

FISH AND WILDLIFE SERVICE **PUBLICATIONS**

THESE PROCESSED PUBLICATIONS ARE AVAILABLE FREE FROM THE OFFICE OF INFORMATION, U. S. FISH AND WILDLIFE SERVICE, WASHINGTON, D. C. 20240. TYPES OF PUBLICATIONS ARE DESIGNATED AS FOLLOWS:

 $\ensuremath{\mathsf{CFS}}$ - current fishery statistics of the united states. FL $\ensuremath{\mathsf{-}}$ Fishery leaflets.

PL - FISHERY LEAFLETS.
MNL - REPRINTS OF REPORTS ON FOREIGN FISHERIES.
SEP.- SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.
SL - STATISTICAL LISTS OF DEALERS IN AND PRODUCERS OF FISHERY PRODUCTS AND BYPRODUCTS.
SSR.- FISH. - SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).

Number Title

CFS-3214 - Shrimp Landings, November 1962, 8 pp. CFS-3258 - Massachusetts Landings, March 1963, 7 pp.

CFS-3259 - Massachusetts Landings, April 1963, 7 pp. CFS-3309 - Texas Landings, 1962 Annual Summary, 6 pp.

CFS-3320 - Frozen Fishery Products, September 1963, 8 pp.

CFS-3325 - Great Lakes Fisheries, 1962 Annual Summary, 9 pp.

CFS-3332 - Fish Sticks and Fish Portions, July-September 1963, 2 pp.

CFS-3333 - Maryland Landings, August 1963, 4 pp. CFS-3334 - Virginia Landings, August 1963, 4 pp.

CFS-3335 - Louisiana Landings, August 1963, 3 pp. CFS-3336 - Georgia Landings, September 1963, 3 pp.

CFS-3337 - North Carolina Landings, September 1963, 4 pp.

CFS-3338 - Michigan Landings, July 1963, 3 pp.

CFS-3339 - Mississippi Landings, August 1963, 3 pp.

CFS-3341 - South Carolina Landings, September 1963, 3 pp.

CFS-3342 - Texas Landings, April 1963, 3 pp. CFS-3343 - Texas Landings, May 1963, 3 pp.

CFS-3347 - Rhode Island Landings, August 1963, 3 pp. CFS-3348 - Maine Landings, August 1963, 4 pp.

CFS-3349 - Fish Meal and Oil, September 1963, 2 pp.

CFS-3350 - Florida Landings, September 1963, 8 pp. CFS-3351 - Michigan Landings, August 1963, 3 pp.

CFS-3353 - Chesapeake Fisheries, 1962 Annual Summary, 7 pp.

CFS-3354 - Maryland Landings, September 1963, 4 pp.

CFS-3355 - Ohio Landings, August 1963, 3 pp.

CFS-3359 - Alabama Landings, August 1963, 4 pp. CFS-3364 - Shrimp Landings, July 1963, 7 pp.

Wholesale Dealers in Fishery Products (Mississippi River and Tributaries), 1962 (Revised): SL-32 - Minnesota, 2 pp.

SL-36 - Iowa, 2 pp.

Sep. No. 698 - Mechanizing the Blue Crab Industry -Part III - Strengthening the Industry's Economic Position.

Sep. No. 699 - Foreign Fisheries Briefs.

FL-455 - Blue Sac Disease of Fish (Also Known as Dropsy, Yolk Sac Disease and Hydrocoele Embry onalis), by Ken Wolf, 5 pp., illus., revised May 1963.

FL-553 - Delicatessen Fish Products, by Norman D. Jarvis, 7 pp., illus., printed, August 1963. Presents recipes for the preparation of large quantities of fish salads, fish and crab cakes, marinated salmon, and other fish dishes.

FL-556 - Saltonstall-Kennedy Act, as Amended (an excerpt from Title 15 of the United States Code), 4 pp., September 1963. Contains Sec. 713c-3. Provides for the promotion of the free flow of domesticallyproduced fishery products.

FL-557 - Fish and Wildlife Act of 1956, as Amended (an excerpt from Title 16 of the United States Code), 10 pp., September 1963.

SSR-Fish. No. 414 - Zooplankton Volumes Off the Pacific Coast, 1959, by James R. Thrailkill, 79 pp., illus., processed, April 1963.

SSR-Fish. No. 447 - The Spiny Dogfish (Squalus acanthias) in the Northeastern Pacific, by Dayton L. Alverson and Maurice E. Stansby, 28 pp., illus., processed, July 1963.

SSR-Fish. No. 465 - Stream Catalog of Southeastern Alaska, Regulatory Districts Nos. 3 and 4, edited by Russell F. Orrell, Carl Rosier, and Lyle R. Simpson, 239 pp., illus., processed, August 1963.

Index of Fishery Biological Papers by U.S. Fish and Wildlife Service Authors Appearing in Nongovernmental Publications, 1940-56, by Lola T. Dees, Circular 151, 140 pp., illus., 1963.

Let's Get Hot with Cool Tuna, Load Up on These Hot Selling Tips for Cool Cash Returns, Special Fisheries Marketing Bulletin, 2 pp., illus., 1963.

Quick Cool Tuna for Long Hot Summer, Take It Easy with Tuna, Special Fisheries Marketing Bulletin, 2 pp., illus., 1963.

THE FOLLOWING MARKET NEWS LEAFLETS ARE AVAILABLE FROM THE SHERPY MARKET NEWS SERVICE, U. S. BUREAU OF COMMERCIAL FISHER-5, WYATT BLDG., SUITE 611, 777 14TH ST. NW., WASHINGTON, D. C. 1075.

Title

L-10 - Swedish Fisheries, 1962/63, 13 pp.

L-12 - Major Developments in Peru's Fishing Industry, 1962/63, 19 pp.

IL-13 - India's Fishing Industry, 1962, 23 pp.
IL-85 - Iran's Fishing Industry, 1963, 9 pp.
IL-86 - Hong Kong Fishing Industry, 1962/63, 22 pp.

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

Saltimore) Monthly Summary--Fishery Products, September 1963, 8 pp. (Market News Service, U.S. Fish and Wildlife Service, 103 S. Gay St., Baltimore, Md. 21202.) Receipts of fresh- and salt-water fish and shellfish at Baltimore by species and by states and provinces; total receipts by species and comparisons with previous periods; and wholesale prices for fresh fishery products on the Baltimore market; for the month indicated.

alifornia Fishery Market News Monthly Summary, Part I - Fishery Products Production and Market Data, October and November 1963, 18 pp. each. (Market News Service, U.S. Fish and Wildlife Service, Post Office Bldg., San Pedro, Calif. 90731.) 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; for the months indicated.

California Fishery Market News Monthly Summary Part II - Fishing Information, November 1963, 8 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.

hicago) Monthly Summary of Chicago's Wholesale Market Fresh and Frozen Fishery Products Receipts, Prices, and Trends, October 1963, 13 pp. (Market News Service, U.S. Fish and Wildlife Service, U.S. Customs House, 610 S. Canal St., Rm. 1014, Chicago, Ill. 60607.) 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.

Gulf of Mexico Monthly Landings, Production and Shipments of Fishery Products, October 1963, 8 pp. (Market News Service, U.S. Fish and Wildlife Service, Rm. 609, 600 South St., New Orleans, La. 70130.) 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; Gulf menhaden landings and production of meal, solubles, and oil; and sponge sales; for the month indicated.

New England Fisheries -- Monthly Summary, November 1963, 21 pp. (Market News Service, U.S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston, Mass. 02210.) Review of the principal New England fishery ports. Presents data on fishery landings by ports and species; industrial-fish landings and exvessel 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--October 1963, 19 pp. (Market News Service, U.S. Fish and Wildlife Service, 155 John St., New York, N. Y. 10038.) 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; for the month indicated.

Pacific Game Fishing Atlas, by James L. Squire, Circular 174, 28 pp., illus., printed, 1963. (Tiburon Marine Laboratory, U.S. Bureau of Sport Fisheries and Wildlife, P.O. Box 98, Tiburon, Calif. 94920.) A synoptic presentation of the most important marine fishing areas in California, Oregon, Washington, Alaska, and Hawaii. In addition to locating areas for the different kinds of game fish, the locations of surf fishing areas, kelp beds, artificial reefs, fishing piers and barges, ramps, and charter boat and rental skiffs are pinpointed.

Halibut and Troll Salmon Landings, and Ex-Vessel Prices for Seattle, Alaska Ports and British Columbia, 1963-1962, 35 pp., December 1963. (Market News Service, U.S. Fish and Wildlife Service, 706 Federal Office Bldg., Seattle, Wash. 98104.) Gives landings and ex-vessel prices of troll salmon and halibut at leading United States ports of the Pacific Coast; ex-vessel halibut prices and landings at leading British Columbia ports; United States and Canadian Pacific Coast halibut landings, 1936-1963; Seattle season averages of ex-vessel halibut prices, 1954-1963; and troll salmon landings and receipts at Seattle and Alaska ports, with comparative data.

(Seattle) Washington and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, November 1963, 8 pp. (Market News Service, U.S. Fish and Wildlife Service, 706 Federal Office Bldg., 909 First Ave., Seattle, Wash. 98104.) 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 vessels as 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.

MISCELLANEOUS PUBLICATIONS

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILD-LIFE 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.

ADDITIVES

Specifications for Identity and Purity of Food Additives. Vol. 1--Antimicrobial Preservatives and Antioxidants, printed, 1962. Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

ALASKA:

1962 Alaska Commercial Fisheries Catch and Production Statistics, by P. E. Chitwood, Statistical Leaflet No. 5, 19 pp., printed, 1963. Alaska Department of Fish and Game, Subport Bldg., Juneau, Alaska.

ALGAE:

"Antibiotic Activity of Some Marine Algae of Puerto Rico," by P. R. Burkholder, L. M. Burkholder, and L. R. Almondovar, article, Botanica Marina, vol. 2, no. 1/2, 1960, pp. 149-156, printed in English with German and French summaries. Studiengesellschaft zur Erforschung von Meeresalgen, e.V. Hamburg, Germany.

"How to Fight Algae," by William S. Service, Jr., article, Aquarium Journal, vol. XXXIV, no. 9, September 1963, pp. 387-388, 390, printed. San Francisco Aquarium Society, Inc., Steinhart Aquarium, Golden Gate Park, San Francisco 18, Calif.

"The Protein Quality, Digestibility, and Composition of Algae, Chlorella 71105," by Joseph A. Lubitz, article, Journal of Food Science, vol. 28, March-April 1963, pp. 229-232, printed. Institute of Food Technologists, 510-522 N. Hickory St., Champaign, Ill.

ANCHOVY:

La Pesca de la Anchoveta--Estadistica de Pesca y
Esfuerzo en Abril, Mayo y Junio de 1962 (The Anchovy Fishery--Statistics of the Fishery and Fishing
Effort in April, May, and June 1962), by W. F.
Doucet, G. Saetersdal, and I. Vasquez A., Report
No. 5, 11 pp., illus., processed in Spanish, 1962.
Library, Instituto de Investigacion de los Recursos
Marinos, P. O. Box 3734, Lima, Peru.

La Pesca de la Anchoveta -- Estadistica de Pesca y Esfuerzo en Enero, Febrero y Marzo de 1962 (The Anchovy Fishery -- Statistics of the Fishery and Fishing Effort in January, February, and March 1962), by W. F. Doucet, G. Saetersdal, and I. Vasquez A., Report No. 2, 11 pp., illus., processed in Spanish, 1962. Library, Instituto de Investigacion de los Recursos Marinos, P. O. Box 3734, Lima, Peru.

La Pesca de la Anchoveta--Estadistica de Pesca y Esfuerzo en Octubre, Noviembre y Diciembre de 1961 (The Anchovy Fishery--Statistics of the Fishery and Fishing Effort in October, November, December 1961), by W. F. Doucet, G. Saetersdal, and I. Vasquez A., Report No. 1, 14 pp., illus., proccessed in Spanish, 1962. Library, Instituto de Investigacion de los Recursos Marinos, P. O. Box 3734, Lima, Peru.

Synopsis of Biological Data on Anchovy, ENGRAULIS ENCRASICOLUS (Linnaeus), 1758 (Mediterranean an Adjacent Seas), by N. Demir, FAO Fisheries Synopsis No. 26, 43 pp., illus., processed, February 1961 Fisheries Division, Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

ANIMAL NUTRITION:

Nutrition of Pigs and Poultry (Proceedings of the University of Nottingham Eighth Easter School in Agricultural Science), edited by J. T. Morgan and D. Lewis, 375 pp., printed, 70s. (about US\$9.80). Butterworth and Co. (Publishers) Ltd., Bell Yard, Teniple Bar, London WC2, England, 1962.

ANTARCTIC:

"Pelagic Gadoid Fish in the Antarctic," by N. R. Merrett, article, Norsk Hvalfangst-Tidende (The Norwegian Whaling Gazette), vol. 52, no. 9, September 1963, pp. 245-247, illus., printed. Hvalfangerforeningen, Sandefjord, Norway.

ANTIOXIDANTS:

"Evaluation of Antioxidants by a Rapid Polarographic Method," by J. W. Hamilton and A. L. Tappel, article Journal of the American Oil Chemists' Society, vol. 40, February 1963, pp. 52-54, printed. American Oil Chemists' Society, 35 E. Wacker Dr., Chicago 1, Ill.

AQUATIC WEEDS:

Aquatic Weeds; Their Identification and Methods of Control, by A. C. Lopinot, Fisheries Bulletin No. 4, 47 pp., printed, 1963. Illinois Department of Conservation, Springfield, Ill.

"Biological Controls for Water-Weeds," by Roy A. Grizzell, Jr. and William W. Neely, article, Transactions of the Twenty-Seventh North American Wildlife and Natural Resources Conference, pp. 107-113, printed. Wildlife Management Institute, Wire Bldg. Washington 5, D. C., 1962.

"The Grip of the Water Hyacinth," by A. D. Evans, article, New Scientist, vol. 19, no. 358, September 26, 1963, pp. 666-668, illus., printed. Cromwell House, Fulwood Pl., High Holborn, London WC1, England. Abnormal growth of water weeds can interfere with fishing, seriously reduce fish populations by deoxygenating the water and blocking the spawning grounds, and lead to increased populations of disease-carrying water snails. A native of Brazil the water hyacinth now threatens many rivers in Africa and Asia.

