



# RECENT FISHERY PUBLICATIONS

## FISH AND WILDLIFE SERVICE PUBLICATIONS

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

CFS - CURRENT FISHERY STATISTICS OF THE UNITED STATES.  
FL - FISHERY LEAFLETS.  
SEP. - SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.  
SL - BRANCH OF STATISTICS LIST OF DEALERS IN AND PRODUCERS OF FISHERY PRODUCTS AND BYPRODUCTS.

Number	Title
CFS-2541	Canned Fish & Pyproducts, 1960, Annual Summary (revised), 22 pp.
CFS-2542	Packaged Fish, 1960, Annual Summary (revised), 5 pp.
CFS-2685	Chesapeake Fisheries, 1960, Annual Summary, 7 pp.
CFS-2694	Gulf Fisheries, 1960, Annual Summary, 10 pp.
CFS-2746	Maine Landings, October 1961, 3 pp.
CFS-2747	Massachusetts Landings, August 1961, 5 pp.
CFS-2750	California Landings, August 1961, 3 pp.
CFS-2752	California Landings, August 1961, 3 pp.
CFS-2753	Georgia Landings, September 1961, 2 pp.
CFS-2754	Georgia Landings, October 1961, 2 pp.
CFS-2757	Michigan Landings, October 1961, 2 pp.
CFS-2758	Frozen Fish Report, November 1961, 8 pp.
CFS-2759	Wisconsin Landings, October 1961, 2 pp.
CFS-2760	Manufactured Fishery Products, 1960, Annual Summary, 7 pp.
CFS-2761	Louisiana Landings, August 1961, 2 pp.
CFS-2762	New Jersey Landings, October 1961, 4 pp.
CFS-2763	New England Fisheries, 1960, Annual Summary, 8 pp.
CFS-2764	Virginia Landings, October 1961, 4 pp.
CFS-2765	Texas Landings, September 1961, 3 pp.
CFS-2766	New York Landings, October 1961, 5 pp.
CFS-2768	Mississippi Landings, September 1961, 2 pp.
CFS-2769	Wisconsin Landings, November 1961, 2 pp.
CFS-2770	Minnesota Landings, October 1961, 2 pp.
CFS-2771	Texas Landings, October 1961, 3 pp.
CFS-2772	Ohio Landings, October 1961, 2 pp.
CFS-2774	Georgia Landings, November 1961, 2 pp.
CFS-2775	South Carolina Landings, November 1961, 2 pp.
CFS-2776	North Carolina Landings, November 1961, 4 pp.
CFS-2777	Maryland Landings, November 1961, 3 pp.

CFS-2778 - New Jersey Landings, November 1961, 4 pp.  
CFS-2779 - Virginia Landings, November 1961, 4 pp.  
CFS-2782 - Florida Landings, November 1961, 9 pp.  
CFS-2784 - Fish Meal and Oil, November 1961, 2 pp.

SL-101 - Firms Canning Salmon, 1960 (Pacific Coast States), 3 pp.

Sep. No. 639 - Bluefin Tuna Concentration Found During a Long-Line Exploration of the Northwestern Atlantic Slope.

Sep. No. 640 - The Composition of Shrimp Meal Made From Fresh and Spoiled Shrimp Heads.

Sep. No. 641 - Oysters: Long Island Sound Spawning and Setting Observations, Summer 1961.

FL-524 - Cephalopods: Cuttlefish, Octopuses, Squids, by Lola T. Dees, 10 pp., illus., September 1961. Discusses in detail the physical characteristics of cephalopods and their food and feeding, locomotion, and reproduction. Describes the familiar cephalopods--cuttlefish, octopuses, and squids; their enemies and protection against them; methods of capture; and commercial utilization.

FL-526 - Sturgeons, by Lola T. Dees, 8 pp., illus., September 1961. Describes the physical appearance of the sturgeon, the species, physical characteristics, feeding and spawning habits, development of the young, decline of the stocks, protection in some states, methods of capture, and commercial value. Also discusses the preparation of caviar and isinglass; culture of sturgeon; and the North American, Asiatic, European, and related species.

