A Symposium on North Pacific Salmonid Ecosystems

"**Salmonid Ecosystems of the North Pacific**," edited by William J. McNeil and Daniel C. Himsworth, contains the papers presented at a symposium of the same title held at Otter Crest, Oreg., in May 1978. The symposium was suggested by R. L. Edwards, Director, NMFS Northeast Fisheries Center as an activity of the Joint U.S.-U.S.S.R. Working Group on Biological Productivity and Biochemistry of the World Ocean. The symposium was organized to accommodate subjects relevant to freshwater, estuarine, and marine ecosystems; population and community dynamics; and artificial propagation of Pacific salmonids. The proceedings include 17 papers delivered by prominent American and Canadian fisheries scientists as well as abstracts of 7 papers submitted by Soviet scientists.

Topics covered include testing for density-dependent marine survival, juvenile salmonids in the oceanic ecosystem during the first summer, trends in North Pacific salmon fisheries, marine mammal-salmonid interactions, trends in Puget Sound and Columbia River salmon, vulnerability of pink salmon to natural and fishing mortality, and ocean migrations and timing of Pacific salmon.

Other subjects are the feeding ecology of young Lake Washington sockeye salmon and the salmon enhancement problem, salmon outmigration studies in Hood Canal in 1977, ecology of juvenile salmon in Georgia Strait, primary productivity of the North Pacific, estuarine influences on young Bristol Bay sockeye salmon, density-dependent growth of Bristol Bay sockeye salmon, population structures of Pacific Northwest salmonids, selection to increase yield of coho salmon, chum salmon responses to artificial propagation, and the pineal gland and migratory behavior.

An appendix presents the following abstracts of Soviet studies: Growth of young sockeye of different year classes and fluctuations in primary production in Lake Dalneye, cranial anatomy of Far East salmon in postembryonic ontogenesis, assortive crossing and the role of sex ratio during the spawning period of Pacific salmon, problems of Pacific salmon population biology, *Hucho perrui* of the Kievka River, age structure of subisolates of sockeye salmon in the first generation, and biochemical genetics of populations of Pacific salmon.

Thus the articles present both current research on Pacific salmonids as well as several important reviews summarizing several years of extensive research. As such, the volume is a valuable addition to Pacific salmonid literature and will be of interest to fisheries scientists and administrators, salmon "ranchers," marine biologists and others seriously interested in the future of these species.

Indexed, the 342-page paperbound $8\frac{1}{2} \times 11$-inch volume is available from the publisher, the Oregon State University Press, 101 Waldo Hall, Corvallis, OR 97331 for $15.

Techniques for Tuna With Pole and Line

"**Tuna Fishing With Pole and Line**," edited by M. Ben-Yami, has been published by Fishing News Books Ltd. for the Food and Agriculture Organization (FAO). The author is with FAO's Fishery Industry Division.

The book contains nine parts: Introduction (with historical notes, data on new fishing grounds, live bait, and fishery development), main species fished, vessels, crews, live-bait techniques, handling and transporting live bait, fishing gear and auxiliary equipment, fishing operations, and handling fish on board. Additionally, a world guide to baitfish for pole and line fishing is given.

The manual is aimed at smaller-scale operations and provides information and advice to newcomers to pole-and-line fishing as well as for those who might want to improve or alter their present techniques. It is based in large part on a Japanese manuscript, but contains data on fishing variations and vessels from Polynesia, Sri Lanka, Hawaii, and other areas and nations.

Species discussed include skipjack tuna, albacore, frigate mackerels, bonitos, and little tunas. Fishing techniques covered include a wide variety of nets: Beach and boat seines, lampara nets, purse seines and ringnets, chiromila nets, drive-in nets, stick-held dipnets, blanket nets, Hawaiian liftnets, opelu nets, Lakshadweep bait fish nets, Sri Lanka liftnets, and others. Use of lights and bait is also discussed. Other gear mentioned includes single and double hooks and jigs or lures (Japanese and Pacific Island feather jigs and pear-shell lures), and trolling jigs. Lines, poles, and other auxiliary equipment (i.e., handnets and scoopnets, chum tanks and buckets, body protection gear, etc.) are detailed.

Also covered are selection of fishing grounds, searching for tuna, and capture operations. Many useful illustrations of the vessels, nets, and other gear and techniques enhance the text, and the book will be useful as a basic guide to this type of fishing.

The 150-page paperbound volume is available from Fishing News Books Ltd., 1 Long Garden Walk, Farnham, Surrey, England for £6.50 plus 65p postage.

Limited Entry: The Conference Proceedings

Publication of "**Limited Entry As a Fishery Management Tool,**" edited by R. Bruce Rettig and Jay J. C. Ginter, has been announced by the University of Washington Press, Seattle. The Washington Sea Grant publication presents the proceedings of a July 1978 national conference on limited entry held in Denver, Colo.