AUSTRALIA:

Coastal Hydrological Investigations in the New South
Wales Tuna Fishing Area, 1963, by A. D. Crooks,
Oceanographical Station List, vol. 53, 84 pp., illus.,
processed, 1963. Division of Fisheries and Oceanography, Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia.

Coastal Investigations at Port Hacking, New South
Wales, 1960, by A.D. Crooks, Oceanographical Station List, vol. 52, 137 pp., processed, 1963. Division of Fisheries and Oceanography, Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia.

Establishing a Business in Australia, OBR 63-108, 16 pp., printed. Bureau of International Commerce,

U. S. Department of Commerce, Washington, D. C., 1963. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.) Discusses Government policies on investment, external capital, and aiding industry; expropriation and compensation; land tenure regulations; rights of aliens; regulations governing entry and repatriation of capital; tariff policy; and laws regarding the various types of business organization. Also covers patent licensing; mining laws; regulations affecting employment; the various forms of taxation to which businesses are subject; and the availability of factory sites.

Nanufacturing Industries, 1961-62, No. 23--Meat and Fish Preserving, by K. M. Archer, 10 pp., processed, October 3, 1963. Commonwealth Bureau of Census and Statistics, Canberra, Australia.

The Results of an Expedition to Bernier and Dorre Islands, Shark Bay, Western Australia, in July 1959, by W. D. L. Ride and others, Fauna Bulletin No. 2, 128 pp., illus., printed, 1962. Fisheries Department, 108 Adelaide Terrace, Perth, Western Australia.

Seventh Annual Report on the Operation of the Fishing Industry Act 1956 during the Year Ended 30th June, 1963, 8 pp., processed. Department of Primary Industry, Canberra, Australia. This report outlines the operations of the Fisheries Development Trust Account, established for the purpose of financing activities designed to foster the development of the Australian fishing industry, for the year ended June 30, 1963. It discusses the shrimp fishery in the Gulf of Carpentaria, research on sperm whales off Western Australia, training school for fisheries field officers, tuna long-lining, and Western Australian spiny lobster biological research.

HT:

The Bloodworm Industry in the Maritimes," by M. C. Cormier, article, <u>Trade News</u>, vol. 16, no. 2, August 1963, pp. 3-5, illus., processed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada.

ARNACLES:

"Effects of Copper Ion on Oxygen Uptake by Planktonic Cyprids of the Barnacle, Balanus amphitrite niveus," by Francis J. Bernard and Charles E. Lane, Contribution No. 465, 3 pp., illus., printed. (Reprinted from Procedures of the Society for Experimental Biology and Medicine, vol. 113, 1963, pp. 418-420.) University of Miami, Marine Laboratory, Institute of Marine Science, 1 Rickenbacker Causeway, Miami 49, Fla.

BELGIUM:

Market for U.S. Products in Belgium (Supplement to International Commerce), by Robert H. Walker, 60 pp., illus., printed, 45 cents. Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C., February 1963. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.) Provides general marketing information on Belgium, guidance on prospects for sales of selected commodities of special interest, and related material essential to

the U.S. businessman preparing to sell goods in Belgium. Includes a section on the market for frozen and convenience foods.

BIOCHEMISTRY:

"Autoxidation of Beef and Tuna Oxymyoglobins," by W. Duane Brown and Ami Dolev, article, Journal of Food Science, vol. 28, March-April 1963, pp. 207-210, printed. Institute of Food Technologists, 510-522 N. Hickory St., Champaign, Ill.

"Flavors from Fat," article, Food Processing and Packaging, vol. 31, no. 369, 1962, pp. 212-217, printed. Putman Publishing Co., 111 E. Delaware Pl., Chicago 11, Ill.

BOTULISM:

"FDA Investigating Botulism Outbreak from Smoked Whitefish," article, FDA Report on Enforcement and Compliance, October 1963, p. 18, processed. Food and Drug Administration, U.S. Department of Health, Education, and Welfare, Washington, D.C. 20201.

BRAZIL

Pesca--1961, Estrutura e Producao (Fishing Industry, 1961, Structure and Production), 45 pp., processed in Portuguese. Ministerio da Agricultura, Servico de Estatistica da Producao, Rio de Janeiro, Brazil, April 1963.

BUFFALOFISH:

Consumer Acceptance of Fresh Buffalo Fish, by W.R. Morrison, Report Series No. 116, 24 pp., printed, 1963. Agricultural Experiment Station, University of Arkansas, Fayetteville, Ark.

CALIFORNIA:

A Historical Review of the Fish and Wildlife Resources of the San Francisco Bay Area, by John E. Skinner, Water Projects Branch Report No. 1, 236 pp., illus., printed, June 1962. Water Projects Branch, Department of Fish and Game, The Resources Agency of California, 722 Capitol Mall, Sacramento, Calif. 95814. Discusses the fishing ports; the early history of the commercial fisheries; the fisheries from 1870 to 1915, and from 1915 to the present; the fisheries of the Bay area today -- schooling and pelagic fish, flatfish, bottomfish, sharks and skates, saltwater perch, croakers, molluscan and crustacean fisheries, freshwater fish, anadromous commercial fisheries; and economic aspects of the commercial fisheries. A section on anadromous fisheries covers king salmon, silver salmon and steelhead trout, striped bass, sturgeon, and American shad. The section on molluscan fisheries includes information on oysters, clams, abalone, and marine borers. The section on the crustacean fisheries discusses crabs, shrimp, and freshwater crayfish. The freshwater fisheries and marine mammals of the area are discussed. Included are many statistical tables giving historical data on various aspects of the fisheries.

CANADA:

Canadian Fisheries Reports, no. 2, October 1963, 31

pp., illus., printed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada. Includes articles on: "Factors Affecting the Efficiency of Antibiotic Dips for Fresh Fish Fillets," by C. M. Blackwood, J. Liston, and J. A. Stern; "A Critical

Survey of Differential Media for the Demonstration of Coagulase-Positive Staphylococci in Food," by N. Neufeld and R. Garm; "Coliform Contaminiation in Lobster Meat Traced to Cooler Construction," by John M. Graham; and "Quality Changes in Vacuum Packed and Non-Vacuum Packed Frozen Lobster Meat during Storage at Different Temperatures," by W. A. Murphy and H. L. Newson.

Fishes of Ontario, by H. H. MacKay, 300 pp., printed, 1963. Department of Lands and Forests, Toronto, Ontario, Canada.

Fishing and Hunting in Canada, 1961, by D. A. Benson, 25 pp., printed, 1963. Canadian Wildlife Service, National Parks Branch, Department of Northern Affairs and National Resources, Ottawa, Canada. A report on an economic survey.

Rapport Annuel, 1962 (Annual Report, 1962), 209 pp., printed in French, 1963. Station de Biologie Marine, Grande-Riviere, Quebec, Canada.

"Trends in Canadian Atlantic Fisheries," by R. U. Mahaffy, article, Canadian Fisherman, vol. 50, no. 11, November 1963, p. 17, printed, single copy C\$2. National Business Publications Ltd., Gardenvale, Que., Canada.

"Trends in Canadian Atlantic Mainland Fisheries
Past, Present, and Future," by W. R. Martin, article, Trade News, vol. 16, no. 2, August 1963, pp.
8-15, illus., processed. Information and Consumer
Service, Department of Fisheries, Ottawa, Canada.

CANNING:

"Cools Cans Three Times Faster," article, Food Processing, vol. 23, no. 6, 1962, pp. 37-38, printed. Putman Publishing Co., 111 E. Delaware Pl., Chicago 11, Ill.

"Spin Processing of Canned Foods," article, Food Preservation Quarterly, vol. 22, no. 3, 1962, pp. 76-77, printed. Commonwealth Scientific and Industrial Research Organization, Division of Food Preservation, P.O. Box 43, Ryde, N.S.W., Australia.

"Vacuum Sealing Machine with Gas Supply, article, Technological Digests, vol. 7, no. 4, 1962, p. 67, printed. Organisation for Economic Co-Operation and Development, 2 Rue Andre Pascal, Paris, France.

CARP:

Kanibalizm u Lychynok i Mal'kiv Sazana" (Cannibalism among the Larvae and Fry of the Carp), by O. I. Kudryns'ka, article, Dopovidi Akad. Nauk Ukrain. R. S. R., vol. 1, 1962, pp. 111-113, printed in Russian. Academy of Science of the Ukrainian SSSR, Kiev, Ukraine, U. S. S. R.

CASPIAN SEA:

"Pump Fishing in the Caspian Sea," article, Fishing News International, vol. 2, no. 3, July-September 1963, p. 304, illus., printed, single copy 6s. 6d. (about 85 U.S. cents). Arthur J. Heighway Publications Ltd., Ludgate House, 110 Fleet St., London EC4, England.

CETACEANS:

Riesenfische, Wale und Delphine (Giant Fishes, Whales and Dolphins), by J. R. Norman and F. C. Fraser, 342 pp., illus., printed in German, 1963. Verlag Paul Parey, Spitalerstrasse 12, Postfach 1129, 2000 Hamburg 1, Federal Republic of Germany. (Also available in an English edition from Putnam, 42 Great Russell St., London WC1, England.) Part I of this book is concerned with fishes, such as sharks, rays, perch-like fishes, barracuda, etc. Part II is concerned with cetaceans, such as whales, porpoises, and dolphins. The book includes a description of the better known forms but does not necessarily include every animal in these families. A biological description of these classes of animals is given for ready use to identify those that are covered. The book is designed to help the layman and scientist to make quicker and more ready identification.

-- Walter H. Stolting

CEYLON:

Administration Report of the Director of Fisheries for 1961-62, Part IV--Education, Science and Art (L), 70 pp., printed in Singhalese and English, 2/40 (about 55 U.S. cents), August 1963. Government Publications Bureau, P.O. Box 500, Secretariat, Colombo, Ceylon. Reports on the activities of the Ceylon Department of Fisheries for 1961-62. Includes information on programs of the organization, disputes and regulations, loans to fishermen, cooperative societies, coastal navigation aids, and fishing harbors. Also covers fresh- and brackish-water fisheries, pearl fisheries, Mutwal fisheries factory and harbor, trawler fishing, and fishery research. Included are statistical tables giving data on production of fresh-water and marine fish, mechanized fishing vessels, and imports and exports of fishery products.

CLAMS:

Seasonal Growth of the Northern Quahog, MERCENARIA MERCENARIA, and the Southern Quahog, M. CAM-PECHIENSIS, in Alligator Harbor, Florida, by R. W. Menzel, Contribution No. 184, 10 pp., illus., processed. (Reprinted from Proceedings of the National Shellfish Association, vol. 52, 1961, pp. 37-46.) Oceanographic Institute, Florida State University, Tallahassee, Fla. Monthly shell length measurements were made of Mercenaria mercenaria for 3.5 years and of M. campechiensis for 2 years, in Alligator Harbor, Franklin County, Florida. The northern clams were laboratory-reared natives of Long Island Sound. They showed the best growth recorded for any locality, with greatest growth in spring and fall, less in winter, and least in summer. The southern clams, which originated in Alligator Harbor, grew faster than the northern species, with greatest growth in spring and fall, almost as much in summer, and least in winter.

COD:

"Kolichestvennaya Otsenka Skoplenii Baltiiskoi Treski s Pomoshch'yu Ekholota" (Quantitative Assessment of Cod Concentrations in the Baltic Using Sonar), by K.I. Yudanov, article, Rybnoe Khoziaistvo, no. 1, 1962, pp. 26-32, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U.S.S.R.

"Laanemere Tursk Randab." (Migrations of the Baltic Cod), by I. Stsukina, article, Eesti Loodus, vol. 6, 1961, pp. 361-363, printed in Estonian. Academy of Sciences of the Estonian SSSR, Tartu, U.S.S.R.

Svyaz' Gidrologicheskikh Uslovii s Kolebaniyami Chislennosti Pokolenii Treski" (Relationship between Hydrological Conditions and Fluctuations in the Numbers of Successive Year-Classes of Cod), by A. G. Kislyakov, article, Trudy Soveshchanii Ikhtiol. Komissiya Akad. Nauk SSSR, vol. 13, 1961, pp. 260-264, printed in Russian. Akademia Nauk SSSR, Ikhtiologicheskaia Komissiia, Moscow, U. S. S. R.

"Where Do Seven Islands Cod Come From?" by Yves Jean, article, <u>Trade News</u>, vol. 16, no. 2, August 1963, pp. 6-7, <u>illus</u>, <u>processed</u>. Information and Consumer Service, Department of Fisheries, Ottawa, Canada.

RABBING:

"Zinc Anodes Save Money for Commercial Crabbers," article, Fish Boat, vol. 8, March 1963, p. 13, printed. H. L. Peace Publications, 624 Gravier St., New Orleans 9, La.

RABS:

Influence of Hosts on the Behavior of the Commensal Crab, PINNOTHERES MACULATUS Say, by A. N. Sastry and R. Winston Menzel, Contribution No. 181, 8 pp., printed. (Reprinted from Biological Bulletin, vol. 123, no. 2, October 1962, pp. 388-395.) Oceanographic Institute, Florida State University, Tallahassee, Fla.

TUBA:

Afloramiento y Corrientes Cercanas a Cuba (Upwelling and Currents Near Cuba), by Juan J. Tapanes, Contribution No. 17, 28 pp., illus., printed in Spanish, July 1963. Centro de Investigaciones Pesqueras, Departamento de Pesca, Playa Habana, Bauta, Cuba.

AHOMEY:

Investment Law in the Republic of Dahomey, OBR 63-104, 12 pp., printed, 15 cents. Bureau of International Commerce, U.S. Department of Commerce, Washington, D. C., August 1963. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.) The Investment Code of the Republic of Dahomey was enacted by the National Assembly on December 31, 1961, as part of the Dahomean Government's program to encourage foreign private investment. The Code guarantees basic rights to all private investors and provides preferential benefits for undertakings contributing to the country's national development. The report presents a summary of provisions of the code and the complete text of the code covering establishment of an investment code, system of ordinary law, systems of preferential treatment, instructions for submitting applications for approval under the investment code, regulations governing foreign investment in the Franc Area; and information to be furnished in support of an application for approval of investment in Dahomey.

