

# RECENT FISHERY PUBLICATIONS

## FISH AND WILDLIFE SERVICE PUBLICATIONS

THESE PROCESSED PUBLICATIONS ARE AVAILABLE FREE FROM THE OFFICE OF INFORMATION, U. S. FISH AND WILDLIFE SERVICE, WASHINGTON 25, D. C. TYPES OF PUBLICATIONS ARE DESIGNATED AS FOLLOWS:

- CFS - CURRENT FISHERY STATISTICS OF THE UNITED STATES.  
 FL - FISHERY LEAFLETS.  
 MNL - REPRINTS OF REPORTS ON FOREIGN FISHERIES.  
 SEP. - SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.  
 SL - BRANCH OF STATISTICS LIST OF DEALERS IN AND PRODUCERS OF FISHERY PRODUCTS AND BYPRODUCTS.  
 SSR. - FISH. SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).

Number	Title
CFS-2844	- Massachusetts Landings, December 1961, 5 pp.
CFS-2848	- New Jersey Landings, 1961, Annual Summary, 9 pp.
CFS-2850	- New York Landings, 1961, Annual Summary, 12 pp.
CFS-2855	- North Carolina Landings, February 1962, 4 pp.
CFS-2856	- Maine Landings, 1961, Annual Summary, by Months, 6 pp.
CFS-2857	- Maine Landings, 1961, Annual Summary, by County, Gear and Subarea, 17 pp.
CFS-2860	- Texas Landings, January 1962, 3 pp.
CFS-2862	- Canned Fishery Products, 1961, Annual Summary, 16 pp.
CFS-2864	- Maryland Landings, 1961, Annual Summary, 9 pp.
CFS-2866	- California Landings, December 1961, 4 pp.
CFS-2867	- Maine Landings, February 1962, 4 pp.
CFS-2868	- New Jersey Landings, February 1962, 3 pp.
CFS-2869	- Florida Landings, February 1962, 8 pp.
CFS-2870	- Frozen Fish Report, March 1962, 8 pp.
CFS-2871	- Virginia Landings, February 1962, 3 pp.
CFS-2872	- Maryland Landings, January 1962, 3 pp.
CFS-2873	- Rhode Island Landings, 1961, Annual Summary, 8 pp.
CFS-2874	- Louisiana Landings, January 1962, 2 pp.
CFS-2875	- Rhode Island Landings, January 1962, 3 pp.
CFS-2876	- Mississippi Landings, February 1962, 3 pp.
CFS-2879	- Michigan Landings, February 1962, 2 pp.
CFS-2880	- Wisconsin Landings, February 1962, 2 pp.
CFS-2881	- Fish Sticks and Portions, January-March 1962, 2 pp.
CFS-2882	- Alabama Landings, February 1962, 3 pp.
CFS-2883	- New York Landings, February 1962, 4 pp.
CFS-2884	- Shrimp Landings, December 1961, 6 pp.
CFS-2885	- Fish Meal and Oil, 1961, Annual Summary, 4 pp.

- CFS-2886 - Florida Landings, 1961, Annual Summary, 13 pp.  
 CFS-2887 - Louisiana Landings, February 1962, 2 pp.  
 CFS-2888 - North Carolina Landings, March 1962, 4 pp.  
 CFS-2889 - California Landings, January 1962, 4 pp.  
 CFS-2891 - South Carolina Landings, March 1962, 2 pp.  
 CFS-2895 - Rhode Island Landings, February 1962, 3 pp.  
 CFS-2896 - Wisconsin Landings, March 1962, 2 pp.  
 CFS-2897 - Florida Landings, March 1962, 8 pp.

FL-254 (Revised) - List of Fishery Associations in the United States, 13 pp., August 1961.

FL-292 (Revised) - List of Fishery Cooperatives in the United States, 1960-1961, by Leslie D. McMullin, 18 pp., August 1961.

FL-522 - Separates from the Commercial Fisheries Review, 7 pp., September 1961.

FL-530 - Construction of a Widmark-Flask Shaker, by D. J. Bond, 2 pp., illus., December 1961.

FL-531 - Food Fishes with Fins and Scales, by Isaac Ginsburg, 7 pp., December 1961.

SL-151 (Revised) - Firms Manufacturing, 1961, Marine Animal Scrap, Meal, Oil, Solubles and Homogenized Condensed Fish.

Sep. No. 650 - Fishery Tariff Concessions in the 1960-61 GATT Negotiations.

Sep. No. 651 - Construction of a Fish Weir.

SSR-Fish. No. 376 - Methods For Lipid Analysis, an Annotated Bibliography, by Alvin L. Jensen, 78 pp., processed, June 1961.

SSR-Fish. No. 386 - Oceanographic Observations Made During a Cooperative Survey of Albacore (Thunnus germon) off the North American West Coast in 1959, by Joseph J. Graham and William L. Craig, 35 pp., illus., processed, August 1961.

SSR-Fish. No. 390 - Seasonal Occurrence of Marine Fishes in Four Shore Habitats Near Beaufort, N. C., 1957-60, by Marlin E. Tagatz and Donnie L. Dudley, 21 pp., illus., August 1961. A report on a 3-year seining program which was conducted to determine monthly frequency of occurrence and size range of salt and brackish water fishes in the inshore waters of the Beaufort area.

SSR-Fish. No. 396 - Oceanographic and Biological Data, Hawaiian Waters, January-October 1959, by Kenneth Sherman and Robert P. Brown, 75 pp., illus., processed, December 1961.

Exempt Trucking of Fresh and Frozen Fish and Shellfish in Interstate Commerce, by John D. Abrahamson and Carl P. Hoffman, Jr., Circular 133, 60 pp., illus., November 1961. Covers a study made because of the need for facts necessary to solve many transportation problems of vital importance to the fishing industry and to give a clearer picture of the operations of exempt and regulated carriers in relation to fishery products. An "exempt" truck is one permitted to operate legally without economic regulation by the Interstate Commerce Commission (ICC). Some trucks operate on an "exempt" basis only part of the year. Such exemption was provided in 1935 when a law placed trucking operations under the jurisdiction of the Interstate Commerce Commission. The law specified various products which were exempt from regulation by ICC. These exemptions were based fundamentally upon the perishability of the product and upon the proposition that the shipper can transport perishables to market more expeditiously by exempt carrier than by carriers required to follow definite route and time schedules. The practice of using exempt trucks has been followed for nearly three decades by individual firms dealing in fishery and other perishable products, but until this study was made by the Bureau of Commercial Fisheries, there was no over-all information on the scope of the operations. The study covered the period 1956 to 1958. A sample of 155 interstate shippers was selected from 1500 firms engaged in distributing fishery products. Another sample was taken from both the exempt and regulated carriers. The survey showed that exempt carriers employed 778 drivers in 1958 and would accept cargo for practically any destination in the country. The carriers usually made three stops to discharge cargo in the course of a trip.

Programs and Activities of the Bureau of Commercial Fisheries, Circular 135, 20 pp., illus., processed, January 1962. A description of current programs and problems of the U. S. Bureau of Commercial Fisheries and of the commercial fishing industry. Bureau programs are primarily of a fundamental and applied research nature, using fundamental research to develop new knowledge and then applying this knowledge to the practical solution of fishery research problems. In addition, the Bureau's programs involve supplying important services to the industry, consistent with services supplied by Government to other basic industries of our country. These include such things as gear development research; new product development; vessel loan programs; collection of statistics; dissemination of current, unbiased information on supplies, movement, distribution, demand, prices, and market conditions; and other important service and management activities. Thus, the program of the Bureau is developed along policies laid down by the President, with the objective of maintaining for our country a healthy, prosperous commercial fishing industry, assuring a maximum sustained harvest of the living resources of the sea.

Seaweeds Are Not Weeds, Circular 130, 6 pp., illus., 1962.

THE FOLLOWING MARKET NEWS LEAFLETS ARE AVAILABLE FROM THE BRANCH OF MARKET NEWS, BUREAU OF COMMERCIAL FISHERIES, U. S. FISH AND WILDLIFE SERVICE, WASHINGTON 25, D. C.

Number	Title
MNL-23	Fisheries of Chile, 28 pp.
MNL-68	Fisheries Survey of Sierra Leone, 8 pp.
MNL-69	Fishing Industry in Northeast Brazil: Unexploited Opportunity, 7 pp.
MNL-70	Fisheries Survey of Liberia, 3 pp.

THE FOLLOWING PUBLICATIONS ARE AVAILABLE ONLY FROM THE SPECIFIC OFFICE MENTIONED.

Annual Report of the Biological Laboratory, Woods Hole, Mass. (for the Year Ending June 30, 1960), Circular 99, 63 pp., illus., processed, December 1960. (Bureau of Commercial Fisheries, Biological Laboratory, Woods Hole, Mass.) This report presents a summary of research activities in the Northwest Atlantic Fishery Investigations program, and a description of vessels and shore facilities. Studies relating to the management of the groundfish of the Northwest Atlantic continue to occupy an important place on the research program. Evaluating the benefit of mesh regulation on the Georges Bank haddock fishery and assessing possible benefits of uniform mesh size for the area covered by the International Commission for the Northwest Atlantic Fisheries (ICNAF) were the two most important problems in this field in 1960.

(Baltimore) Monthly Summary--Fishery Products, February, March, and April 1962, 8 pp. each. (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 months indicated.

California Fisheries, 1961, by V. J. Samson, 46 pp. (Available free from the Market News Service, U. S. Fish and Wildlife Service, Rm. 208, Post Office Bldg., San Pedro, Calif.) A review of 1961 trends and conditions in the California fisheries, including a historical review of California fish-meal prices, 1941-1961. Among the subjects discussed are the tuna industry and cannery receipts; domestic tuna fishery; record yellowfin tuna catch; albacore fishery; ex-vessel prices; other tuna prices; canned tuna pack; imports; and status of California purse-seine fleets in 1961. Also covered are the sardine industry and canned pack; mackerel fishery, pack, and prices; anchovy fishery; canned pet-food pack; whaling industry; and seasons in major fisheries. Included in the statistical tables are data on tuna and tunalike fish-cannery receipts, domestic landings, cannery receipts of frozen imported tuna, and canned pack, 1959-61; sardine landings, canned pack, and meal and oil produced, 1961-62 and 1960 seasons; and the cannery receipts and pack of mackerel and jack mackerel, 1959-61. It gives data on cannery receipts of raw materials and production of anchovies, herring, squid, pet food, and meal and oil; freezings and cold-storage holdings of fish and shellfish; landings in the Eureka and San Pedro-Santa Monica areas; and imports of fishery products into Arizona and California Customs Districts, 1960-61.

California Fishery Market News Monthly Summary, Part I - Fishery Products Production and Market Data,

March 1962, 14 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, 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.

California Fishery Market News Monthly Summary, Part II - Fishing Information, March 1962, 10 pp., illus. (U. S. Bureau of Commercial Fisheries, Biological Laboratory, P. O. Box 6121, Pt. Loma Station, San Diego 6, Calif.) Contains sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists; for the month indicated.

Chicago Monthly Summary of Chicago's Wholesale Market Fresh and Frozen Fishery Products Receipts, Prices, and Trends, April 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.

