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halibut landings, 1937-1961; Seattle season averages of ex-vessel halibut prices, 1952-1961; and troll salmon landings and receipts at Seattle and Alaskan ports, with comparative data.

- (Baltimore) Monthly Summary--Fishery Products, January 1962, 8 pp. (Market News Service, U. S. Fish and Wildlife Service, 103 S. Gay St., Baltimore 2, Md.) Receipts of fresh- and salt-water fish and shellfish at Baltimore by species and by states and provinces; total receipts by species and comparisons with previous periods; and wholesale prices for fresh fishery products on the Baltimore market; for the month indicated.
- <u>Vonthly Summary of Fishery Products Production in</u> <u>Selected Areas of Virginia, North Carolina, and</u> <u>Maryland, February 1962, 4 pp. (Market News Service, U. S. Fish and Wildlife Service, 18 S. King St., Hampton, Va.) Landings of food fish and shellfish and production of crab meat and shucked oysters for the Virginia areas of Hampton Roads, Chincoteague, Lower Northern Neck, and Lower Eastern Shore; the Maryland areas of Crisfield, Cambridge, and Ocean City; and the North Carolina areas of Atlantic, Beaufort, and Morehead City; together with cumulative and comparative data on fishery products and shrimp production; for the month indicated.</u>
- Gulf of Mexico Monthly Landings, Production and Shipments of Fishery Products, January and February 1962, 8 pp., each. (Market News Service, U. S. Fish and Wildlife Service, Rm. 609, 600 South St., New Orleans 12, La.) Gulf States shrimp, oyster, finfish, and blue crab landings; crab meat production; LCL express shipments from New Orleans; wholesale prices of fish and and shellfish on the New Orleans French Market; fishery imports at Port Isabel and Brownsville, Texas, from Mexico; and sponge sales; for the months indicated.
- New England Fisheries -- Monthly Summary, January and February 1962, 22 pp., each. (Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) Review of the principal New England fishery ports. Presents data on fishery landings by norts and species; industrialfish landings and ex-vessel prices; imports; cold storage stocks of fishery products in New England warehouses; fishery landings and ex-vessel prices for ports in Massachusetts (Boston, Gloucester, New Bedford, Provincetown, and Woods Hole), Maine (Portland and Rockland), Rhode Island (Point Judith), and Connecticut (Stonington); frozen fishsery products prices to primary wholesalers at Boston, Gloucester, and New Bedford; and Boston Fish Pier and Atlantic Avenue fishery landings and ex-vessel prices by species; for the months indicated.
- New York City's Wholesale Fishery Trade--Monthly Summary--December 1961, 24 pp. (Market News Service, U. S. Fish and Wildlife Service, 155 John St., New York 38, N. Y.) Includes summaries and analyses of receipts and prices on wholesale Fulton Fish Market, including both the salt- and freshwater sections; imports entered at New York customs district; primary wholesalers' selling prices for fresh, frozen, and selected canned fishery products; marketing trends; and landings at Fulton Fish Market docks and Stonington, Conn.; for the month indicated.

- (Chicago) Monthly Summary of Chicago's Wholesale Market Fresh and Frozen Fishery Products Receipts, Prices, and Trends, February 1962, 14 pp. (Market News Service, U. S. Fish and Wildlife Service, 565 W. Washington St., Chicago 6, Ill.) Receipts at Chicago by species and by states and provinces for fresh- and salt-water fish and shellfish; and weekly wholesale prices for fresh and frozen fishery products; for the month indicated.
- (Seattle) Washington and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, February 1962, 6 pp. (Market News Service, U. S. Fish and Wildlife Service, 706 Federal Office Bldg., 909 First Ave., Seattle 4, Wash.) Includes Seattle's landings by the halibut and salmon fleets reported through the exchanges; landings of halibut reported by the International Pacific Halibut Commission; landings of otter-trawl receipts reported by the Fishermen's Marketing Association of Washington; local landings by independent vessels; coastwise shipments from Alaska by scheduled and non-scheduled shipping lines and airways; imports from British Columbia via rail, motor truck, shipping lines, and ex-vessel landings; and imports from other countries through Washington customs district; for the month indicated.
- California Fishery Market News Monthly Summary, Part I - Fishery Products Production and Market Data, January 1962, 13 pp. (Market News Service, U S. Fish and Wildlife Service, Post Office Bldg., San Pedro, Calif.) California cannery receipts of tuna and tunalike fish and other species used for canning; pack of canned tuna, tunalike fish, sardines, mackerel, and anchovies; market fish receipts at San Pedro, Santa Monica, and Eureka areas; California and Arizona imports; canned fish and frozen shrimp prices; ex-vessel prices for cannery fish; Oregon and Washington receipts (domestic and imports) of fresh and frozen tuna and tunalike fish; for the month indicated.

THE FOLLOWING SERVICE PUBLICATIONS ARE FOR SALE AND ARE AVAILABLE ONLY FROM THE SUPERINTENDENT OF DOCUMENTS, WASHINGTON 25, D. C.

- Abundance and Age of Kvichak River Red Salmon Smolts, by Orra E. Kerns, Jr., Fishery Bulletin 189 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), 24 pp., illus., printed, 20 cents, 1961.
- Abundance and Distribution of Eggs and Larvae and Survival of Larvae of Jack Mackerel (TRACHURUS SYM-METRICUS), by David A. Farris, Fishery Bulletin 187 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), 36 pp., illus., printed, 30 cents, 1961.
- Calanoid Copepods from Equatorial Waters of the Pacific Ocean, by George D. Grice, Fishery Bulletin 186 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61) 80 pp., illus., printed, 45 cents, 1961.
- Distribution and Abundance of Skipjack in the Hawaii Fishery, 1952-53, by Herbert H. Shippen, Fishery Bulletin 188 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), 24 pp., illus., printed, 20 cents, 1961.