DEHYDRATION:

"The Influence of Dehydration of Foods on the Digestibility and the Biological Value of the Protein," by A. P. De Groot, article, <u>Food Technology</u>, vol. 17, March 1963, pp. 103-107, printed. The Garrard Press, 510 N. Hickory, Champaign, Ill.

"Instant Fish-Potato Flakes," by J. J. Quigley and L. E. Deveau, article, Trade News, vol. 16, no. 3, September 1963, pp. 8-9, illus., processed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada. A process for producing instant fish-potato flakes, which should prove a real boon for the busy homemaker and restaurant owner is now being tested and improved by the Candian Department of Fisheries at its Fish Processing Experimental Plant located at Valleyfield on Newfoundland's northeast coast. The process involves the dehydration of a mixture of cooked fish and cooked potatoes on an external type drum dryer. The final product consists of snowy white, fine, dry flakes, each flake containing fish and potato. The flakes may be used for preparing fishcakes, croquettes, fish soup, chowder, or casseroles.

DIRECTORIES:

Directory of the Public Aquaria of the World, by Spencer Tinker and Marian Omura, 37 pp., printed, 1963. Waikiki Aquarium, Honolulu, Hawaii.

DRUM:

"A Study of Redfish, Sciaenops ocellata (Linnaeus) and Black Drum, Pogonias cromis (Linnaeus)," by Ernest G. Simmons and Joseph P. Breuer, article, Publications of the Institute of Marine Science, vol. 8, 1962, pp. 184-211, printed. Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Miami 49, Fla.

DRYING:

"Investigations on Dehydration of Some Commercial Fish in India," by P. V. Prabhu and others, article, Current Affairs Bulletin, no. 37, August 1963, pp. 1-12, illus., printed. Indo-Pacific Fisheries Council, Food and Agriculture Organization of the United Nations, Bangkok, Thailand.

EL SALVADOR:

Foreign Trade Regulations of El Salvador, OBR 63-109, 8 pp., processed, 15 cents. Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C., July 1963. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.) Covers trade policy, import tariff system, sales and other internal taxes, and documentation and fees. Also discusses labeling and marking requirements, special customs provisions, nontariff import trade controls, United States controls, and Government representation in the United States. Pending ratification of the San Jose Protocol (Signed July 1962) to the Central American Convention on the Equalization of Import charges, preferential import duty rates are applicable to unpacked cod, edible fish eggs and sardines.

EUROPEAN COMMON MARKET:

"Une Nouvelle Reunion de Hauts Fonctionnaires des Peches du Marche Commun s'Est Tenue a Bruxelles le 6 Septembre" (A New Meeting of High Officials in the Fisheries of the Common Market is Held in Brussels on September 6), article, La Peche Maritime, vol. 42, no. 1026, September 1963, p. 571, printed in

French, single copy 12 F (about US\$2.45). Les Editions Maritimes, 190, Boulevard Haussmann, Paris, France.

FACTORYSHIPS:

"BMV Delivery of Shrimp Factory Ship to Pakistan," article, Norwegian Fishing and Maritime News, vol. 9, no. 4, 1962, p. 11, printed. Norwegian Fishing and Maritime News, P. O. Box 740, Slottsgt. 3, Bergen, Norway.

"The Development of Factory Ships and of Related Media in Ocean Fisheries, III," by Onar Onarheim, article, Norwegian Fishing and Maritime News, vol. 10, no. 3, 1963, pp. 31, 33, 35, printed. Norwegian Fishing and Maritime News, P.O. Box 740, Slottsgt. 3, Bergen, Norway.

FARM PONDS:

"Standing Crops of Fish in Oregon Farm Ponds," by Gary W. Isaac and Carl E. Bond, article, Transactions of the American Fisheries Society, vol. 92, no. 1, 1963, pp. 25-29, printed. Secretary, American Fisheries Society, P. O. Box 483, McLean, Va.

FIRST AID:

The Ship's Medicine Chest and First Aid at Sea, 498 pp., illus., printed, revised 1955. Public Health Service, U.S. Department of Health, Education, and Welfare, Washington, D.C. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.) Includes chapters on the structure and functions of the human body, hygiene, general nursing care, first aid, and the classification and treatment of diseases. Provides instructions beyond first aid, as continued treatment and after care may be necessary until the services of a physician become available.

FISH BEHAVIOR:

"The Fright Reaction in North American Fish," by Wolfgang Pfeiffer, article, Canadian Journal of Zoology, vol. 41, no. 1, 1962, pp. 69-77, printed. Division of Administration, National Research Council, Sussex St., Ottawa 52, Canada.

"Maksimal'nye Skorosti Dvizheniya Ryb." (The Maximum Speeds of Movement of Fishes), by V. N. Chestnoi, article, Rybnoe Khoziaistvo, vol. 9, 1961, pp. 22-27, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U. S. S. R.

FISH CULTURE:

The Susquehanna Fishery Study, 1957-1960; a Report of a Study on the Desirability and Feasibility of Passing Fish at Conowingo Dam, Contribution No. 169, 81 pp., printed, 1961. Department of Research and Education, Solomons, Md.

FISH HANDLING:

Handling Sea-Frozen Fish, by A. Banks, Torry Advisory Note No. 2, 8 pp., printed. Torry Research Station, Aberdeen, Scotland.

Take Care of Your Catch, Torry Advisory Note No. 4, 3 pp., printed, 1962. Torry Research Station, Aberdeen, Scotland.

FISHING VESSEL STABILITY:

The following papers were presented before the Food and Agriculture Organization Fishing Vessel Stability Meeting, Gdansk, Poland, October 7-14, 1963. A limite number of copies are available free from the Fisheries Division, Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

Systematic Stability Investigations of Danish Fishing Vessels, by Poul Fribert and Leo Retvig, Paper No. 3, 18 pp., illus., processed.

The Sizing and Rating of the Stability Criteria of Fishing Vessels in the GDR, by G. Mitschka, Paper No. 6, 11 pp., processed.

Stability of Icelandic Fishing Vessels, by Hjalmar R. Bardarson, Paper No. 7, 18 pp., illus., processed.

Casualty and Stability of Japanese Fishing Vessels, by Atsushi Takagi, Paper No. 8, 11 pp., illus., processed.

Stability Security Measure, by Seitaro Kojima, Paper No. 9, 7 pp., processed.

Center of Gravity and Freeboard of a Ship Observed from a Viewpoint of the Stability Criterion, by Toshio Hishida and Norio Tanaka, Paper No. 10, 19 pp., illus., processed.

Stability Standard for Two-Boat Trawlers and Purse Seiners, by Tsutomu Tsuchiya, Paper No. 11, 9 pp., illus., processed.

A Remarkable Case of Capsizing of a Small Trawler, by J. G. De Wit, Paper No. 12, 4 pp., illus., processed.

Stability of Double-Rig Beam Trawlers, by J. G. De Wit, Paper No. 13, 8 pp., illus., processed.

Polish Experience Concerning the Normalization of Fishing Vessels' Stability, by Olgierd Jablonski, Paper No. 14, 8 pp., processed.

Problems Connected with the Introduction of International Rules for Fishing Vessels' Stability, by Lech Kobylinski, Paper No. 15, 7 pp., processed.

Some Suggestions on Investigations into Fishing Vessels Stability, by Kazimierz Szponar, Paper No. 16, 2 pp., processed.

Analysis of the Relative Value of the Criteria Regarding the Stability of Fishing Vessels, by Jan Dudziak, Paper No. 17, 16 pp., illus., processed.

Stability Properties of Polish Trawlers, by Kazimierz Sokolowski, Paper No. 18, 31 pp., illus., processed.

Operational Stability Control on Fishing Vessels, by Olgierd Jablonski, Paper No. 19, 13 pp., illus., processed.

Transverse Stability for Small Ships or Crafts, by Patricio R. Roda, Paper No. 20, 35 pp., processed.

Freeboard, Stability, Bulwark Freeing Port, Hatch and Access Standards of Small Craft, by H. S. Townsend, Paper No. 21, 10 pp., processed.

Stability of Trawlers, by R. Norrby, Paper No. 22, 5 pp., processed.

Some Thoughts on Stability Criteria, by George C. Nickum, Paper No. 23, 8 pp., illus., processed.

Analysis of Cross Curves of Fishing Trawlers, by Krystyn Kupras and Wlodzimierz Majewski, Paper No. 25, 8 pp., illus., processed.

FISHING WITH LIGHTS:

Fishing with Electric Lights for Black Sea Horse Mackerel," by A. Dolgov, article, Rybnoe Khoziaistvo, vol. 37, no. 2, 1961, pp. 53-55, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U.S.S.R.

FISH-LIVER OILS:

"The Air Blowing of Cod Liver Oil. II--Changes in Fatty Acid Composition as Determined by Gas-Liquid Chromatography," by P. M. Jangaard and others, article, Journal of the Fisheries Research Board of Canada, vol. 20, January 1963, pp. 89-94, printed.

Queen's Printer and Controller of Stationery, Ottawa, Canada.

"Growth of Rats Given Cod Liver Oil," by R. J. Ward and C. C. Amos, article, British Journal of Nutrition, vol. 16, 1962, pp. 219-222, printed. Cambridge University Press, 200 Euston Rd., London NW1, England.

"Preliminary Studies on the Methods of Extraction and Determination of Vitamin A Content of Liver Oils of Common Philippine Market Fishes," by S. V. Bersamin, L. G. Salcedo, and G. Guevara, article, Current Affairs Bulletin, no. 37, August 1963, pp. 13-18, illus., printed. Indo-Pacific Fisheries Council, Food and Agriculture Organization of the United Nations, Bangkok, Thailand.

FISH MEAL:
"Differences in Quality of Fish Meals," by L. E. Ousterhout, article, <u>Canadian Fisherman</u>, vol. 50, no. 10, October 1963, pp. 18-20, printed, single copy \$2. National Business Publications Ltd., Gardenvale, Que., Canada. Two fish meals which may have the same protein, fat, and ash content, may differ widely in feeding value. These differences are discussed in this article. Although written with anchovy meal primarily in mind, the article gives good advice on the quality production of any type of fish meal. The quality is affected by the method of cooking, drying, curing, and storing. The way any one fish meal drier is operated can have a much greater effect on the nutritive value of the meal than can the differences between types of driers.

"Iceland Invention Boosts Meal Production," article, World Fishing, vol. 11, no. 10, 1962, pp. 8-9, illus., printed. John Trundell & Partners Ltd., St. Richards House, Eversholt St., London NW1, England.

"New Swedish Shipboard Fish Meal Plant," article, World Fishing, vol. 11, no. 10, 1962, p. 77, illus., printed. John Trundell & Partners Ltd., St. Richards House, Eversholt St., London NW1, England.

El Tamizado y la Molienda en la Harina de Pescado (The Screening and Milling of Fish Meal), by E. Arnesen, J. Sanchez, and R. Lam, Report No. 10, 15 pp., illus., processed in Spanish, 1963. Library, Instituto de Investigacion de los Recursos Marinos, P.O. Box 3734, Lima, Peru.

FISH OIL:

Nutritive Value of Marine Oils. I -- Menhaden Oil at Varying Oxidation Levels, with and without Antioxidants in Rat Diets," by A. A. Rasheed and others, article, Journal of Nutrition, vol. 79, March 1963, pp. 323-332, printed. American Institute of Nutrition, 36th St. at Spruce, Philadelphia 4, Pa.

FISH PONDS:
"Povyshenie Ryboproduktivnosti Vyrostnykh Prudov
Putem Primeneniya Udobrenii" (Increasing the Fish Productivity of Rearing Ponds by the Use of Fertilizers), by L.I. Mamontova, article, Doklady Moskov. Sel'skokhoz. Akad. Im. K. A. Timiryazeva, vol. 69, 1961, pp. 171-174, printed in Russian. Podsosenski Per. 21, Moscow B-64, U.S.S.R.

FISH POPULATIONS:

"The Application of Some Special Immunological Methods to Marine Population Problems," by George J. Ridgway, article, American Naturalist, vol. 96, no. 889, 1962, pp. 219-224, printed. The Science Press, Lancaster, Pa.

FISH PROTEIN CONCENTRATE:

"Chemical Composition and Shelflife of a Protein Food Based on Low-Fat Groundnut Flour, Bengalgram Flour, and Fish Flour;" "Supplementary Value of Proteins of Fish Flour to Those of Groundnut Flour and the Protein Efficiency Ratio of Protein Food Containing Groundnut, Bengalgram, and Fish Flour;"
"Supplementary Value of Fish Flour and a Protein Food Containing Low-Fat Groundnut Flour, Bengalgram Flour, and Fish Flour to Poor Rice Diet, S. R. Shurpalekar and others, articles, Food Science, vol. 11, no. 2, 1962, pp. 39-48, printed. Central Food Technological Research Institute, Mysore, India.

FLORIDA:
"Biological Investigations of the St. Lucie Estuary (Florida) in Connection with Lake Okeechobee Discharges through the St. Lucie Canal," by Gordon Gunter and Gordon E. Hall, article, Gulf Research Reports, vol. 1, no. 5, August 1963, pp. 189-317, illus., printed. Gulf Coast Research Laboratory, Ocean Springs, Miss.

Summary of Florida Commercial Marine Landings 1962, and an Analysis of the Catch and Effort of Certain Species, by Albert Rosen and Richard K. Robinson, Marine Fisheries Research 63-4, 30 pp., illus., printed, June 1963. Florida State Board of Conservation, W. V. Knott Bldg., Tallahassee, Fla.

FOOD AND AGRICULTURE ORGANIZATION: Information Bulletin, General Fisheries Council for the Mediterranean, no. 23, November 1962, 43 pp., illus., processed. General Fisheries Council for the Mediterranean, Food and Agriculture Organization

of the United Nations, Viale delle Terme di Caracalla, Rome, Italy. Discusses the Freedom from Hunger Campaign, activities of the GFCM, activities of FAO, and news of member countries. Also includes information on international organizations and meetings, fisheries statistics for 1961, and schedule of international meetings of interest to fisheries workers.

