 1, 1988; the quota was caught within two weeks; and the Fisherman's Cooperative canned sardines for the first time since the 1966–67 season.

Fishery-oriented cruises this year included a 42-day groundfish trawl survey; three 10-day sardine surveys that combined the use of two ships (one for egg collections and one for adult collections); two night-lighting recruitment cruises to assess juvenile Pacific mackerel; and four 15-day surveys of the California Current. For future surveys of the California Current, the CalCOFI Committee is considering taking continuous, underway measurements to increase spatial coverage, identify mesoscale processes, and generate ground-truth measurements for satellites. Initial measurements will be near-surface, but an ultimate goal is to obtain data for at least the entire mixed layer. It is likely that electronic sensing will replace physical sampling.

Data from this year's surveys extend the CalCOFI time series to 38 years. CalCOFI's extensive data base is on line and user-friendly, and a manual describing the menu-driven system was published this year. In addition, all ichthyoplankton data have been reviewed and edited over the last four years, culminating in the publication of 23 data reports covering 1951 to 1981. The utility of the data and value of this time series in attaining CalCOFI's main objective—understanding the variations of fish populations and their biotic and physical environment in the California Current—are discussed in the symposium papers published in this issue.

Cooperative research is paramount in meeting CalCOFI objectives. During the year the U.S. and Mexican governments signed a formal agreement for cooperative fisheries research on the west coast, establishing the Mexus-Pacifico committee to implement the agreement. Mexus-Pacifico contains two binational subcommittees: one to gather and exchange data and one to assess stock. Both subcommittees were productive during the year. Mexican and U.S. scientists also participated in several workshops this year—two on the egg production method for determining spawning biomass, one on age determination, and one on sampling. Scheduled for next year is a Mexican sardine cruise from Cabo San Lucas to Ensenada, a continuing routine interchange of fisheries and biological data, and a workshop on stock synthesis. Finally, Mexus-Pacifico agreed to present a symposium dealing with the sardine "recovery" at the 1990 CalCOFI Conference.

CalCOFI continued to support the U.S. and Spanish Sardine-Anchovy Recruitment Program (SARP). Spanish scientists were trained by NMFS and CDFG personnel in physical oceanographic techniques, population dynamics, the egg production method (EPM) used for biomass assessment, and recruitment-directed assessment techniques (e.g., histopathology and serological assays that define predator-prey relations). A cruise was completed to estimate the sardine spawning biomass off the Atlantic coast of Spain and Portugal. In the next year scientists will compare the sardine birthdate distribution to the spawning season and cube of the wind-speed time series.

To increase the visibility of *CalCOFI Reports* in the marine science community, our publication will be abstracted for *Aquatic Sciences and Fisheries Abstracts (ASFA) and Oceanic Abstracts* retroactively to 1986, and beginning with this issue, *CalCOFI Reports* will be indexed in *Current Contents/Agriculture, Biology & Environmental Sciences*, and covered in the *Science Citation Index, Automatic Subject Citation Alert*, and an online data base SCISEARCH. In addition, *CalCOFI Reports* now carries an International Standard Serial Number (ISSN) from the Library of Congress.

We sadly report the deaths of two dominant figures in fishery and marine science, and champions

of CalCOFI—Abe Fleminger and Reuben Lasker. A scholarship fund, The Reuben Lasker Memorial Fund, has been established for graduate students to attend the annual CalCOFI Conference.

Many thanks to the officers and crews who assist us in our work on the University of California RV *New Horizon*, the National Oceanic and Atmospheric Administration RV *David Starr Jordan*, RV *Yellowfin*, FV *Lakeside*, RV *Shana Rae*, and the FV *Vitina-A*.

The Committee also thanks all of those who have worked so hard on this 29th volume: *CalCOFI Reports* editor Julie Olfe for her continuing proficient work; Spanish editor Patricia Matrai; Coordinator Gail Theilacker; and the following reviewers who spent time and effort making this an excellent report: Mario Aguayo, Angeles Alvariño, Kevin Bailey, Ed Brinton, John Butler, Bob Francis, Michael Fogarty, John Graves, Loren Haury, Roger Hewitt, Ed Houde, Bill Lenarz, Nancy Lo, Ron Lynn, Alec MacCall, Roy Mendelssohn, Richard Methot, Beatriz Morales Nin, Richard Parrish, William Pearcy, James Simpson, Paul Smith, Gary Stauffer, Gary Winans, and Patricia Wolf.

Finally the Committee thanks past CalCOFI Coordinator George Hemingway for his support, and current Coordinator Gail Theilacker, who has moved so quickly and positively into her new position.

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