- Early Developmental Stages of Pink Shrimp, PENAEUS DUORARUM, from Florida Waters, by Sheldon Dobkin, Fishery Bulletin (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), pp. 321-349, illus., printed, 30 cents, 1961.
- Serological Studies of Atlantic Redfish, by Carl J. Sindermann, Fishery Bulletin 191 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), 8 pp., printed, 15 cents, 1961.

# MISCELLANEOUS

# PUBLICATIONS

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZA-TION ISSUING THEM. CORRESPONDENCE REGARDING PUBLICATIONS THAT FOLLOW SHOULD BE ADDRESSED TO THE RESPECTIVE ORGANIZATIONS OR PUBLISHER MENTIONED. DATA ON PRICES, IF READILY AVAILABLE, ARE SHOWN.

#### ALGAE:

An Introductory Account of the Smaller Algae of British Coastal Waters. Part VIII--Euglenophyceae-Euglenineae, by R. W. Butcher, Fishery Investigations Series IV, 23 pp., illus., printed, 12s. 6d. (about US\$1.75). Her Majesty's Stationery Office, York House, Kingsway, London WC2, England.

#### ANADROMOUS FISH:

Seasonal Races Among Anadromous Fishes, by V. A. Abakumov, Translation Series No. 353, 19 pp., processed. (Translated from the Russian, Voprosy Ikhtiologii, No. 17, 1961, pp. 179-190.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C., Canada, 1961.

#### ANGOLA:

Contribuicao para o Estudo da Pesca de Arrasto em Angola--Cartas Provisorias da Pesca de Arrasto da Costa de Angola (Contribution to the Study of Fish Trawling in Angola--Preliminary Charts of Trawling Areas Along the Coast of Angola), by Pedro da Franca, Fernando Correia da Costa, and Henrique Serpa de Vasconcelos, Notas Mimeografadas do Centro de Biologia Piscatoria No. 24, 22 pp., 9 charts, processed in Portuguese. Centro de Biologia Piscatoria, Ministerio do Ultramar, Junta de Investigacoes do Ultramar, Lisbon, Portugal, 1961.

#### ANTIFOULING PAINTS:

Mechanism of Antifouling Action in Shipbottom Paints, by Charles E. Lane and Francis J. Bernard, Final Report No. 62-1, 13 pp., processed. The Marine Laboratory, Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Miami 49, Fla.

#### AQUARIUM FISH:

Studies on the Relationship Between Sexual Maturation and Growth in LEBISTES, by Gunnar Svardson, Translation Series No. 126, 35 pp., illus., processed. (Translated from the German, <u>Meddelander fran</u> Statens Undersoknings-Och Forsoksanstalt for Sotvattenfisket, No. 21, 1943, pp. 1-48.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C., Canada, 1959.

#### ARAL SEA:

The Effect of the Fishery on the Productivity of Bream Stocks of the Aral Sea, by E. A. Bervald, Translation Series No. 354, 16 pp., illus., processed. (Translated from the Russian, <u>Voprosy Ikhtiologii</u>, No. 7, 1956, pp. 21-32.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C., Canada, 1961

#### BARNACLES:

Absorption and Excretion of Copper Ion During Settlement and Metamorphosis of the Barnacle, BALANUS AMPHITRITE NIVEUS, by Francis J. Bernard and Charles E. Lane, 11 pp., illus., printed. (Reprinted from Biological Bulletin, vol. 121, no. 3, December 1961, pp. 438-448.) The Marine Laboratory, Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Miami 49, Fla.

#### BELGIUM:

"La Peche Belge en 1961: 46,365 Tonnes" (Belgian Fisheries in 1961: 46,365 Tons), by V. Van derKimpen, article, La Peche Maritime, No. 1007, February 1962, pp. 81-82, printed in French. La Peche Maritime, 190 Boulevard Haussmann, Paris, France.

#### CANADA:

- Annual Report of the Fisheries Research Board of Canada, 1960/61 (For the Fiscal Year Ended March 31, 1961), 193 pp., illus., printed in English with ad-ditional introduction in French, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961. A comprehensive summary of the work of the Fisheries Research Board of Canada and its field stations during 1960/61. The research work of the Board is divided into three principal branches: research in aquatic biology with emphasis on fishery biology, research in fishery technology, and research in oceanography. The Board's 177-foot researchves sel A. T. Cameron continued to serve as a very valuable research "tool" and is making possible the gathering of information on populations of Northwest Atlantic species of fish of particular importance to the fishing industry. Oceanographic studies in Atlantic, Arctic, and Pacific waters are described. Detailed reports cover activities of the Board's biological and technological stations. A list of the publications and reports published during 1960 by the Board is included.
- British Columbia Catch Statistics, 1961 (By Area and Type of Gear), 164 pp., illus., processed. Department of Fisheries of Canada, 1110 W. Georgia St., Vancouver 5, B.C., Canada, February 2, 1962. The eleventh annual report of fish-catch statistics for British Columbia based on Departmental copies of sales slips that are completed by all commercialfish buyers operating within the Province. The report is divided into three sections: (1) summary of landings by district and total landed value of all fish; (2) highlights of catch statistics -- a general review of significant events of salmon fishing in each area and general review for other types of fish; and (3) detailed district and area monthly statistics by type of gear. Certain economic, weather, and conservation factors that have a bearing on the catch are also reviewed.

The Canadian Fish Culturist, Issue 29, November 1961, 42 pp., illus., printed. Director, Information and Consumer Service, Department of Fisheries, Ottawa, Canada. Contains the following articles: "Fish Ponds in Canada--a Preliminary Account," by M. W. Smith "Vital Statistics of Trout Populations in New York Farm Ponds," by Alfred W. Eipper; "A Review of Farm Trout Ponds in Southern Ontario," by H. R.