FOOD TECHNOLOGY:

Food Technologists Study Fish," by Kay Stewart, article, <u>Trade News</u>, vol. 16, no. 3, September 1963, pp. 6-7, <u>processed</u>. Information and Consumer Service, Department of Fisheries, Ottawa, Canada.

FRANCE:

"L'Administration a Prime des Projets de Chalutiers-Senneurs pour la Peche Artisanale" (The Administration's First Project is Trawlers-Purse Seiners for the Artisan Fishery), article, La Peche Maritime, vol. 42, no. 1026, September 1963, pp. 577-580, illus., printed in French, single copy 12 F (about US\$2.45). Les Editions Maritimes, 190, Boulevard Haussmann, Paris, France.

"Le Plan de Relance 1963 Marque un Tournant de Ses Principes et de Ses Procedures d'Etablissement" (The Renewal Plan of 1963 Marks a Turning Away from its Principles and Established Procedures), article, La Peche Maritime, vol. 42, no. 1026, September 1963, p. 575, printed in French, single copy 12 F (about US\$2.45). Les Editions Maritimes, 190, Boulevard Haussmann, Paris, France.

FREEZER VESSELS:

"Development of Tuna Freezing Equipment for B. C. Seine Boats," by S. W. Roach and J. S. M. Harrison, article, Western Fisheries, vol. 66, April 1963, pp. 28-30, 32, printed. Roy Wrigley Publications Ltd., 1104 Hornby St., Vancouver 1, B. C., Canada.

FRESH-WATER FISH:

"The Efficiency of Reproduction and Recruitment in Freshwater Fish," by E. D. Le Cren, article, British Ecological Society Symposium, vol. 2, 1962, pp. 283-296, printed. Honorary Secretary, British Ecological Society, Osmington House, Osmington, Weymouth, Dorset, England, 1962.

"The Status of Spearfishing and the Use of SCUBA in Fish Management Programs in the Freshwaters of the United States," by Richard L. Poole, article, Transactions of the American Fisheries Society, vol. 92, no. 1, pp. 30-33, printed. Secretary, American Fisheries Society, P. O. Box 483, McLean, Va.

"A Study of the Numbers and Kinds of Species Found in Rivers in Eastern United States," by Ruth Patrick, article, Proceedings of the Academy of Natural Sciences of Philadelphia, vol. 113, no. 10, 1962, pp. 215-258, printed. Academy of Natural Sciences of Philadelphia, 19th St. and the Parkway, Philadelphia 3, Pa.

GEAR:

Atlas Freshwater Generator," article, Norwegian Fishing and Maritime News, vol. 9, no. 1, 1962, pp. 41, 45, illus., printed. Torolf Holme, P.O. Box 740, Slottsgt. 3, Bergen, Norway. "Degradation of Manila Cordage by Marine Fungi: Analysis of Breaking Strength Tests," by Samuel P. Meyers and others, Contribution No. 429, 4 pp., illus. printed. (Reprinted from TAPPI, vol. 46, no. 2, February 1963, pp. 164A-167A.) University of Miami, Marine Laboratory, 1 Rickenbacker Causeway, Miami 49, Fla.

"High Speed Diesel Engine for Fishing Vessels of Not Less than 100 Feet," by J. R. Read, article, Canadian Fisherman, vol. 49, no. 8, 1962, pp. 22-27, illus., printed. National Business Publications Ltd., Gardenvale, Que., Canada.

GEAR RESEARCH:

"Progress Seen in Shrimp Gear Research," by Frederick Wathne, article, Fish Boat, vol. 8, March 1963, pp. 24, 37, printed. H. L. Peace Publications, 624 Gravier St., New Orleans 9, La.

GENERAL:

"Food Production for the Expanding World Population," by E. J. Russel, article, Advancement of Science, vol. 18, 1962, pp. 427-435, printed. The British Association for the Advancement of Science, Burlington House, London W1, England.

A History of Fishes, by J. R. Norman, 429 pp., illus., printed, 81s. (about US\$11.35). Ernest Benn, Ltd., Bouverie House, 154 Fleet St., London EC4, England, 1963.

GHANA:

Fisheries Research Report, vol. 1, no. 1, 1962, 33 pp., illus., processed. Fisheries Inspectorate Unit, Ministry of Agriculture, Accra, Ghana. Presents articles on: "Marine Fisheries Research in Ghana--Its Scope and Development," by M. Zei; "The Appearance of Plankton from August 16 to December 21, 1962," by M. A. Mensah; "Improving the Traditional Method of Smoking," by J. N. N. Adjetey; and "The Herring Season," by D. A. Hammond.

GREAT LAKES:

"Limnological and Meteorological Observation Towers in the Great Lakes," by Roger E. Deane, article, Limnology and Oceanography, vol. 8, no. 1, 1963, pp. 9-15, printed. Limnology and Oceanography, Woods Hole Oceanographic Institution, Woods Hole, Mass.

GREENLAND:

Okonomisk Politik i Gronland (Economic Policy in Greenland), by Mogens Boserup and Viggo Svendsen, 520 pp., illus., printed in Danish with English summary, Kr. 20 (US\$2.90). Ministeriet for Gronland, Hausergade 3, Copenhagen K, Denmark, 1963. A study divided into 3 principal sectors devoted to discussions of: (1) the long-range prospects for economic expansion in Greenland; (2) the economic structure, i. e., the interplay of Government, cooperative, and private economic activity; and (3) wage and price policies. Although dealing primarily with problems of internal Danish significance, the book contains much information of general interest and a large amount of statistical data. A chapter devoted to the Greenland fisheries discusses the catch, prices, and changes in price structure. A chapter on the prospects for Greenland's fishing industry discusses

geographical, human, and technical prerequisites, and various measures which might help to accelerate the transition to more modern methods of fishing. Other chapters contain considerable material on Greenland's fisheries.

RBICIDES:

lethod of Controlling Aquatic Plants, by J. V. Overbeek, U.S. Patent 2,959,476, printed. Patent Office, U.S. Department of Commerce, Washington, D.C. 20231.

ERRING:

The Manufacture of Quick Frozen Marinated Herring," by H. Houwing, article, Conserva, vol. 10, no. 9, 1962, pp. 183-186, printed in Dutch. Maanblad voor de Voedlings-en Genotmiddelen-Industrie, Moormans Periodieke, Pers N. V., The Hague, Netherlands.

HTHYOLOGY:

"Collecting and Preserving Fishes," by Frank B. Cross, article, University of Kansas Museum of Natural History Miscellaneous Publication, No. 30, pp. 41-44, printed. Museum of Natural History, University of Kansas, Lawrence, Kan.

VDIA:

Foreign Trade Regulations of India, OBR 63-120, 8
pp., printed, 15 cents, September 1963. Bureau of
International Commerce, U.S. Department of Commerce, Washington, D.C. (For sale by the Superintendent of Documents, U.S. Government Printing
Office, Washington, D.C. 20402.) The import policy
of India is based on the availability of foreign exchange, the economic needs of the country, and the
requirements of industry and other consumers. The
report discusses India's import tariff system, sales
and other internal taxes, documentation and fees,
labeling and marking requirements, and special
customs provisions. Also covers nontariff import
trade controls, India's export controls, United States
controls on exports and imports, and diplomatic
representation between India and the United States.

LAND FISHERIES:

Biologicheskie Osnovy Rybnogo Khozyaistva na Vnutrennykh Vodoemakh'' (Biological Principles of Fisheries of Inland Waters), by B. G. Ioganzen, article, Biol. Osnovy Rybn. Khoz. Tomskii Univ., Tomsk, 1959, pp. 9-30, printed in Russian. Tomskii University, Tomsk, U. S. S. R.

NTERNATIONAL COMMISSIONS:

International North Pacific Fisheries Commission,
Bulletin No. 11, 159 pp., illus., printed, 1963. International North Pacific Fisheries Commission,
6640 Northwest Marine Dr., Vancouver 8, B.C.,
Canada. Contains articles on: "Ocean Conditions in the Vicinity of the Aleutian Islands, Summer 1957," by Richard J. Callaway; "Racial Analysis of Red Salmon by Means of Scales," by Kenneth H.
Mosher; "Oceanographic Conditions and Salmon Distribution South of the Alaska Peninsula and Aleutian Islands, 1956," by Felix Favorite and Mitchell G. Hanavan; "Use of a Discriminant Function in the Morphological Separation of Asian and North American Races of Pink Salmon, Oncorhynchus gorbuscha (Walbaum)," by Murray H. Amos, Ray-

mond E. Anas, and Roger E. Pearson; and "Parasites as Indicators of the Geographical Origin of Sockeye Salmon, Oncorhynchus nerka (Walbaum), Occurring in the North Pacific Ocean and Adjacent Seas," by Leo Margolis.

International North Pacific Fisheries Commission
Statistical Yearbook, 1962, 68 pp., printed, 1963. International North Pacific Fisheries Commission, 6640 Northwest Marine Dr., Vancouver 8, B. C., Canada.

INVERTEBRATES:

Fresh-Water Invertebrates of the United States, by Robert W. Pennak, 778 pp., printed, 1963. Ronald Press, 15 E. 26th St., New York 10, N.Y.

IRRADIATION PRESERVATION:

"Push for Progress in Food Irradiation," by Ferdinand P. Mehrlich, article, Food Processing, vol. 24, May 1963, pp. 84-89, printed. Putman Publishing Co., 111 E. Delaware Pl., Chicago 11, Ill.

JAPAN:

Bulletin of the Japanese Society of Scientific Fisheries, vol. 29, no. 5, May 1963, 112 pp., illus., printed in Japanese with English abstracts. Bureau of the Society, c/o Tokyo University of Fisheries, Shiba Kaigandori 6, Minato-ku, Tokyo, Japan. Includes, among others, articles on: "Tissue Distribution of Mercury Orally Given to Fish," by Hanato Tsuruga; "Studies on Fishing Conditions of the Dolphin, Coryphaena hippurus L., in the Western Region of the Sea of Japan. VII--Relationship between the Stomach Contents and the Pelagic Fauna of Juveniles," by Shunpei Kojima; "Studies on the Movement of Shoals of Mackerel and Its Environmental Factors. II -- The Relationship between the Floating-Up of Mackerel Shoals in the Bay of Ishikari, Hokkaido, and the Environmental Factors," by Takeo Kawakami; "Some Factors Having Effects on the Behavior of Salmon in the Time of Gill-Netting," by Kisaburo Taguchi; "On the Fatigue of Netting Twines against Repeated Impact Loads," by Katsuji Honda; "A Model Experiment of Aquatic Food Chain with Special Significance in Fatty Acid Conversion," by Mitsu Kayama, Yasuhiko Tsu-chiya, and James F. Mead; "Variations in Chemical Composition in Some Commercial Fishes from the South of Brazil," by Ko Watanabe; "Yield and Proximate Composition of Sea-Trout from Southern Bra-zil," by Ko Watanabe; and "On the Tagging Experiments for Fisheries Research in Japan," by Kenji Kurogane.

Bulletin of the Japanese Society of Scientific Fisheries, vol. 29, no. 4, April 1963, 113 pp., illus., printed in Japanese with English abstracts. Bureau of the Society, c/o Tokyo University of Fisheries, Shiba Kaigandori 6, Minato-ku, Tokyo, Japan. Includes, among others, these articles: "Studies on Reproduction of Rainbow Trout, Salmo gairdneri, with Special Reference to Egg Taking. IV--The Fecundity or Number and Weight of Eggs Taken," by Minoru Nomura; "A Study of Herring on the Coast of Olyutorskii Region," by Yohiko Yunokawa; "Quality of Kombu, Edible Seaweeds Belonging to the Laminariaceae. VI--Effect of the First Processing," by Keiichi Oishi and others; "Studies on Muscle of Aquatic Animals. XXXVII--Octopine in Squid Muscle," by Kinji Endo and Wataru

Simidu; "Studies on Muscle of Aquatic Animals. XXXVIII--Changes in Nitrogenous Extractives of Squid Muscle during Storage," by Kinji Endo, Masao Hujita, and Wataru Simidu; "Carotenoid Pigments in Fish. I--Carotenoids in Goldfish and Fancy Colored Carp," by Shuichi Hirao, Ryo Kikuchi, and Hisako Taguchi; and "Carotenoid Pigments in Fish. II--Effect of Dietary Carotenoid on Body Color of Goldfish," by Shuichi Hirao, Satoko Ozawa, and Yasuko Suematsu.

The Island of the Fisherwomen, by Fosco Maraini, 95 pp., illus., printed, \$6.75. Harcourt, Brace and Co., Inc., 383 Madison Ave., New York 17, N. Y., April 1963.

"Japan's Fisheries Education," by S. Konda, article, Fishing News International, vol. 1, no. 4, 1962, pp. 59-61, printed. Arthur J. Heighway Publications, Ltd., Ludgate House, 110 Fleet St., London EC4, England.

Progress Report of the Cooperative Investigations on Important Neritic-Pelagic Fisheries Resources, 1959, 128 pp., illus., printed in Japanese and English, November 1962. Tokai Regional Fisheries Research Laboratory, Tsukishima, Chuo-ku, Tokyo, Japan.

Progress Report of the Cooperative Investigations on Important Neritic-Pelagic Fisheries Resources, 1958, 149 pp., illus., printed in Japanese and English, March 1962. Tokai Regional Fisheries Research Laboratory, Tsukishima, Chuo-ku, Tokyo, Japan.

LARVICIDE:

"Histological Effects of 3-Trifluormethyl-4-Nitrophenol (TFM) on Larval Lamprey and Trout," by Ronald M. Christie, article, Canadian Journal of Zoology, vol. 41, no. 1, 1962, pp. 51-62, printed. Division of Administration, National Research Council, Sussex St., Ottawa 52, Canada.

LOBSTERS:

Current-Voltage Relations in the Lobster Giant Axon Membrane under Voltage Clamp Conditions, by Fred J. Julian, John W. Moore, and David E. Goldman, 20 pp., printed, January 30, 1962. (Reprinted from Journal of General Physiology, vol. 45, no. 6, July 1962, pp. 1217-1238.) Naval Medical Research Institute, Bethesda, Md., 20014.