Receipts and Prices of Fresh and Frozen Fishery Products at Chicago, 1961, by G. A. Albano, 68 pp., processed, April 1962. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 565 W. Washington St., Chicago 6, Ill.) In the analysis of receipts of fishery products at Chicago, the author discusses the 1961 fishery products receipts and carload receipts as compared to previous years. He also discusses sources of receipts, trends in fishery products transportation, receipts by months, receipts by species and varieties, lake trout and whitefish fishery and receipts, trends in Great Lakes commercial fishery, cold-storage inventories, and imports of selected frozen fishery products. Also covers trends in the frozen shrimp market, shrimp landings, shrimp imports and exports, and the changing ecology of Lake Erie. Also included is a table giving the names, classifications, and approximate weights of certain fishery products as used in the Chicago wholesale markets. The second section presents statistical data on fresh and frozen fishery products receipts at Chicago by species and by states and provinces of origin, states and provinces by species, species by months, states and provinces by months, totals by species, and totals by states and provinces. Receipts are tabulated by method of transportation (truck, express, and freight). A table shows the monthly range of wholesale prices of some of the leading varieties of fresh and frozen fishery products handled in the Chicago market.

Shrimp Fisheries (Selected Areas), 1961, by Peter DiMarco, 44 pp., processed, May 1962. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 609-611, Federal Bldg., 600 South St., New Orleans 12, La.) Part I reports on trends and conditions in Gulf Coast fisheries during 1961 and gives a resume of the individual fisheries. For the shrimp fishery, a detailed account is presented of total landings by states, extent of coverage of landings, composition of shrimp landings by species and sizes, prices, canning, imports, cold-storage stocks, and

general trends and developments. Discusses production and market conditions for the oyster, blue crab, and menhaden fisheries, as well as imports of fresh and frozen fish and shellfish. Part II includes shrimp closed seasons in effect in the Gulf States during 1961, minimum shrimp size regulations, conversion factors and container capacities, and shrimp sizes. The second part also contains statistical tables showing total fishery products landings; Gulf menhaden landings and production of meal, solubles, and oil; crab meat production by areas and months; fishery imports through the New Orleans and Morgan City, La., Customs Districts and Port Isabel and Brownsville, Tex.; and LCL express shipments from New Orleans for 1961 by months and destination. Also includes tables showing monthly range of wholesale prices of fishery products on the New Orleans French Market; Gulf States weekly oyster and shrimp packs, 1960/61 season and packs by season 1956-61; summary of Gulf shrimp landings for selected areas, 1960-61 and 5-year averages; and fishery products market classifications in the Gulf area.

Gulf of Mexico Monthly Landings, Production and Shipments of Fishery Products, March and April 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 shellfish on the New Orleans French Market; fishery imports at Port Isabel and Brownsville, Texas, from Mexico; and sponge sales; for the months indicated.

Monthly Summary of Fishery Products Production in Selected Areas of Virginia, North Carolina, and Maryland, April 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.

New England Fisheries--Annual Summary, 1961, by John J. O'Brien, 48 pp. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) Reviews the fish marketing trends and conditions at the principal New England fishery ports, and highlights of fisheries in other nearby areas. Covers food-fish landings by ports and species; industrial-fish landings and ex-vessel prices; fishing vessel news; imports; frozen fishery products; and the fish-meal market. Also includes fishery landings and ex-vessel prices by months for ports of Boston, Gloucester, New Bedford, Provincetown, Woods Hole, Portland, Rockland, Point Judith, and Stonington; highlights of the Maine sardine and lobster fisheries; highlights of the fisheries of Canada, Denmark, Iceland, Norway, and Peru; and historical data of fisheries at principal New England ports. In addition, regulations governing the Massachusetts sea and bay scallop industries are outlined.

New England Fisheries--Monthly Summary, April 1962, 21 pp. (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 ports and species; industrial-fish 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 fishery 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 month indicated.

New York City's Wholesale Fishery Trade--Monthly Summary--January and February 1962, 16 and 18 pp., each. (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 fresh-water 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 months indicated.

New York City's Wholesale Fishery Trade, 1961 (Includes Statistics and Marketing Trends), by T. J. Risoli, 45 pp. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 155 John St., New York 38, N. Y.) The first part of this annual summary discusses fishery products receipts and marketing trends in the salt-water section of New York's wholesale Fulton Fish Market during 1961. The second part covers marketing trends and receipts in the wholesale fresh-water fish market for 1961. The third part consists of a series of statistical tables giving monthly overland and vessel receipts; receipts by species, methods of transportation, states, and provinces; imports of fishery products at New York City; and selling prices for fresh headless raw shrimp.

THE FOLLOWING PUBLICATIONS ARE AVAILABLE ONLY FROM THE SPECIFIC OFFICE MENTIONED.

1960 Lake Michigan Program of U. S. Bureau of Commercial Fisheries, 7 pp., processed, April 12, 1962. (Bureau of Commercial Fisheries, U. S. Fish and Wildlife Service, 920 N. Main St., Ann Arbor, Mich.)

Problems Related to the Establishment of a Trawl Fishery on Lake Michigan, 8 pp., processed June 30, 1960. (U. S. Fish and Wildlife Service, Bureau of Commercial Fisheries, 920 N. Main St., Ann Arbor, Mich.)

Seattle--Landings, Receipts, and Value of Fishery Products, 1961, by Charles M. Reardon, 35 pp. (Available free from the Market News Service, U. S. Fish and Wildlife Service, Pier 42, South Seattle 4, Wash.) Reviews Pacific Northwest fisheries trends and their effect upon Seattle fishery products receipts for 1961; halibut landings; carload and truckload shipments of fishery products from Seattle by months; imports of canned fishery products; receipts of Alaskan canned fishery products; and names, classifications, and approximate standards as used on Seattle wholesale market. The report also contains a number of statistical tables on receipts of fresh and frozen fish and shellfish, fresh and frozen salmon receipts and imports, halibut landings, ex-vessel landings by the otter-trawl fleet, Puget Sound canned salmon pack, and related data.

(Seattle) Washington and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, April 1962, 9 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.

THE FOLLOWING ENGLISH TRANSLATIONS OF FOREIGN LANGUAGE ARTICLES ARE AVAILABLE ONLY FROM THE U. S. FISH AND WILDLIFE SERVICE, BUREAU OF COMMERCIAL FISHERIES, P. O. BOX 3830, HONOLULU, HAWAII.

The Distribution of Some Mass Species of Copepods in the Indian Ocean, by M. E. Vinogradov and N. M. Voronina, 6 pp., illus., processed, April 1962. (Translated from the Russian, Doklady Akademii Nauk SSSR, vol. 140, no. 1, 1961, pp. 219-222.)

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

Chemical Composition of Blood of Smallmouth Bass, by Eddie Wayne Shell, Research Report 57, 41 pp., illus., printed, 30 cents, 1961.

Estimating Red Salmon Escapements by Sample Counts from Observations Towers, by Clarence Dale Becker, Fishery Bulletin 192 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61, pp. 355-369), 19 pp., illus., printed, 20 cents, 1962.

Fluctuations in Age Composition and Growth Rate of Cutthroat Trout in Yellowstone Lake, by Ross V. Bulkley, Research Report 54, 35 pp., illus., printed, 30 cents, 1961.

Limnology of Yellowstone Lake in Relation to the Cutthroat Trout, by Norman G. Benson, Research Report 56, 38 pp., illus., printed, 40 cents, 1961.

Mortality Studies on Cutthroat Trout in Yellowstone Lake, by Orville P. Ball and Oliver B. Cope, Research Report 55, 66 pp., illus., printed, 45 cents, 1961.

National Survey of Fishing and Hunting, 1960, Circular 120, 77 pp., illus., printed, 50 cents, September 1961.

## MISCELLANEOUS PUBLICATIONS

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION 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.

### AGAR-AGAR:

Photos Showing Growth of Gelidium Cultured Artificially, by Kakujiro Ohno, 12 pp., illus., processed in

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Japanese and English. Tokai Suisan Kagaku Kenhyusho, 1, 125, 2-chome, Ikebukuro, Toshima-ku, Tokyo, Japan.

"Rheological Properties of Hydrogels of Agar-Agar," by Kiyoshi Arakawa, article, Bulletin of the Chemical Society of Japan, vol. 34, September 1961, pp. 1233-1235, printed. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

Statement on Artificial Cultivation and Production of Agar-Agar, by Kakujiro Ohno, 30 pp., illus., processed in Japanese. Tokai Suisan Kagaku Kenhyusho, 1, 125, 2-chome, Ikebukuro, Toshima-ku, Tokyo, Japan.

"Studies on the Antisepsis for Agar During the Manufacturing Process in the Mild Winter. VI--Influences of Antiseptics on the Qualities of 'Tokoroten' and Agar," by Hiroaki Fujisawa and Terutake Sukegawa, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 27, April 1961, pp. 318-322, printed. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

#### ALGAE:

The Algae, by V. J. Chapman, 472 pp., illus., printed, \$8. The Macmillan Company, 60 Fifth Ave., New York 11, N. Y.

Una Clave Ilustrada de los Generos de Algas Benticas del Pacifico de la America Central (Illustrated Key to the Genera of Pacific Central American Benthic Algae), by E. Yale Dawson, article, Pacific Naturalist, vol. 3, no. 4, April 16, 1962, pp. 167-231, illus., printed in Spanish and English. Library, Beaudette Foundation for Biological Research, 1597 Calzada Rd., Santa Ynez, Calif.

#### AMINO ACID:

"The Amino Acid Composition of Cod Tropomyosin," by P. L. Hoogland and others, article, Journal of the Fisheries Research Board of Canada, vol. 18, July 1961, pp. 501-512, printed. Queen's Printer & Controller of Stationery, Ottawa, Canada.

#### ANCHOVIES:

"Ansjovisen pa Vastkusten" (Anchovy Fishing on the West Coast), by Armin Lindquist, article, Svenska Vastkustfiskaren, vol. 32, no. 7, April 10, 1962, p. 148, illus., printed. Svenska Vastkustfiskarnas Central-forbund, Goteborg, Sweden.

#### AQUATIC PLANTS:

Eurasian Water Milfoil in the Chesapeake Bay and the Potomac River, by Dexter Haven, Contribution No. 108, 5 pp., illus., printed., 1961. Virginia Institute of Marine Science, Gloucester Point, Va.

#### BACTERIOLOGY:

Type E Botulism Poisoning, Poland, by Henryk Meisel, JPRS 9425, 14 pp., printed. Joint Publications Research Service, Washington 25, D. C., June 19, 1961. (For sale by Office of Technical Services, Department of Commerce, Washington 25, D. C., price upon application.)

#### BIOCHEMISTRY:

"The Nature of the Components Liberated by Treatment of Cod Myosin with Alkali or with Low Concentrations of Urea," by J. J. Connell and H. S. Olcott, article, Archives of Biochemistry and Biophysics, vol. 94, July 1961, pp. 128-135, printed. Academic Press, Inc., 111 5th Ave., New York 3, N. Y.

"The Solubility of Actomyosin as a Biochemical Characteristic of the Processes Occurring in the Muscles of Fishes During Cold Treatment," by N. A. Golovkin and L. I. Pershina, Chemical Abstracts, vol. 55, October 2, 1961, 20256c, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C.

#### BRAZIL:

Alguns Peixes Pouco Conhecidos Ocorrendo na Costa Brasileira (Some Little Known Fish Occurring on the Brazilian Coast), by Paulo de Miranda Ribeiro, Zoologia No. 224, 11 pp., illus., printed in Portuguese. (Reprinted from Boletim do Museu Nacional, May 3, 1961.) Museu Nacional, Quinta da Boa Vista, Rio de Janeiro, Brazil.