McCrimmon; "The Genetics of Selection in a Fish Population," by L. Butler; "Selectivity and Hybridization in Management of Fish Stocks," by S. B. Smith; and "The Effects of Underwater Explosions on Yellow Perch," by R. G. Ferguson. The articles were among the papers presented at a symposium on "Farm Fish Ponds as a Technique of Fishery Management," at the fourteenth meeting of the Canadian Committee on Freshwater Fisheries Research, under the sponsorship of the Fisheries Research Board of Canada.

Journal of the Fisheries Research Board of Canada, vol. 18, no. 6, December 1961, pp. 893-1178, illus., printed, \$1.50. Queen's Printer and Controller of Stationery, Ottawa, Canada. Includes, among others, the following articles: "Proximate Composition of Canadian Atlantic Fish. III--Sectional Differences in the Flesh of a Species of Chondrostei, one of Chimaerae, and of Some Miscellaneous Teleosts," by D. I. Fraser, A. Mannan, and W. J. Dyer; "On the Chemical Composition of Eleven Species of Marine Phytoplankters," by T. R. Parsons, K. Stephens, and J. D. H. Strickland; "On the Pigment Composition of Eleven Species of Marine Phytoplankters," by T. R. Parsons; "Some Oceanographic Features of Juan de Fuca Strait," by R. H. Herlinveaux and J. P. Tully; "Order of Succession of Different Types of Infraoral Lamina in Landlocked Sea Lamprey (Petromyzon marinus)," by V. D. Vladykov and G. N. Mukerji; "Ocean Temperatures and Their Relation to Albacore Tuna (Thunnus germo) Distribution in Waters off the Coast of Oregon, Washington, and British Columbia," by Dayton L. Alverson; and "Diving and Photographic Techniques for Observing and Recording Salmon Activities," by D. V. Ellis.

Journal of the Fisheries Research Board of Canada, vol. 19, no. 1, January 1962, pp. 1-171, illus., printed, \$1.50, Queen's Printer and Controller of Stationery, Ottawa, Canada. Includes, among others, the following articles: "Physical Characteristics and Chemical Composition of Two Subspecies of Lake Trout," by Claude E. Thurston; "The Pollett Apron Seine," by P. F. Elson; "Hydrographic and Meteorological Factors Affecting Shellfish Toxicity at Head Harbour, New Brunswick," by A. Prakash and J. C. Medcof; "Growth and Reproduction of the Longnose Sucker, Catostomus catostomus (Forster), in Great Slave Lake," by Roy H. D. Harris; "Preliminary Studies on the Visible Migrations of Adult Salmon," by D. V. Ellis; "Radioactive Caesium as a Fish and Lamprey Mark," by D. P. Scott; and "Fat Hydrolysis in Frozen Fillets of Lingcod and Pacific Gray Cod," by J. D. Wood and S. A. Haqq.

Regulations Respecting the Construction and Inspection of Fishing Vessels Exceeding Eighty Feet Registered Length (P. C. 1956--1077 of July 12th, 1956, Amended by P. C. 1956--1403 of September 13th, 1956), 43 pp., printed, 50 Canadian cents. Queen's Printer, Ottawa, Canada, 1962.

ANNING MACHINERY:

Machine for Close Packing of Small Fish into Cans, by M. A. Danilov and L. F. Gerasimenko, patent described in Byulleten' Izobreteniy, No. 7, 1959, p. 69, printed. Byulleten' Izobreteniy, c/o Mezhdunarodnaia Kniga, Moscow 200, U.S.S.R. CUBAN SNAPPER:

LUTIANUS AMBIGUUS, by Zeida Rodriguez Pino, Contribution No. 14, 19 pp., illus., printed. Centro de Investigaciones Pesqueras del Departamento de Pesca del Instituto Nacional de Reforma Agraria, Playa Habana, Bauta, Cuba, November 1961.

#### DOGFISH:

A Method of Determining the Age and the Composition of the Catches of the Spiny Dogfish (SQUALUSACAN-THIAS L.), by S. Kaganovskaia, Translation Series No. 281, 3 pp., processed. (Translated from the Russian, Vestnik Dalnevostochnovo Filiala Akademii Nauk SSSR for 1933, No. 1-3, 1933, pp. 139-141.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1960.

#### EXPORTS:

Preparing Shipments to the United Kingdom, WTIS
Part 2, Operations Report No. 62-6, 8 pp., printed, single copy 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) A report giving information on the preparation of shipments for export to the United Kingdom. It covers the preparation of shipping documents, information on labeling and marking, customs procedures, and related subjects.

#### FISH POPULATION:

Concerning the Influence of Exploitation on the Structure of the Population of a Commercial Fish, by G. V. Nikolsky, Translation Series No. 280, 26 pp., illus., processed. (Translated from the Russian, Zoologicheskii Zhurnal, vol. 37, no. 1, 1958, pp. 41-56.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1961.

#### FOOD AND AGRICULTURE ORGANIZATION:

Regional Fisheries Advisory Commission for the South West Atlantic, Note by Director-General, C61/LIM/8, 9 pp., processed. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy, November 4, 1961.

Report--Technical Committee on Fisheries (FAO Conference), C 61/FI/6/Rev. 1, 15 pp., processed. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy, November 10, 1961.

#### FOREIGN TRADE:

Licensing and Exchange Controls - Brazil, WTIS Part 2, Operations Report No. 61-93, 8 pp., printed, 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

Licensing and Exchange Controls--Ecuador, WTIS Part 2, Operations Report No. 61-94, 4 pp., printed, 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.\*C.)

