

PUBLICATIONS

FISH AND WILDLIFE SERVICE

These publications are available free from the Office of Information, U. S. Fish and Wildlife Service, Washington, D. C. 20240. Publications are designated:

- CFS --Current fishery statistics of the United States.
- FFL --Reprints of reports on foreign fisheries.
- SEP.--Separates (reprints) from Commercial Fisheries Review.
- SL --Statistical lists of dealers in and producer of fishery products and byproducts.
- SSR. --Fish.--Special Scientific Reports-- Fisheries (limited distribution)

Number	Title
CFS-4154--	Michigan, Ohio & Wisconsin Landings, Apr. 1966, 4 pp.
CFS-4188--	Michigan, Ohio & Wisconsin Landings, May 1966, 4 pp.
CFS-4207--	Shrimp Landings, Mar. 1966, 5 pp.
CFS-4208--	Gulf Coast Shrimp Data, Mar. 1966, 15 pp.
CFS-4211--	Rhode Island Landings, Apr. 1966, 3 pp.
CFS-4213--	Fish Meal and Oil, July 1966, 2 pp.
CFS-4214--	North Carolina Landings, July 1966, 3 pp.
CFS-4216--	Maine Landings, June 1966, 4 pp.
CFS-4217--	Louisiana Landings, June 1966, 3 pp.
CFS-4218--	Louisiana Landings, July 1966, 3 pp.
CFS-4219--	Massachusetts Landings, Mar. 1966, 7 pp.
CFS-4226--	South Carolina Landings, June 1966, 2 pp.
CFS-4228--	Georgia Landings, June 1966, 3 pp.
CFS-4230--	Massachusetts Landings, Apr. 1966, 9 pp.
CFS-4231--	Alabama Landings, June 1966, 3 pp.
CFS-4233--	Rhode Island Landings, May 1966, 3 pp.
CFS-4234--	Texas Landings, June 1966, 2 pp.
CFS-4237--	Fish Meal and Oil, Aug. 1966, 2 pp.
CFS-4238--	Florida Landings, Aug. 1966, 8 pp.
CFS-4242--	Texas Landings, July 1966, 2 pp.

- SL-12--Wholesale Dealers in Fishery Products, Virginia, 1966, revised, 11 pp.
- Sep. No. 773--The Channel Net for Shrimp in North Carolina.
- Sep. No. 774--Rare Fossils Dredged off Atlantic Coast.
- Sep. No. 775--Chile--Her Riches Are Just Off Coasts--But Far From Markets
- SSR-Fish. 530--Seasonal and Areal Distribution of Zooplankton in Coastal Waters of the Gulf of Maine, 1964, by Kenneth Sherman, 11 pp., illus., May 1966.
- SSR-Fish. 531--Length-Weight Relation of the Summer Flounder of Paralichthys dentatus (Linnaeus), by Fred E. Lux and L. R. Porter, Jr., 8 pp., June 1966.

The following Foreign Fishery Leaflets (formerly Market News Leaflets) are available free from the Branch of Foreign Fisheries, Bureau of Commercial Fisheries, Room 8015, U. S. Department of the Interior, Washington, D. C. 20240.

- FFL-5--Denmark's Fisheries, 1964, 10 pp., Apr. 1966.
- FFL-7--Mexican Fisheries, 1965, 33 pp., Oct. 1966; 1964, 27 pp. Jan. 1966.
- FFL-8--Portugal's Fishing Industry, 1965, 28 pp., Aug. 1966.
- FFL-10--Swedish Fisheries, 1964, 11 pp., Jan. 1966.
- FFL-18--Panama's Fishing Industry, 1965, 10 pp., Mar. 1966.
- FFL-22--(Supplement) Republic of South Africa and Territory of South West Africa Fisheries, 1965, 8 pp., Oct. 1966.
- FFL-26--Taiwan Fisheries in 1965, 24 pp., Sept. 1966.
- FFL-32--Venezuela's Fisheries, 1964, 25 pp., Apr. 1966.
- FFL-34--Greek Production of Processed Fishery Products and Foreign Trade in Fish, 1965, 8 pp., June 1966.
- FFL-56--Norwegian Fisheries, 1965, 8 pp., May 1966.
- FFL-57--Fisheries in the Federal Republic of Germany--Annual Survey 1965, 36 pp., Aug. 1966.
- FFL-58--Republic of Korea Fisheries, 1964, 4 pp., Apr. 1966.
- FFL-80--Brazil's Fishing Industry, 1964 & 1965, 20 pp., June 1966.

