UNITED STATES DEPARTMENT OF THE INTERIOR STEWART L. UDALL, SECRETARY

> FISH AND WILDLIFE SERVICE CLARENCE F. PAUTZKE, COMMISSIONER

BUREAU OF COMMERCIAL FISHERIES DONALD L. MCKERNAN, DIRECTOR DIVISION OF RESOURCE DEVELOPMENT RALPH C. BAKER, CHIEF



A review of developments and news of the fishery industries prepared in the BUREAU OF COMMERCIAL FISHERIES.

Joseph Pileggi, Editor G. A. Albano, H. M. Bearse, and H. Beasley, Assistant Editors

Address correspondence and requests to the: Chief, Fishery Market News Service, U.S. Bureau of Commercial Fisheries, Wyatt Bldg., Suite 611, 777 14th Street, NW., Washington, D.C. 20005.

Publication of material from sources outside the Bureau is not an endorsement. The Bureau is not responsible for the accuracy of facts, views, or opinions contained in material from outside sources.

Although the contents of the publication have not been copyrighted and may be reprinted freely, reference to the source is appreciated.

Use of funds for printing this publication has been approved by the Director of the Bureau of the Budget, May 1, 1963.

5/31/68

### CONTENTS

COVER: The common power-lifted dredge being brought in over the roller of a typical Chesapeake Bay blue-crab fishing vessel. Vessels using this type of gear supply large quantities of blue crabs during the winter months to processing plants in Virginia and Maryland.

Page

1 ...Mechanizing the Blue Crab Industry--Part III - Strengthening the Industry's Economic Position, by Charles F. Lee, George M. Knobl, Jr., and Emmett F. Deady

| Page                                                                                       | Page                                                                              |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| TRENDS AND DEVELOPMENTS:<br>Alaska:                                                        | TRENDS AND DEVELOPMENTS (Contd.):<br>Great Lakes Fishery Investigations (Contd.): |
| 8 Bristol Bay Area Office Shifted to Town of<br>King Salmon                                | 11 Lake Trout Distribution Studies Continued<br>Gulf Exploratory Fishery Program: |
| California:                                                                                | 12 Preliminary Survey off the Coast of Vene-                                      |
| 8 Abundance and Condition of Dungeness Crabs                                               | zuela                                                                             |
| Surveyed Prior to Open Season                                                              | 13 Shrimp Gear Studies Continued                                                  |
| 9 Cans Shipments for Fishery Products, Jan-                                                | Gulf Fishery Investigations:                                                      |
| uary-September 1963                                                                        | 14 Shrimp Distribution Studies                                                    |
| Federal Purchases of Fishery Products:                                                     | Hawaii:                                                                           |
| 9 Department of Defense Purchases, July 1963                                               | 15 Skipjack Tuna Landings, January-October                                        |
| Fish Farming:                                                                              | 1963                                                                              |
| 10 Gear Tested for Harvesting Fish from Rice                                               | Industrial Fishery Products:                                                      |
| Farm Ponds                                                                                 | 15 New Uses for Fish Oils Promoted at Annual                                      |
| Fish Larvae:                                                                               | Paint Industries Show                                                             |
| 10 First Larval Fish Biology Conference Held                                               | U. S. Fish Meal, Oil, and Solubles:                                               |
| in California                                                                              | 16 Production by Areas, October 1963                                              |
| Fish Oils:                                                                                 | 16 Production, September 1963                                                     |
| 11 Composition of Fish Oils Studied by Frac-<br>tional Distillation and Gas-Liquid Chroma- | 18 Major Indicators for U. S. Supply, October<br>1963                             |
| tography                                                                                   | U. S. Fish Meal and Solubles:                                                     |
| Great Lakes Fishery Investigations:<br>11 Depth Distribution Studies of Chubs and As-      | 18 Production and Imports, January-September<br>1963                              |
| sociated Species in Lake Michigan Con-<br>tinued                                           | 18 Review of Trends in the Use of Fish Meal in<br>Texas Area                      |