Pescas do TOKO MARU (Fish Caught by the Toko Maru), by Paulo de Miranda Ribeiro, Zoologia No. 228, 18 pp., printed in Portuguese. (Reprinted from Boletim do Museu Nacional, August 10, 1961.) Museu Nacional, Quinta da Boa Vista, Rio de Janeiro, Brazil.

#### CALIFORNIA:

California Fish and Game, vol. 48, no. 2, April 1962, 62 pp., illus., printed, single copy 75 cents. Department of Fish and Game, 987 Jedsmith Dr., Sacramento 19, Calif. (For sale by the Printing Division, Documents Section, Sacramento 14, Calif.) Includes, among others, articles on "Effects of Sardine Spawning Stock Size and Environment on Year-Class Production," by John Radovich; and "Introduction of Pond Smelt from Japan into California," by Joseph H. Wales.

#### CANADA:

Fisheries Statistics of Canada, 1960 (Saskatchewan), 9 pp., printed in French and English, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, April 1962. Contains statistical tables on Canadian fisheries located on the lakes of Saskatchewan. Includes value of fishery products by species, 1953-1960; quantity and value of landings by species; 1959-1960; quantity and value by major species and by lakes, 1959 and 1960; capital equipment in primary fisheries operations, 1959-1960; and number of persons engaged in the primary fisheries operations, 1959-1960.

Inland Fisheries, 1945-1960, Reference Paper No. 2, illus., printed in English and French, 74 pp. Department of Industry and Commerce, Quebec Bureau of Statistics, Quebec, Canada. Includes statistics on fresh-water fish caught by commercial fishermen, quantities and values by species of fish, and the annual census of fishing boats, fishing gear, wharves and shelters.

"List of the Marine Fishes of Canada," by D. E. McAllister, article, National Museum of Canada Bulletin, no. 168, pp. 1-76, printed. National Museum of Canada, Ottawa, Canada.

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Pecheries Maritimes, Annee 1961 (Preliminary Report on Maritime Fisheries, 1961), 42 pp., processed in French and English. Department of Industry and Commerce, Quebec Bureau of Statistics, Quebec, Canada, April 6, 1962. Summarizes the twelve monthly reports and gives the size of the catch and its value to the fishermen, as well as a summary of production. Some comparisons are also made with the two previous seasons.

Pecheries Maritimes, 1958-1960 (Maritime Fisheries, 1958-1960), 96 pp., illus., printed in French and English. Department of Industry and Commerce, Quebec Bureau of Statistics, Quebec, Canada, 1962. Contains statistics of maritime fisheries of the Province of Quebec for the years 1958-1960. Includes graphs and tables on fishermen, capital equipment, catches, and landed and marketed values.

31st Annual Report, 1960, Department of Fisheries, Cat. No. Fs 1-1960, 138 pp., illus., printed, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961. Presents the functions and activities of the Department of Fisheries for the year 1960, and the financial statements of the Department for the fiscal year 1960/61. Covers in detail the activities of the Department's Conservation and Development Service, Inspection and Consumer Service, Economics Service, Information and Educational Service, and Industrial Development Service. Also covers the Fishermen's Indemnity Plan, and activities of the Fisheries Prices Support Board, Fisheries Research Board of Canada, International Commissions, and special committees. Canada's Pacific Coast, Lake, and Atlantic Coast fisheries are also discussed. Statistics cover the quantity and value of fish and shellfish landed, exports by type of products, number of fishermen in Canada, and value of fishing craft and gear. The 56-page appendix contains financial statements for fiscal year 1960/61, and statements on fish culture development.

#### CATFISH:

"Potential Industry: Commercial Catfish Production," by G. E. Mason, article, Mississippi Game and Fish, vol. 24, no. 10, March-April 1962, pp. 9, 12, illus., printed. Mississippi Game and Fish Commission, Jackson, Miss. Describes commercial catfish production as a new farm business which is at present in an experimental stage in the State of Mississippi.

#### CEYLON:

Administration Report of the Director of Fisheries for 1960, Part IV--Education, Science and Art (L), 71 pp., illus., printed in Ceylonese and English, 2/35 (about 50 U. S. cents). Government Publications Bureau, Colombo, Ceylon. Report on the activities and accomplishments of the Ceylon Department of Fisheries for the year 1960. Includes, among other data, information on programs of the organization; disputes and regulations; benefits for fishermen; fishery loans, coastal and navigation aids; fishing harbors; and air-sea rescue services. It covers fresh- and brackish-water fisheries; pearl fisheries; fish factory at Mutwal; cooperative fish sales union; and fishery research. Also contains statistical tables on imports and exports of fish and fishery products; and production of fresh and cured fish for 1960.

#### CHILE:

"Explotacion Pesquera y Aprovechamiento de los Productos de la Pesca en Chile" (Fishery Exploitation and Utilization of Fishery Products in Chile), Primer Congreso Chileno de Ingenieria Quimica, vol. 3, 307 pp., illus., printed in Spanish. Instituto de Ingenieros Quimicos de Chile, Universidad de Concepcion, Concepcion, Chile, August 1959.

Import Tariff System of Chile, WTIS Part 2, Operations Report No. 62-10, 2 pp., printed, single copy 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C., February 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Presents information on units of currency, weights, and measures; basis of custom duties; custom surcharges; method of payment of duties; preferential rates; sales and similar internal taxes; consular fees; and free ports.

#### COD:

"The Oogenesis and Reproduction Cycle of the Cod," by V. P. Sorokin, article, Soviet Fisheries Investigations in Northern Seas, vol. 10, pp. 125-144, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, S.W. 7, England.) Soviet Fisheries Investigations in Northern Seas, Moscow, U.S.S.R.

"La production de l'industrie Canadienne de la peche a la morue a diminue en 1961" (Production of the Canadian Cod Fishery Declined in 1961), by J. E. Turner, article, La Peche Maritime, vol. 41, no. 1009, April 1962, pp. 217-219, illus., printed in French. La Peche Maritime, 190 Boulevard Haussman, Paris, France.

#### COMMUNIST CHINA:

Fishery Production and Policy in Communist China, by Asakawa Kenji, JPRS 12253, 57 pp., printed. Joint Publications Research Service, Washington, D. C. (Photocopies for sale by Photoduplication Service, Library of Congress, Washington 25, D. C.--price upon application.)

#### COMPOSITION:

"Estradiol-17B in the Eggs of the American Lobster, Homarus americanus," by Robert D. Lisk, article, Canadian Journal of Biochemistry and Physiology, vol. 39, April 1961, pp. 659-662, printed. Division of Administration, The National Research Council, Sussex St., Ottawa, Canada.

"Estrogens and Progesterone in the Sea Urchin (Strongylocentrotus franciscanus) and Pecten (Pecten hercicus)," by Charles R. Botticelli, Frederick L. Hissaw, Jr., and Herbert H. Wotiz, article, Proceedings of the Society for Experimental Biology and Medicine, vol. 106, April 1961, pp. 887-889, printed. Society for Experimental Biology and Medicine, 139 St. & Convent Ave., New York 31, N. Y.

"Fish Meat Protease," by Tadao Hata, Toshio Asao, and Etsushiro Doi, Chemical Abstracts, vol. 55, June 12, 1961, 11696b, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

"Guanidino Compounds from a Sea-Anemone, *Anthopleura japonica*," by Satoru Makisuma, article, *Journal of Biochemistry*, vol. 49, April 1961, pp. 284-291, printed. The Japanese Biochemical Society, c/o Dept. of Biochemistry, Faculty of Medicine, Tokyo University, Bunkyo-ku, Tokyo, Japan.

" $\gamma$ -Hydroxyarginine, a New Guanidino Compound from a Sea Cucumber. III--Actions of Arginase and Arginine Decarboxylase," by Yoshimasa Fujita, article, *Journal of Biochemistry*, vol. 49, June 1961, pp. 468-471, printed. The Japanese Biochemical Society, Dept. of Biochemistry, Faculty of Medicine, Tokyo University, Bunkyo-ku, Tokyo, Japan.

#### CONNECTICUT:

*A History of the Connecticut River and its Fisheries*, by Douglas D. Moss, 15 pp., illus., printed. Connecticut Board of Fisheries and Game, Hartford, Conn., 1960.

#### COOKERY:

*Israeli Cookery*, by Lilian Cornfield, 375 pp., illus., printed, \$4.95 for U. S., \$5.70 for foreign mailing. The Avi Publishing Co., Inc., P. O. Box 388, Westport, Conn., 1962. Many cookbooks have been published, but now and then one comes along that is unique. This is a unique book of recipes that are really different. Fish and fish products need to be cooked and served in a variety of ways in order to hold the interest of the diner. This book will help all those looking for new, plain or exotic, and different recipes for all types of foods, including fish. There are recipes for appetizers, soup, meats, poultry, fish, desserts, fruits, and sauces. But because of my interest, those for fish attracted my interest particularly. Whether you are a processor, wholesaler, hotel and restaurant supplier, food editor, nutritionist, chef, hotel or restaurant operator, or a housewife, the recipes in this book will give you something different. Although characteristically Israeli, it should appeal to anyone who is interested in serving foods, and especially fish, in new and appetizing ways. Each chapter covers one of the many divergent communities existing from time immemorial which go to make up modern Israel. Their food culture; folk lore; method of preparation of typical dishes, description of menus, and spices and ingredients used are included. There are many photographs of the different communities, native dress, and illustrations of the dishes against an Israeli background which help to visualize what a dish looks like. The variety of the recipes can be more readily imagined when one realizes that included among the different communities are Arabs, Iraqis, Caucasians and Yemenites, Afghanistani, Sephardi Jews of the Balkans, North Africa, and Jerusalem, as well as Ashkenazis living in the country. Also, other groups from western, central, and eastern Europe, Persians, Cochin Chinese, etc. There is one or more fish recipes in almost each section of the book. As a whole, fish recipes are well represented. In the Chapter "Foods of the Near and Far East" some are simple recipes like grilled fish (Masgoof) and fish for the Sabbath, yet mouth-watering in their simplicity. Then there is the more exotic recipe, fish Musaka with eggplant, under the chapter on "North Africa." To name a few, there are recipes for flaked fish pie, pickled fried fish, fish baked with cream or olives,

fish balls in celery, fish and broad beans, Chinese fish, fish and cucumber salad; boiled, grilled, or baked carp; kedgeree fish. A chapter on chef's recipes of leading Israeli hotels and restaurants includes such fish recipes as filled fish as served at the Sharon Hotel on the Mediterranean shore just north of Tel Aviv, Mediterranean fish at the King David Hotel of Jerusalem, filet de sole bonne femme from the Zion Hotel in Haifa, and Red Sea fish sausage from the Ron Restaurant in Tel Aviv. Rather unusual is a section under Israeli fish dishes which gives several recipes using fresh tuna, including tuna fish chowder, tuna fish to taste like canned tuna, steamed tuna steaks in butter, grilled tuna steaks, goulash of tuna fish, and several recipes using canned tuna. Besides a special holiday section, there is a spice table and how spices are used in Israeli, a glossary of culinary terms in Hebrew and English, an introduction which is a short history of the different ethnic groups and their integration in Israel, and a good index. For recipes that are different, this is the book. The author is well qualified to write such a book. She is a Canadian school teacher who has been working in Israel as a nutritionist and home economist for nearly 40 years except for three years when she studied nutrition in Columbia University Teachers College. The recipes have all been personally tested by the author.