#### FRANCE:

"Decree No. 60-1524 on the Control of Manufacture of Canned and Semi-Preserved Fish, Shellfish and Oth-

er Marine Animals," <u>Food and Agricultural Legisla-</u> <u>tion</u>, vol.X, no. 2, December 30, 1960, France, XVII/2, 8 pp., printed, \$1. Columbia University Press, International Documents Service, 2960 Broadway, New York 27, N. Y.

#### FUR SEALS:

Furor over Alaskan Seals," article, <u>Business Week</u>, no. 1693, February 10, 1962, pp. 60, 62, 64, illus., printed. Business Week, McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., New York 36, N. Y. Discusses the cancelling of the exclusive contract for processing Alaska fur seal skins held by a St. Louis firm. The United States Department of the Interior manages the seal herd on the Pribilof Islands under the terms of a 1911 treaty, and in return takes 70 percent of the harvest. The company has had a contract to process and sell all U. S. Alaska fur seal skins for 40 years. However, this contract is to be cancelled effective December 31, 1962.

#### GENERAL:

Fishing News International, vol. 1, no. 2, January 1962, 120 pp., illus., printed, single copy 6s. 6d. (about 91 U. S. cents). Fishing News International, Arthur J. Heighway Publications Ltd., Ludgate House, 110 Fleet St., London EC4, England. Includes among others, these articles: "Focus on Japan," by Kozo Kitahara; "Fish Culture and the World's Protein Needs," by B. Havinga; "Role of Fisheries Nutrition in the Pacific Area," by Georg Borgstrom; "Trading in Fish under Stockholm Convention;" "Decline of British Herring Fisheries in the North Sea," by B. B. Parrish; "Preservation by Antibiotics and Penetrating Radiations. II," by H. L. A. Tarr; "Determining Optimum Speed for Trawlers," by D. Bogucki and J. Swiecicki; "Production Specifications for Concentrated Fish Protein;" "Migrating Tuna;" "Midwater Trawling," by A. von Brandt; "Handling the Catch. 2--Mechanical Unloading," by Jan F. Minnee; "Ocean-Unique Stern Trawler from a French Design," by M. Jollant and D. E. F. Vickers; "Multi-Purpose Cod Liver Oil--Food, Medicine, and Nutrient;" and "The Fisheries Division of the Food and Agriculture Organization."

#### GHANA:

Ghana Leads Africa with New Fishing Fleet," article, <u>World Fishing</u>, vol. 11, no. 2, February 1962, pp. 24-29, illus., printed, single copy 3s. (about 42 U. S. cents). World Fishing, John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London NW1, England. Describes the first of four tuna purse-seiners to be commissioned for the Ghanaian Government, which will fish for tuna, hake, John Dory, ocean perch, and other species on the continental shelf. Technical assistance has been rendered by United States and British interests. A cold-storage plant is being constructed and later a cannery will be built. The four vessels, in addition to stern trawlers, worth nearly US\$2.8 million, will lay the foundation of a modern fishing fleet which the Ghana Government will operate from the port of Tema:

#### ICELAND:

Verzlunarskyrslur Arid 1960 (External Trade 1960), 219 pp., printed in Icelandic with contents in English, 35 kroner (about 80 U. S. cents). Statistical Bureau of Iceland, Reykjavik, Iceland, 1961. Details and statistical data on fishery exports are included.

#### INTERNATIONAL COMMISSIONS:

International Commission for the Northwest Atlantic Fisheries, Statistical Bulletin for the Year 1959, vol. 9, 70 pp., illus., printed. International Commission for the Northwest Atlantic Fisheries, Halifax, N. S., Canada, 1961. This bulletin is divided into two parts Part 1 summarizes statistics on fishery landings in the Convention Area 1952-1959; and Part 2 includes statistical tables dealing with the fisheries in 1959. The presentation of the basic statistical data again has been designed to place emphasis on area and month of fishing. Contains a summary of all landings by species group, country, and statistical subdivision; landings of cod, haddock, ocean perch, halibut, and flounder for each type of gear; landings of each species by subarea; and fishing effort and landings by country, gear, and subarea.

#### INTERNATIONAL CONFERENCES:

Participation of the United States Government in International Conferences (July 1, 1959-June 30, 1960), Publication 7043, 270 pp., illus., printed, 65 cents. Office of International Conferences, Department of State, Washington, D. C. (For sale by the Superin-tendent of Documents, U. S. Government PrintingOffice, Washington 25, D. C.) Describes, among others, the following conferences: Law of the Sea Conference (London, Nov. 16-18, 1959); Second Conference on the Law of the Sea (Geneva, Mar. 17-Apr. 26, 1960); International Conference on Safety of Life at Sea (Lon don, May 17-June 17, 1960); Third Caribbean Fisheries Seminar (St. Maarten, July 3-9, 1959); Inter-American Tropical Tuna Commission, Twelfth Annual Meeting (San Jose, Feb. 23-24, 1960); International North Pacific Fisheries Commission, Sixth Annual Meeting (Seattle, Nov. 2-7, 1959) -- Committee on Biology and Research (Seattle, Oct. 19-26, 1960)-Working Party on the Distribution of Salmon in the High Seas (Tokyo, May 25-July 19, 1960) -- Working Party on Long-Term Research Plans (Tokyo, June 6-17, 1960)--Editorial Committee (Tokyo, June 6-17 1960) -- Ad Hoc Committee on Abstention: Scientific Committee (Vancouver, Oct. 12-17, 1959); International Commission for the Northwest Atlantic Fisheries: Tenth Annual Meeting (Bergen, May 30-June 3, 1960) -- Standing Committee on Research and Statistics and Sub-committees (Bergen, May 23-June 3 1960); North Pacific Fur Seal Commission: Third Meeting (Moscow, Jan. 25-27, 1960); International Council for the Exploration of the Sea: Forty-seventh Annual Meeting (Copenhagen, Oct. 5-10, 1959); and International Whaling Commission: Twelfth Annual Meeting (London, June 20-24, 1960). Publication of this bulletin is being discontinued with this issue.