- FFL-88--Japanese Exports of Salmon and King Crab, 1962-1964, 15 pp., July 1966.
- FFL-90--Belgian Fishing Industry, 1965, 21 pp., Oct. 1966.
- FFL-92--Greenland's Fisheries, 1964 and 1965 Trends, 24 pp., May 1966.
- FFL-101--Conference of Plenipotentiaries on the Conservation of Atlantic Tunas--Rio de Janeiro, Brazil - 2 to 14 May 1966 - Final Act, 25 pp., June 1966.
- FFL-102--Fisheries Development Potential of the Territory of Baja California Sur, Mexico, 11 pp., Sept. 1966.
- FFL-103--Japan's Fisheries Catch, 1965, 6 pp., Sept. 1966.
- FFL-104--Fisheries of Communist China, 1966, 6 pp., Oct. 1966.

The following service publication is for sale and is available only from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

The Progressive Fish Culturist, vol. 28, no. 4, Oct. 1966, pp. 187-247, illus., printed, single copy 25 cents. Some of the articles are: "Survival of trout fed dry and meat-supplemented dry diets," by John W. Mason et al.; "Results of tests with channel catfish in Alabama ponds," by Johnie H. Crance and L. Glenn McBay; "Comparative evaluation of plastic and concrete pools and earthen ponds in fish-cultural research," by E. W. Shell; "Use of M.S. 222 in anesthetizing and transporting the sand shrimp," by Frank J. Schwartz; and "DDVP as a selective toxicant for the control of fishes and insects," by U. S. Srivastava and S. K. Konar.

The following publications are available only from the specific office mentioned:

Fishery Production in Selected Areas of Maryland, Virginia, and North Carolina, by William N. Kelly, 31 pp., Oct. 1966. (Market News Service, U. S. Fish and Wildlife Service, P. O. Box 447, Hampton, Va. 23369.) A summary of commercial landings of fish and shellfish and the production of crab meat and shucked oysters as reported by producers and wholesalers from selected principal fishing localities of Virginia, Maryland, and North Carolina. Discusses landings in the Hampton Roads, Lower Northern Neck, Lower Eastern Shore, and Chincoteague areas of Virginia; Ocean City, Cambridge, and Crisfield, Maryland; and Morehead City, North Carolina. The statistics in the summary present partial commercial fisheries production only and do not represent complete

commercial landings or production for a given area, individual state, or the Chesapeake Bay area as a whole. However, the statistics do show trends in fisheries production for the specific area designated and do reflect the over-all production trends by species, localities, and states. A highlight of the report is the scallop fishery in the Chesapeake Bay region.

Research Leads to Improved Harvesting-Processing-Marketing of Commercial Farm Pond Fish, Newsletter to Industry, 15 pp., illus., printed, Aug. 16, 1966. Regional Director, Region 4, 5 Research Drive, Ann Arbor, Mich. 48103. Discusses recent accomplishments of BCF research projects of significance to farm pond fish producers.

(Seattle) Washington and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, September 1966, 9 pp. (Market News Service, U. S. Fish and Wildlife Service, 706 New Federal Office Bldg., 909 First Ave., Seattle, Wash. 98104.) Includes landings by the halibut fleet reported by the Seattle Halibut Exchange; salmon landings reported by primary receivers; landings of halibut reported by the International Pacific Halibut Commission; landings and otter-trawl receipts reported by the Fishermen's Marketing Association of Washington; local landings by independent vessels; coastwise shipments from Alaska by scheduled and nonscheduled 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

These publications are not available from the Fish and Wildlife Service, but usually may be obtained from the organization issuing them. Correspondence regarding publications that follow should be addressed to the respective organization or publisher mentioned. Data on prices, if readily available, are shown.

ALGAE:

"New technique for mass assays of physiological characteristics of unicellular algae," by Richard L. Massey and Rudolf H. T. Mattoni, article, Applied Microbiology, vol. 13, Sept. 1965, pp. 798-800, printed.

These publications are not available from the Fish and Wildlife Service, but usually may be obtained from the organization issuing them.

Williams and Wilkins Co., 428 E. Preston St., Baltimore, Md. 21202.