# COMMERCIAL FISHERIES REVIEW

Vol. 26, No 1

## CONTENTS (CONTINUED)

| Page | Contd)                                                              | rage                         | Т   | RENDS AND DEVELOPMENTS (Contd.):                         |
|------|---------------------------------------------------------------------|------------------------------|-----|----------------------------------------------------------|
|      | TRENDS AND DEVELOPMENTS (Conta.).                                   |                              |     | U. S. Foreign Trade (Contd.):                            |
| 10   | Irradiation Preservation:<br>Comparative Tests Made With Irradiated | 35 .                         |     | Imports of Canned Tuna Under Quota                       |
| 19 . | Fillets and Fresh Controls                                          | 35 .                         |     | Imports of Fish Meal and Scrap by Customs                |
|      | Maine Sardines:                                                     |                              |     | Districts, September 1963<br>Wholesale Prices:           |
| 20 . | Canned Stocks, November 1, 1963                                     | 0.5                          |     | Edible Fish and Shellfish, November 1963                 |
|      | Marketing.                                                          | 35 .                         | · . | OREIGN:                                                  |
| 20 . | Edible Fishery Products Marketing Products,                         |                              | r   | International:                                           |
|      | Winter 1963/64                                                      |                              |     | Fishery Agreements:                                      |
|      | Michigan:                                                           | 38 .                         |     | a I mushish Eicheny Cooperative Pro-                     |
| 20   | Lake Trout Stocking Program Continued in                            |                              |     | posed                                                    |
|      | Fall 1963                                                           |                              |     | Food and Agriculture Organization:                       |
| 91   | New England:<br>Fisheries, 1962                                     | 38 .                         |     | Working Party on Atlantic Ocean Tuna Re-                 |
| 41 . | North Atlantic Fisheries Exploration and                            |                              |     | sources Meets in Rome                                    |
|      | Gear Research:                                                      |                              |     | International Association of Fish Meal Man               |
| 21   | Electrical Trawling Tests Continued                                 |                              |     | facturers:                                               |
|      | North Pacific Exploratory Fishery Program:                          | 39 .                         |     | Peruvian Annual Conference Stresses                      |
| 22   | Pelagic Trawl Tested for Effectiveness in                           |                              |     | Quality                                                  |
|      | Catching Winter Herring                                             |                              |     | International North Pacific Fisheries Com-               |
| 22   | Scallop Resources off Coast of Oregon Sur-                          | 10                           |     | mission:<br>Tenth Annual Meeting Held in Vancouver       |
| 9.2  | veyed<br>Survey of Deep-Water Marine Fauna off                      | 40 .                         |     | Organization for Economic Cooperation and                |
| 20   | Mouth of Columbia River Continued                                   |                              |     | Development:                                             |
|      | Oceanography:                                                       | 40 .                         |     | Fisheries Committee Meets                                |
| 23   | . Address to the National Academy of Sciences                       |                              |     | North Pacific Fisheries Commission:                      |
|      | by the Late President Kennedy                                       | 41 .                         |     | Reduction of Halibut Quota for Triangle                  |
| 24   | Committee for Scientific Exploration of the                         |                              |     | Area Recommended                                         |
|      | Atlantic Shelf                                                      | 1000                         |     | Whaling:                                                 |
| 25   | Honolulu Laboratory Vessel Finishes First                           | 41 .                         |     | FAO Appeals for Voluntary Limits on Ant-                 |
|      | Phase of Indian Ocean Survey                                        |                              |     | arctic Catch                                             |
| 26   |                                                                     | 4.0                          |     | Angola:                                                  |