#### LAMPREYS:

The Damage Done by Lampreys to Fish Stocks, by V. A Abakumov, Translation Series No. 274, 2 pp., processed. (Translated from the Russian, Rybnoe Khoziaistvo, vol. 35, no. 4, 1959, pp. 32-33.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1960.

#### MARINE SCIENCE:

Bulletin of Marine Science of the Gulf and Caribbean, vol. 11, no. 4, December 1961, pp. 483-649, illus.,

printed, single copy \$2. Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Virginia Key, Miami 49, Fla. (For sale by University of Miami Press, Coral Gables, Fla.) Contains, among others, the following articles: "Normal Stages of the Early Development of the Flying Fish, <u>Hir</u>undichthys affinis (Gunther)," by John W. Evans; "Charting the Marine Environment of St. John, U. S. Virgin Islands," by Herman E. Kumpf and Helen A. Randall; and "A Checklist of the Flora and Fauna of Northern Florida Bay and Adjacent Brackish Waters of the Florida Mainland Collected during the Period July 1957 through September 1960," by Durbin Tabb and Raymond B. Manning.

#### EW JERSEY:

Annual Report of Division of Fish and Game (For the Fiscal Year Commencing July 1, 1960, and Ending June 30, 1961), 61 pp., illus., printed. Division of Fish and Game, Department of Conservation and Economic Development, Trenton, N. J. The many and diverse activities and accomplishments covered in this report reflect broader concepts in New Jersey fish and game management. Included, among others, is a report on the Bureau of Fisheries Management, commercial fishing and landings for 1960 in New Jersey, fish catch by pound nets, and data on the Hudson and Delaware River shad industries.

#### DRWAY:

Fiskernes Arsinntekter i 1960" (Annual Report on Fishermen in 1960), article, Fiskets Gang, vol. 48, no. 8, February 22, 1962, pp. 103-115, illus., printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

Norges Fiskerier 1961" (Norway's Fisheries, 1961), article, <u>Fiskets Gang</u>, vol. 47, no. 52, December 28, 1961, pp. 806-808, printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

The Norwegian Canning Industry in 1961," article, <u>Tidsskrift for Hermetikindustri</u>, vol. 48, no. 1, January 1962, pp. 11-14, printed in English and Norwegian. Tidsskrift for Hermetikindustri (Norwegian Canners Export Journal), Stavanger, Norway. Gives statistical data on the canning of kippered herring, brisling, small sild, and other products in 1961, and the quantity and value of exports. Also discusses the EFTA agreement and the need for Norway to become a member of the Common Market.

Norwegian Purse-Seiners Did Well in 1961," article, World Fishing, vol. 11, no. 2, February 1962, pp. 44, 47, Illus., printed, single copy 3s. (about 42 U.S. cents). World Fishing, John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London NW1, England. When the winter herring fishery failed, Norwegian purse-seiners diverted their efforts to catching capelin, fat and small herring, and cod. Landings for most species except winter herring.during 1961 exceeded those of previous years.

Rapport om Makrell- og Habrannundersokelser med f/f <u>Peder Ronnestad</u> i Skagerak-Nordsjoen, 4-30 October 1961" (Report on Mackerel and Shark Investigation of the <u>Peder Ronnestad</u> in Skagerak-North Sea, October 4-30, 1961), by Arne Revheim, article, Fiskets Gang, vol. 48, no. 6, February 1962, p. 74, illus., printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway

"Smasild- og Feitsildtokt med f/f G. O. Sars i Tiden 30 August til 28 September 1961" (Small Herring and Fat Herring Cruise of the Research Vessel G. O. Sars during the Period August 30-September 28, 1961), by Olav Dragesund and Per Hognestad, article, Fiskets Gang, vol. 48, no. 1, January 4, 1962, pp. 6-9, illus., printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

"Stortralernes Lonnsomhet i 1960" (Profit from Operating Large Trawlers in 1960), article, <u>Fiskets</u> Gang, vol. 47, no. 51, December 21, 1961, <u>pp. 783-</u> 797, illus., printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

"Transport av Levende Fisk i Bronnbater" (Transportation of Live Fish in a Vessel Provided with a Tank Containing Sea Water), by F. Kjelstrup-Olsen and G. Sundnes, article, Fiskets Gang, vol. 47, no. 49, December 7, 1961, pp. 760-761, illus., printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

#### OCEANOGRAPHY:

Geological and Geophysical Progress Report, January 18, 1962 (Unpublished Manuscript), 5 pp., processed National Oceanographic Data Center, Washington, D. C.

Oceanographic Cruise Report USC & GS Ship EXPLOR-ER, <u>1960</u> (Seattle, Washington, to Norfolk, Virginia, February 2-April 27, 1960), 162 pp., illus., printed, \$3. Coast and Geodetic Survey, U. S. Department of Commerce, Washington 25, D. C., or any U. S. Department of Commerce Field Office. Contains data, including charts, maps, and illustrations, obtained during the February-April 1960 oceanographic expedition of the USC & GS ship Explorer, together with results from analyses of those data.

- "Oceanography in Latin America," article, Nature, vol. 193, no. 4817, February 24, 1962, pp. 731-732, printed. Nature, St. Martin's Press, Inc., 175 Fifth Ave., New York 10, N. Y.
- Progress Report on Bathythermogram Problems, January 18, 1962 (Unpublished Manuscript), 7 pp., processed. National Oceanographic Data Center, Washington, D. C.
- Quality Control Procedures--Physical and Chemical Data (Unpublished Manuscript), 7 pp., processed. National Oceanographic Data Center, Washington, D. C

Tentative Plans for NODC Bathythermograph Production (Unpublished Manuscript), 7 pp., processed. National Oceanographic Data Center, Washington, D. C.

