

Nutritional and Environmental

- 43 Environmentally Related Diseases of Marine Fish and Shellfish
Carl J. Sindermann
- 44 Nutrient Requirement of the Lobster and Nutrition Pathology
Robert C. Bayer, Margie Lee Gallagher, and Dale F. Leavitt
- 45 Nutritionally Induced Cataracts in Salmonids Fed Purified and Practical Diets
Hugh A. Poston, Ronald C. Riis, Gary L. Rumsey, and H. George Ketola
- 46 Environmental Parameters Affecting Fish Physiology in Water Reuse Systems
Thomas L. Meade
- 47 PCB-Induced Alterations in Teleost Liver: A Model for Environmental Disease in Fish
David E. Hinton, James E. Klaunig, and Michael M. Lipsky
- 51 A Review of Histopathological Effects of Selected Contaminants on Some Marine Organisms
George R. Gardner

Department

- 52 NOAA/NMFS Developments: Proteolysis Inhibition in Pacific Hake

Cover: A *Baculovirus* that infects the hepatopancreas of the blue crab, *Callinectes sapidus*. See the article beginning on page 13.

2nd Annual Eastern Fish Health Workshop

A workshop, cosponsored by the Oxford Laboratory of the Northeast Fisheries Center, National Marine Fisheries Service, NOAA, and the National Fish Health Research Laboratory of the U.S. Fish and Wildlife Service, at the Tidewater Inn, Easton, Md., 26-27 May 1977.

*Robert A. Murchelano, Editor
Investigation Chief
Pathobiology Division
Northeast Fisheries Center
National Marine Fisheries Service, NOAA
Oxford, Md.*

*Aaron Rosenfield, Coeditor
Director
Pathobiology Division
Northeast Fisheries Center
National Marine Fisheries Service, NOAA
Oxford, Md.*

Preface

Individuals interested in the diseases of wild and cultured fish and shellfish have few forums from which to present their research progress. Perhaps the two most universally acceptable national organizations are the American Fisheries Society and the Wildlife Disease Association.

For many years, fish culturists and fish disease researchers in the midwestern and western states have met informally to discuss research progress. At the April 1976 meeting of the Northeast

Wildlife Conference in Hershey, Pa., James Warren of the Fish and Wildlife Service convened a meeting to investigate the feasibility of a yearly eastern fish health workshop. Participants concurred that an annual workshop to discuss research progress would be desirable.

To that effect, the Oxford Laboratory of the Northeast Fisheries Center, National Marine Fisheries Service, NOAA, and the National Fish Health Research Laboratory of the U.S. Fish and Wildlife Service convened the 2nd

Annual Eastern Fish Health Workshop at Easton, Md., on 26-27 May 1977. Participants represented Federal, State, and academic institutions engaged in studies of the health of marine and freshwater fishes, crustaceans, and mollusks.

The workshop was structured to include four major categories of research activity: Bacterial, viral, parasitic, and nutritional and environmental diseases of fish and shellfish. This issue contains the papers presented at the 2nd Annual Eastern Fish Health Workshop.