| 27   | Completed<br>New Research Vessel to be Acquired by                  | 42 .                         | *   | Foreign Trade in Fishery Products, 1962                  |
| 21   | Duke University                                                     | 42 .                         | •   | Fisheries Trends, November 1963                          |
| 27   |                                                                     | 42 .                         |     | Fishery Landings Sharply Lower for First<br>Half of 1963 |
| 2.   | Year of Operation                                                   |                              |     | Australia:                                               |
| 28   | Sea Bottom of the Caribbean Area Under                              | 43                           |     | Japanese Take Measures to Stop Damage to                 |
|      | Study                                                               |                              | -   | Fishing Gear                                             |
|      | Pollution:                                                          |                              |     | Canada:                                                  |
| 28   | Potomac River Fish Losses                                           | 43 .                         |     | British Columbia Canned Salmon Pack Lowe                 |
| 20   | Shellfish:<br>Lake Frie Shellfish Mars Hars G                       |                              |     | in 1963                                                  |
| 40   | Lake Erie Shellfish May Have Commercial Value                       | 44 .                         |     | Fisheries Development Program Proposed                   |
|      | Shrimp:                                                             | 44 .                         |     | Long-Lining Boosts Nova Scotia's Swordfish               |
| 29   | United States Shrimp Supply Indicators, No-                         | 14                           |     | Landings in 1963                                         |
|      | vember 1963                                                         | 44 .                         | *   | New Brunswick Fishermen to Enter East                    |
|      | South Atlantic Exploratory Fishery Program:                         | 45 .                         |     | Coast Purse-Seine Fishery for Tuna                       |
| 29   | · · Frehminary Fishery Explorations off His-                        | 10 .                         | •   | New Fish-Processing Plants for Maritime<br>Provinces     |
|      | paniola and Scallop Survey off Florida                              | 45 .                         |     | Newfoundland Fishermen to Benefit from                   |
| 21   | Tuna:<br>Age-Growth Studies of Bluefin Tune Londo                   |                              |     | New Shore Facilities                                     |
| 01   | . Age-Growth Studies of Bluefin Tuna Landed<br>in California        | 45 .                         |     | Newfoundland Swordfish Long-Lining Exper-                |
|      | United States Fisheries:                                            |                              |     | ments Successful                                         |
| 31   | Commercial Fishery Landings, January-                               | 46 .                         |     | Process for Dehydrating Fish-Potato Mix-                 |
|      | Debrember 1903                                                      |                              |     | ture Developed                                           |
| 32   | Fish Sticks and Portions, July-September                            | 17                           |     | Chile:                                                   |
|      | 1000                                                                | 4(,                          | •   | Fisheries Trends, November 1963                          |
| 0.0  | U. S. Fishing Vessels:                                              | a state of the second second |     | Colombia.                                                |
| 33   | Documentations Issued and Cancelled, Sep-                           | 11 .                         |     | Bill Establishing Territorial Waters at 200              |
|      | tember 1963<br>U. S. Foreign Trade:                                 |                              |     | Miles Passes House<br>Cook Islands:                      |
| 34   | Airborne Imports of Diet                                            | 48 .                         |     | Plan for Japanese-Sumpling                               |
|      | . Airborne Imports of Fishery Products, Au-<br>gust 1963            |                              |     | Plan for Japanese-Supplied Tuna Cannery<br>Rejected      |
| 34   | Exports of Edible Fishery Products, Sep-                            |                              |     | Denmark                                                  |
|      | tember 1963                                                         | 49.                          |     | New Trade Agreement with Soviets May In-                 |
|      |                                                                     |                              |     | clude Fish Freezerships                                  |