#### OREGON:

Research Briefs, vol. 8, no. 1, August 1961, 79 pp., illus., printed. Fish Commission of Oregon, 307 State Office Bldg., Portland 1, Oreg. Contains among others, articles on "The Oregon Trawl Fishery for Mink Food--1948-1957," by Walter G. Jones and

George Y. Harry, Jr.; "Biological Observations and Results of the 1960 John N. Cobb Exploratory Shrimp Cruise Off the Central Oregon Coast," by Lael L. Ronholt and Austin R. Magill; "Sixth Progress Report on Salmon Diet Experiments," by Russell O. Sinnhuber and others; "Seventh Progress Report on Salmon Diet Experiments," by Duncan K. Law and others; "Occurrence of the California Halibut in Oregon Waters," by Charles D. Snow and Raymond N. Breuser; "Two Diseases New to Adult Pacific Salmon," by James W. Wood; and "Chinook and Silver Salmon Spawning Together," by Raymond N. Breuser.

#### OYSTERS:

"Direct Observation of Spawning in the Blacklip Pearl Shell Oyster (Pinctada margarififera) and the Thorny Oyster (Spondylus sp.)," by J. S. Bullivant, article, <u>Nature</u>, vol. 193, no. 4816, February 17, 1962, pp. 700-701, illus., printed. Nature, St. Martin's Press, Inc., 175 Fifth Ave., New York 10, N. Y.

#### PARASITES:

The Parasite Fauna and the Species Relationships of the Kamchatka Azabach, ONCORHYNCHUS NERKA infrasp. ASABATCH Berg 1932, by A. Kh. Akhmerov, Translation Series No. 283, 4 pp., processed. (Translated from the Russian, Doklady Akademii Nauk SSSR, vol. 94, no. 5, 1954, pp. 969-971.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1960.

Zoogeographical Analysis and a Hypothesis of the Origin of the Helminth Fauna of the Vertebrates of Sakhalin, by A. I. Krotov, Translation Series No. 334, 13 pp, processed. (Translated from the Russian, Zoologicheskii Zhurnal, vol. 39, no. 4, 1960, pp. 481-489.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1961.

#### PHILIPPINES:

The Philippine Journal of Fisheries, vol. 6, no. 1, January-June 1958, 105 pp., illus., printed. Agricultural Information Division, Department of Agriculture and Natural Resources, Quezon City, Philippines. Includes, among others, these articles: "The Propagation of the Grey Mullet in Northern Luzon Brackish-Water Fishponds," by Guillermo J. Blanco and Pascual A. Acosta; "Kapis (Pearl Oyster) Farming at the Tidal Flats of Bacoor Bay, Luzon," by Guillermo J. Blanco; "Socio-Economic Problems Affecting the Production, Processing and Distribution of Fisheries Products," by Jose C. de la Cruz; and "Research Activities on Marine Fisheries Biology in 1957," by Klaus Tiews.

#### PORTUGUESE MAN-OF-WAR:

Fishers of the High Seas," by Charles E. Lane, article, <u>Ciba Journal</u>, no. 19, Autumn 1961, pp. 32-35, illus., printed. Ciba Journal, Ciba Limited, Basle, Switzerland. Compares the structure of the Portuguese man-of-war (<u>Physalia physalis</u>) with a modern whaling operation. This brightly colored invertebrate has many long, inconspicuous tentacles dependent from its lower side. These tentacles are covered with stinging cells with which the prey is paralyzed, after which it is entangled and killed, then conveyed to the digestive organisms of the animal. Concludes the author "thus we see that the most elaborate, sophisticated techniques invented by man for the capture of elusive marine mammals were antedated by millions of years by methods and equipment which the most primitive multicellular en imals evolved under the irresistible drive of natural selection and adaptive survival."

#### SALMON:

- Annual Fish Passage Report, North Pacific Division, Bonneville, The Dalles and McNary Dams, Columbia River, Oregon and Washington, 1960, 64 pp., illus., processed. U. S. Army Engineer District, Portland Oreg., 1961.
- On the Artificial Raising of the Level of Water on the Spawning Grounds of Far-Eastern Salmon, by I.S. Vasilev, Translation Series No. 351, 2 pp., processed. (Translated from the Russian, <u>Rybnoe Khoziaistvo</u>, No. 7, 1957, pp. 70-71.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, July 1961.
- The Functional Importance of the Pre-Spawning Changes in the Skin of Salmon (as Exemplified by the Genus ONCORHYNCHUS), by A. I. Smirnov, Translation Series No. 348, 14 pp., processed. (Translated from the Russian, Zoologicheskii Zhurnal Akademiia Nauk SSSR, vol. 38, no. 5, 1959, pp. 734-744.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1961.
- Local Stocks of Pink Salmon in the Amur Basin and Neighbouring Waters, by R. I. Eniutina, 8 pp., illus., processed. (Translated from the Russian, Voprosy Ikhtiologii, no. 2, 1954, pp. 139-143.) Fisheries Research Board of Canada, Biological Station, Nanaimo B. C., Canada, 1960.
- Spawning Grounds of Sockeye Salmon (ONCORHYNCHUS NERKA Walb.)--A Review of Their Geomorphology Temperature Conditions and Hydrochemistry, by E. M. Krokhin, Translation Series No. 344, 31 pp., illus., processed. (Translated from the Russian, Voprosy Ikhtiologii, No. 16, 1960, pp. 89-110.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1961.