Illustrations in Publications of the Fish and Wildlife Service, by Faxon W. Cook, Circular 116, 23 pp., illus., 1961.

THE FOLLOWING ENGLISH TRANSLATIONS OF FOREIGN LANGUAGE ARTICLES ARE NOT FOR GENERAL DISTRIBUTION BUT ARE AVAILABLE FOR REFERENCE ONLY FROM THE U. S. FISH AND WILDLIFE SERVICE, BUREAU OF COMMERCIAL FISHERIES, P. O. BOX 3830, HONOLULU, HAWAII.

Egg Development and Larval Stages of the Dolphin, by Satoshi Mito, 6 pp., illus., processed, December 1961. (Translated from Japanese, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 3, 1960, pp. 223-226.)

On the Frequency Characteristics of Sea Noise and Fish School Sounds, by Minoru Nishimura, 12 pp., illus.,

processed. (Translated from Japanese, Technical Report of Fishing Boat, No. 15, March 1961, pp. 111-118.)

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

The Distribution of Plankton in the Pacific Ocean and Its Relation to Geographical Zonation, by V. G. Bogorov, K. V. Beklemishev, and M. E. Vinogradov, 7 pp., illus., processed, January 1962. (Translation from Russian, 10th Pacific Science Congress, Honolulu, Hawaii, August 1961.)

On the Transformation of Plankton in the North Pacific Current and Adjacent Waters, by C. W. Beklemishev, 4 pp., illus., processed, January 1962. (Translation from Russian, 10th Pacific Science Congress, Honolulu, Hawaii, August 1961.)

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

(Baltimore) Monthly Summary--Fishery Products, November 1961, 8 pp. (Market News Service, U. S. Fish and Wildlife Service, 103 S. Gay St., Baltimore 2, Md.) Receipts of fresh- and salt-water fish and shellfish at Baltimore by species and by states and provinces; total receipts by species and comparisons with previous periods; and wholesale prices for fresh fishery products on the Baltimore market; for the month indicated.

California Fishery Market News Monthly Summary, Part I - Fishery Products Production and Market Data, November 1961, 17 pp. (Market News Service, U. S. Fish and Wildlife Service, Post Office Bldg., San Pedro, Calif.) California cannery receipts of tuna and tunalike fish and other species used for canning; pack of canned tuna, tunalike fish, sardines, mackerel, and anchovies; market fish receipts at San Pedro, Santa Monica, and Eureka areas; California and Arizona imports; canned fish and frozen shrimp prices; ex-vessel prices for cannery fish; Oregon and Washington receipts (domestic and imports) of fresh and frozen tuna and tunalike fish; for the month indicated.

California Fishery Market News Monthly Summary, Part II - Fishing Information, November 1961, 7 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.

Gulf of Mexico Monthly Landings, Production and Shipments of Fishery Products, December 1961, 11 pp. (Market News Service, U. S. Fish and Wildlife Service, Rm. 609, 600 South St., New Orleans 12, La.) Gulf States shrimp, oyster, finfish, and blue crab landings; crab meat production; LCL express shipments from New Orleans; wholesale prices of fish and shellfish on the New Orleans French Market; fishery imports at Port Isabel and Brownsville, Texas, from Mexico; and sponge sales; for the month indicated.

Monthly Summary of Fishery Products Production in Selected Areas of Virginia, North Carolina, and Maryland, December 1961, 4 pp. (Market News Service, U. S. Fish and Wildlife Service, 18 S. King St., Hampton, Va.) Landings of food fish and shellfish and production of crab meat and shucked oysters for the Virginia areas of Hampton Roads, Chincoteague, Lower Northern Neck, and Lower Eastern Shore; the Maryland areas of Crisfield, Cambridge, and Ocean City; and the North Carolina areas of Atlantic, Beaufort, and Morehead City; together with cumulative and comparative data on fishery products and shrimp production; for the month indicated.