--Joseph Pileggi

#### CRABS:

"Crab Trap Escape-Opening Studies," by Tom Jow, article, *Pacific Marine Fisheries Commission, Bulletin 5*, pp. 49-71, illus., printed. Pacific Marine Fisheries Commission, 741 State Office Bldg., 1400 S. W. Fifth Ave., Portland 1, Oreg., 1961.

#### EAST AFRICA:

*East African Fishes of the EPINEPHELUS TAUVINA Complex, with a Description of a New Species*, by John F. C. Morgans, 17 pp., illus., processed. East African Marine Fisheries Research Organization, Zanzibar, East Africa. Describes several species of grouper.

*A Preliminary Survey of Bottom Fishing on the North Kenya Banks*, by John F. C. Morgans, 84 pp., illus., processed. East African Marine Fisheries Research Organization, Zanzibar, East Africa.

*Serranid Fishes of Tropical East Africa, Part I - Keys to the Subfamilies, Genera, and Species with Descriptions of Certain Species and Notes on Their Biology*, by John F. C. Morgans, 54 pp., processed. East African Marine Fisheries Research Organization, Zanzibar, East Africa. Discusses the many species of rock cod in the region.

*A Synopsis of Existing Knowledge on the Fishes of the Genus Auxis cuvier, 1829 in the Indian Ocean*, by F. Williams, 14 pp., processed. East African Marine Fisheries Research Organization, Zanzibar, East Africa. Common name of *Auxis cuvier* is frigate mackerel or boo hoo.

*Triggering Depth Gauge*, by B. E. Bell, 11 pp., illus., manuscript. East African Marine Fisheries Research Organization, Zanzibar, East Africa, March 9, 1961.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

#### EXPORTS:

United States Exports of Domestic and Foreign Merchandise (Commodity by Country of Destination), 1961 Annual, Report No. FT 410, processed, Part I, 202 pp., \$1.25; and Part II, 354 pp., \$2. Bureau of the Census, U. S. Department of Commerce, Washington, D. C., April 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) The statistics in Part I cover United States exports of domestic and foreign merchandise (including fishery products and by-products) under group 00 through group 5. Part II covers merchandise under groups 6 through 9 (some items of interest to the fishery and allied industries are included). Data are shown by commodity and country of destination.

#### FEDERAL REGULATIONS:

Cumulative Pocket Supplement to Code of Federal Regulations, Title 50, Wildlife and Fisheries as of January 1, 1962, GS 4.108: 50/supp. 961, 77 pp., printed, 40 cents. Federal Register Office, General Services Administration, Washington, D. C., 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

#### FISH MANAGEMENT:

"Inshore Fisheries Management," by C. O'D. Iselin, article, Oceanus, vol. 8, no. 3, March 1962, pp. 2-6, illus., printed. The Woods Hole Oceanographic Institution, Woods Hole, Mass. A well-known oceanographer presents his views on the need for an intense program of marine management in order to develop the vast fishery resources of the inshore waters. He feels that such management in the form of state aquacultural experimental stations can do for the sea what state agricultural stations have done for farming the land.

Populationsanalys vid Studium av Reglerade Sjoar (Population Analysis with Studies on Lake Management), by T. Lindstrom, 16 pp., processed in Swedish with English bibliography. (Reprinted from Vandringfiskutredningen Meddelande, Report No. 5.) Sartryck ur Ostkusten, Hudiksvalle, Sweden, 1960.

#### FISH MEAL:

Protein Requirements of Broilers as Influenced by Fish Products, by T. D. Runnels and D. G. Snyder, FAO International Conference on Fish in Nutrition Paper No. C/IV. 1, 3 pp., printed. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy, 1961.

#### FISH MUSCLE:

"Extractable Nitrogenous Compounds of Fish Muscle," by P. L. Vul'fson, article, Biochemistry (U.S.S.R.), vol. 26, September-October 1961, pp. 271-274, printed. Consultants Bureau, Inc., 227 W. 17th St., New York 11, N. Y.

#### FISH OILS:

Nutritional Effect of Oxidized and Thermally Polymerized Fish Oils, by Noboru Matsuo, 32 pp., printed. (Reprint from unidentified source.) Department of Chemistry, Seikei University, Tokyo, Japan, September 1961.

#### FISH POPULATIONS:

Annotated Collection of Works Published in 1956 on the Problem of Enumeration of Population Dynamics, Behavior and Distribution of Fishes, Marine Mammals, Commercial Invertebrates, and Algae and Their Relationship with Conditions of Their Existence, by N. S. Romanov, 168 pp., printed. Academy of Science, Section of Biological Science, Ichthyological Commission, Moscow, U.S.S.R., 1959.

The Application of Comparative Population Studies to Fisheries Biology--An Exploration, by S. J. Holt, 21 pp., illus., printed. (Reprinted from The Exploitation of Natural Animal Populations, pp. 51-71.) Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

"Elementary Populations of Fishes," by N. V. Lebedev, article, Zoologicheskii Zhurnal, vol. 25, no. 2, 1946, pp. 136-164, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, S.W. 7, England.) Redaktsiia Zoologicheskogo Zhurnala, Podsosenskii per. d. 21, Moscow, B-64, U.S.S.R.

Factors of Population Dynamics of the Commercial Fauna in the Northwest Pacific Ocean, by P. A. Moiseev, OTS 60-51152, 10 pp., printed, 50 cents. (Translated from the Russian, Zoologicheskii Zhurnal, vol. 35, no. 11, 1956, pp. 1601-1607.) Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C., 1962.

Mathematical Analysis of the Population Dynamics of Fish, by V. S. Ivlev, OTS 60-51145, 10 pp., illus., printed, 50 cents. (Translated from the Russian, Vestnik Leningradskogo Universiteta, vol. 2, no. 9, 1959, pp. 119-127.) Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C., 1961.

#### FISHY ODORS:

"Speculations on Fishy Odors and Flavors," by M. E. Stansby, article, Food Technology, vol. 16, no. 4, April 1962, pp. 28-32, illus., printed, \$1.50. The Garrard Press, 510 North Hickory, Champaign, Ill. The author explains that there are many types of fishy odors and flavors that occur in fish that are described as being "fishy." However, these odors may range from those characteristic of individual species of fish through altered odors resulting from such changes as oxidative deterioration of fish oils and release of specific compounds during bacterial or enzymatic degradation. The mechanisms of reactions and the nature of the chemical compounds responsible for fishy odors are still very imperfectly understood, and much more research is needed to clarify the nature and causes of these various fishy odors. The topics discussed in this article are: definition of fishy odor; causes of fishy odor; nitrogen-oil reactions; and experiments made to determine whether more research is warranted on the relationship of reactions between nitrogen and oil and development of fishy odors and flavors.

#### FOOD AND AGRICULTURE ORGANIZATION:

The Food and Agriculture Organization has published reports describing that Agency's activities under the



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Expanded Technical Assistance Program for developing the fisheries of many countries. These reports have not been published on a sales basis, but have been processed only for limited distribution to governments, libraries, and universities. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

Second Report to the Government of India on Fishing Boats, by Peter Gurtner, FAO Report No. 1096, 59 pp., illus., processed, 1959.

#### FOREIGN TRADE:

Licensing and Exchange Controls--Gabon, Chad, Congo, and Central African Republic, WTIS Part 2, Operations Report No. 62-13, 4 pp., printed, 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C., March 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

#### FRANCE:

"Construit aux Chantiers de la Perriere, le Paris-Bretagne premier chalutier francais a peche par l'arriere (The First French Stern Trawler, the "Paris-Bretagne," was Constructed in the Shipwards of Chantiers de la Perriere), article, La Peche Maritime, vol. 41, no. 1009, April 1962, pp. 212-214, illus., printed in French. La Peche Maritime, 190 Boulevard Haussman, Paris, France.

"Le developpement de la peche par l'arriere dependra beaucoup de la possibilite de trouver de nouveaux fonds de peche" (The Development of Stern Trawler Fishing Will Depend Mostly Upon the Possibility of Finding New Fishing Grounds), by G. Lienesch, article, La Peche Maritime, vol. 41, no. 1009, April 1962, pp. 226-230, illus., printed in French. La Peche Maritime, 190 Boulevard Haussman, Paris, France.

Rapport sur la Production de l'Industrie des Peches Maritimes en 1961 (Report on the Production of the Fishing Industry in 1961), 66 pp., illus., processed in French. Comiti Central des Peches Maritimes, Direction des Peches Maritimes, Secretariat de la Marine Marchande, Paris, France.

#### FREEZE-DRYING:

"Freeze-Drying Being Widely Demonstrated to Food Factories," article, Modern Refrigeration, vol. 64, September 1961, pp. 919-920, printed. Refrigeration Press Ltd., Maclaren House, 131 Great Suffolk St., London, SE 1, England

"Present Status of Freeze-Drying Surveyed," article, National Provisioner, vol. 145, October 14, 1961, pp. 12-14, 16, printed. National Provisioner Inc., 15 W. Huron St., Chicago 10, Ill.

#### FREEZING:

How to Freeze Fish, by Nita Orr, Misc. Pamphlet 208, 4 pp., printed. North Carolina Agricultural Extension Service, State College Station, Raleigh, N. C., July 1961. Offers helpful hints on freezing fish in order to keep that "captured freshness," including care of fresh caught fish, and how to successfully package, freeze, and store fish. A few informative questions and answers are also included.

"Influence of Different Lethal Conditions upon Fish Muscle Protein. II--Denaturation of Carp Myosins by Freezing and Frozen Storage," by Masao Migita and Shigeo Otake, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 27, April 1961, pp. 327-338, printed. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

#### FRESH-WATER FISH:

Studies on the Freshwater Fishes of Japan, by Yaichiro Okada, 1,065 pp., illus., printed, \$15. Prefectural University of Mie, Tsu, Mie Prefecture, Japan, 1961. (For sale by Japan Publications Trading Co., Ltd., Central P. O. Box 722, Tokyo, Japan.)

#### FROZEN FISH:

Peixe Congelado--Fabrico-Armazenagem-Distribuicao (Frozen Fish--Processing, Storage, Distribution), by Luis Torres, Notas Mimeografadas do Centro de Biologia Piscatoria No. 22, 27 pp., illus., processed in Portuguese with French summary. Centro de Biologia Piscatoria, Lisbon, Portugal, 1961. A bibliographical review concerning the processing of frozen fish, its freezing chain, and resulting biochemical changes in the product.

#### FROZEN FISHERY PRODUCTS:

"Survival of Bacteria of Public Health Significance in Frozen Sea Foods," by H. Raj and J. Liston, article, Food Technology, vol. 15, October 1961, pp. 429-434, printed. Institute of Food Technologists, The Garrard Press, 510 N. Hickory, Champaign, Ill.

#### FROZEN STORAGE:

"Visual Indicator Measures Maximum Temperature of Frozen Food Loads," article, Food Engineering, vol. 33, October 1961, p. 91, printed. Chilton Company, Chestnut & 56th Sts., Philadelphia 39, Pa.

#### GEAR:

On the Behaviour of Fishes in Relation to Fishing Gear, by H. Mohr, 30 pp., processed. (Translated from the German, Protokolle zur Fischereitechnik, vol. 29, no. 6, 1960, pp. 296-326.) Ministry of Agriculture, Fisheries and Food, Fisheries Laboratory, Lowestoft, Suffolk, England.