"Lobsters Are Local," by D. G. Wilder, article, <u>Trade News</u>, vol. 16, no. 3, September 1963, pp. 3-5, illus., processed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada.

Processing Lobsters, by J. J. Waterman, Torry Advisory Note No. 6, 3 pp., printed, 1963. Torry Research Station, Aberdeen, Scotland.

MACKEREL:

Analyse du Contenu du Tractus Digestif du Stade
Planctonique de Maquereau (SCOMBER SCOMBRUS
L.) en Adriatique (Analysis of the Contents of the
Digestive Tract of Postlarval Mackerel (Scomber
scombrus L.) in the Adriatic), by J. Karlovac, Reports, vol. IV, no. 4a, 18 pp., illus., printed in SerboCroatian with French summary, 1962. Institut za
Oceanografiju i Ribarstvo, Split, Jugoslavia.

A Method of Collection, Transportation and Post-Incubation of PLEUROGRAMMUS AZONUS Roe and the Greenlings and Their Introduction into the Northern Seas of the U.S.S.R., by Yu. I Orlov, L. V. Polikas and T.S. Rass, OTS 63-21510, 32 pp., printed, April 4, 1963. (Translated from the Russian, Trudy Akademiia Nauk SSSR. Institut Okeanologii, vol. 59, 1962 pp. 183-203.) Office of Technical Service, U.S. Department of Commerce, Independence Ave. and Ohio Dr. SW., Washington, D. C. 20235.

MARINE CORROSION:

The Marine Corrosion Handbook, by T. Howard Roger 297 pp., Illus., printed, 1960. McGraw-Hill Book Co. Inc., 330 W. 42nd St., New York 18, N. Y.

MARINE MICROBIOLOGY:

Preliminary Survey of the Microflora and Microfauna Occurring on Experimental Anti-Fouling Panels in the Kishon Harbour, by B. Komarovsky and T. Edelstein, Technical Paper No. 42, 3 pp., printed. (Reprinted from General Fisheries Council for the Mediterranean, Proceedings and Technical Papers, No. 6, 1961, pp. 285-287.) General Fisheries Council for the Mediterranean, Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

MARYLAND:

Maryland Marine Facilities, edited by William B.

Mathews, Jr., 34 pp., printed, 35 cents. Department of Tidewater Fisheries, Annapolis, Md., May 1962.

MASSACHUSETTS:

Fisheries Report for Some Central, Eastern, and Western Massachusetts Lakes, Ponds, and Reservoirs, 1951-52, by Richard H. Stroud, 454 pp., illus., printed 1955. Division of Fisheries and Game, Bureau of Wildlife Research and Management, 73 Tremont St., Boston, Mass. The sixth in a series of fisheries reports covering the biological survey of Massachusetts ponds in eleven of the counties. In addition to recommendations for the management of each of the ponds studied, it contains a discussion of fish management problems, a study of hybridization between two species of pickerel, and a manual for a reconnaissance survey of lakes and ponds.

MINK RATIONS:

"A Secondary Induced Thiamine Deficiency in Mink," by F. M. Stout, J. E. Oldfield, and J. Adair, article, National Fur News, vol. 35, no. 8, September 1963, pp. 22, 30, illus., printed. Broyles, Allebaugh and Davis, Inc., 200 Clayton St., Denver 6, Colo., 80206.

NETHERLANDS:

Statistiek van de Visserij, 1962 (Fisheries Statistics, 1962), J 31/1962, 41 pp., processed in Dutch with English table of contents and captions, f. 4.25 (about US\$1.20), 1963. Uitgeversmaatschappij W. de Haan N. V., Zinzendorflaan 3, Zeist, Netherlands.

NEW HAMPSHIRE:

Fisheries Division, 1962 Annual Report of Operations, by Bernard W. Corson, 23 pp., processed. Fisheries Division, New Hampshire Fish and Game Department, Concord, N. H.

EW ZEALAND:

Harvest of the Sea, 1985: A Well Exploited Fishing Industry," by J. E. Morton, article, Commercial Fishing, vol. 2, no. 1, September 1963, pp. 28-30, illus., printed. Trade Publications Ltd., 47 Lewis Eady Bldg., 192 Queen St., Auckland, New Zealand.

RTHERN RHODESIA:

ame and Fisheries Annual Report for the Year 1962, 36 pp., illus., printed, 2s. 6d. (about 35 U.S. cents), 1963. The Government Printer, Lusaka, Northern Rhodesia. The section on fisheries discusses research; work on fisheries development; progress in fresh-water fisheries in Luapula Province, Northern Province, and Southern Area; and accomplishments in fish farming, fishery investigations, and extension work. Also includes a report by the Chief Fisheries Research Officer covering activities of the Department of Fisheries and Game, and the research program.

CEANOGRAPHY:

British Columbia Inlet Cruises, 1962, Data Report
No. 21, 90 pp., printed, 1963. British Columbia Institute of Oceanography, Vancouver, B.C., Canada.

First National Coastal and Shallow Water Research
Conference, October 1961, Proceedings, edited by
D.S. Gorsline, 897 pp., printed, 1962. Florida State
University, Tallahassee, Fla.

"Man Explores the Sea," by T. F. Gaskell, article, Fishing News International, vol. 2, no. 3, July-September 1963, pp. 285-286, printed, single copy 6s. 6d. (about 85 U. S. cents). Arthur J. Heighway Publications Ltd., Ludgate House, 110 Fleet St., London EC4, England. In the long run, the study of fish in the sea may be the most necessary of all our oceanographic researches because we shall increasingly be made to turn to the sea as a vast food producer by the increase in the world population, states the author.

"Rybolovstvo i Nekotorye Voprosy Okeanologii" (Fishing and Some Problems of Oceanography), by Yu. Marti, article, Okeanologiya, vol. 1, no. 5, 1961, pp. 779-790, printed in Russian. Akademia Nauk SSSR, Moscow, U. S. S. R.

The Sea (Ideas and Observations on Progress in the Study of the Seas), vol. 3, The Earth Beneath the Sea: History, edited by M. N. Hill, 979 pp., illus., printed, \$28, 1963. Interscience Publishers, John Wiley and Sons, Inc., 440 Fourth Ave., New York 16, N. Y. This is the third and last volume of The Sea, a project started to provide up-to-date accounts of many of the ideas, observations, and trends of research in oceanography and related earth sciences. This volume is largely on the geology of the sea floor: topography, structure, sediments, the techniques and history of exploration, and the processes at work in and on the sea floor. Extensive information on the historical geology of the ocean basins is also included. Noteworthy is a chapter on the origin of life.

The Sea; the Largest Continent in the World, by Hein Wenzel and others, 188 pp., illus., printed, \$17.50. Rand McNally Co., 536 S. Clark St., Chicago 5, Ill., 1962

Travaux du Centre de Recherches et d'Etudes Oceanographiques, New Series, vol. V, no. 1, May 1963, 34 pp., illus., printed in French. Centre de Recherches et d'Etudes Oceanographique, 1, Quai Branly, Paris (7e), France. Includes articles on: "Sur les Variations Saisonnieres de la Circulation Superficielle dans le Secteur Nord-Est de la Mediterranee Occidentale" (On the Seasonal Variations in the Surface Circulation in the Northeast Sector of the Western Mediterranean) and "Rapport sur les Mesures Effectuees dans le Canal de Corse en Aout 1960' (Report on the Effective Measurements in the Corsican Channel in August 1960), by Jean Le Floch; "Les Causes de la Tempete du ler Decembre 1959 dans la Region de Nice" (The Causes of the Storm of December 1, 1959, in the Region of Nice) and "Effet du Vent sur le Mouvement des Eaux Littorales" (Effect of Wind on the Movement of Coastal Waters), by V. Romanovsky.

OCEAN PERCH:

"O Mestnykh Stadakh Okunya-Klyuvacha Severnoi Atlantiki" (Local Schools of Sea Perch in the North Atlantic), by K. G. Konstantinov, article, Rybnoe Khoziaistvo, vol. 38, no. 2, 1962, pp. 12-15, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U. S. S. R.

OTOLITHS:

"Contribuciones al Conocimiento de los Otolitos de Peces Actuales" (Contributions to the Knowledge of the Otoliths of Recent Fishes), by Juan Bauza Rulian, article, Boletin de la Real Sociedad Espanola Historia Natural, vol. 59, no. 2, 1961, pp. 153-168, printed in Spanish. Real Sociedad Espanola Historia Natural, Madrid, Spain.

PANAMA:

Foreign Trade Regulations of Panama, OBR 63-119, 8 pp., printed, 15 cents, September 1963. Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.) The new Customs Tariff of 1957 has as its policy objectives the fostering of economic development through the protection of domestic industries. This is accomplished by the establishment of higher tariffs and the imposition of quotas on imports competing with domestic products. The report discusses the import tariff system sales and other internal taxes, documentation and fees, labeling and marking requirements, and special customs provisions. Also covers nontariff import trade controls, Panama's export controls, United States controls on foreign trade with Panama, and diplomatic representation between Panama and the United States.

PESTICIDES:

Pesticide Handbook 1962, by Donald E.H. Frear, 14th edition, 303 pp., printed. College Science Publishers, State College, Pa.

PHILIPPINES

Fisheries Statistics of the Philippines, 1962, 105 pp., processed. Fisheries Economics and Statistics Section, Fisheries Research Division, Philippine Fisheries Commission, Department of Agriculture and Natural Resources, Quezon City, Philippines. A complete report covering all aspects of Philippine

fishery production during 1962, with some comparative data for previous years. The tables are grouped together under the headings (1) production, consumption, and requirement; (2) commercial fishing vessels; (3) fish ponds; (4) foreign trade; and (5) other data. Subdivisions of the tables is made according to gear, species caught, monthly production, and fishing grounds. The appendices include, among other items, information on the fishery districts, fishing grounds used by commercial vessels, and forms used in collecting statistics. Except for the table showing production data since 1950, most of the information covers the five-year period 1958-1962.

PHYSIOLOGY:

"Primenenie Sposoba Chebysheva k Metodike Rekonstruktsii Rosta Ryb po Cheshue" (The Use of Chebyshev's Method for Calculating the Growth of Fish from the Scales), by L. F. Shentyakova, article, Trudy Inst. Biol. Vodkhranilishch Akad. Nauk SSSR, vol. 4, no. 7, 1961, pp. 281-293, printed in Russian. Akademiia Nauk SSSR, Institut Biologicheskoi Fiziki. Vodokhraneniia, Moscow, U. S. S. R.

Theoretical Studies on Sea Animal Locomotion, by Julius Siekmann, Engineering Progress at the University of Florida, vol. 17, no. 7, July 1963, Technical Paper No. 264, 48 pp., illus., printed. (Parts I and II reprinted from Ingenieur-Archiv, vol. 31, no. 3, 1962, and vol. 32, no. 1, 1963, respectively. Part III reprinted from the Journal of Fluid Mechanics, vol. 15, part 3, 1963.) Engineering and Industrial Experiment Station, University of Florida, Gainesville, Fla.

"Vliyanie Fiziologicheskogo Sostoyaniya Ryb na Ikh Reaktsiyu na Svet" (Effect of the Physiological Condition of Fish (Leucospius delineatus) on Their Response to Light), by S. G. Zusser and R. M. Etingen, article, Rybnoe Khoziaistvo, vol. 11, 1961, pp. 19-21, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U. S. S. R.

PLANKTON:

Behaviour of Plankton in Relation to Hydrographic Factors, by H. B. Moore, Final Report, 7 pp., printed, 1962. University of Miami, Marine Laboratory, 1 Rickenbacker Causeway, Miami 49, Fla.

Field Trials with the Clarke-Bumpus Plankton Sampler, by Lance Regan, Manuscript Report No. 16, 28 pp., illus., printed, 1963. University of British Columbia, Institute of Oceanography, Vancouver, B. C., Canada.

POLAND:

Budownictwo Okretowe, vol. VIII, no. 5, May 1963, 47 pp., illus., printed in Polish with English summaries. Wydawnictwa Czasopism Technicznych NOT, Warsaw, Czackiego 3/5, Poland. Includes articles on: "Kierunki Budownictwa Statkow Rybackich dla Polskiego Rybolowstwa" (Trends in the Fishing Boats Building for the Polish Fishery), by J. Swiecicki; "Swiatowa Produkcja Statkow Rybackich" (The World Prcduction of Fishing Boats), by C. Wojewodka; "Okres Eksploatacji Nowych Typow Statkow Rybackish" (Operational Age of New Type Fishing Vessels), by M. Domagala; "Pomocnicza Flota Rybacka" (Auxiliary Fishing Boats), by J.

Staszewski; "Trawler-Zamrazalnia B 18" (Freezer-Trawler B 18 Type), by R. Roguski; "Trawler-Zamrazalnia 2,500 TDW" (Freezer-Trawler of 2,500 Tons D. W.), by W. Piltz; "Koncepcja Trawlera Dostawczego dla Wspolpracy z Baza-Przetwornia" (Proposal for a Catcher to Co-Operate with a Factory-Ship), by Z. Tretkowski; "Nowoczesne Trawlery Rufowe dla Rybolowstwa" (Modern Stern Trawlers), by M. Gasiorowski; "Superkuter Stalowy B 25sT w Wesji Tropikalnej" (Large Steel Cutter B 25sT--Tropical Version), by Z. Foltyn; "Urzadzenie Tralowe Zastosowane na Trawlerze-Prezetworni m. t. 'Kastor'" (Trawling Arrangements as Fitted in Factory-Trawler m. t. "Kastor"), by W. Czajka; "Perspekty Budowy Kadlobow Statkow Rybackich z Tworzyw Sztucznych" (Prospects of Building Fishing Boats Hulls of Glass Reinforced Plastics), by J. Kozlowski "Nowoczesne Uklady Napedowe Statkow Rybackich" (Modern Machinery Installations of Fishing Boats), by D. Bogucki; and "Analiza Pracy Urzadzen Elektrycznych na Trawlerze Przetworni" (The Work of Electrical Installations in a Factory-Trawler--Analysis), by R. Szymanski.