New England Fisheries--Monthly Summary, November and December 1961, 24 pp., each. (Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) Review of the principal New England fishery ports. Presents data on fishery landings by ports and species; industrial fish landings and ex-vessel prices; imports; cold-storage stocks of fishery products in New England warehouses; fishery landings and ex-vessel prices for ports in Massachusetts (Boston, Gloucester, New Bedford, Provincetown, and Woods Hole), Maine (Portland and Rockland), Rhode Island (Point Judith), and Connecticut (Stonington); frozen fishery products prices to primary wholesalers at Boston, Gloucester, and New Bedford; and Boston Fish Pier and Atlantic Avenue fishery landings and ex-vessel prices by species; for the months indicated.

New York City's Wholesale Fishery Trade--Monthly Summary, September 1961, 26 pp. (Market News Service, U. S. Fish and Wildlife Service, 155 John St., New York 38, N. Y.) Includes summaries and analyses of receipts and prices on wholesale Fulton Fish Market, including both the salt- and fresh-water sections; imports entered at New York customs district; primary wholesalers' selling prices for fresh, frozen, and selected canned fishery products; marketing trends; and landings at Fulton Fish Market docks and Stonington, Conn.; for the month indicated.

(Seattle) Washington and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, December 1961, 8 pp. (Market News Service, U. S. Fish and Wildlife Service, 706 Federal Office Bldg., 909 First Ave., Seattle 4, Wash.) Includes Seattle's landings by the halibut and salmon fleets reported through the exchanges; landings of halibut reported by the International Pacific Halibut Commission; landings of otter-trawl receipts reported by the Fishermen's Marketing Association of Washington; local landings by independent vessels; coastwise shipments from Alaska by scheduled and non-scheduled shipping lines and airways; imports from British Columbia via rail, motor truck, shipping lines, and ex-vessel landings; and imports from other countries through Washington customs district; for the month indicated.

Efficiency Evaluation, Tracy Fish Collecting Facility, Central Valley Project, California, by Daniel W. Bates, Orren Logan, and Everett A. Pesonen, 98 pp., illus., processed, October 1960. (U. S. Fish and Wildlife Service, Bureau of Commercial Fisheries, Pacific Region, 6116 Arcade Bldg., 1319 Second Ave., Seattle 1, Wash.)

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Effects of Copper Ore on the Ecology of a Lagoon, by Kenneth T. Marvin, Larence M. Lansford, and Ray S. Wheeler, Fishery Bulletin 184 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), 12 pp., illus., printed, 15 cents, 1961.

"Normal Behavior of Chinook Salmon Fingerlings," by Roger E. Burrows, article, The Progressive Fish-Culturist, vol. 23, no. 1, 1961, p. 7, processed.

"A Staining Method for Marking Large Numbers of Small Fish," by James E. Deacon, article, Progressive Fish-Culturist, vol. 23, no. 1, 1961, pp. 41-42, processed.

"Trout Hepatoma--a Preliminary Report," by R. R. Rucker, W. T. Yasutake, and H. Wolf, article, Progressive Fish-Culturist, vol. 23, no. 1, 1961, pp. 3-7, processed.

"An Underwater Camera Case," by John L. Wagner and W. L. Hartman, article, Progressive Fish-Culturist, vol. 22, no. 4, 1960, pp. 188-191, processed.

Validity of Age Determination from Scales of Marked American Shad, by Mayo H. Judy, Fishery Bulletin 185 (from Fishery Bulletin of the Fish and Wildlife Service, vol. 61), 14 pp., illus., printed, 15 cents, 1961.

## MISCELLANEOUS PUBLICATIONS

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

### ALASKA:

1960 Alaska Commercial Fisheries Catch & Production Statistics, by Philip E. Chitwood, Statistical Leaflet No. 1, 20 pp., processed. Contains statistical tables showing fisheries operating units by region, catch summary, catch and value to fishermen by region and by gear, salmon catch by gear and region in numbers of fish, and salmon catch by district in numbers of fish. Tables also show 1958-60 average weight of salmon; transporting, wholesaling, and manufacturing; summary of products as prepared for market; and production of canned products in standard cases.