AQUATIC PLANTS:

Plants of the Deep Oceans, by E. J. Ferguson Wood, Contribution No. 687, 3 pp., printed. (Reprinted from Zeitschrift fur Allegemeine Mikrobiologie, vol. 6, no. 3, 1966, pp. 177-179.) Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Virginia Key, Miami, Fla. 33129.

ARGENTINA:

Produccion Pesquera Argentina 1965 (Argentine Fishery Production 1965), 104 pp., illus., printed in Spanish, 1965. Departamento de Investigaciones Pesqueras, Direccion Generale de Pesca, Brasil y Florencio Sanchez, Buenos Aires, Argentina.

BACTERIOLOGY:

"Bacteria under pressure," article, Chemical and Engineering News, vol. 44, Jan. 10, 1966, p. 96, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C. 20006.

BARENTS SEA:

The Barents Sea, by K. Demel and St. Rutkowicz, translated from Polish, Morze Barentsa, 301 pp., illus., printed in English, 1966, US\$7.00. Published for U. S. Department of the Interior and the National Science Foundation, Washington, D. C. (For sale by U. S. Department of Commerce, Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.)

First published in Poland in 1958. Gives an insight into the basic problems of oceanography. Part one and two examines extensively the oceanographic and biological background. Part three is devoted to fisheries, describing the resources of the Barents Sea, species of commercial fish, fishing seasons and modern fishing techniques applied, and a detailed analysis of fishing grounds. The book is a monograph of the Barents Sea directed to the sea fishermen and those connected with sea fisheries; it also would be appreciated by geographers, natural scientists, and others who intend to derive better acquaintance of one of the largest seas in Northern Europe.

BIOCHEMISTRY:

"Isolation, purification, and characterization of p¹, p⁴-diguanosine 5'-tetrphosphate asymmetrical-pyrophosphohydrolase from brine shrimp eggs," by A. H. Warner and F. J. Finamore, article, Biochemistry, vol. 4, Aug. 1965, pp. 1568-1575, printed. Society for Experimental Biology and Medicine, 139th Street and Convent Ave., New York, N. Y. 10031.

CALIFORNIA:

"An introduction to the California Fish and Wildlife Plan," article, Outdoor California, vol. 27, nos. 5 & 6, May-June 1966, 23 pp., illus., printed. State of California, Office of Procurement, Documents Section, P.O. Box 1612, Sacramento Calif. 95807. This issue of Outdoor California is devoted exclusively to the new California Fish and Wildlife Plan which is concerned with fish and wildlife management in California. It covers the plan in general, tells briefly what it contains, how and why it was put together, and gives some examples of the kinds of material in the plan. It discusses the major points and recommendations, and what will be done with the plan in the future.

CANADA:

The Canadian Fish Culturist, issue 37, August 1966, 50 pp., illus., printed. Information and Consumer Service, Department of Fisheries of Canada, Ottawa, Canada. Includes these articles: "The effect of flow control on freshwater survival of chum, coho, and chinook salmon in the Big Qualicum River," by D. B. Lister and C. E. Walker, pp. 3-25; "A downstream migrant diversion screen," by K. H. Kupka, pp. 27-34; "A field assessment of the effects of spraying a small coastal coho salmon stream with phosphamidon," by W. J. Schouwenburg and K. J. Jackson, pp. 35-43; "The role of the Department of Fisheries of Canada in dealing with problems presented by the use of pesticides in British Columbia," by K. J. Jackson, pp. 45-50.

Canadian Fisheries Reports, no. 6, July 1966, catalogue no. Fs 4-24/6, 43 pp., illus., printed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada. Includes these articles: "Off-shore lobster investigations, 1965," by R. A. McKenzie; "Eutectic brine freezer

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for Eskimo fishermen," by A. W. Lantz; and "Development of a recipe for lobster paste," by W. A. Murphy and R. L. Doyle.