#### SEAWEEDS:

"Seaweed Technology," by E. Booth, article, Nature, vol. 193, no. 4813, January 27, 1962, pp. 331-332 printed. Nature, St. Martin's Press, Inc., 175 Fifth Ave., New York 10, N.Y. The fourth International Seaweed Symposium was held at Biarritz, during September 18-25, 1961, and was attended by more than 220 scientists and industrialists from thirtyfour countries. The various interests in algology, algal chemistry, and seaweed utilization were all evident at this Symposium, but in contrast with previous symposia, the botanical section was unusually well represented. In fact, almost two-thirds of the papers presented were on taxonomy and the culture of algae or their distribution, while the other papers were almost equally divided between pure chemistry and the various facets of the industrial utilization of seaweeds.

#### SHRIMP:

"Forsoksfiske etter Reker pa Helgelandskysten" (Experimental Fishing for Shrimp on the Helgeland Coast), by Odd Selvag, article, <u>Fiskets Gang</u>, vol.47,

no. 3, January 19, 1961, pp. 56-58, illus., printed in Norwegian. Fiskets Gang, Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

Over 43 Years of Co-Operative Shrimping," article, World Fishing, vol. 11, no. 2, February 1962, pp. 35-36, illus., printed, single copy 3s. (about 42 U.S. cents). World Fishing, John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London NW1, England. Discusses the operations of a Morecambe, England, shrimp-fishing cooperative and its use in recent years of a German shrimp-peeling machine, which can perform the work of 10 women.

### MALL BUSINESS MANAGEMENT:

- Finding New Products for Small Manufacturers, by James F. Mahar and Dean C. Coddington, Management Research Summary, 4 pp., processed. Small Business Administration, Washington 25, D. C., January 1962. A summary of a report, titled "New Product Development--Reducing the Risk." The conditions essential to successful new-product development include: (1) surplus management capacity, (2) awareness of the firm's sales potential, (3) good financial condition, (4) budgeting of time and money to be used for new-product development, (5) a clear definition of the areas of interest, and (6) a creative atmosphere.
- Reducing Management Waste, by Harvey C. Krentzman, Management Aid for Small Manufacturers No. 136, 4 pp., processed. Small Business Administration, Washington 25, D. C., January 1962. Reducing management waste can be achieved by: (1) being aware of why the business exists, (2) organizing and delegating responsibilities and authorities to accomplish the company's goals, (3) keeping the company in touch with the future, (4) establishing daily, weekly, or monthly goals for the top supervisors, (5) keeping top supervisors informed on company goals and progress, (6) guiding top supervisors around the pitfalls of management waste, and (7) evaluating periodically the daily procedures and systems used to avoid management waste.
- detirement Plans for Small Business, by Morton R. Gould, Management Aids for Small Manufacturers No. 135, 4 pp., processed. Small Business Administration, Washington 25, D. C., December 1961. A leaflet on retirement plans for small business. In summary, the author states that "Small businessmen are finding a growing interest in retirement plans. This interest is growing because the United States population is living longer, because of business competition, and because of the personal and business advantages to be gained through the use of such plans." The leaflet discusses the types of plans that can be used, pointing out the general advantages of each.

Small Suppliers and Large Buyers in American Industry, by Samuel Paul, Sidney C. Sufrin, and Marion A. Buck, Management Research Summary, 4 pp., processed. Small Business Administration, Washington 25, D. C., October 1961. A summary of a report, titled "Business Relations Between Small Suppliers and Large Buyers." Steady flow of business, assurance of payment without friction, size of order, and prestige value are the most beneficial aspects of doing business with large buyers, according to the small suppliers who took part in the study. Suggested changes included improvement in bureaucratic practices, better timing of orders and delivery improvements, in technical relations, and consideration for small suppliers' problems.

- Specialized Help for Small Business, by David R. Mayne, Small Marketers Aid No. 74, 4 pp., processed. Small Business Administration, Washington 25, D. C., December 1961. Small businessmen in increasing numbers are finding that outside assistance can be of real dollars-and-cents benefit in solving certain management problems. They are using such experts to help analyze and solve various management, operating, and technical problems. This leaflet discusses when and when not to use consultants. It highlights some specific financial savings small companies have made as the result of outside help, advice, and guidance.
- Using a Combination Export Management Firm, by Richard G. Lurie, Management Aids for Small Manufacturers No. 137, 4 pp., processed. Small Business Administration, Washington 25, D. C., March 1962. Discusses the services which combination export management (CEM) firms offer manufacturers. Gives suggestions on the advantages of those services and how to select and locate a CEM firm that is best-suited for a particular company. In summary, the author states that "Small businessmen sometimes feel that they could sell abroad, but don't enter export markets because they aren't familiar with overseas selling. Or, in other cases, they cannot afford to set up an export department to handle the specialized details of foreign trade. Many of these men are solving these problems by using a combination export management firm.

#### SOUTH AFRICA:

Tunnies and Marlins of South Africa," by F. H. Talbot and M. J. Penrith, article, Nature, vol. 193, no. 4815, February 10, 1962, pp. 558-559, illus., printed. Nature, St. Martin's Press, Inc., 175 Fifth Ave., New York 10, N. Y.