Polish Shipbuilding Industry, 53 pp., illus., printed. Zjednoczenie Przemyslu Okretowego, Warsaw, ul. Krucza 36, Poland.

POLLUTION:

"Effects of Logging upon Fish Resources of the West Coast," by Donald W. Chapman, article, Journal of Forestry, vol. 60, no. 8, 1962, pp. 533-537, printed. Society of American Foresters, Mills Bldg., 17th St. and Pennsylvania Ave. NW., Washington, D. C. 20006.

The Growth and Survival of Fish in Some Suspensions of Solids of Industrial Origin, by D. W. M. Herbert, Reprint No. 427, 6 pp., printed, 1963. Water Pollution Research Laboratory, Stevenage, Herts., England.

Oxygen Relationships in Streams; Proceedings of a Seminar Sponsored by the Water Supply and Water Pollution Program of the Sanitary Engineering Center, October 30-November 1, 1957, 194 pp., printed 1958. Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio.

"Study of the Bio-Assay Method for the Evaluation of Water Pollution. II--Use of the Fertilized Eggs of Sea Urchins and Bivalves," by Katsuwo Okubo and Takako Okubo, article, Bulletin of Tokai Regional Fisheries Research Laboratory, no. 32, 1962, pp. 131-140, printed. Tokai Regional Fisheries Research Laboratory, Tsukishima, Chuo-ku, Tokyo, Japan.

Water Pollution Control, Sewage Treatment, Water Treatment--Selected Biological References, by William M. Ingram and Kenneth M. Mackenthun, 148 pp., illus., printed, 70 cents, 1963. Division of Water Supply and Pollution Control, Public Health Service, U. S. Department of Health, Education, and Welfare, Washington, D. C. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.) Contains sections of biological references on water pollution control, sewage treatment, water treatment, industrial waste water, recreational water treatment, organism identification, and aspects of water quality. Includes a subsection on fish and shellfish in relation to water pollution control.

LYUNSATURATED FATS:

Froduction of Hypercholesterolemia and Atherosclerosis by a Diet Rich in Shellfish," by William E. Connor, Jay J. Rohwedder, and John C. Hoak, rticle, Journal of Nutrition, vol. 79, April 1963, pp. 443-450, printed. American Institute of Nutrition, 36th St. at Spruce, Philadelphia 4, Pa.

ESERVATION:

Pish Preservation Inquiries. II--Crayfish Handling Practices (5)," by A. R. Prater and W. A. Montgomery, article, Fisheries Newsletter, vol. 22, February 1963, p. 18, printed. Commonwealth Fisheries Office, Department of Primary Industry, Canberra, Australia.

Fish Preservation Inquiries. III--Fisheries Products. Fish Sausages (1)," by W. A. Montgomery and A. R. Prater, article, Fisheries Newsletter, vol. 22, March 1963, p. 20, printed. Commonwealth Fisheries Office, Department of Primary Industry, Canberra, Australia.

Preservation by Antibiotics and Penetrating Radiations. I and II," by H. L. A. Tarr, articles, Fishing News International, vol. 1, no. 1, 1961, pp. 17-20 and vol. 1, no. 2, 1962, pp. 46-48, respectively, illus., printed. A. J. Heighway Publications Ltd., 110 Fleet St., London EC4, England.

Radiation on the Storage Life Extension of Soft-Shelled Clams and Haddock Fillets, by J. T. R. Nickerson, S. A. Goldblith, and E. B. Masurovsky, Quarterly Progress Report, November 1961-January 1962, 35 pp., printed. Massachusetts Institute of Technology, Cambridge, Mass.

he Temperature of British Fish during Distribution in Summer, by G. H. O. Burgess, Torry Technical Paper No. 1, 54 pp., printed, 1959. Torry Research Station, Aberdeen, Scotland.

RSE SEINE:

tudies on the Mechanical Characters of Purse Seine in Relation to Its Fishing Efficiency, by Yunosuke Iitaka, 118 pp., illus., printed. Fisheries Institute, Faculty of Agriculture, Kinki University, Fufe City, Osaka Prefecture, Japan, December 1962. Deals specifically with the mechanical properties and behavior of a purse seine in working condition. The report is divided into four parts. In the first section, the origin, development, and present condition of the purse seine fisheries are traced. In the second part, the fundamental researches on the net are described. A simple current meter, the weight of webbing in water, the resistance of a plane net in a current are treated. The mechanical behavior of the purse seine in action is discussed in the third section. The results of a series of model experiments of purse seines are given and the theoretical analysis of sinking movement of the lead line is also introduced. The last section deals with the fishing capacities of purse seines.

UALITY:

Mechanical Properties of Fish and Fish Products," by J. J. Connell, article, Flow Properties of Blood and Other Biological Systems, pp. 316-326, illus., printed, 1960. Pergamon Press, 122 E. 55th St., New York 22, N. Y.

"Quality Evaluation Studies of Fish and Shellfish from Certain Northern European Waters," by Lionel Farber, article, Food Technology, vol. 17, April 1963, pp. 110-112, 113-114, printed. The Garrard Press, 510 N. Hickory St., Champaign, Ill.

RADIOACTIVE WASTES:

"Some Fundamental Aspects of Marine Ecology in Relation to Radioactive Wastes," by M. B. Schaefer, article, Health Physics, vol. 6, nos. 3/4, 1961, pp. 97-102, printed. Health Physics, 122 E. 55th St., New York 22, N. Y.

RADIOBIOLOGY:

Problems of Radiobiology. Vol. 2--Transactions of the Central Roentgenological and Radiological Institute of the Ministry of Health of the USSR, edited by M. N. Pobedinskii and P. N. Kiselev; Vol. 3--Collection of Papers in Honor of the 60th Anniversary of Professor M. N. Pobedinskii, by P. N. Kiselev, G. A. Gusterin, and A. I. Strashinin, OTS 61-31016; OTS 61-31017, 439 pp. and 341 pp., respectively, illus., processed, \$4.50 and \$3.50, respectively, 1962. (Translated from the Russian, Voprosy Radiobiologii.) Office of Technical Services, U. S. Department of Commerce, Washington, D. C. 20235.

REFRIGERATION:

"Recent Advances in Refrigerating Machinery Installations in Fishing Vessels," by M. B. F. Ranken, article, Norwegian Fishing and Maritime News, vol. 10, no. 3, 1963, pp. 10, 12, 14, 16-17, 19, 21, illus., printed. Norwegian Fishing and Maritime News, P. O. Box 740, Slottsgt. 3, Bergen, Norway.

ROCKFISH:

"O Morskom Okune Zaliva Alyaska" (Rockfish of the Gulf of Alaska), by T. G. Lyubimova, article, Rybnoe Khoziaistvo, vol. 9, 1961, pp. 27-30, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U. S. S. R.

SAFETY:

"Air-Sea Rescue Devices," by J. Burgess, article, Fishing News, no. 2579, 1962, pp. 6-7, illus., printed. A. J. Heighway Publications Ltd., 110 Fleet St., London EC4, England.

SALMON:

"Baltic Salmon Fluctuations. 2--Porpoise and Salmon," by Arne Lindroth, article, Institute of Freshwater Research Report No. 44, pp. 105-112, printed. Institute of Freshwater Research, Drottningholm, Sweden, 1962.

A Comparative Survey of the Migratory Behaviour of Adult Salmon in Fish Control Devices, by D. V. Ellis, Manuscript Report Series (Biological) No. 749, 50 pp., printed, 1963. Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada.

An Estimation of the Numbers of Mature and Immature
Salmon in Herring Purse-Seine Catches from British
Columbia Coastal Waters during the Winters of 1959,
1960 and 1961, by W. E. Barraclough and D. N. Outram, Manuscript Report Series (Biological) No. 753,

14 pp., printed., 1963. Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada.

"Grey Seals as Competitors with Man for Salmon," by J. D. Lockie, article, British Ecological Society Symposium, no. 2, pp. 316-322, printed. Honorary Secretary, British Ecological Society, Osmington House, Osmington, Weymouth, Dorset, England, 1962.

"Izmenie Pishchevaritel'nogo Apparata Letnei Kety v Period Prednerestovogo Golodaniya" (Changes in the Digestive Tract of Chum Salmon during the Prespawning Fast), by V. P. Korzhenko, article, Nauchnye Doklady Vyshey Shkoly Biologicheskie Nauki, vol. 3, 1960, pp. 19-32, printed in Russian. Gosudarstvennoe Izdatel'stvo "Vysshaia Shkola," Podsosenskii Per. 20, Moscow B-62, U. S. S. R.

"Materialy po Vozrastu i Tempu Rosta Letnei Kety (Oncorhynchus keta Walbaum) Reki My" (Data on the Age and Growth Rate of the Chum Salmon, Oncorhynchus keta (Walbaum), of the My River), by A. A. Svetovidova, article, Nauch. Doklady Vyshey Shkoly Biol. Nauk, vol. 1, 1961, pp. 29-32, printed in Russian. Gosudarstvennoe Izdatel'stvo Vysshaia Shkola," Podsosenskii Per. 20, Moscow B-62, U. S. S. R.

"Sravitel naya Kharakteristika Vozrasta i Rosta Krasnoi (Oncorhynchus nerka Walb.) Kuril skogo Ozera, Kamchatki i Bristol skogo Zaliva Alyaski" (Comparative Age and Growth Characteristics of the Sockeye Salmon (Oncorhynchus nerka Walb.) of Lake Kuril, Kamchatka, and Bristol Bay, Alaska), by O. A. Mathisen, article, Voprosy Ikhtiologii, vol. 2, no. 1, 1962, pp. 42-54, printed in Russian. Akademia Nauk SSSR, Ikhtiologicheskaia Komissaia, Moscow, U. S. S. R.

"Zavisimost! Vylupleniya Zarodyshei Losoevykh i Sigovykh ot Nekotorykh Faktorov Sredy" (The Relationship between the Time of Hatching of Salmon and Whitefish Embryos and Certain Environmental Factors), by A. V. Popov and A. I. Zotin, article, Rybnoe Khoziaistvo, no. 11, 1961, pp. 22-28, printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U. S. S. R.

SALMONIDS:

"Utbredningen av Furunkulos hos Fisk i Sverige under Aren 1951-1960" (Outbreaks of Fish Furunculosis in Salmonids in Sweden 1951-1960), by J. Lange and O. Ljungberg, article, Nordisk Veterinaermed, vol. 14, no. 3, 1962, pp. 177-191, printed in Swedish. Statens Veterinarmedicinska Anstalt, Stockholm, Sweden.

SARDINES:

Fecundidad de la Sardina Europea (SARDINA PIL-CHARDUS Walb.) (Fecundity of the European Sardine--Sardina pilchardus Walb.), by Buenaventura Andreu, 26 pp., illus., printed in Portuguese. (Reprinted from Publicacoes do XXVI Congresso Luso-Espanhol, vol. 1.) Associacao Portuguesa para o Progresso das Ciencias, Porto, Portugal, 1962.

SCALLOPS:

"Reproduction of the Bay Scallop, Aequipecten irradians Lamarck. Influence of Temperature on Maturation and Spawning," by A. N. Sastry, article, The Biological Bulletin, vol. 125, no. 1, August 1963, pp. 146-153, printed, single copy \$2.50. The Biological Bulletin, Marine Biological Laboratory, Woods Hole Mass.

SCOMBROIDS:

Body Form and Swimming Performance in the Sconbroid Fishes," by Vladimir Walters, article, American Zoologist, vol. 2, no. 2, 1962, pp. 143-149, printed. American Society of Zoologists, 104 Liberty St., Utica, N. Y.

SEA LAMPREY:

"The Histology of Tail Regeneration in the Ammocoetes," by I. A. Niazi, article, Canadian Journal of Zoology, vol. 41, no. 1, 1962, pp. 125-146, printed. Division of Administration, National Research Council, Sussex St., Ottawa 52, Canada.

SEA OTTER:

"Recovery of a Fur Bearer," by Karl W. Kenyon, article, Natural History, vol. LXXII, no. 9, November 1963, pp. 12-21, illus., printed, single copy 50 cents. The American Museum of Natural History, Central Park W. at 79th St., New York 24, N.Y. Discusses life history, anatomy, reproduction, tagging, and near extinction of the sea otter.

SEAWEED:

British Seaweeds, by Carola I. Dickinson, 244 pp., illus., printed, 25s. (about US\$3.50). Eyre and Spottiswoode Ltd., 15-16 Bedford St., Strand, London WC2, England, 1963.

"Drying of Seaweeds and Other Plants. V--Through-Circulation Drying of Ascophyllum nodosum in a Semi-Continuous Drier," by J. H. Merritt and E. Gordon Young, article, Journal of the Science of Food and Agriculture, vol. 14, January 1963, pp. 39-42, printed. Society of Chemical Industry, 14 Belgrave Sq., London SW1, England.

SEROLOGY:

'A Simple Technique for Immobilizing Fish to Remove Blood," by Jack D. Burke, article, Copeia, no. 4, 1962, pp. 852-854, printed. American Society of Ichthyologists and Herpetologists, 18111 Nordhoff St., Northridge, Calif.

SHARKS:

"The Behavior of Sharks," by P. W. Gilbert, article, Scientific American, vol. 207, no. 1, 1962, pp. 60-68 illus., printed. Scientific American Inc., 415 Madison Ave., New York 17, N. Y.

Shark for Sale, by William Travis, 175 pp., illus., printed, 1961. Rand McNally and Company, 536 S. Clark St., Chicago 5, Ill.

SHRIMP:

"Effect of Salinity on Growth of Postlarval Penaeid Shrimp," by Zoula P. Zein-Eldin, article, The Biological Bulletin, vol. 125, no. 1, August 1963, pp. 188-

196, illus., printed, single copy \$2.50. The Biological Bulletin, Marine Biological Laboratory, Woods Hole, Mass.

The Proper Zoological Name of the North American White Shrimp," by Gordon Gunter, 8 pp., printed. Reprinted from Proceedings of the Gulf and Caribean Fisheries Institute, Fifteenth Annual Session, Tovember 1962, pp. 103-110.) Gulf and Caribbean Fisheries Institute, University of Miami, Marine Laboratory, 1 Rickenbacker Causeway, Miami 49, Fla.