Journal of the Fisheries Research Board of Canada, vol. 23, no. 9, September 1966, pp. 1291-1473, illus., printed, single issue U.S., Mexico, and Canada C\$1.00, all other countries C\$1.25. Fisheries Research Board of Canada, Queen's Printer, Ottawa, Canada. Includes articles on: "Premating and mating behavior of the Dungeness crab (Cancer magister Dana)," by Dale C. Snow and John R. Neilsen, pp. 1319-1323; "Incidence of Gaffkya homari in natural lobster (Homarus americanus) populations of the Atlantic region of Canada," by James E. Stewart, John W. Cornick, Doris I. Spears, and D. W. McLeese, pp. 1325-1330; "Changes in chemical composition of central British Columbia pink salmon during early sea life," by Robert R. Parker and W. E. Vanstone, pp. 1353-1384; "Oxidative rancidity in frozen stored cod fillets," by H. C. Castell, B. A. Moore, P. M. Jan-gaard, and Wanda E. Neal, pp. 1385-1401; "Times of annulus formation on scales of sockeye, pink, and chum salmon in the Gulf of Alaska," by T. H. Bilton and S.A.M. Ludwig, pp. 1403-1410; "Design of small holding tank for fish," by D. F. Alderdice, J. R. Brett, and D. B. Sutherland, pp. 1447-1450; "Northern range extension records for two rockfish species (Sebastes caurinus and S. elongatus)," by S. J. Westrheim, pp. 1455-1456; "Northern range extensions for three species of rockfish (Sebastes flavidus, S. paucispinis, and S. pinniger) in the North Pacific Ocean," by S. J. West-rheim, pp. 1469-1471.

CATFISH:

"Channel catfish feeding research," by C. W. Deyoe and O. W. Tiemeier, article, Feed-stuffs, vol. 38, Feb. 26, 1966, pp. 56-58, printed. Feedstuffs, P. O. Box 67, Minneapolis, Minn. 55440.

CHESAPEAKE BAY:

Chesapeake Science, vol. 7, no. 3, Sept. 1966, pp. 117-136, illus., printed, single copy 75 cents. Natural Resources Institute, University of Maryland, Chesapeake Biological Laboratory, Solomons, Md. Includes, among others, these articles: "Locomotor activity of the American eel (Anguilla rost-

rata)," by Sheila Bohun and Howard E. Winn; "Larval development of the crab, Hexapanopeus angustifrons," by John D. Costlow, Jr. and C. G. Bookhout; "Larval stages of the crab, Pinnotheres maculatus, under laboratory conditions," by John D. Costlow, Jr. and C. G. Bookhout; "Internal condition of a diminishing blue crab population (Callinectes sapidus)," by H. Perry Jeffries; and "Some blood chemistry values for five Chesapeake Bay area fishes," by Joseph B. Hunn and Paul F. Robinson.

CONTAINERS:

"Plastic 'can' one step closer--approved for crab meat in Maryland," by Harold V. Sem-ling, Jr., article, Canner/Packer, vol. 134, Nov. 1966, p. 36, printed. Vance Publish-ing Co., 59 E. Monroe St., Chicago, Ill. 60603.

CRABS:

"21,000 miles of ocean shelf is home for Alaska king crab," article, Pacific Fish-erman, vol. 63, June 1965, pp. 30-31, printed. Miller Freeman Publications, 71 Columbia St., Seattle, Wash. 98104.

CRUSTACEA:

Handbook on the Common Marine Isopod Crustacea of Georgia, by Robert J. Men-zies and Dirk Frankenberg, 101 pp., illus., printed, 1966, \$2.50. University of Georgia Press, Athens, Ga. 30602. This handbook is a purely taxonomic work. It presents 30 species of marine isopods collected from littoral and sublittoral zones off the coast of Georgia. This book should be help-ful to an isopod taxonomist and zoology students who work on Atlantic coastal fauna.

Serial Atlas of the Marine Environment--Distribution of Decapod Crustacea in the Northwest Atlantic, by Hubert J. Squires, Folio 12, illus., printed, 1966, looseleaf \$3.50, bound \$7.00. Serial Atlas of Marine Environment, American Geographical Society, Broadway at 156th St., New York, N. Y. 10032.

DENMARK:

Fiskeriberetning for Aret 1965 (Fishing In-dustry Data for 1965), 114 pp., illus., printed in Danish with English summary, 1966, Kr. 7.50 (US\$1.10). Fiskeriminis-teriet, 1 Kommission Hos G.E.C. Gad, Copenhagen, Denmark.

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FATTY ACIDS:

"Evaluation of methods for identifying fatty acid esters separated by gas chromatography," by John L. Iverson et al, article, Journal of the Association of Official Agricultural Chemists, vol. 48, June 1965, pp. 482-489, printed. Association of Official Agricultural Chemists, Box 450, Benjamin Franklin Station, Washington, D. C., 20044.

FISH MEAL:

"Changes in the vitamin A content during storage of fish meal for fodder," by T. Dabrowski and S. Iwazkiewicz, article, Chemical Abstracts, vol. 63, August 30, 1965, p. 6244h; printed.

