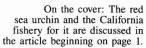
Marine Fisheries



Articles





47(3), 1985

| <u> </u> | 11(0), 1 | 000 |
|--|---|-----|
| Biology of the Red Sea Urchin, Strongylocentrotus franciscanus, and Its Fishery in California | Susumu Kato and Stephen C. Schroeter | 1 |
| The Columbia River Estuary: An Important Nursery for Dungeness Crabs, Cancer magister | Robert L. Emmett and Joseph T. Durkin | 21 |
| Shelf Life Extension of Drawn Whole Atlantic Cod, Gadus morhua, and Cod Fillets by Treatment With Potassium Sorbate | Vincent G. Ampola and Cynthia L. Keller | 26 |
| Fatty Acid Composition of Commercial Menhaden, <i>Brevoortia</i> spp., Oils, 1982 and 1983 | Jeanne D. Joseph | 30 |
| Underwater Separation of Juvenile Salmonids by Size | Michael H. Gessel, Winston E. Farr, and Clifford W. Long | 38 |
| Relationship of Sea Surface Temperature Isotherm Patterns off Northwestern Mexico to the Catch of Striped Marlin, <i>Tetrapturus audax</i> , off Southern California | James L. Squire, Jr. | 43 |
| Recreational Albacore, <i>Thunnus alalunga</i> , Fishery by U.S. West Coast Commercial Passenger Fishing Vessels | Dave Holts | 48 |
| Charterboat Catch and Effort from Southeastern U.S. Waters, 1983 | Harold A. Brusher and Barbara J. Palko | 54 |
| Departments | | |
| NOAA/NMFS Developments | | 67 |
| Foreign Fishery Developments | | 72 |
| Publications | | 84 |

U.S. DEPARTMENT OF COMMERCE

Malcolm Baldrige, Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

William G. Gordon, Assistant Administrator for Fisheries

National Marine Fisheries Service

Editor: W. Hobart

The Marine Fisheries Review (ISSN 0090-1830) is published quarterly by the Scientific Publications Office, National Marine Fisheries Service, NOAA, 7600 Sand Point Way N.E., Bin C15700 Seattle, WA 98115. Single copies and annual subscriptions are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402: single copy, \$4.00 domestic, \$5.00 foreign; annual subscription, \$8.75 domestic, \$10.95 foreign.

Publication of material from sources outside the NMFS is not an endorsement and the NMFS is not responsible for the accuracy of facts, views, or opinions of these sources. The Secretary of Commerce has determined that the publication of this periodical is necessary for the transaction of public business required by law of this

Department. Use of the funds for printing this periodical has been approved by the Director of the Office of Management and Budget.

The NMFS does not approve, recommend or endorse any proprietary product or proprietary material mentioned in this publication. No reference shall be made to NMFS, or to this publication furnished by NMFS, in any advertising or sales promotion which would indicate or imply that NMFS approves, recommends, or endorses any proprietary product or proprietary material mentioned herein, or which has as its purpose an intent to cause directly or indirectly the advertised product to be used or purchased because of this NMFS publication. Second class postage paid at Finance Department, USPS, Washington, DC 20260.