Research and Shrimp Production," by Lyle S. St. Amant, article, Louisiana Conservationist, vol. 15, nos. 11 and 12, November-December 1963, pp. 6-9, illus., printed. Louisiana Conservationist, Wild, Life and Fisheries Bldg., 400 Royal St., New Orleans 16, La. Recent declines in shrimp production in the northern Gulf of Mexico have resulted in a great impetus in shrimp research by state and federal agencies. During the past 3 years shrimp research in that area has been coordinated and carried out by those agencies at a level which for the first time has made adequate data available in time to apply to each year's production. These data are now being applied annually in the prediction of the shrimp harvest, the setting of seasons, and the general management of the shrimp population. This article attempts to place research in its proper perspective and examines what may be expected from the application of research in the shrimp industry in the near and distant future.

ALL BUSINESS MANAGEMENT:

ringing Management Information to Small Business, by J. Richard Stevens, Management Research Summary, 4 pp., processed. Small Business Administration, Washington, D. C. 20416. A major block to greater success for many small businessmen is failure to make use of the management information that is available. There are many sources of good nanagement information and counsel. Major probems are (1) to present the material in such a form hat the small businessman can and will use it, and 2) to develop channels through which the small businessman can find the help he needs when he needs it. Agencies that originate and communicate business information, the report suggests, should coordinate their efforts in order to reduce the avaanche of duplicate and overlapping materials. Effort should be made to provide local personal Bources of management information and counsel.

invironment vs. Management in Small Business Failure, Management Research Summary, 2 pp., processed, 1963. Small Business Administration, Washington, D. C. 20416. Environmental rather than managerial factors were dominant in the termination of 20 of the 37 out-of-business firms studied. Some environmental factors were economic decline of the industry in that area and unavailability of financing. The most noticeable difference between successful and unsuccessful owners lay in their approach to decision making. In general, ownermanagers of the out-of-business firms had relied less on outside management and technical help than had owner-managers of the firms that were still active.

Keeping Score with Effective Records, by William L. Raby, Small Marketers Aid No. 94, 4 pp., processed. Small Business Administration, Washington, D. C. 20416, August 1963. Designed for small marketers who may wish to check their records. To be effective, records should provide needed facts at the proper time, and they should be easy to handle. The kinds of records and how many depend on the nature of the particular business. Types of records often used by small marketers include inventory and purchasing, sales records, cash records, credit records, personnel records, fixtures and property, and bookkeeping.

Profitability and Size of Firm, by H. O. Stekler, Management Research Summary, 2 pp., processed, 1963. Small Business Administration, Washington, D. C. 20416. Findings showed that small firms generally have lower profit ratios than large firms. The report concludes that small firms as a group have less ability to expand than large firms. The profit ratios of the small firms, however, are not excessively low in comparison with industry averages. Small firms showed more variation than large ones in the profit ratios of firms within a size class.

Tax Guide for Small Business, 1964, 144 pp., printed, 40 cents, December 1963. Internal Revenue Service, U.S. Department of the Treasury, Washington, D.C. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.) For use in filing the 1963 income tax returns, excise tax returns, and other returns. It answers the Federal tax questions of corporations, partnerships, and sole proprietorships. Explains in plain layman's language the tax results from buying, starting, operating, and the sale and other disposition of a business. In addition, contains a tax calendar for 1964 which should prove helpful to the businessman throughout the year, since it indicates what he should do and when he should do it in regard to the various Federal taxes. Also has a checklist of special interest for the man just starting in business in that it affords a quick method for determining for what Federal taxes he may be liable.

Trends and Prospects for Affiliated Food Retailers, by Russell L. Childress, 168 pp., printed, \$2. Department of Agricultural Economics, University of Delaware, Newark, Del., 1962.

Will Profit Sharing Help Your Firm?, by B. L. Metzger, Management Aid for Small Manufacturers No. 157, 4 pp., processed, October 1963. Small Business Administration, Washington, D. C. 20416. Small companies are finding that profit sharing, when properly handled, provides incentives which can help to bring about employee teamwork, reduced labor turnover, high productivity, better product quality, and lower costs. These results are achieved because profit sharing programs "share the caring" by giving employees a stake in the company's success. Yet the success of a profit-sharing program is not automatic. It depends on many factors, including the company's profit potential, a plan tailored to the company's needs, and keeping employees interested.

SMOKING:

Recommendations for the Preparation of Smoked Salmon, by A. Bannerman, Torry Advisory Note No. 5, 3 pp., printed, 1962. Torry Research Station, Aberdeen, Scotland.

Smoked White Fish--Recommended Practice for Producers, Torry Advisory Note No. 9, 7 pp., printed, 1963. Torry Research Station, Aberdeen, Scotland.

SOUTH AFRICA REPUBLIC:

Thirty-First Annual Report for the Period 1st April, 1959 to 31st March, 1960, 242 pp., printed, 1963. Division of Sea Fisheries, Department of Commerce and Industries, Pretoria, South Africa Republic.

SPAIN:

Las Conservas de Pescado Espanolas ante el Mercado Comun (The Spanish Canned Fish Industry and the Common Market), by Francisco Lopez Capont, 7 pp., printed in Spanish. (Reprinted from Informacion Conservera, no. 111-112, March-April 1963.) Informacion Conservera, Colon, 62, Valencia, Spain.

"Glance at Some Spanish Fishing Methods," by G. Christian, article, Fishing News International, vol. 2, no. 3, July-September 1963, pp. 299-300, 302-303, illus., printed, single copy 6s. 6d. (about 85 U.S. cents). Arthur J. Heighway Publications Ltd., Ludgate House, 110 Fleet St., London EC4, England. Discusses long-line fishing, trammel net fishing, and ring net fishing as practiced by Spanish fisher-men in the province of Catalonia.

SPAWNING:

Izmenienie Polovykh Tsiklov u Ryb s Edinovremennym Ikrometaniem v Svyazi s Izmeneniem Uslovii Sushchestvovaniya'' (Change of the Sexual Cycle of Fishes Having a Single Spawning Time (Each Year) Associated with Changed Conditions of Existence), by B. V. Koshelev, article, Voprosy Ikhtiologii, vol. 1, no. 4, 1961, pp. 716-724, printed in Russian. A-kademia Nauk SSSR, Ikhtiologicheskaia Komissaia, Moscow, U.S.S.R.

SPOILAGE:
"The Effect of Tylosin on Coagulase-Positive Staphylococci in Food Products," by R. A. Greenberg and J. H. Silliker, article, Journal of Food Science, vol. 27, no. 1, 1962, pp. 60-63, printed. Institute of Food Technologists, 510-522 N. Hickory St., Champaign,

SPORT FISHERY:

"Valuation of a Fishery," by James A. Crutchfield, article, Transactions of the Twenty-Seventh North American Wildlife and Natural Resources Conference, pp. 335-347, printed. Wildlife Management Institute, Wire Bldg., Washington 5, D. C., 1962.

SQUID:
"A New Species of Gonatid Squid from the Northeastern Pacific," by William G. Pearcy and Gilbert L. Voss, Contribution No. 466, 7 pp., illus., printed. (Reprinted from Proceedings of the Biological Society of Washington, vol. 76, August 2, 1963, pp. 105-112.) University of Miami, Marine Laboratory, Institute of Marine Science, 1 Rickenbacker Causeway, Miami 49, Fla.

STERN TRAWLERS:

Brunswick Type Stern Trawler," article, Canadian Fisherman, vol. 49, no. 5, 1962, pp. 15-17, illus., printed. National Business Publications Ltd., Gardenvale, Que., Canada.

"French Yard Claims Improved Stern Trawler Arrangement," article, World Fishing, vol. 11, no. 5, 1962, p. 55, illus., printed. John Trundell & Partners, Ltd., St. Richards House, Eversholt St., London NW1, England.

"Stern Trawler with Ferry-Type Bridge," article, World Fishing, vol. 11, no. 11, 1962, pp. 40, 43, illuprinted. John Trundell & Partners, Ltd., St. Richards House, Eversholt St., London NW1, England.

STRIPED BASS:

"Resultats d'Etiquetage du Bar d'Amerique, dans le Fleuve Saint Laurent de 1945 a 1960" (Results of Tagging Striped Bass in the Saint Lawrence River during the Period 1945 to 1960), by G. Beaulieu, ar ticle, Naturaliste Canadien, vol. 89, no. 8/9, 1962, pp. 217-236, printed in French. Naturaliste Canadien, l'Universite Laval, Quebec, Canada.

SWEDEN:

Vastkustfiskarna Begar att fa Behalla sin Olycksfall sforsakring; Uppvaktning infor Yrkesskadeutredningen" (The Fishermen of the West Coast Demand to Keep Their Accident Insurance; a Delegation before the Work-Hazards Investigating Group), by Ingemar Gerhard, article, Svenska Vastkust Fiskaren, vol. 33, no. 16, August 1963, p. 388, printed in Swedish. Svenska Vastkustfiskarnas Centralforbund, Goteborg Sweden.

TAGGING:

Zavisimost' Sokhrannosti Metok ot Povedeniya i Uslovii Obitaniya Ryb.'' (The Relation of Retention Tags to the Behavior and Environmental Conditions of Fishes), by K. R. Fortunatova and N. I. Chugunova article, Voprosy Ikhtiologii, no. 15, 1960, pp. 91-105, printed in Russian. Akademia Nauk SSSR, Ikhli ologicheskaia Komissaia, Moscow, U.S.S.R.

TARIFF AND TRADE:

Negotiations under the Trade Expansion Act of 1962, Publications 63-1, 30 pp., processed, 20 cents, Oct ber 1963. Office of the Special Representative for Trade Negotiations, Washington, D. C. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.) Contains "Notice of Proposed Trade Agreement Negotiations and Articles to be Considered for Negotiation;" and "Notice of Public Hearings: Trade Information Corr mittee.

Public Notice of Investigation and Hearings (Investigation No. TEA-221 (b)-1 Under Section 221 of the Trade Expansion Act of 1962, With Respect to Presi dent's List of Articles for Possible Consideration in Trade Agreement Negotiations), 6 pp., processed, October 22, 1963. U.S. Tariff Commission, Washin ton, D. C. 20436. Included in requests for reservation of certain items from negotiations are cod, cusl haddock, hake, pollock, Atlantic ocean perch, "other wise processed.

TRIFFS:

ariff Schedules of the United States Effective August 31, 1963, TC Publication 112, 532 pp., processed, \$4 (includes cost of supplemental pages to be issued until further notice), 1963. United States l'ariff Commission, Washington, D.C. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.) resents a republication of the legal text of the Tarif Schedules of the United States and of the related naterial originally published by the President in Part II of the Federal Register of August 17, 1963. Also includes the text of Proclamation 3548 which brought the new schedules into effect on August 31, 1963; the Tariff Classification Act of 1962, as amended; and a special list of rates of duty regarded as "existing on July 1, 1962," under section 256 (4) of the Trade Expansion Act of 1962. Included in the volume is a schedule of duties on fish and shellfish.

MAILAND:

Chilling of Fish in Thailand," by M. C. Kosolsuri-yathit Suriyong, P. Nityachin, and G. N. Subba Rao, article, Current Affairs Bulletin, no. 37, August 1963, pp. 19-25, illus., printed. Indo-Pacific Fisheries Council, Food and Agriculture Organization of the United Nations, Bangkok, Thailand.

LAPIA:

The African Cichlid, Tilapia heudeloti Dumeril, in the Commercial Fish Catch of Florida," by Victor G. Springer and John H. Finucane, 2 pp., printed. (Reprinted from Transactions of the American Fisheries Society, vol. 92, no. 3, July 1963, pp. 317-318.) Secretary, American Fisheries Society, P.O. Box 483, McLean, Va.

MANSPORTATION:

rad Transport of Frozen Fish, D. L. Nicol, Torry Advisory Note No. 8, 5 pp., printed, 1963. Torry Research Station, Aberdeen, Scotland.

WLING:

inige Grundlagen fur die Berechnung der Bewegung es Trawlers mit dem Schleppnetz" (Some Fundamentals for the Calculation of the Motion of a Trawler with the Trawl Gear), by H. Stengel, article, Fischereiforschung, vol. 5, no. 3, 1962, pp. 10-14, illus., printed in German. Institut fur Hochseefischerei und Fischverarbeitung, Rostock-Marinehe, Germany.

Midwater Trawling," by A. von Brandt, article, Fishing News International, vol. 1, no. 2, 1962, pp. 63-65, illus., printed. A. J. Heighway Publications Ltd., 110 Fleet St., London EC4, England.

Die Optimale Schleppgeschwindigkeit" (The Optimum Towing Speed), by V. N. Cestnoj, article, Fischereiforschung, vol. 5, no. 2, 1962, pp. 16-19, illus., printed in German. Institut fur Hochseefischerei und Fischverarbeitung, Rostock-Marienehe, Germany.

AWLS:

Du Chalut de Fond a Grande Ouverture Verticale au Chalut Flottant" (From a Bottom Trawl with Large Vertical Opening to the Floating Trawl), by C. Nedelec, article, <u>Science et Peche</u>, no. 95, 1961, 13 pp., illus., printed in French. Institut Scientifique et Technique des Peches Maritimes, 59 Ave. Raymond-Poincare, Paris XVI, France.

Trawls, by Zbigniew Zebrowski, OTS 60-21500, 109 pp., illus., printed, \$1.50, 1963. (Translated from the Polish, Wloki Trawlerowe, 1954.) Office of Technical Services, U.S. Department of Commerce, Washington, D.C. 20235.