"Fish meal plant a reality," article, Fishermen's News, vol. 22, no. 12, July 1966, pp. 1, 16, printed. Fishermen's News, Fishermen's Terminal, Seattle, Wash.

"Preparation of fatless fish meal by solvent extraction," by Kosaku Suzuki and Kuman Saruya, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 30, July 1964, pp. 570-573, printed. Japanese Society of Scientific Fisheries, Shiba-Kaigandori 6, Minato-Ku, Tokyo, Japan.

FISH SOLUBLES:

"Condensed fish solubles as a source of unidentified factors," by J. R. Couch, article, Feedstuffs, vol. 38, Apr. 2, 1966, p. 76, printed. Miller Publishing Co., 3501 Wayzata Blvd., Minneapolis, Minn. 55416.

FLORIDA:

Summary of Florida Commercial Marine Landings, 1965, by Hazel Jones and June Smith, 63 pp., printed, June 1966. Board of Conservation, Salt Water Fisheries Division, Marine Fisheries Research, Tallahassee, Florida.

FOOD AND AGRICULTURE ORGANIZATION:

Directory of Fisheries Institutions in Africa, 185 pp., processed, 1965. Food and Agriculture Organization Regional Office for Africa, P.O. Box 1628, Accra, Ghana. Replaces a provisional directory issued in May 1962. Part 1 lists international and interterritorial organizations; part 2, national institutions. Describes nature, organization, and activities of the institutions listed.

FRANCE:

Etat Des Recherches Francaises Sur La Peche a La Morue (Status of French research on the cod fishery), by Jean Fur- nestin, Science et Peche, no. 150, July- August 1966, 15 pp., illus., printed in French. L'Institut Scientifique et Tech- nique des Peches Maritimes, 59, Avenue Raymond-Poincare, Paris 16^e, France.

FROGS:

"Frog gastric mucosal atpase," by G. Sachs et al., article, Proceedings of the Society for Experimental Biology and Medicine, vol. 119, Aug.-Sept. 1965, pp. 1023-1027, printed. Society for Experimental Biology and Medicine, 630 W. 168th St., New York, N. Y. 10032.

FROZEN FISH:

"The state of the industry. Part III--Sea- foods, juices and drinks, poultry," by Sam Martin, article, Quick Frozen Foods, vol. 28, Nov. 1965, pp. 36-38, 128, printed. E. W. Williams Publications, Inc., 1776 Broadway, New York, N. Y. 10019.

GENERAL:

"Food from the sea," by H. S. Olcott and M. B. Schaefer, article, Food Technology, vol. 19, May 1965, pp. 92-95, printed. The Garrard Press, 510 N. Hickory St., Cham- paign, Ill. 61820.

IMPORTS:

"Seafood imports mount to 65% of frozen sales in U.S.," article, Quick Frozen Foods, vol. 28, Aug. 1965, pp. 133-134, 141-142, printed. E. W. Williams Publi- cations, 1776 Broadway, New York, N. Y. 10019.

INDIAN OCEAN:

International Indian Ocean Expedition, USC&GS Ship "Pioneer" - 1964, Cruise Narrative and Scientific Results, vol. 1, catalog no. C4.2:In 2/2/V. 1, 147 pp., illus., printed, 1966, \$1.25. Environmental Sci- ence Services Administration, U.S. De- partment of Commerce, Washington, D. C. (Sold by Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.) Describes the 1964 field operations of the Pioneer during the In- ternational Indian Ocean Expedition, sum- marizes the data obtained, and presents

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the preliminary scientific results of the cruise. Investigations conducted in the Pacific Ocean, en route to and returning from the Indian Ocean, are included.

IRRADIATION PRESERVATION:

"Irradiation preservation of freshwater fish. I--Extension of refrigerated storage life of fresh yellow perch fillets," by J. A. Emerson et al., article, Food Technology, vol. 20, Feb. 1966, pp. 108-110, printed. The Garrard Press, 510 No. Hickory St., Champaign, Ill. 61820.