A Hydraulic Escalator Shellfish Harvester, J. S. MacPhail, Bulletin No. 128, 28 pp., illus., printed, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961.

#### GERMANY:

"Nahrungsuntersuchungen an Einigen Fischen im Elbe-Mundungsgebiet" (Investigations of the Food of Some Fishes in the Estuary of the Elbe), by Heinrich Kuhl, article, Berichte der Deutschen Wissenschaftlichen Kommission fur Meeresforschung, vol. 16, no. 2, July 1961, pp. 90-104, illus., printed in German with English summary. E. Schweizerbart'sche Verlagsbuchhandlung (Nagele u Obermiller), Stuttgart W., Germany.

"Über die Biologie und Fischereiliche Bedeutung der Lengfische (Molva molva L., Molva byrkelange Walb.) und des Lumb (Brosmius brosme Asc.)" (On the Biology and Economic Importance of the Ling, Blue Ling, and Torsk), by Gatot Rahardjo Joenoes, article, Berichte der Deutschen Wissenschaftlichen Kommission

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fur Meeresforschung, News Series, vol. 16, no. 2, July 1961, pp. 129-160, illus., printed in German with English summary. E. Schweizerbart'sche Verlagsbuchhandlung (Nagele u Obermiller), Stuttgart W., Germany.

#### HALIBUT:

"Proximate Composition of Canadian Atlantic Fish. I--Variation in Composition of Different Sections of the Flesh of Atlantic Halibut (*Hippoglossus hippoglossus*)," by A. Mannan, D. I. Fraser, and W. J. Dyer, article, *Journal of the Fisheries Research Board of Canada*, vol. 18, July 1961, pp. 483-493, printed. Queen's Printer & Controller of Stationery, Ottawa, Canada.

#### HERRING:

"The First Voyage of the Pinro Herring Research Reconnaissance Expedition to the Northwest Atlantic in the Summer of 1960," by I. G. Yudanov, article, *Okeanologiya*, no. 4, 1961, pp. 756-757, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW 7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R.

"Observations on Herring During a Voyage of R. Sub Severyanka," by D. V. Radakov, M. 4715, article, *Biulletin' Okeanograficheskoi Komissi, An SSSR*, no. 6, 1960, pp. 39-40, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R.

#### ICHTHYOLOGY:

*Copeia*, no. 1, 253 pp., illus., printed, \$2.50. American Society of Ichthyologists and Herpetologists, 18111 Nordhoff St., Northridge, Calif., April 11, 1962. Includes, among others, articles on "The Redfin Pickerel, *Esox americanus* in North Carolina," by E. J. Crossman, "Some Phases in the Life History of the Alaskan Blackfish, *Dallia pectoralis*," by Roger F. Blackett, and "Marlin and Swordfish in Oceanic Waters of the Western North Atlantic," by James L. Squire, Jr.

#### INTERNATIONAL COMMISSIONS:

*International Commission for the Northwest Atlantic Fisheries, Annual Proceedings for the Year 1960-61*, vol. 11, 1961, 113 pp., illus., printed. International Commission for the Northwest Atlantic Fisheries, Halifax, N.S., Canada. Presents the Commission's administrative report for the year ending June 30, 1961, including financial statements; a report of the Eleventh Annual Meeting held June 5-10, 1961; summaries of research during 1960, by countries; a compilation of research reports by subareas for 1960; and lists of scientists and laboratories engaged in the Commission's work. Also contains the following selected research paper from the 1960 Annual Meeting: "Continuous Plankton Records--The Distribution of Young *Sebastes marinus* (L.)," by G. T. D. Henderson.

"North Pacific Fur Seal Commission," article, *Trade News*, vol. 14, no. 8, February 1962, pp. 3-6, illus., printed. Department of Fisheries of Canada, Ottawa, Canada. A brief report on the Fifth Annual Meeting of the North Pacific Fur Seal Commission held in Ottawa, Canada, February 7-9, 1962. The

Commission was established in 1957 for the purpose of developing and maintaining the stocks of fur seals of the North Pacific to levels designed to produce the highest sustainable yield. It is composed of representatives from the member countries of Canada, Japan, the U.S.S.R. and the United States.

*Report by the President on the Ninth Meeting of the Permanent Commission Held in Copenhagen, May 1961*, 31 pp., processed in English and French. Office of the Commission, International Fisheries Convention of 1946, Board of Trade Bldgs., Whitehall Gardens, London SW1, England, 1961. Includes report by the President on the Ninth Meeting of the Permanent Commission; list of names and descriptions of delegates, advisers, and observers attending the meeting; agenda; report by the Finance Committee in regard to the financial year ending July 30, 1960, and estimate of payments and receipts for the year ending June 30, 1961; provisional budget for the year ending June 30, 1962; and a press notice issued after the Ninth Meeting.

#### INVESTMENT OPPORTUNITIES:

"Variety of Lending Agencies Assist Overseas Business," by William F. Doering and Robert D. Sethian; "U. S. Guides and Guards Private Investor Abroad," by Eugene M. Braderman; "Investment Office Acts as Capital 'Matchmaker'," by Robert L. Oshins; and "Foreign Credit Insurance Available Through FCIA," by Henry G. Sheehy, articles, *Foreign Commerce*, vol. 67, no. 20, May 14, 1962, pp. 884-890, illus., printed, 30 cents. U. S. Department of Commerce, Washington 25, D. C. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) A series of articles on investment opportunities abroad. Provide a simplified introduction to the United States and international lending agencies, whose basic policies and programs are outlined in table form. Also point out the complications of investing abroad and describe how to obtain current information on business conditions and activities of Governments affecting business anywhere in the world. Information on a new office within the Department of Commerce designed to coordinate businessmen interested in overseas investment and appropriate projects in developing areas is also available. The problem of exporters insurance for the payment of products and the final formulation of such a program are also discussed.

#### ISRAEL:

*Bamidgeh* (Bulletin of Fish Culture in Israel), vol. 13, no. 3/4, December 1961, 44 pp., illus., printed in Hebrew and English. Department of Fisheries and Fish Breeders' Association, Nir-David, D. N., Hakiryia, Israel. Includes the following articles: "Monosex Culture of Carp," by S. Kessler and others; "Fisheries and Fish Culture in Israel in 1960," by S. Sarig; "Study of the Growth of *Tilapia galilaea* (AR-TEDI) in Various Saline Concentrations," by J. Chervinski; and "Transporting Live Carp in Polyethylene Bags," by G. Wohlfarth and others.

*Fishermen's Bulletin*, vol. 4, no. 1 (31), March 1962, 32 pp., illus., printed in Hebrew with some English abstracts. Sea Fisheries Research Station, P. O. Box 699, Haifa, Israel. This bulletin contains, among others, the following articles: "Plankton Research

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and Its Relationship to the Herring Fishery in the North Sea," by B. Kimor (Komarovsky); "Plinius on Fish," by M. Sas; "Fisheries in the Atlantic with Las Palmas as a Base," by M. Kramer; "Fishing Vessel Hiram 1," by M. Ehrlich; "Preliminary Report on an Experiment with a Ring-Net in the Red Sea," by Z. Porath (Fried); "An Experiment with a Nylon Trawl-Net of the Mediterranean Type," by E. Hamburger and I. Herziger; "The Fisheries in Lake Tiberias During 1961," by M. Bar-Ilan; "Drift-Net Fishing in the North Sea," by B. Kimor; and "Norwegian Sardine Fishery," by A. Abrahamsen.

#### KOREA:

Central Fisheries Inspection Station, no. 4293, 223 pp., illus., printed in Korean with table of contents and statistical table headings in English. Ministry of Agriculture and Forestry, Central Fisheries Inspection Station, Seoul, Korea, December 1961. Contains a general review and results of fishery inspection, production, and consumption of manufactured fishery products, and related subjects.

Korea Statistical Yearbook, Ninth Edition, 438 pp., illus., printed in Korean and English. Bureau of Statistics, Economic Planning Board, Seoul, Korea, 1962. Includes, among others, a chapter on fisheries which contains the following sections: exports of marine products by years; number of households engaged in fisheries; fishing boats; shipping boats; processed marine products by kind; fish catches by species; exports of marine products by country; and production of marine products. The latest data shown are for 1961 and comparative data are also included.

#### LABELS:

Read the Label on Foods, Drugs, Devices, Cosmetics, and Household Chemicals, FDA Publication No. 3, Revision No. 3, 37 pp., illus., printed, 20 cents. U. S. Department of Health, Education and Welfare, Food and Drug Administration, Washington 25, D. C., 1961 revision. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) A booklet designed to furnish the consumer with information necessary to properly read labels on foods, drugs, devices, cosmetics, and household chemicals. Includes data on what is required of manufacturers by law, and what the consumer should look for when reading labels of products purchased in order to get his money's worth and guard his family's health.

#### LABOR IN FISHERIES:

Part 784--Provisions of the Fair Labor Standards Act Applicable to Fishing and Operations on Aquatic Products, 48H, 15 pp., printed, 10 cents. Wage and Hour and Public Contracts Division, U. S. Department of Labor, Washington, D. C., 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) It is the purpose of this Part 784 of Chapter V, Title 29 of the Federal Regulations to provide an official statement of the views of the Department of Labor with respect to the application and meaning of those provisions of the Fair Labor Standards Act which govern rights and obligations of employees and employers in the various enterprises engaged in fishing and related activities and in operations on aquatic products.

#### LAWS AND REGULATIONS:

Requirements of the United States Food, Drug, and Cosmetic Act, FDA Publication No. 2, 61 pp., printed, 20 cents. U. S. Department of Health, Education, and Welfare, Food and Drug Administration, Washington 25, D. C., 1961 revision. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Conveys information on the Federal Food, Drug, and Cosmetic Act that will be helpful to foreign manufacturers and exporters and to United States importers who may not be fully familiar with the requirements of this United States law. The Act applies alike to products shipped in interstate commerce and those imported into the country. While this publication was prepared primarily as a guide to foreign manufacturers and shippers, it contains a summary of the major provisions of the law and regulations which should be useful to domestic producers and shippers.

#### LOBSTER POTS:

"The Broadstairs Folding Lobster Pot," article, World Fishing, vol. 11, no. 5, May 1962, p. 31, illus., printed. John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London, NW1, England. Describes the folding lobster pot which has been used in Broadstairs, England, for some 20 years or more. Contains illustrated instructions on how to make a lobster pot of this type.

#### MARINE AIDS:

List of Lights and Other Marine Aids, vol. III--Pacific Coast and Pacific Islands, CG-162, 351 pp., illus., printed, \$2.25. Superintendent of Documents, Government Printing Office, Washington 25, D. C., 1962. Covers lights and other marine aids to navigation maintained by or under authority of the United States Coast Guard on the Pacific Coast of the United States and Pacific Islands. For the convenience of mariners, there are also included the lighted aids, fog signals and radiobeacons maintained by British Columbia which may be used by vessels proceeding directly from the United States to Alaska. This volume covers the Eleventh, Twelfth, Thirteenth, Fourteenth, and Seventeenth Coast Guard Districts.

#### MARKETING:

Building Sales to Established Accounts, by Rowe Meador, Small Marketers Aids No. 79, 4 pp., processed. Small Business Administration, Washington 25, D. C., May 1962. Sometimes owners of small distributing, jobbing, or wholesaling firms miss opportunities for increased sales because they take their established accounts for granted. This leaflet points out to the small marketer that the best way to build sales to established accounts is by helping his customers to increase their sales at a profit. It discusses three kinds of help which small marketers can offer through their salesmen. Salesmen can coach their customers on: (1) sales promotion, (2) stock control, and (3) cost control.