### ANTIBIOTICS:

"The Ice-Antibiotic Treatment in the Preservation of Some Seafood Products," by C. Mateu and G. Varela, Chemical Abstracts, vol. 55, 3867a, February 20, 1961.

### AUSTRALIA:

Annual Report for Year Ending June 30, 1961, 33 pp., illus., processed. Division of Fisheries and Oceanography, Commonwealth Scientific and Industrial Research Organization, Cronulla, Australia. Covers activities of the Division of Fisheries and Oceanography, its cooperation with other institutions, and operation of research vessels. Also covers activities in physical oceanography, hydrology, chemical analysis of sea water, zooplankton research, bio-

chemistry, phytoplankton, bacteriology, benthos sampling, and marine fouling; fisheries oceanography, fish taxonomy, and fisheries biology.

### BIBLIOGRAPHY:

A Bibliography--Effects of External Forces on Aquatic Organisms, by Frank J. Schwartz, Contribution No. 168, 88 pp., printed. Chesapeake Biological Laboratory, Solomons, Md., January 1961.

### BLOOD OF FISH:

Distribution of Some Blood Constituents in Fishes from the Gulf of Mexico, by L. L. Sulya, B. E. Box, and Gordon Gunter, 4 pp., printed. (Reprinted from The American Journal of Physiology, vol. 199, no. 6, December 1960, pp. 1177-1180.) American Physiological Society, 9650 Wisconsin Ave. NW., Washington 14, D. C.

Some Evolutionary Patterns in Fishes' Blood, by Gordon Gunter, L. L. Sulya, and B. E. Box, 5 pp., printed. (Reprinted from Biological Bulletin, vol. 121, no. 2, October 1961, pp. 302-306.) Marine Biological Laboratory, Woods Hole, Mass.

### BLUE CRABS:

"A Blue Blue Crab," by Paul A. Haefner, Jr., article Estuarine Bulletin, vol. 6, nos. 3 and 4, December 1961, pp. 3-5, illus., printed. Estuarine Bulletin, University of Delaware, Department of Biological Sciences, Newark, Del. Discusses the finding of a pale-blue-colored blue crab on a Delaware beach. Explains the various types of pigments found in crustaceans and the probable causes of the unique color of that particular specimen.

### BRAZIL:

Sudene, Boletim de Estudos de Pesca, vol. 1, no. 1, October 1961, 22 pp., illus., processed in Portuguese. Sudene, Boletim de Estudos de Pesca, Superintendencia do Desenvolvimento do Nordeste, Departamento de Estudos Especiais, Recife, Brazil. Included in this issue are articles on a development program for maritime fisheries of northeast Brazil, biological studies on the commercial spiny lobsters of Recife, and the tuna fishery in tropical Atlantic exploratory areas.

### BROWNING:

"Studies on the Browning of Fish Flesh. IV--Browning of Sugar with Certain Amino Acids by Heat," by Fumio Nagayama, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 27, January 1961, pp. 28-33, printed. Japanese Society of Scientific Fisheries, 6-Chome, Shiba-Kaigandori, Minato-Ku, Tokyo, Japan.

### BUFFALOFISH:

"Propagation of Buffalo Fishes," by Lee Brady and Andrew Hulsey, article, Proceedings of the Thirteenth Annual Conference, Southeastern Association of Game and Fish Commissioners, pp. 80-90, printed. Southeastern Association of Game and Fish Commissioners, Columbia, S. C., 1959.

### BUOYS:

A Technical Report of Research in Marine Science in Connection with Buoy Instrumentation Conducted during the Period 1 April 1960 to 31 March 1961, 28 pp., illus., processed. Fisheries Instrumentation Laboratory, Houghton, Wash.

### CALIFORNIA:

"The Californian Market for Fish," by Charles S. Collins, article, Foreign Trade, vol. 116, no. 13, Decem-

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ber 16, 1961, pp. 10-11, printed, single copy 20 Canadian cents. Queen's Printer, Government Printing Bureau, Ottawa, Canada. Canada shipped 68 varieties of fish and byproducts valued at nearly \$3 million to California in 1959. These products included frozen Pacific halibut and coho salmon, frozen whitefish, pickled herring, kippers, finnan haddies, and smoked cod fillets. Despite large landings of fish and shellfish in California, imports of fishery products increased in 1960. According to the author, California continued to lead all other states in the pack of canned pet food made from fisheries products.