Contents continued page III.

II

January 1964

#### COMMERCIAL FISHERIES REVIEW

#### CONTENTS (CONTINUED)

| Page |                                                                    | Page                                                        |
|------|--------------------------------------------------------------------|-------------------------------------------------------------|
| 0    | FOREIGN (Contd.):                                                  | FOREIGN (Contd.):                                           |
|      | Ecuador:                                                           | Japan (Contd.):                                             |
| 49 . |                                                                    | 59 Commercial Quality Pearls Produced From                  |
| 49 . |                                                                    | Fresh-Water Mussels                                         |
|      | United States Market                                               | 59 Long-Range Fisheries Management Program<br>Planned       |
| 50   | Egypt:<br>. Plans for Food-Processing Plants Include               | 59 Production Targets and Composition of                    |
| 50 . | Fishery Products                                                   | 1963/64 Antarctic Whaling Fleets                            |
|      | French Guiana:                                                     | 60 Antarctic Whaling Fleets Look for Better Oil             |
| 50 . | . United States Shrimp Firms Continue to Ex-                       | Market in 1964                                              |
|      | pand                                                               | 61 Japan-Communist China Fisheries Agree-                   |
|      | Ghana:                                                             | ment                                                        |
| 50.  | . Contract with Soviet Union Signed for Build-                     | Republic of Korea:                                          |
|      | ing Fish-Processing Plants                                         | 61 Government Guarantees Payment of Three                   |
| 50 . |                                                                    | Private Fishery Loans                                       |
|      | Fishing out of Ghanaian Ports                                      | 62 New Fish Market Center at Pusan Dedicated<br>Liberia:    |
| 51   | Greece:<br>New Purse Seine-Type Net Hauler Developed               | 62 Freezing Broadens Market for Fish                        |
| 51 . | Guatemala:                                                         | 63 . New Fishing Company Expected to Increase               |
| 51   | . Guatemalan-Japanese Shrimp Fishing Ven-                          | Landings and Consumption                                    |
| 01 . | ture Trends, November 1963                                         | Mexico:                                                     |
|      | Hong Kong:                                                         | 63 Campeche Shrimp Vessel Owners Suffer                     |
| 51 . | . Foreign Trade in Fishery Products, 1961                          | From Lower Prices                                           |
|      | and 1962                                                           | 64 Cuban Fishing Vessels Inspected for Hoof                 |
|      | Iceland:                                                           | and Mouth Disease                                           |
| 52 . | . Fishery Landings by Principal Species, Jan-                      | 64 Fish Meal Imports Up Sharply, January-                   |
|      | uary-May 1963                                                      | September 1963                                              |
| 52 . |                                                                    | Morocco:<br>Fighenica Trenda Thind Overter 1062             |
|      | May 1963                                                           | 64 . Fisheries Trends, Third Quarter 1963<br>New Caledonia: |
| 5.2  | India:<br>Fisheries Expansion Aided by Cooley Loan                 | 64 . Japanese to Expand Tuna Fishing Base                   |
| 52   |                                                                    | Nicaragua:                                                  |
| 02   | Trade, 1962/63                                                     | 65 U.S. Fisheries Firm Begins Shrimp Proc-                  |
|      | Iran:                                                              | essing at El Bluff                                          |
| 53 . | . Status of Fishing Industry, 1963                                 | Norway:                                                     |
|      | Jamaica:                                                           | 65 Antarctic Whaling Industry Encouraged by                 |
| 54   |                                                                    | Higher Oil Prices                                           |
|      | Japan:                                                             | 66 Exports of Canned Fishery Products, Jan-                 |
| 54   | . Exports of Canned Tuna in Oil, April-Sep-                        | uary-June 1963<br>Withdrawal from Whaling Convertion Dre    |
| 54   | tember 1962 and 1963<br>. Export Quota for Canned Tuna in Brine to | 67 Withdrawal from Whaling Convention Pro-<br>posed Again   |
| 54   | United States                                                      | Okinawa:                                                    |
| 54   |                                                                    | 67 Tuna Fishing Fleet Increasing                            |
| 55   |                                                                    | Pakistan:                                                   |
|      | ber 1963                                                           | 67 Extension of Territorial Waters to 12 Miles              |
| 55   | . Fishery Firm Applies to Operate Tuna Moth-                       | Advocated                                                   |
|      | ership in Atlantic Ocean                                           | Peru:                                                       |
| 55   |                                                                    | 67 Fish Meal Industry Trends, Third Quarter                 |
| 5.0  | Fishing Base                                                       | 1963<br>Dhilippinga                                         |
| 56   |                                                                    | Philippines:<br>68 Canned Mackerel Award                    |
| 5.6  | Difficulty<br>Tuna Federation Hopes to Continue Refuel-            | 68 Canned Mackerel Award<br>Portugal:                       |
| 56   | ing Vessels at Sea                                                 | 68 Canned Sardine Supply Reported Adequate to               |
| 56   |                                                                    | Meet Demand                                                 |
| 00   | Sponsored Meeting on Conservation of At-                           | Senegal:                                                    |
|      | lantic Ocean Tuna                                                  | 68 Fish Landings Up Sharply in 1962                         |
| 57   | . Exports of Canned Sardines, Mackerel, and                        | Somalia Republic:                                           |
|      | Saury, April-October 1963                                          | 68 Delegation Studies United States Fishing In-             |
| 57   |                                                                    | dustry<br>South Africa Beruhlia                             |
| 58   |                                                                    | South Africa Republic:                                      |
| 58   | by Ghana<br>Government Allots Funds for Fish Meal Im-              | 69 Fish Meal Association Contracts to Sell to<br>Japan      |
| 50   | ports                                                              | Sweden:                                                     |
| 58   |                                                                    | 69 Experimental Mid-Water Pair-Trawling for                 |
|      | High Inventory                                                     | Large Herring Shows Promise                                 |
| 59   | New Firm Plans Trawling and Fish-Meal                              | Taiwan:                                                     |
|      | Operations in Atlantic                                             | 69 Fisheries Trends, Third Quarter 1963                     |