#### MOLLUSKS:

Marine Mollusks from Los Angeles Bay, Gulf of California, by James H. McLean, 27 pp., illus., printed. (Reprinted from Transactions of the San Diego Society of Natural History, vol. 12, no. 28, August 15, 1961, pp. 449-476.) San Diego Society of Natural History, San Diego, Calif.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

Mollusks of the Tropical Eastern Pacific, Panamic-Pacific Pelecypoda, by Axel A. Olsson, 660 pp., illus., printed, \$15. Paleontological Research Institution, 109 Dearborn Pl., Ithaca, N. Y., 1961.

#### MOTHER-OF-PEARL:

"Twenty Fathoms Down for Mother-of-Pearl," by Winston Williams, illustrations by Bates Littlehales, article, National Geographic, vol. 121, no. 4, April 1962, pp. 512-529, illus., printed. National Geographic Society, 16th & M Sts. NW., Washington 6, D. C.

#### NETS:

"On the Preservation Test of Fish Net by Antibiotic Fish Oils" (Preliminary Report), by Yukio Tomiyasu and Masamichi Toyomizu, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 19, August 1953, pp. 474-475, printed in Japanese with English summary. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

Savings Gear Studies on Pacific Coast Flatfish, by E. A. Best, article, Bulletin No. 5, pp. 26-47, printed. Pacific Marine Fisheries Commission, 741 State Office Bldg., 1400 S. W. 5th Ave., Portland 1, Oreg., 1961.

#### NORTHERN RHODESIA AND NYASALAND:

(Joint Fisheries Research Organization) Annual Report, No. 10, 1960, 93 pp., illus., printed, 7s. 6d. (about US\$1.05). Joint Fisheries Research Organization, P. O. Box 48, Samfya, Northern Rhodesia, 1962. Covers activities of the Organization in Northern Rhodesia including research performed on Lakes Mweru and Kariba, and research results on Lake Tanganyika such as hydrology and plankton; sardine fishery; shoaling and vertical migration behavior of the sardines, as recorded by echo-sounding; diurnal and vertical migrations of fish, and effect of predation; the gill-net fishery for the Nile perch; and observations on the growth of juvenile Lates (Nile perch) species. Also describes activities of the Organization in Nyasaland such as research results at Lake Nyasa including hydrology, long-line fishery, gill-net experiments on Labeo mesops (Gunther); length-weight relationships of some Nyasa fishes; and Bagrus meridionalis--variation in catch per unit effort and changes in gonad state. Includes three papers on fisheries of the region and a list of publications by members of the Organization.

#### NORWAY:

"Fiskernes Arsinntekter i 1960" (Fisheries Catch for the Year 1960), article, Fiskets Gang, vol. 48, no. 8, February 22, 1962, pp. 103-115, illus., printed in Norwegian. Fiskeridirektoratet, Radstuplass 10, Bergen, Norway.

#### NUTRITION:

Use of Fish in the Control of Hypercholesteremia and Obesity, by C. M. Harlow and A. R. Morton, FAO International Conference on Fish in Nutrition Paper No. C/III/4, 3 pp., printed. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy, 1961.

#### OCEANOGRAPHY:

"Gradient Measurements of Pressure Fluctuations in a Surface Sea Layer by Means of a Wave Measurer from on Board Ship," by V. F. Tsyplukhin and others, article, Okeanologiya, vol. 1, no. 3, 1961, pp. 522-530, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R.

An Introduction to Physical Oceanography, by William S. von Arx, 431 pp., illus., printed, \$15. Addison-Wesley Publishing Co., Inc., Reading, Mass., January 1962.

Method for Calculation of the Deep Sea Currents from the Surface Current and the Gradient of the Atmospheric Pressure, by A. I. Fel'zenbaum, L. F. Fomin, and V. B. Shtokman, OTS 61-11407, 21 pp., illus., printed, 50 cents. (Translated from the Russian, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, vol. 25, 1957, pp. 153-170.) Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C., 1961.

Oceans, by Irving and Ruth Adler, 48 pp., illus., printed, \$2. John Day, Inc., 210 Madison Ave., New York 16, N. Y. Oceanography at elementary reading level.

ORSOM III--Croisiere "Epi" Oceanographie Physique (Orsom III--Cruise "Epi" Physical Oceanography), by Henri Rotschi, Rapport Scientifique No. 22, 65 pp., illus., processed in French. Office de la Recherche Scientifique, Et Technique Outre-Mer, 24, rue Bayard, Paris 8, France, March 1961.

"The Research Submarine Severyanka," by V. G. Azhazha, M.4715, article, Biulleten' Okeanograficheskoi Komissi, An SSSR, no. 6, 1960, pp. 66-67, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R.

The Sea, by Leonard Engel and the Editors of Life, 190 pp., illus., printed. Time Incorporated, New York, N. Y., 1961. One of Life's Nature Library series. An extremely attractive volume containing a great deal of authentic information on the sea and the creatures which inhabit it, along with many excellent illustrations, most of which are in color. Covers a wide range of subject matter, from the chemistry of the sea to the underwater landscape and the great pyramid of life contained in salt water. Man's relationship to the oceans in the past, the present, and the future is also discussed.

"Severyanka--Results of Research Trips," M.4715, article, Biulleten' Okeanograficheskoi Komissi, An SSSR, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R., 1960.

"Shallow-Water Oceanography," by Willis E. Pequegnat, article, Science, vol. 135, no. 3507, March 16, 1962, pp. 1000-1005, printed. American Association for the Advancement of Science, 1515 Massachusetts Ave. NW., Washington 5, D. C. A report on the First

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

Coastal and Shallow-Water Research Conference held at Johns Hopkins University October 19-21, at Florida State University from October 23-25, and at the University of Southern California from October 27-29, 1961. The chief objectives of the conference were: (1) to obtain some conception of the number of scientists who consider themselves to be engaged in shallow-water oceanographic research and training, (2) to review the nature of the work being carried out; (3) to review methods of sampling, observing, and data handling presently employed; and (4) to serve as a stimulus for future research and training in the field.

"Some Results of Oceanographic Research in the Norwegian and Greenland Seas," by A. P. Alekseev and B. V. Istoshin, article, Soviet Fisheries Investigations in Northern Seas, pp. 23-26, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Soviet Fisheries Investigations in Northern Seas, Moscow, U.S.S.R., 1960.

"Use of the Principles of a Discrete Counter for Transmitting Data of Deep Water Measurements," by A. N. Paramonov, article, Okeanologiya, no. 4, 1961, pp. 710-716, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R.

"Visual Underwater Observations in the Fifth Voyage of Submarine Severyanka," by O. A. Sokolov, article, Okeanologiya, no. 4, 1961, pp. 757-761, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademii Nauk SSSR, Moscow, U.S.S.R.

#### OYSTERS:

Oyster Mortalities in Delaware and Chesapeake Bays, by Lewis Eugene Cronin, 9 pp., processed, Chesapeake Biological Laboratory, Solomons, Md., August 1960.

"Zinc-65 Levels in Oysters in the Thames River (Connecticut)," by B. W. Fitzgerald, J. S. Rankin, and D. M. Skauen, article, Science, vol. 135, no. 3507, March 16, 1962, p. 926, printed. American Association for the Advancement of Science, 1515 Massachusetts Ave. NW., Washington 5, D. C.

#### PAKISTAN:

Investment Factors in Pakistan, WTIS Part 1, Economic Report No. 62-3, 12 pp., illus., printed, single copy 15 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C., January 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Presents information on prospects for United States private investment; policy toward foreign investment; Government controls over industry; screening of investment proposals; taxation; financial facilities; and related subjects.

#### PARASITES:

Parasites and Diseases of Fish, vol. 42 of the Bulletin of the All-Union Scientific Research Institute Fresh-Water Fisheries, OTS 60-51169, 345 pp., illus.,

printed, \$3.50. (Translated from the Russian, Parazity i Bolezni Ryb.) Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C.

#### PERU:

Anuario de Pesca, 1961-1962 (Fishing Yearbook 1961-1962), 235 pp., illus., printed in Spanish with some English summaries, S/.100 (about US\$3.75). Ediciones Sudamericana S. A., Avenida Wilson 911, Lima, Peru. A supplement to the monthly publication Pesca. Contains useful information and statistical and analytical data regarding the fishing industry of Peru. Includes among others, articles on 1961 landings, Peru's fisheries and the National Fisheries Association, fisheries in the Peruvian economy, world market for fish meal, research on marine resources, fish in world nutrition, the future of the anchovy, and an economic study of Peru's fishing industry.

#### PHILIPPINES:

1961 Souvenir Handbook--14th Anniversary, Bureau of Fisheries, 72 pp., illus., printed. Department of Agriculture and Natural Resources, Bureau of Fisheries, Diliman, Quezon City, Philippines. The Bureau of Fisheries came into existence as a distinct bureau under the Department of Agriculture and Natural Resources on July 1, 1947, for the purpose of conservation and development of aquatic resources, developing and expanding fishery industries, and increasing fish production of the Philippine Islands. The Bureau has made considerable progress since its inception in the implementation of its program of activities. The notable accomplishments of the Bureau are described in this handbook. Also presented are several selected articles on different fisheries subjects and fisheries statistics.

#### POLLACK:

"Biology and Fishing Industry of Pollack," by N. V. Mironova, article, Trudy Murmanskoi Biologicheskio Stantsii, no. 3, 1957, pp. 114-129, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Akademia Nauk SSSR, Moscow, U.S.S.R.

#### POLLUTION:

Ecological Effects of Sewage Pollution in Biscayne Bay, Florida: Sediments and the Distribution of Benthic and Fouling Macro-Organisms, by J. Kneeland McNulty, Contribution No. 337, 54 pp., illus., printed. (Reprinted from Bulletin of Marine Science of the Gulf and Caribbean, vol. 11, no. 3, September-September 1961, pp. 394-447.) Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Miami 49, Fla.

#### PORTUGAL:

25 Anos de Assistencia a Gente do Mar (25 Years of Assistance to Fishermen), 59 pp., illus., printed in Portuguese, French, & English. Junta Central das Casas dos Pescadores, Lisbon, Portugal, 1962. A well illustrated pamphlet describing the vast range of achievements of the Portuguese Central Board of Fishermen's Welfare Centers in providing assistance and welfare to the fishermen and their families over the past 25 years.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

#### POTOMAC RIVER

Research on the Tidal Potomac, by William J. Hargis, Jr., Contribution No. 107, 7 pp., printed, 1961. (Reprinted from "Water Management in the Potomac Estuary," article, Interstate Commission on the Potomac River Basin, 1961, pp. 38-44. Virginia Institute of Marine Science, Gloucester Point, Va.

#### PREDATORS:

The Pilchard of South West Africa (*Sardinops ocellata*) and the Maasbanker (*Trachurus trachurus*)--Bird Predators, 1957-1958, by J. P. Mathews, Investigational Report No. 3, 35 pp., illus., printed. Administration of South West Africa, Marine Research Laboratory, Walvis Bay, South West Africa, 1961. A study of the feeding habits of three important fish-eating birds (Cape Gannet, Cape Cormorant, and Cape Penguin) and their possible effect on the pilchard population off the coast of South West Africa.