JAPAN:

Bulletin of Tokai Regional Fisheries Research Laboratory, no. 45, February 1966, 163 pp., illus., printed in Japanese and English. Tokai Regional Fisheries Research Laboratory, 5/5 Kachidoki, Chuo-ku, Tokyo, Japan. Includes articles: "On the factors controlling the catch of the Japanese spiny lobster, Panurilus japonicus, and the prediction of the amount of catch in the fishing ground of Manazuru," by T. Maruyama, pp. 81-95; "An efficient use of Nori (Phorphyra Spp.) culture ground at Nagai, Yokosuka," by T. Maruyama, pp. 97-106; "Experiments on the attractiveness of artificial reefs for marine fishes, by T. Ogawa and Y. Takemura-- I. Preliminary observations on small models in the laboratory," pp. 107-113; II. An automatic recording apparatus," pp. 115-126; III. Observations on stone bream in the outdoor tank," pp. 127-135; IV. Attraction of stone bream and rudderfish to black objects on the white background," pp. 137-145; V. Attraction of fishes to imitative sea-weed," pp. 147-154; VI. Attraction common sea bass to model reefs," pp. 155-163.

"Studies on the fishery of mackerel by purse seines on the sea off southwest Hokkaido. 4. Statistical investigation about the structures of two-boat type purse seine on Ishikari Bay, and a preliminary experiment on the representative model net," by Hideo Nakamura and Shûzô Igarashi, article, Bulletin of the Faculty of Fisheries, Hokkaido University, vol. 15, November 1964, pp. 157-168, printed. Faculty of Fisheries, Hokkaido University, Kameda-Machi, Hakodate, Japan.

LOBSTERS:

An Annotated Bibliography of the Spiny Lobsters, by Harold W. Sims, Jr., Technical Series No. 48, 89 pp., printed, June 1966. Marine Laboratory, Florida State Board of Conservation, Maritime Base, Bayboro Harbor, St. Petersburg, Fla.

LOBSTER, SPINY:

"On the relationship between activity of Japanese spiny lobster and underwater light intensity," by Itsuo Kubo and Naonori Ishiwata, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 30, November 1964, pp. 884-888, printed. Japanese Society of Scientific Fisheries, Shiba-Kaigandori 6, Minato-ku, Tokyo, Japan.

MACKEREL:

"Seasonal changes of the content of fat in the bodies of small Black Sea horse mackerel," by G. E. Shul'man, article, Chemical Abstracts, vol. 62, April 12, 1965, Abstract No. 9503e, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C. 20006.

MARINE BIOLOGY:

Studies on Pogonophora. Fine Structure of the Tentacles, by Brij L. Gupta et al., Contribution No. 678, 34 pp., illus., printed. (Reprinted from Journal of the Marine Biological Association of the United Kingdom, vol. 46, no. 2, June 1966, pp. 351-372.) Institute of Marine Science, University of Miami, 1 Rickenbacker Causeway, Virginia Key, Miami, Fla. 33129.

NORTHWEST ATLANTIC:

"The fisheries situation in the Northwest Atlantic," by Dr. Wilfred Templeman, article, Fisheries of Canada, vol. 19, no. 3, September 1966, pp. 3-10, illus., printed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada. Based on a paper presented at the annual meeting of the Fisheries Council of Canada, Halifax, N.W., May 9-11, 1966. Discusses the four chief groundfish species (cod, haddock, redfish or ocean perch, and flatfish) of the Northwest Atlantic.

OCEANOGRAPHY:

Fishing Oceanography (Natural grounds of marine fishery), by K. Demel and J. Kuliowski, translated reprint from Polish,

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Oceanografia Rybacka (Przyrodnicze podstawy rybolowstwa morskiego), 223 pp., illus., printed, 1965, \$6.00. Polish Scientific Publishers, Warsaw, Poland. (For sale by Office of Technical Services, U.S. Department of Commerce, Washington, D. C. 20230.) Although first published in Poland in 1955, the English translation has been brought up to date to include world catches as published in the FAO Yearbook of Fishery Statistics, 1960. Discusses marine environment and organisms, biology of commercial fish, methods applied in fishery research, most important species of commercial fish, world's chief fishing grounds, ocean resources other than fish, and man's activities in respect to the sea. Includes a limited bibliography.

OXIDATION:

"The protection of marine products from their deterioration due to the oxidation of oil. XII-Applicability of 3,5-di-tert-butyl-4-hydroxyanisole (3,5-di-bha)," by Kenzo Toyama and Kuman Saruya, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 31, April 1965, pp. 286-292, printed. Japanese Society of Scientific Fisheries, Shiba-Kaigandori 6, Minato-ku, Tokyo, Japan.

