

# Marine Fisheries REVIEW



On the cover: Creamy shrimp.  
See the article beginning on page 13.

## Articles

February 1983, 45(2)

- Botulism and Heat-Processed Seafoods Joseph J. Licciardello 1
- Some Effects of Mt. St. Helens  
Volcanic Ash on Juvenile Salmon Smolts Timothy W. Newcomb and Thomas A. Flagg 8

## Departments

- NOAA/NMFS Developments *U.S. Seafood Attitude Data, The NMFS  
Charleston Laboratory and Its Experimental  
Lab, Fish Silage, and Atlantic Bluefin Tuna Quota* 13
- Foreign Fishery Developments *Norway's Fishing Industry, Japan's  
1981 Fish Production, The Mozambique and  
French Fishing Fleets, New Zealand Limits Fishing,  
Latin American Fish Products, Growth in U.K. Salmon  
Farms, New Zealand's Fishing Industry Board, European  
Lobster Markets, and Japan's Fish Trade Ombudsman Program* 16
- Publications *New NMFS Scientific Publications, Aquaculture  
Laws, Exporting Fish to Japan, Chilean Fishery  
Reports, COFI Meeting Report, Marketing Canned Fish  
in England, Marine Birds and Mammals of Puget Sound,  
Pinnipeds and Man, and Indian and Philippine Fishery Data* 24
- In Brief . . . . *Meetings, Conferences, and Early Fisheries Results* 28

### U.S. DEPARTMENT OF COMMERCE

Malcolm Baldrige, Secretary

### NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

John V. Byrne, Administrator  
William G. Gordon, Assistant  
Administrator for Fisheries

National Marine Fisheries Service

Editor: W. Hobart

*Marine Fisheries Review* (USPS 090-080) is published monthly 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. Prices are: Single copy, \$3.25 domestic, \$4.10 foreign; annual subscription, \$18.00 domestic, \$22.50 foreign. Copies of individual articles, in limited numbers, are available from the Publications Services Branch (E/A113), National Environmental Satellite, Data, and Information Service, NOAA, 11400 Rockville Pike, Rockville, MD 20852. News items are not reprinted.

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 through 30 June 1983.

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.