#### CANADA:

The Fisheries Problems Associated with the Power Development of the Puntledge River, Vancouver Island, B. C., 183 pp., illus., processed. Department of Fisheries, Vancouver, B. C., Canada, October 1958.

Fisheries Statistics of Canada, 1960 (Alberta and Northwest Territories), 21 pp., printed in French and English, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961. Contains tables giving the value of the principal species of fish landed in Alberta, 1953-1960; and the quantity and value of fish landed by fisheries districts, 1959-1960. Also contains tables showing value of fishery products by species in the Northwest Territories, 1953-1960; quantity and value of fishery products by species, 1959-60; capital equipment used in the primary fishery operations; and the number of persons engaged in the fisheries.

Fisheries Statistics of Canada, 1960 (Manitoba), 9 pp., printed in French and English, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961. Contains tables giving the value of fishery products by species in Manitoba, 1953-1960; quantity and value of landings by species and fisheries districts, 1959-60; quantity and value of fishery products by species, 1959-60; capital equipment used in the primary fishery operations; and the number of persons engaged in the fisheries.

Fisheries Statistics of Canada, 1960 (Ontario), 9 pp., illus., printed in French and English, 50 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, 1961. Contains tables giving the value of fishery products by species in Ontario, 1953-1960; quantity and value of landings by species and fisheries districts, 1959-60; capital equipment used in the primary fisheries operations; and the number of persons engaged in the fisheries.

Fishes of the Pacific Coast of Canada, by W. A. Clemens and G. V. Wilby, Bulletin No. 69, 2nd Edition, printed, C\$5. Fisheries Research Board of Canada, Ottawa, Canada, 1961. (For sale by the Queen's Printer and Controller of Stationery, Ottawa, Canada.) The composition of the marine fish fauna of the Pacific coast of Canada is extremely varied. A few northern, or arctic, fish have their southern limits of distribution on the British Columbia coast, and on the other hand certain southern pelagic forms tend to reach a northern limit. During the past few

years some unusual fish known mostly from other oceans have been found, and several unique fish living at great depths along the coast have become known. The fact that the 272 species recorded in this volume belong in 83 families indicates something of the varied character of the fish in this area.

#### CATCH RATE:

"Catch Curves and Mortality Rates," by D. S. Robson and D. G. Chapman, article, Transactions of the American Fisheries Society, vol. 90, no. 2, 1961, pp. 181-189, printed. Librarian, Colorado A & M College, Fort Collins, Colo.

"Measurement of Potential Fishing Quality," by Robert S. Rupp, article, Transactions of the American Fisheries Society, vol. 90, no. 2, 1961, pp. 165-169, printed. Librarian, Colorado A & M College, Fort Collins, Colo.

#### CAVIAR:

"Bites of Caviar Mean Tons of Unwanted Sturgeon," article, Food Manufacture, vol. 36, April 1961, pp. 134-135, printed. Food Manufacture, Leonard Hill, Ltd., Stratford House, 9 Eden St., London NW1, England.

#### CODLING:

"Changes in Sugar Phosphates of Chilled Codling (Gadus callarias) Muscle," by J. R. Burt and N. R. Jones, article, Journal of the Science of Food and Agriculture, vol. 12, April 1961, pp. 344-347, printed. Journal of the Science of Food and Agriculture, Society of Chemical Industry, 14 Belgrave Square, London SW1, England.

#### DEODORIZATION:

"Deodorized Fish Products," by Ezra Levin, Chemical Abstracts, vol. 55, 11701d, June 12, 1961.

#### DOGFISH:

"Comments on the Smooth Dogfish, Mustelus canis, from Chesapeake Bay, Maryland," by Frank J. Schwartz, article, Chesapeake Science, vol. 1, no. 2, 1960, pp. 124-125, printed. Department of Research and Education, Chesapeake Biological Laboratory, Solomons, Md.