#### PRESERVATION:

"Antibiotic Ice in the Preservation of Some Fisheries Products," by C. Mateu and G. Varela, article, Anales de Bromatologia, vol. 12, 1960, pp. 271-333, printed. Sociedad Espanola de Bromatologia, Ciudad Universitaria (Edificio Facultad de Farmacia), Madrid, Spain.

"The Use of Biomycin for the Preservation of Cooled Fish Fillets" by T. N. Sakharova, Chemical Abstracts, vol. 55, April 17, 1961, 7693d, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C.

#### QUALITY:

"Quality of Fish Reaching the Consumer," article, Torry Research Station Annual Report, 1960, pp. 14-15, printed. Torry Research Station, Aberdeen, Scotland, 1961.

#### RADIOACTIVITY:

"Radioactive Contamination of Foods by Atomic or Hydrogen Bomb Explosion. X--Radio-Contamination of Fish Livers in 1959," by Kakuma Nagasawa, Katsuaki Kametani, and Yasumasa Kido, Chemical Abstracts, vol. 55, December 11, 1961, 26300b, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C.

#### REFRIGERATION:

Refrigeration Engineering in the Fish Industry--A Source Book of Soviet Literature, 1922-1956, by D. N. Prilutskii, OTS 61-11414, 43 pp., processed, 50 cents. (Translated from the Russian, Bibliograficheskii Spravochnik--Kholodil'naya Tekhnika v Rybnom Khoz-yaistve, 1922-1956, Moskva 1957.) Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C. A bibliographic index of articles on refrigeration engineering which appear in various Russian journals. Presented in chronological order and in three parts: technical operation and design of cold storage plants; refrigeration processing of fish and fish products, refrigeration transport; and the technique of production of low temperatures.

#### SALMON:

"Breeding Salmon in Fish Farms Proved Possible in Norway," by John J. Murdoch, article, Canadian Fisherman, vol. 49, January 1962, pp. 8-10, printed. Canadian Fisherman, Gardenvale, Quebec, Canada.

"Commercial Landings of Atlantic Salmon 1910 Through 1959," by C. J. Kerswill, article, Atlantic Salmon Journal, no. 3, 1960, pp. 5-6, printed. The Atlantic Salmon Association, Inc., 1559 McGregor St., Montreal 25, Canada.

"A Consideration in Regard Fishing Effects on the Salmon Drift Net about the Appearance of Catches to the Times of Laying Out or Hauling Up of the Net," by Atusi Koike, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 27, May 1961, pp. 382-388. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

Forsok over Vissa Orsaker till Dodlighet hos Laxrom (Experiments on the Mortality of Salmon Roe), by Arne Lindroth, 4 pp., illus., processed in Swedish. (Reprinted from Vandringsfiskutredningen Meddelande, Report No. 5.) Sartryck ur Ostkusten, Hudiksvalle, Sweden, 1959.

Laxfisket i Ostersjoomradet under ar 1959 (Salmon in the Baltic Sea and Vicinity During 1959), by Gunnar Alm, 4 pp., printed in Swedish. (Reprinted from Vandringsfiskutredningen Meddelande, Report No. 7.) Sartryck ur Ostkusten, Hudiksvalle, Sweden, September 1960.

"Muscle Proteins of Pacific Salmon (*Oncorhynchus*). I--A Note on the Separation of Muscle Proteins Soluble in Low Ionic Strength Salt Solutions," by H. Tsuyuki and Eve Roberts, article, Journal of the Fisheries Research Board of Canada, vol. 18, July 1961, pp. 637-640, printed. Queen's Printer & Controller of Stationery, Ottawa, Canada.

Orsaker till Variation i Overlevnad och Tillvaxt i 200 Tragbesattningar av Ensomrig lax och Oring (Causes of the Variation in Life Expectancy and of the Offsprings During 200 Different Seedings with Salmon and Trout), by Arne Lindroth, 23 pp., illus., processed in Swedish. (Reprinted from Vandringsfiskutredningen Meddelande, Report No. 6.) Sartryck ur Ostkusten, Hudiksvalle, Sweden, 1959.

"On the Weight Distribution of the Fishes Caught by the Salmon Drift Nets in the Region of the Northern Pacific Ocean. I--Fundamental Study on the Weight Distribution of Rainbow Trout Caught by the Gill Nets in the Outdoor Pool; II--The Weight Distribution of Individual Fish in the Region of the Northern Pacific Ocean," by Atusi Koike, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 27, May 1961, pp. 372-381, printed. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

#### SANITATION:

The Shellfish Sanitation Program of the Public Health Service, Public Health Service Publication No. 906, 4 pp., printed, 5 cents. U. S. Department of Health, Education, and Welfare, Washington, D. C., 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Contains information on how shellfish become contaminated, initial efforts at sanitary control, the shellfish sanitation program today, and shellfish toxins. Also describes the individual responsibilities of industry, state, and the Public Health Service in a joint cooperative program for the sanitary control of shellfish.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

**SARDINES:**

"Sardine-Like Packs with Sprats from the Caspian Sea," by M. V. Kalantarova, M. V. Maksimova, and J. K. Rogova, article, Trudy Tekhnologia Rybnikh Produktov, vol. 60, 1959, pp. 81-93, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U.S.S.R.

**SEAWEEDS:**

"Chemical Studies on the Green Seaweed. III--On the Inorganic Components of Enteromorpha compressa, Ulva pertusa, and Their Mucilages," by Kiyō Mita, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 27, March 1961, pp. 239-242, printed. Japanese Society of Scientific Fisheries, 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

**SEINES:**

"Certain Elements of Optimal Method of Operation in Fishing with Danish Seine," by A. V. Lestev, article, Rybnoe Khoziaistvo, vol. 34, 1958, pp. 37-46, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U.S.S.R.

**SHARKS:**

"What You Should Know About Sharks (Part 1)," by Ednard Waldo, article, Louisiana Conservationist, vol. 14, nos. 5 & 6, May-June 1962, illus., printed. Louisiana Wild Life & Fisheries Commission, Wild Life & Fisheries Bldg., 400 Royal St., New Orleans, La. This the first part of an article on sharks. Describes a few of the estimated 300 species of sharks recognized in the world today, including, among other facts, their appearance, location, and feeding habits. Also contains a topographical diagram of a "typical" shark, illustrating terms used in the text.

**SHRIMP:**

"How Much 'Meat' is Found in Frozen Shrimp Packages?," by J. T. R. Nickerson, J. J. Licciardello, and M. M. Joselow, article, Frosted Food Field, vol. 34, no. 4, April 1962, pp. 31, 36, illus., printed. In view of the strong interest in the actual amount of shrimp meat offered in consumer packages of frozen shrimp, a survey was undertaken during the spring and summer of 1960. Five types of frozen shrimp were examined: raw, breaded; cooked, breaded; raw, shell on; raw, peeled; and cooked, peeled. The results of the survey are disclosed in this article, including comparative tables showing the shrimp meat content of the various types of shrimp tested.

"Prawn Farming Shows Promise," article, World Fishing, vol. 11, no. 4, April 1962, pp. 59-60, illus., printed. John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London, NW1, England. Three Australians are at present making the world's first attempt to mass-breed prawns in captivity. This article discusses their experimental work and their reasons for believing that large-scale prawn farming on a sound economic basis is possible along a vast stretch of the eastern Australian coast. Although the effort is still in an experimental stage, the indications are that it will be successful, according to the article.

Shrimp Survey in the Newfoundland Fishing Area, 1957 and 1958, by H. J. Squires, Bulletin No. 129, 35 pp., illus., printed, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961.

Contains a detailed account of equipment and methods of fishing used in a shrimp survey, and descriptions of other types of nets used elsewhere. Results of explorations by area are given, including the Gulf of St. Lawrence, southwest coast, and east and northern coasts of Newfoundland. Also includes a note on the preparation of shrimp for market.

**SMALL BUSINESS MANAGEMENT:**

Providing Management Talent for the Small Business, by Leon C. Megginson, Management Research Summary, 4 pp., processed. Small Business Administration, Washington 25, D. C., October 1961. A summary of a report on a study of small businesses in Louisiana and several other Southern States. Management is defined as the function by which the objectives of an organization are attained through cooperative action. According to the report a management selection program should include (1) systematic recruitment of potential managers, (2) preliminary screening of candidates on the basis of past records and preliminary interviews, (3) further probing of their abilities through tests and references, (4) a series of intensive interviews, and (5) final selection based on all the data plus the personal judgment of the executive making the decision. The most satisfactory plans for developing executives include training both inside and outside the company.

Small Business Problem Studies, by John B. Kline and John T. Douth, Management Research Studies, 4 pp., processed. Small Business Administration, Washington 25, D. C., April 1962. The research reported in this summary consists of case studies of small manufacturing companies and small retail, wholesale, and service establishments in the Rocky Mountain area. In the original report, each case is presented in a narrative style and covers a particular problem confronting the owner-manager or management group. The narratives in many cases are documented by various exhibits which support the situation; for example, organization charts, cost schedules, sales records and charts, personnel schedules, maps, job descriptions, balance sheets, income statements, and inventory records.

**SMOKED FISH:**

"The Phenol Composition in Smoke-Cured Fish," by A. I. Yuditskaya and T. M. Lebedeva, 10 pp., illus., processed. (Translated from the Russian, Rybnoe Khoziaistvo, vol. 9, 1960, pp. 69-73.) U. S. Department of Commerce, Office of Technical Services, Washington 25, D. C.

**SPAIN:**

"La Sardina, los Tunidos, y la Anchoa en 1961" (The Sardine, the Tuna, and the Anchovy in 1961), by Mareiro, article, Industria Conservera, vol. 28, no. 272, February 1962, pp. 29-30, printed in Spanish. Union de Fabricantes de Conservas de Galicia, Calle Marques de Valladares, 41, Vigo, Spain.

**SPINY LOBSTERS:**

"This Market is Worth £ A4.8 Million," by D. J. Gates, article, Fishing News International, vol. 1, no. 3, April 1962, pp. 57-58, 61-62, illus., printed, 6s. 6d. (about 90 U. S. cents). Arthur J. Heighway Publications, Ltd., Ludgate House, 110 Fleet St., London, E.C. 4, England. The first of two articles describing

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the rapidly growing crayfish (spiny lobster) industry of Australia. Aspects of crayfish production are outlined. Includes production figures, vessels, methods of processing at sea, handling and processing, export regulations, and refrigeration equipment.

#### STERN RAMP:

"The Case for the Stern Ramp," article, *World Fishing*, vol. 10, October 1961, pp. 28-29, 35, printed. John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London, NW1, England.

#### SUNFISH:

"Occurrence of Early Developmental Stages of the Oblong Ocean Sunfish, *Ranzania laevis* (Pennant) in the Central North Pacific," by Kenneth Sherman, article, *Copeia*, no. 4, 1961, pp. 467-470. American Society of Ichthyologists and Herpetologists, 18111 Nordhoff St., Northridge, Calif.

#### SWEDEN:

Gill Disease, en Sjukdom som Fiskodlingsanstalterna bor Vara Uppmarksamma pa (Gill Disease, a Sickness which the Fish Hatcheries Must Watch Closely), by Olle Ljungberg, 5 pp., processed in Swedish. (Reprinted from *Vandringsfiskutredningen Meddelande*, Report No. 4.) Sartryck ur Ostkusten, Hudiksvalle, Sweden, 1960.