POULTRY NUTRITION:

"Influence of dietary oils on reproduction in the hen," by H. Menge et al., article, Journal of Nutrition, vol. 87, Dec. 1965, pp. 365-370, printed. American Institute of Nutrition, 36th Street at Spruce, Philadelphia, Pa. 19104.

PROTEIN:

"Extraction process wins protein from fish," article, Chemical Engineering, vol. 73, Feb. 14, 1966, pp. 98, 100, printed. American Chemical Society, 1155 16th St. NW., Washington, D. C. 20005.

RHODESIA:

"The transport of live fish in northern Rhodesia," by D. J. Ruth and M. A. E. Mortimer, article, Progressive Fish-Culturist, vol. 27, July 1965, pp. 121-127, printed. U. S. Bureau of Sport Fisheries and Wildlife, Washington, D. C. 20240. (Sold by Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

SCALLOPS:

"History of Victorian scallop fishery," by M. J. Sanders, article, Australian Fisheries Newsletter, vol. 25, no. 9, September 1966, pp. 11, 13, 15, illus., printed. Fisheries Branch, Department of Primary Industry, Canberra, A.C.T., Australia. Reports on the Victorian scallop fishery in Port Philip Bay. Fishery has expanded dramatically since dredging began in September 1963. During 1965 catches were worth A\$750,000 to the fishermen.

SCOTLAND:

Torry Research Station Annual Report 1965, 70 pp., printed, 1965, US\$1.10. Torry Research Station, Ministry of Technology, 135 Abbey Road, P.O. Box no. 31, Aberdeen, Scotland. (For sale by Sales Section, British Information Service, 845 Third Ave., New York, N. Y. 10022.

SEA URCHIN(S):

Redescription of the Echinoid Species PAR-ASTER FLORIDIENSIS (Spatangoida: Schizasteridae), by Richard H. Chesher, 19 pp., illus., printed. (Reprinted from Bulletin of Marine Science, vol. 16, no. 1, Mar. 1966, pp. 1-19). Institute of Marine Science, 1 Rickenbacker Causeway, Virginia Key, Miami, Fla. 33129.

SHRIMP:

A Bibliography of the Genus Artemia (ARTEMIA SALINA) 1812-1962, by Jack L. Littlepage and Marilyn N. McGinley, Special Publication No. 1, 73 pp., processed, Nov. 15, 1965. San Francisco Aquarium Society, Inc., Steinhart Aquarium, California Academy of Sciences, San Francisco, Calif. 94118.

"Machine for peeling shrimp," Abstracts from Current Scientific and Technical Literature, vol. 18, abstract no. 2347, September 1965, p. 443, printed. British Food Manufacturing Research Assoc., Randalls Road, Leatherhead, Surrey, England.

SPAIN:

"La aplicacion del frío a la conservación del pescado" (The use of cold temperatures to preserve fishery products), by F. Bramnaes, Revista del Frio, vol. 10, no. 4, October-December 1965, pp. 105-112, printed in Spanish. Centro Experimental del Frío, Serrano 150, Madrid, Spain.

These publications are not available from the Fish and Wildlife Service, but usually may be obtained from the organization issuing them.

POILAGE:

"Spoilage of fish and crustaceans. Rapid determination of volatile ammonia by accelerated microdiffusion," by W. Vyncke and E. Merlevede, article, Abstracts from Current Scientific and Technical Literature, vol. 17, abstract no. 895, April 1964, p. 173, printed. British Food Manufacturing Research Association, Randalls Road, Leatherhead, Surrey, England.

"Studies on the retention of meat color of frozen tuna. I - Absorption spectra of the aqueous extract of frozen tuna meat undergoing discoloration," by Masamichi Bito, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 30, October 1964, pp. 847-857, printed. Japanese Society of Scientific Fisheries, Shiba-Kaigandori 6, Minato-ku, Tokyo, Japan.

TAGGING:

Returns from the 1964 Schlitz Tagging Program, by Dale S. Beaumariage and Arthur C. Wittich, Technical Series No. 47, 53 pp., illus., printed, Mar. 1966. Marine Laboratory, Florida State Board of Conservation, Maritime Base, Bayboro Harbor, St. Petersburg, Fla.

"Tuna spotting at 500 feet," article, Fishing Gazette, vol. 82, May 1965, p. 23, printed. Fishing Gazette Publishing Corp., 461 Eighth Ave., New York, N. Y. 10001.

TURKEY:

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