#### SOUTH PACIFIC:

- Better Barramundi Catches for Papuan Fishermen," by A. M. Rapson, article, <u>South Pacific Bulletin</u>, vol. 12, no. 1, January 1962, pp. 46-47, illus., printed, single copy 30 cents. South Pacific Commission, G.P.O. Box 5254, Sydney, Australia. Barramundi, or giant perch, is an excellent eating fish often found in abundance in Papuan waters. This article briefly reviews the extensive experiments being carried out with mesh nets and fish traps to improve barramundi catches by Papuan fishermen.
- "Fisheries Development in the Cook Islands," by Ronald Powell, article, <u>South Pacific Bulletin</u>, vol. 12, no. 1, January 1962, pp. 50-53, 60-61, illus., printed, single copy 30 cents. South Pacific Commission, G.P.O. Box 5254, Sydney, Australia.
- "Islanders Learn Modern Fishing Methods at SPC-FAO Centre," by Pierre Lusyne and Louis Devambez, article, <u>South Pacific Bulletin</u>, vol. 12, no. 1, January 1962, pp. 24-26, illus., printed, single copy 30 cents. South Pacific Commission, G.P.O. Box 5254,

Sydney, Australia. A subregional Fisheries Training Center for Pacific islanders from Melanesian territories was held under the auspices of the South Pacific Commission and the Food and Agriculture Organization from August 23 to November 6, 1961, at Tulagi, British Solomon Islands. The twofold purpose was to train fishermen in the construction and operation of improved fishing gear, and in the operation of mechanized fishing craft.

#### SPAIN:

"La Conserva Espanola en los Mercados Europeos" (Spanish Canned Products in European Markets), by Alevin, article, <u>Industria Conservera</u>, vol. 27, no. 270, December 1961, p. 309, printed in Spanish. Industria Conservera, Calle Marques de Valladares, 41, Vigo, Spain.

"La Industria de Conservas de Pescado en Galicia y su Proyeccion Exportadora" (The Canned Fish Industry in Galicia and Its Export Possibilities), article, <u>Industria Conservera</u>, vol. 27, no. 270, December 1961, pp. 310-312, printed in Spanish. Industria Conservera, Calle Marques de Valladares, 41, Vigo, Spain.

#### TRADE LISTS:

- The Bureau of International Business Operations, U.S. Department of Commerce, Washington 25, D.C., has published the following mimeographed trade lists. Copies may be obtained by firms in the United States from that office or from Department of Commerce field offices at \$1 a copy.
- Boat and Ship Builders, Repairers and Chandlers--India, 17 pp. (December 1961). Lists the names, addresses, and size of boat builders, and types of vessels (including fishing craft) built by each firm.

Boat and Ship Builders, Repairers and Chandlers-<u>The Netherlands</u>, 27 pp. (December 1961). Lists the names, addresses, and size of boat builders, and types of vessels (including fishing craft) built by each firm.

Canneries and Frozen Foods--Producers and Exporters--Austria, 11 pp. (January 1962). Lists the names and addresses, size of firms, and types of products handled by each firm. Includes producers and exporters of canned fish and anchovy paste.

Canneries and Frozen Foods--Producers and Exporters--Chile, 7 pp. (January 1962). Of the approximately 70 food canners in Chile, 27 can fish and shellfish. Sardines, tuna, bonito, and salmonlike fish are the principal canned fish products. A wide range of shellfish is processed, including black and white mussels, crabs, sea urchins, shrimp, clams, and limpets. In 1959 exports of canned shellfish to the United States amounted to approximately \$120,000 and to Great Britain \$43,000. Lists the names and addresses, size of firms, and types of products handled by each firm.

Fishing Industry Plant and Equipment--Importers, Dealers, and Manufacturers--Republic of South Africa, 20 pp. (January 1962). Lists the importers, dealers, and manufacturers of fishing industry plant and equipment, size of firms, and type of equipment handled by each firm. Imported equipment for the fishing fleet and fish-processing plants consists of marine and industrial Diesel engines, fish nets, pumps, floats, generators, radio telephones, radar, echosounders, engineroom fittings, life-saving equipment and protective clothing, weighing machines for wet fish and for fish meal, can seamers and syrupers, can labelers, carton packers, fork-lift equipment, stainless steel tubing, twin screw fish-meal presses, centrifugal oil separators, process-control instruments, and outboard motors.

#### TRAWLERS:

"Une Nouvelle Serie de Chalutiers Polonais de 61 m" (A New Series of Polish Trawlers of 61 Meters), article, La Peche Maritime, No. 1007, February 1962, pp. 97-99, illus., printed in French. La Peche Maritime, 190 Boulevard Haussmann, Paris, France.

#### TRAWLING:

'La Peche par L'Arriere" (Stern Trawling), article, La Peche Maritime, No. 1007, February 1962, pp. 93-96, illus., printed in French. La Peche Maritime, 190 Boulevard Haussmann, Paris, France.

#### TUNA:

Age Determination of the Pacific Albacore of the California Coast, by Robert R. Bell, 11 pp., illus., printed. (Reprinted from California Fish and Game, vol. 48, no. 1, January 1962, pp. 39-48.) Department of Fish and Game, 722 Capitol Ave., Sacramento 14, Calif.

#### UNITED KINGDOM:

Les Problemes de la Peche Britannique" (British Fishery Problems), article, La Peche Maritime, vol. 41, no. 1006, January 1962, pp. 54-58, illus., printed in French, single copy 17 NF (aboutUS\$3.50). La Peche Maritime, 190 Boulevard Haussmann, Paris, France.

#### VOLGA DELTA:

<u>Availability of Sticklebacks as Food for the Preda-</u> cious Fishes of the Volga Delta, by K. P. Fortunatova, Translation Series No. 331, 19 pp., illus., processed. (Translated from the Russian, <u>Zoologic</u>heskii Zhurnal, vol. 38, no. 11, 1959, pp. 1689-1701.) Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada, 1961.

#### WORLD TRADE:

The following printed World Trade Information Service Reports, published by the Bureau of International Programs, U. S. Department of Commerce, Washington, D. C., are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Establishing a Business in Sudan, Economic Report<sup>NO.</sup> 62-1, WTIS Part 1, 8 pp., illus., 15 cents, January 1962.

Import Tariff System of Libya, Operations Report No. 62-1, WTIS Part 2, 2 pp., 10 cents, January 1962.