#### DRIFT NETS:

"Ob Izmenenii Vysoty Drifternoi Seti pri Dreife (On Changes in Height of a Driftnet in Wind), by A. M. Karpelianskii, article, Rybnoe Khoziaistvo, vol. 35, no. 12, 1959, pp. 39-42, illus., printed in Russian. VNIRO, Glavniproekta, pri Gosplanie, SSSR, Moscow, U.S.S.R.

#### EELS:

The Freshwater Eels (ANGUILLA spp.) of Southern Africa. An Introduction to Their Identification and Biology, by R. A. Jubbs, illus., printed. (Reprinted from Annals of the Cape Provincial Museums, March 1961.) Albany Museum, Grahamstown, South Africa Republic.

#### ELECTRICAL FISHING:

"Bibliographie uber die Elektrofischerei und Ihre Grundlagen" (Bibliography on Electrical Fishing and Its Fundamentals), by P. F. Meyer-Waarden, Egon Halsband, and Inge Halsband, article, Archiv

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fur Fischereiwissenschaft, vol. 11, no. 1, 1960, 104 pp., printed in German. Bundesforschungsanstalt für Fischerei, Hamburg, Germany.

A Note on the Effect of Electric Fields on GADUS VIRENS, by Olav Dragesund and Helge Leivestad, Fiskeridirektoratets Skrifter, Serie Havundersøkelse, vol. XII, no. 4, 7 pp., illus., printed. A. S. John Griegs Boktrykkeri, Bergen, Norway, 1959.

#### EUROPE:

"Probable Development of Fish Industries in Europe during the Future 20 Years," by M. B. F. Ranken, article, Peche Maritime, no. 993, December 1960, pp. 807-817, illus., printed in French. Peche Maritime, 190 Boulevard Haussmann, Paris 8, France.

#### FACTORYSHIPS:

"A Plant for the Freezing of Whalemeat on Board a Modern Factoryship," by E. Hofmann, article, Linde Ber., Germ., No. 10, November 1960, pp. 8-11, printed. Abstract 9498, Bulletin de L'Institut International du Froid, vol. 41, No. 2, 1961. International Institute of Refrigeration, 177 Blvd. Malesherbes, Paris 17, France.

#### FATTY ACIDS:

"Distribution and Function of Essential Fatty Acids in Mitochondria," by Richardson, Tappel, and Gruger, article, Archives of Biochemistry and Biophysics, vol. 94, no. 1, July 1961, pp. 1-6, printed. Archives of Biochemistry and Biophysics, Academic Press Inc., 111 5th Ave., New York 3, N. Y.

#### FISH BEHAVIOR:

"Studies on the Swimming Noise of the Fish," by Michio Uno and Tuneo Konagaya, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 11, 1960, pp. 1069-1073, printed in Japanese with English summary. Japanese Society of Scientific Fisheries, 6-Chome, Shiba-Kaigandori, Minato-Ku, Tokyo, Japan.

Symposium on Fish Behaviour, Proceedings of the Indo-Pacific Fisheries Council, 1958, 116 pp., printed. Indo-Pacific Fisheries Council, Food and Agriculture Organization of the United Nations, Bangkok, Thailand, 1960.

#### FISH FACILITIES:

"The Fish Facilities at the Whitehorse Rapids Power Development, Yukon Territory," by R. N. Gordon, R. A. Crouter, and J. S. Nelson, article, The Canadian Fish Culturist, no. 27, August 1960, pp. 43-56, printed. The Canadian Fish Culturist, Information and Educational Service, Department of Fisheries, Ottawa, Canada.

#### FISH-LIVER OIL:

"Alkali Digestion for Producing Vitamin Oil from Fish Liver," by Hideo Higashi, Yaichiro Shimma and Hisako Taguchi. Chemical Abstracts, vol. 55, 8769h, May 1, 1961.