TROUT

"He's Forever Chasing Rainbows," by Frank J. Taylor, article, The Saturday Evening Post, vol. 236, no. 42, November 30, 1963, pp. 70-71, illus., printed, single copy 20 cents. The Curtis Publishing Compnay, Philadelphia, Pa., 19105. Discusses a large trout farm in Idaho and how it was developed. A striking fact is that this is the most productive acreage on earth. Where an acre of dirt farm may produce a yearly harvest of 2,000 pounds of poultry or 500 pounds of beef, each acre of this farm yields 400,000 pounds of rainbow trout (weight based on fish dressed, packed, and ready for the market). In breeding the fish, the owner has eliminated the migratory pattern, extended the spawning period from 3 to 9 months, and developed trout that spawn at the age of 2 rather than 3 years. Fed on a mixture of fish meal, brewer's yeast, whey, soybean and alfalfa meal, and vitamins and minerals, the trout grow an inch a month. The use of a fish-cleaning machine in the packing plant has increased the production output. In 10 years, annual production has risen from 250,000 pounds to 1.5 million pounds. Recent innovations are the development of a mutation golden trout and plans for sale of live trout in West Coast food

"A Contribution to the Growth and Food Biology of the Brown Trout Salmo trutta Trutta M. Fario and Salmo trutta Labrax M. Fario in Some Waters of Czechożslovakia," by Stanislav Frank, article, Vestnik Ceskoslovenske Spolecnosti Zoologicke, vol. 26, no. 4, 1962, pp. 316-328, printed in Czechoslovak. Department of Zoology, Laboratory of Ichthyology, Charles University, Prague, Czechoslovakia.

"Preliminary Research on the Action of Alkylaryl-sulphonate on Salmo irideus," by C. Maldura, article, Proceedings of the General Fisheries Council for the Mediterranean, no. 6, 1961, pp. 203-206, printed. General Fisheries Council for the Mediterranean, Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.

"On the Rainbow Trout (Salmo gairdnerii Irideus) in Lake Titicaca, South America," by Yoshiichi Matsui, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 28, no. 5, 1962, pp. 497-498, printed. Japanese Society of Scientific Fisheries, Shiba-Kaigondori 6, Minato-ku, Tokyo, Japan.

"Thermoperiodism in Sea-Run Cutthroat Trout (Salmo clarki Clarki)," by Wallace G. Heath, article, Science, vol. 142, no. 3591, October 25, 1963, pp. 486-488, illus., printed, single copy 35 cents. American Association for the Advancement of Science, 1515 Massachusetts Ave, NW., Washington 5, D.C.

Trout Stream Management in Massachusetts, by
James W. Mullan, 94 pp., illus., printed. Massachusetts Division of Fisheries and Game, Boston, Mass., 1960.

TUNA:
"On the Blood Types of Yellowfin and Bigeye Tuna," by Akimi Suzuki, article, American Naturalist, vol. 96, no. 889, 1962, pp. 239-246, printed. The Science Press, Lancaster, Pa.

"Sobre as Pescarias de Atuns e Afins e Suas Areas de Ocorrencia no Atlantico Tropical no Bienio 1961-1962" (On the Fisheries for Tuna and Related Species and Their Areas of Occurrence in the Tropical Atlantic in the Bienium 1961-1962), by J. B. Gomes da Fonseca and Aldemir C. Barros, article, <u>Sudene</u>, <u>Boletim de Estudos de Pesca</u>, vol. 13, no. 7, <u>July</u> 1963, pp. 18-25, processed in Portuguese. Departamento de Industrializacao, Seter Pesca, Superintendencia do Desenvolvimento do Nordeste, Edificio Juscelino Kubitschek, 12º Andar, Recife, Brazil.

Statistical Research Report on the Tuna Longline
Fisheries, by Fishing Grounds, April 1961-March
1962, 103 pp., illus., processed in Japanese with English summary, August 1963. Statistics and Survey Division, Ministry of Agriculture and Forestry, Japanese Government, Tokyo, Japan. Discusses recent production trends in tuna long-line fishery; types of fishery and catch by ocean; operation and catch by area; and productivity. Includes statistical tables giving data on tuna long-line fishery catch by year and by type of fishery; number of vessels; composition of catch by area and by species; productivity by vessel size of Japan-based fishery; productivity by ocean by vessels in the 200-500 ton class; and other similar data.

"Studies of the Erythrocyte Antigens of the Skipjack Tuna (Katsuwonus pelamis)," by Lucian M. Sprague, article, American Naturalist, vol. 96, no. 889, 1962, pp. 233-238, printed. The Science Press, Lancaster, Pa.

Subsides pour l'Etude de l' "Honeycombing" de la Chair de Thon (Subsidies for the Study of 'Honey-combing' of Tuna Meat), by Manuel de sa Nogueira, 45 pp., illus., printed in French. Ministerio da Economia, Secretaria de Estado do Comercio, Instituto Portugues de Conservas de Peixe, Lisbon, Portugal, 1959.

"Treasure on the Table," article, Good Packaging, vol. 24, no. 7, July 1963, Yearbook Edition, pp. 5 76, illus., printed, single copy 75 cents. Good Packaging, 171 Second St., San Francisco 5, Calif. A survey of the United States tuna industry, from sea to table. Discusses the history of the tuna fishery in Greece and Peru; the principal tuna species -albacore, bluefin, skipjack, and yellowfin; methods of catching tuna; processing and canning; tuna research; and marketing and consumption.

"The Tuna Fishery: Methods, Distribution, and Abundance," by G. V. Howard, article, Western Fisheries, vol. 64, no. 3, 1962, pp. 15-16, 50-53, 56-57, illus., printed. Roy Wrigley Publications Ltd., 1104 Hornby St., Vancouver1, B.C., Canada.

TURKEY:

Balik ve Balikcilik, vol. XI, no. 10, October 1963, 35 pp., illus., printed in Turkish with English table of contents. Et ve Balik Kurumu G. M., Balikcilik Muc urlugu, Besiktas, Istanbul, Turkey. Includes, amon others, articles on: "Fish Pigments" and "Basic Researches on the Development of Fishery in Turkish Freshwater Lakes and Dams.

Balik ve Balikcilik, vol. XI, no. 9, September 1963, 35 pp., illus., printed in Turkish with English table of contents. Et ve Balik Kurumu G. M., Balikcilik Mudurlugu, Besiktas, Istanbul, Turkey. Includes, a mong others, these articles; "The Fishing of Bonito and Skipjacks by Hook and Line in the Territorial Waters (Part 2);" and "The Sulphurization and Sul-phonation Methods of Fish Oil and Utilization of Raw Material of Fish Oil in Industry.

UNDERWATER EXPLOSIONS:

Geophysical Offshore Oil Explorations and Associated Fishery Problems, by R. L. Rulifson and R. W. Schoning, investigational Report No. 1, 46 pp., printed, 1963. Oregon Fish Commission, Portland, Oreg.

UNDERWATER OBSERVATIONS:

"A Self-Contained Portable Tape Recording System for Use by SCUBA Divers," by Lloyd R. Breslau, John M. Zeigler, and David M. Owen, article, Bulletin de l'Institut Oceanographique, no. 1235, 1962, pp. 1-4, printed. Institut de l'Institut Oceanographique, Monaco-Ville, Monaco.

Undersea Photography in Marine Research, by R. E. Craig and R. Priestly, 1963 Marine Research No. 1, 27 pp., illus., printed, 15s. (about US\$2.10), 1963. Her Majesty's Stationery Office, 13A Castle St., Edin burgh 2, Scotland.

Underwater Photography, by Hilbert Schank and Harr-Kendall, illus., printed. Camera Shop of the Maritimes Ltd., Halifax, N. S., Canada.

U.S.S.R.:

Biologicheskie Rybokhoz yaistvennye Issledovaniya V Sibiri" (Biological Fishery Research in Siberia), by B. G. Ioganzen, article, Voprosy Ikhtiologii, vol. 2, no. 1, 1962, pp. 3-17, printed in Russian. Akademia Nauk SSSR, Ikhtiologicheskaia Komissaia, Moscow, U. S. S. R.

"Fish Culture in the U.S.S.R.," by Michael M. Ovchy nnyk, article, Fishing News International, vol. 2, no. 3, July-September 1963, pp. 279-282, printed, single copy 6s. 6d. (about 85 J.S. cents). Arthur J. Heighway Publications Ltd., Ludgate House, 110 Fleet St., London EC4, England. The vast territory of the U. S. S. R. includes inland seas, about 25 million hectares of big and small lakes, about 4 million hectares of reservoirs, more than 3 million kilometers of rivers suitable for fishing, and more than 400,000 hectares of ponds suitable for fish culture. The Soviet authority announced that in 1962 about 800,000 metric tons of fish would be obtained from inland waters and that this amount will increase each year.

Fishing Economy 1962, Vol. 38, No. 6: (Selected)
Translations, OTS 63-21982, 24 pp., processed, 75 cents, June 5, 1963. (Translated from the Russian,

hbnoe Khoziaistvo, vol. 38, no. 6, 1962, pp. 3-7, 5-23.) Office of Technical Services, U.S. Department of Commerce, Washington, D.C., 20235.

eoriya Rybnogo Khozyaistva Kak Razdel Biotekhnii ee Polozhenie v Sisteme Nauk v Svyazi s Probmoi Gidrostroitel'stva" (The Theoretical Basis the Fishing Industry as a Division of Biotechnics of Its Position in the Scientific System in Relation the Problem of Hydroelectrical Construction), by B. Berlyand, article, Byull. Nauch.-Tekh. Inform. esoyuz. Proektno-Izyskat. Nauch.-Issledovatel. st. "Godroproekt.," vol. 13, 1961, pp. 24-33, rinted in Russian. Vsesoiuznyi Proektno-Izyska-Iskii Nauchnyi Issledovatel'skii Institut, Moscow, S.S.R.

TIH.

bliography of Utah Aquatic Biology, No. II," by arl M. Christensen, article, The Great Basin Natralist, vol. XXII, nos. 1-3, 1962, pp. 32-53, rinted. Department of Botany, Brigham Young hiversity, Provo, Utah.

VISELS:

rchant Vessels of the United States, 1963 (Including Yachts), 1,224 pp., processed, \$7. Bureau of lustoms, U.S. Treasury Department, Washington, C. (For sale by the Superintendent of Documents, S. Government Printing Office, Washington, D.C. 0402.) Covers every American merchant vessel and yacht (including fishing vessels) which had an acanceled document (register, enrollment and liense, or license) on January 1, 1963. The official limber, signal and radio-call letters, type of rig, ame, tonnage, dimensions, place and date built, ame of owner, and home port of every vessel are rovided.

all Boat Construction, by Robert M. Steward, inted, 1958. Rudder Publishing Co., 9 Murray St., w York 7, N. Y.

all Seagoing Craft and Vessels for Inland Navigation; a Treatise on the Design and Construction of the part of the Design and Boats Engaged in Inland Navigation, Coast-Trade, Passenger and Ferry-Services, Towing, breaking, and Sea Fishing, by A. Roorda, 568, illus., printed, 1957. Technical Publishing Co., aarlem, Netherlands.

MINGTON:

hural Resources of Washington, 75 pp., illus., rinted, 50 cents. Division of Information, Office I the Secretary, U.S. Department of the Interior, lashington, D.C., 1963. (For sale by the Superindent of Documents, U.S. Government Printing ffice, Washington, D.C. 20402.) Discusses early information and settlement, physical characteristics, irk and recreational resources, water and power sources, fish and wildlife resources, mineral resources, land resources, indian tribes, and geologic story. Also covers programs of Federal natural source agencies—Bureau of Reclamation, Bonnelle Power Administration, U.S. Army Corps of agineers, Geological Survey, Bureau of Mines, areau of Indian Affairs, Bureau of Land Management, U.S. Forest Service, Fish and Wildlife Serv-

ice, National Park Service, and Bureau of Cutdoor Recreation.

WHALES:

Bionics and Cetaceans, by A. C. Tomilin, OTS 63-13833, 3 pp., processed, January 10, 1963. (Translated from the Russian, Trans. of Priroda, vol. 51, no. 10, 1962, pp. 101-103.) Office of Technical Services, U.S. Department of Commerce, Independence Ave. and Ohio Dr. SW., Washington, D. C. 20235.

Ovulation Counts and Their Relation to Age and Stock

Assessment in Female Fin Whales from British Columbia, by Gordon C. Pike, Manuscript Report Series (Biological) No. 752, 26 pp., printed, 1963. Fisheries Research Board of Canada, Biological Station, Nanaimo, B. C., Canada.

"Vitamin A Toxicity in Whale Liver," article, Nutrition Reviews, vol. 19, no. 10, 1961, pp. 318-319, printed. The Nutrition Foundation Inc., 99 Park Ave., New York 16, N. Y.

WHITEFISH:

"Life History of Whitefish Young (<u>Coregonus</u>) in Two Lake Reservoirs," by Thorolf Lindstrom, article, <u>Institute of Freshwater Research Report No. 44</u>, pp. 113-144, printed. Institute of Freshwater Research, Drottningholm, Sweden, 1962.

"The Tale of the Whitefish," by Russell McKee, article, Michigan Conservation, vol. XXXII, no. 5, September-October 1963, pp. 36-39, illus., printed. Michigan Conservation, Lansing 26, Mich. Whitefish numbers are again increasing in the Great Lakes. Two factors appear to be working in favor of this species: the sea lamprey may well be drastically reduced in the Upper Great Lakes by special control measures now in effect; and the record for the past 50 years indicates that whitefish may be ready for a surge in population within the next few years.

WHITE SUCKERS:

"Homing Tendency of Spawning White Suckers in Many Point Lake, Minnesota," by Donald E. Olson and Warren J. Scidmore, article, Transactions of the American Fisheries Society, vol. 92, no. 1, 1963, pp. 13-16, printed. Secretary, American Fisheries Society, P. O. Box 483, McLean, Va.

WORLD FISHERIES:

"Science and the Future of World Fisheries," by G. L. Kesteven, article, Fishing News International, vol. 2, no. 3, July-September 1963, pp. 289, 293, 295-296, printed, single copy 6s. 6d. (about 85 U. S. cents). Arthur J. Heighway Publications Ltd., Ludgate House, 110 Fleet St., London EC4, England. The author advances the view that stocktaking of fishery resources and fishery industries should be accelerated, and developed under international auspices. He believes that this work should be sponsored and organized by FAO's new resources' committee for which membership should be drawn from the existing fishery councils and commissions. The work in this stocktaking should be carried out largely by the councils and commissions which now provide a pattern covering the greater part of the earth's surface and its resources.