The issues are addressed from biological, economic, legal, political, and anthropological viewpoints. Other papers review the limited entry experience in Alaska, Washington, Michigan, Wisconsin, Canada, and Australia. Counterpoints are brought out in published questions and answers.

While the concept of limited entry is controversial, this new volume takes a step toward addressing the question of whether limited entry is a practical and effective management tool. The 463-page paperbound volume is available from the University of Washington Press, Seattle, WA 98105 for $15.00.

A Symposium on Fish Phenology

"**Fish Phenology, Anabolic Adaptiveness in Teleosts,**" edited by P. J. Miller, has been published by Academic Press (London) as Number 44 of the Symposia of the Zoological Society of London.

The book addresses a new definition of phenology, relates it to anabolism, and explores it in teleost fishes. Basic topics include treatment of energy partitioning, accumulation, endocrine control, and response to environmental influences. Timing, magnitude, and fecundity of reproductive commitment is discussed for some ecotypes, and a wide range of habitats from savannah pools to the deep sea are considered, as well as phenological modifications required by the migratory life-style of salmonids, seasonality in tropical habitats, and the diminutive adult size of certain aquarium fishes. Also addressed is the nature of senescence affecting the duration of individual anabolism and the genetic transmission of growth and reproductive characteristics.

The 450-page volume will be of interest to both fisheries biologists and researchers. The book is available from the publisher, Academic Press Inc. (London) Ltd., 24-28 Oval Road, London NW1 7DX, England for $52.

The Fishes of New York and Idaho

Two new state guidebooks to fishes, including commercially and recreationally valuable and anadromous species, have been published at opposite ends of the country. "**Freshwater Fishes of New York State, A Field Guide,**" by Robert G. Werner, funded in part by a NOAA grant, was published by the Syracuse University Press. The author is Professor of Forest Zoology at State University of New York College of Environmental Science and Forestry at Syracuse.

A key to all New York fishes is given along with more complete data on the identification, biology, life history, and distribution of 68 of the most common species. A table shows the distribution of each species by major drainage basin. In addition, selected references provide suggestions for additional information on the various species. And, a basic guide to fish anatomy and a glossary is provided.

Families included in the book are: Petromyzontidae, Acipenseridae, Lepisosteidae, Amiidae, Clupeidae, Hiodontidae, Salmonidae, Osmeridae, Esocidae, Umbridae, Cyprinidae, Catostomidae, Ictaluridae, Aphredoderidae, Percopsidae, Gadidae, Cyprinodontidae, Atherinidae, Gasterosteidae, Cottidae, Percichthyidae, Centrarchidae, Percidae, and Sciaenidae.

The volume vastly updates a 1903 volume "A Catalog of New York Fishes" by T. H. Bean, but would have been of more value with more and better illustrations. It remains useful, of course, as a current listing of and key to New York fishes.

Published in both paper ($11.95) and cloth ($20) editions, the book is available from Syracuse University Press, 1011 East Water Street, Syracuse, NY 13210.

"**Fishes of Idaho,**" by James Simpson and Richard Wallace, has been published as part of the Northwest Naturalist series by the University Press of Idaho. Simpson, retired, was Chief of Fisheries, Idaho Department of Fish and Game, and Wallace is with the Department of Biological Sciences, University of Idaho.

This book represents the first attempt to publish distributional and life history data on all Idaho fishes and is an outgrowth of an earlier key to Idaho fishes by the senior author in 1962. In all, 34 genera representing 13 families are included. Information is given on 67 species (39 native, 28 introduced) believed to have reproducing populations within the state (seven questionable species are also listed).

An illustrated key leads to the individual species accounts which include data on the identification, biology, and life history of the species, its natural and Idaho ranges, and on its uses or value. The book is amply illustrated with black and white drawings.

Information is given on past collections and accounts of Idaho fishes, river drainages, lakes, and reservoirs. A provisional checklist of Idaho fishes is also provided. Appendix one presents a glossary and Appendix two lists Idaho fishes by drainage. A list of references is given for further reading.

Families discussed include Petromyzontidae, Acipenseridae, Salmonidae, Esocidae, Cyprinidae, Catostomidae, Ictaluridae, Percopsidae, Gadidae, Poeciliidae, Centrarchidae, Percidae, and Cottidae.

Written for both the professional biologist as well as the interested layman, the volume fills a definite void and will be useful to both audiences. Indexed, the 237-page paperbound volume is sold by the publisher, University Press of Idaho, P.O. Box 3368, University Station, Moscow, ID 83843 for $6.50.