STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
MARINE RESEARCH COMMITTEE

CALIFORNIA
COOPERATIVE
OCEANIC
FISHERIES
INVESTIGATIONS



VOLUME XVI
1 July 1970 to 30 June 1971

## Cooperating Agencies:

CALIFORNIA ACADEMY OF SCIENCES

CALIFORNIA DEPARTMENT OF FISH AND GAME

STANFORD UNIVERSITY, HOPKINS MARINE STATION

UNIVERSITY OF CALIFORNIA, SCRIPPS INSTITUTION OF OCEANOGRAPHY

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL MARINE

FISHERIES SERVICE

DEPARTMENT OF FISH AND GAME

## MARINE RESEARCH COMMITTEE

CHARLES R. CARRY, Chairman JOHN G. PETERSON, Vice Chairman ROBERT CHAPMAN W. J. GILLIS, SR. B. J. RIDDER
JOHN J. ROYAL
AL SCHIAVON
NICHOLAS F. TRUTANIC

5 January 1973

The Honorable Ronald Reagan

Governor of the State of California

Sacramento, California

Dear Governor Reagan:

We have the honor to submit the sixteenth report of the California Cooperative Oceanic Fisheries Investigations.

The report consists of three sections. The first contains a review of the administrative and research activities during the period 1 July 1970 - 30 June 1971, a description of the fisheries, and a list of publications arising from the programs.

The second section consists of papers presented at a symposium "Pollutants and Contaminants in the California Current System" held in November 1970, which brought together officials charged with regulating the use of hazardous materials which as wastes or escapes may pollute the environment objectionably.

The third section consists of scientific contributions to know-ledge of the distribution of such substances in marine environments, the processes controlling the distribution, and effects on marine organisms.

Respectfully submitted,

THE MARINE RESEARCH COMMITTEE

charles Il Carry

Charles R. Carry, Chairman

## CONTENTS

	CONTENTO	D
I.	Review of Activities of 1 July 1970-30 June 1971	Page
	Report of CalCOFI Committee	
	Agency Reports	
	Review of the Pelagic Wet Fisheries for 1971	
	Publications	17
	Special Report	
	The Federal Reorganization and Its Impact on Fisheries.  Philip M. Roedel	21
II.	Symposium on Pollutants and Contaminants in the California Current System.  David Ganssle, Convenor	
	What are the Responsibilities and Programs of Federal, State and Local Agencies?	
	Federal Food and Drug Administration Responsibilities and Programs in the Field of Marine Pollution. Fred Shallit	
	Pesticide Program of the California Department of Fish and Game. Part I. Eldridge Hunt	29
	Pesticide Program of the California Department of Fish and Game.  Part II. Jack Linn	32
	Development of a Temperature Control Policy for the Coastal and Interstate Waters of California. Ray Dunham	
	Wastewater Treatment and Disposal System. Frank Dryden	
	Southern California Coastal Water Research Project. George Hlavka	5.
III.	Scientific Contributions	
	Near-Shore Circulation in the California Current. Richard A. Schwartzlose and Joseph L. Reid	
	Zinc-65 and DDT Residues in Albacore Tuna Off Oregon in 1969.  William G. Pearcy and Robert R. Claeys	
	Evidence for Eutrophication in the Sea near Southern California Coastal Sewage Outfalls. Angelo F. Carlucci, Richard W. Eppley, Osmund Holm-Hansen, Dale Kiefer, James J. McCarthy and Peter M. Williams	
	Some Aspects of Pollution in San Diego County Lagoons. John S. Bradshaw and Peta J. Mudie	84
	Lipids in the Marine Environment. Richard F. Lee, Jed Hirota, Judd C. Nevenzel, Richard Sauerheber, Allan Lewis and Andrew A. Benson	
	Pesticide Research at the Fishery-Oceanography Center. John S. Mac- Gregor	10
	DDT in Marine Plankton and Fish in the California Current. James L. Cox	10'
	Heavy Metals in Coastal Sediments. James N. Galloway	112
	Biological Changes in Los Angeles Harbor Following Pollution Abatement. Donald J. Reish	. 11
	Santa Barbara Oil Spill—Intertidal and Subtidal Surveys. Alex R. Strachan	12
	A Survey of the Benthos off Santa Barbara Following the January 1969 Oil Spill. Kristian Fauchald	. 12
	The Santa Barbara Oil Spills in Perspective. Nancy Nicholson	
	The Santa Barbara Oil Spill: Dosage of Crude Oil on Shore and Initial Effects on Intertidal Organisms. Michael Foster	. 15