III

Contents continued page IV.

## COMMERCIAL FISHERIES REVIEW

Vol. 26, No. 1

### CONTENTS (CONTINUED)

|      |                                                                                                                               | Page                                                                                                                  |
|------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| age  | FOREIGN (Contd.):                                                                                                             | FEDERAL ACTIONS:<br>Department of Commerce:                                                                           |
| 70   | Thailand:<br>Lifting of Ban on Fish Imports by Malaya<br>Requested                                                            | <ul> <li>Area Redevelopment Administration:</li> <li>Study of Impact of New Alaska Ferry System Authorized</li> </ul> |
| -    | , Tunisia:<br>Detention of Italian Fishing Vessels<br>Fishing Vessels To Be Built in Yugoslavia<br>Under Economic Aid Program | 74 Survey of Distributors Stocks of Canned<br>Foods                                                                   |
| 71   | United Kingdom:<br>Fishery Loans Interest Rates Revised                                                                       | Department of Health, Education, and Welfare:<br>Public Health Service:<br>74 Study of Fish Kills in Louisiana        |
| 10.4 | Fleet of Freezership-Trawlers Expanding<br>Improved-Type Underwater TV Camera to<br>Aid in Marine Research                    | 74 Study of Fish Kills in Louisiana<br>Department of the Interior:<br>International Regulatory Agencies (Fishing      |
| 72   | a: Low Mationa Invited to Conference on                                                                                       | and Whaling):<br>75 North Pacific Halibut Fishery Regulations                                                         |
|      | Foreign Fisheries Briefs:                                                                                                     | United States Circuit Court of Appeals:<br>79 Fishermen Considered Employees for Tax                                  |
| 73   | Participates in Joint Project                                                                                                 | Purposes                                                                                                              |
| 73   | . Soviets Participate in Indian Ocean Tuna<br>Fishery                                                                         | 79 Eighty-Eighth Congress (First Session)<br>RECENT FISHERY PUBLICATIONS:                                             |
| 73   | Soviet Fishing Vessels May Base at Trinidad                                                                                   | 82 Fish and Wildlife Service Publications                                                                             |
| 73   | a it I Tam I Mar Fishony Dogoonoh Vog-                                                                                        | 84 Miscellaneous Publications                                                                                         |



Created in 1849, the Department of the Interior--America's Department of Natural Resources--is concerned with the management, conservation, and development of the Nation's water, fish, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States--now and in the future.



Editorial Assistants: Ruth V. Keefe and Jean Zalevsky

Sr. Compositor: Alma Greene Jr. Compositors: Donna K. Wallace and Marjorie McGlone

\* \* \* \* \*

<u>Photograph Credits</u>: Page by page, the following list gives the source or photographer for each photograph in this issue. Photographs on pages not mentioned were obtained from the Service's file and the photographers are unknown.

> Cover--Bailey, Virginia Fisheries Laboratory; p. 25--National Science Foundation; p. 39--FAO photo; Outside back cover--Elliot A. Macklow.

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. Price 60 cents (single copy). Subscription Price: \$5.50 a year; \$2 additional for foreign mailing.

IV