Nagra Synpunkter pa Vardering av Skada pa Fisket Genom Sjoregleringar (Some Viewpoints on the Evaluation of the Injury to the Fishing Industry Through Sea Regulations), by Lennart Hannerz, 17 pp., processed in Swedish. (Reprinted from *Vandringsfiskutredningen Meddelande*, No. 1.) Sartryck ur Ostkusten, Hudiksvalle, Sweden, 1959.

#### SYRIA:

Import Tariff System of Syria, WTIS Part 2, Operations Report No. 62-14, 2 pp., printed, single copy 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C., March 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Presents information on units of currency, weights and measures; bases of specific and ad valorem duties; method of payment of duty; custom surtaxes; sales and other internal taxes; preferential duties; consular documents and fees; trade restrictions; and other special regulations.

#### TARIFF AND TRADE:

General Agreement on Tariffs and Trade (1960-61 Tariff Conference--Geneva, Switzerland). Volume I--Negotiations with the EEC Under Article XXIV: 6 of GATT. Reciprocal Negotiations with the EEC, Austria, Canada, Denmark, Finland, Israel, New Zealand, Norway, Pakistan, Peru, Portugal, Sweden, Switzerland, and the United Kingdom, Department of State Publication 7349, Commercial Policy Series 186, 280 pp., illus., printed, \$1.25. Department of State, Washington 25, D. C., March 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) The United States has completed the larger part of its negotiations in the bilateral phase of the 1960-61 Tariff Conference held under the auspices of the Contracting Parties to the General Agreement on Tariffs and Trade (GATT), in Geneva, Switzerland. This

report includes the results of reciprocal negotiations with the European Economic Community (EEC) and other member countries, and the results of renegotiations with the EEC.

Volume II--Compensatory Renegotiations, Department of State Publication 7350, Commercial Policy Series 187, 110 pp., illus., printed, 35 cents. During the Tariff Conference the United States negotiated with a number of contracting parties making changes in their schedules of concessions. The results of those negotiations which have been completed are included in this report.

#### TIDE TABLES:

Tide Tables--West Coast, North and South America (including the Hawaiian Islands), 1963, 224 pp., printed, \$1. Coast and Geodetic Survey, U. S. Department of Commerce, Washington 25, D. C., 1962. High and low water predictions.

#### TRADE EXPANSION ACT:

Questions and Answers on the New Trade Expansion Act, Department of State Publication 7364, Commercial Policy Series 188, 44 pp., illus., printed. Department of State, Washington 25, D. C., April 1962. On January 24, 1962, President Kennedy proposed to the Congress a new Trade Expansion Act to replace the Trade Agreements Act of 1934, which is scheduled to expire June 30, 1962. The new act, the President explained, is designed to meet the needs of the U. S. in the changed trading world of the 1960's. This publication has been prepared to answer numerous questions that have arisen during the wide and necessary public discussion of the proposed legislation.

#### TRADE LISTS:

The U. S. Department of Commerce has published the following mimeographed trade lists. Copies may be obtained by firms in the United States from the Commercial Intelligence Division, Office of Trade Promotion, Bureau of Foreign Commerce, U. S. Department of Commerce, Washington 25, D. C., at \$1 a copy.

Canneries--Mexico, 13 pp. (April 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 shellfish and frozen fish. Also contains basic trade and industry data.

Boat and Ship Builders, Repairers and Chandlers--Ecuador, 3 pp. (April 1962). Lists the names, addresses and size of boat builders, and types of vessels (including fishing craft) built by each firm.

#### TRANSPORTATION:

"Air-Ship Fresh Fish Cross-Country," article, *Food Processing*, vol. 22, October 1961, pp. 134, 136, printed. Putnam Publishing Co., 3 E. Delaware Pl., Chicago 2, Ill.

#### TRAWL BOARDS:

"Some Experiments with Trawl Boards," by Dick Brett, article, *World Fishing*, vol. 11, no. 5, May 1962, pp. 43-44, 47, illus., printed. John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London, NW1, England. Discusses various experiments made by the author in an attempt to improve the traditional type



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trawl board. Some of his troubles, not only in designing boards, but in getting them accepted by local fishermen, are described in this article.

#### TRAWLERS:

"The Most Economic Steaming Speed of Trawlers," by U. Wegner, article, Schiffstechnik, vol. 37, 1960, p. 114, printed. C. Schroedter und Co., 10 Stubbenhuk, Hamburg II, Germany.

#### TRAWLING:

Deep Sea Trawling and Wing Trawling, 106 pp., printed, 21s. (about US\$2.95). The Gourcock Ropework Co., Ltd., Port Glasgow, Scotland, 1961.

#### TRAWL NETS:

"The Design and Operation of the Wing Trawl," by Alan Glanville, article, World Fishing, vol. 10, September 1961, pp. 23-25, printed. John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London, NW1, England.

"French Trawl Can Improve Catches," article, World Fishing, vol. 11, no. 5, May 1962, pp. 32-33, illus., printed. John Trundell (Publishers) Ltd., St. Richard's House, Eversholt St., London, NW1, England. Summary of a comprehensive and informative report on the trials carried out with the Boulogne white fish trawl in two Aberdeen trawlers. Included are diagrams showing various parts of the trawl.

#### TROPICAL FISHERIES:

Tropical Inland Fisheries, by C. F. Hickling, Tropical Agriculture Series, 371 pp., illus., printed, 42s. 6d. (about US\$6.00). Longmans Green & Co., Ltd., 6-7 Clifford St., London W1, England.

#### TUNA:

Le Thon Patudo, PARATHUNNUS OBESUS (Lowe) et sa Peche (The Big-Eyed Tuna and Its Fishery), by Fernando Frade, Studies, Investigations and Documents No. 69, 74 pp., illus., printed in Portuguese with French and English summaries, 25\$00 (87 U.S. cents). Junta de Investigacoes do Ultramar, Rua da Junqueira, 86, Lisbon, Portugal, 1960.

"Tuna Harvest," by Gerald V. Howard, article, Fishing News International, vol. 1, no. 3, April 1962, pp. 22-23, 25-26, 29, illus., printed, 6s. 6d. (about 90 U.S. cents). Arthur J. Heighway Publications, Ltd., Ludgate House, 110 Fleet St., London, EC4, England. Describes the tuna industry around the world, including characteristics of various species of tuna, amount of landings, fishing methods, and condition of resources. Also contains a map showing world-wide distribution of the albacore tuna.

#### UNITED STATES GOVERNMENT:

General Regulations for the Enforcement of the Federal Food, Drug, and Cosmetic Act, Title 21, Part 1, 28 pp., printed, 25 cents. U. S. Department of Health, Education, and Welfare, Food and Drug Administration, Washington, D. C., 1961. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Presents provisions of the regulations promulgated under the Federal Food, Drug, and Cosmetic Act as amended.

#### U.S.S.R.:

Collection of the Literature on Fisheries Economy of the Southern Basins of the U.S.S.R. from 1918 to 1953, by N. S. Romanov, 296 pp., printed. Academy of Science, Section of Biological Science, Ichthyological Commission, Moscow, U.S.S.R., 1955.

Collection of the Literature on Fisheries of the Far East U.S.S.R. from 1923 to 1956, by N. S. Romanov, 291 pp., printed. Academy of Science, Section of Biological Sciences, Ichthyological Commission, Moscow, U.S.S.R.

On Nature of Sounds Produced by Certain Black Sea Fish, by V. R. Protasov and Ye. V. Romanenko, JPRS 11738, 6 pp., printed. Joint Publications Research Service, Washington, D. C. (Photocopies for sale by Photoduplication Service, Library of Congress, Washington 25, D. C.--price upon application.) (OTS:62-15354, Xerox reproduction, \$1.10, also for sale by the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C.)

"Russia: Advanced Ocean Fishing Country," by J. L. Kask, article, Fishing News International, vol. 1, no. 3, April 1962, pp. 9-13, illus., printed, 6s. 6d. (about 90 U.S. cents). Arthur J. Heighway Publications, Ltd., Ludgate House, 110 Fleet St., London, EC4, England. Describes the planning and organization that lies behind the rapid development of the Russian fishing industry which, in a very few years, transformed a non-seafaring nation into one of the most advanced ocean fishing countries in the world. The author's on-the-spot look at some of the fishing ports as well as demonstrations of fishing on the Black and Caspian Seas and on the Volga River, complemented by seminar reviews of all phases of fisheries, planning, development, and research in the U.S.S.R. by authorities in those fields forms the background and source of the information on which this report is based. In conclusion, the author states that: "Judging from past performance, present activities and stated policy, it appears safe to predict that the U.S.S.R. will continue to expand and intensify her ocean fishing in all international waters. She seems to be tooling up scientifically and operationally to do a thorough job."

"Severyanka in the Schools of Herring and Cod," by M. Ryzhenko, article, Rybovodstvo I Rybolovstvo, vol. 4, 1961, pp. 29-30, printed in Russian. (Translation available on loan only to approved borrowers from Keeper, Science Museum Library, London, SW7, England.) Ministerstvo sel'skogo khoziaistva SSSR, Moscow, U.S.S.R.

"Sovjet har 100,000 fiskefartyg" (Soviets Have 100,000 Fishing Vessels), by Hans Forshell, article, Svenska Vastkustfiskaren, vol. 32, no. 7, April 10, 1962, p. 149, illus., printed in Swedish. Svenska Vastkustfiskarnas Central-forbund, Goteborg, Sweden.

#### VESSELS:

Research Vessel Design, 618 pp., illus., processed. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy, 1961. Reprints of papers and discussions presented to the FAO Research Vessel Forum in Tokyo Sep-

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tember 18-30, 1961. The purpose of the meeting was to exchange information on all important technical aspects of the design and operation of research vessels, particularly those for fishery research, and to provide such experts as oceanographers, biologists and naval architects who work, or may have occasion to work, in this field an opportunity to discuss these problems.

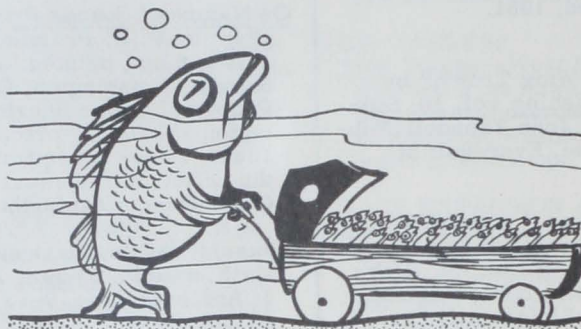
#### VITAMIN D:

"Determination of Vitamin D in Fish and Fish Products by Chromatography with Japanese Acid Clay,"

by Hideo Higashi and others, Chemical Abstracts, vol. 55, November 13, 1961, 23865g, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C.

#### WORLD TRADE:

Import Tariff System of Mexico, Operations Report No. 62-16, WTIS Part 2, 2 pp., printed, 10 cents. Bureau of International Programs, U. S. Department of Commerce, Washington, D. C., April 1962. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)



Prolific fish—such as carp—often deposit as many as 150,000 eggs annually.

#### HADDOCK

The mating call of male haddock, said to sound somewhat like the noise made by an outboard motor, has been tape-recorded by marine biologist Per Hognestad at Tromsø Aquarium, Tromsø, Norway. (News of Norway, May 3, 1962, Norwegian Information Service.)

Editorial Assistant--Ruth V. Keefe

Compositors--Jean Zalevsky, Alma Greene, Helen Paretta, and Raie Carron

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