"Prevention of the Injurious Effects of Excessive Cod-Liver Oil by its Fortification with Vitamin E," by T. Moore and I. M. Sharman, article, British Journal of Nutrition, vol. 15, No. 2, 1961, pp. 297-303, printed. British Journal of Nutrition, Cam-

bridge University Press, 32 E. 57th St., New York 22, N. Y.

#### FISH MEAL:

Low-Fat Fish Meal, Norwegian Patent 96, 116, May 23, 1960. Chemical Abstracts, vol. 55, May 1, 196 8696f.

#### FISH MORTALITY:

"Definitive Diagnosis of Fish Mortalities," by E. M. Wood, article, Journal of Water Pollution Control Federation, vol. 32, no. 9, 1960, pp. 994-999, printed. Journal of Water Pollution Control Federation, Prince and Lemon Sts., Lancaster, Pa.

#### FISH POPULATIONS:

"A Mechanical Model for the Study of Population Dynamics," by Oliver P. Pearson, article, Ecology, vol. 41, no. 3, 1960, pp. 494-508, printed. Ecological Society of America, Duke University Press, Box 6697, College Station, Durham, N. C.

"Suggested Standard Methods of Reporting Fish Population Data for Reservoirs (Prepared for the Reservoir Committee, Southern Division of the American Fisheries Society)," by Eugene W. Surber, article, Proceedings of the Thirteenth Annual Conference, Southeastern Association of Game and Fish Commissioners, pp. 313-325, printed. Southeastern Association of Game and Fish Commissioners, Columbia, S. C., 1959.

#### FISH SAUSAGE:

"Studies on the Heat Sterilization of Fish Sausage (1)," by Eiichi Tanikawa, Misao Suwaki and Minoru Akiba, article, Bulletin of Faculty of Fisheries, Hokkaido University, vol. 10, February 1960, pp. 332-356, printed. Faculty of Fisheries, Hokkaido University, Hakodate, Japan.

#### FISHERY DYNAMICS:

"A Standard Terminology and Notation for Fishery Dynamics," by S. J. Holt and others, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 25, no. 3, 1959, pp. 245-248, printed. Japanese Society of Scientific Fisheries, 6-Chome, Shiba-Kaigandori, Minato-Ku, Tokyo, Japan.

#### FISHERY OCCUPATIONS:

Training Programs for Fishery Occupations, OE-84025, 61 pp., printed, 20 cents. Office of Education, U. S. Department of Health, Education and Welfare, Washington, D. C., 1961. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) A booklet containing information on fishery occupational training. Discusses the United States fishing industry; advisory services, national associations, Federal and State agencies; areas of instruction for high schools and short courses; instructional units; and institutions offering courses in fisheries and related sciences.

#### FISHING WITH LIGHTS:

Improvement of Techniques for Fishing with Lights, by Francois Bourgois and Luigi Farina, General Fisheries Council for the Mediterranean, Studies and Reviews No. 17, 28 pp., illus., processed. GFCM Secretariat, Food and Agriculture Organization of the United Nations, Rome, Italy, November 1961.

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Describes trials made between 1957 and 1959 by FAO experts for the purpose of determining what technical advances could be introduced into Tunisian fishing practices. Discusses in detail light-fishing methods, fishing lamps, generator sets, findings of detection and control trials, practical implications of detection and control findings, and distribution of gear and dissemination of new techniques. Includes photos of gear and vessels and drawings of equipment used in fishing with lights.

"Primeneniie Svetovoykh Blokov pri Love Kilki Rybonasosom" (Use of Bunches of Lamps in Fishing for Sprats with Fish Pumps), by I. V. Nikonorov, article, Rybnoe Khoziaistvo, vol. 35, no. 12, 1959, pp. 42-47, illus., printed in Russian. VNIRO Glavniproekta, pri Gosplanie SSSR, Moscow, U.S.S.R.

#### FISHWAYS:

Design of Fishways and Other Fish Facilities, by C. H. Clay, 300 pp., illus., printed, \$5. Queens Printer, Ottawa, Canada, 1961.

#### FLORIDA:

"Exploited Fish Populations of the St. Johns River, Florida," by Harold L. Moody, article, The Quarterly Journal of the Florida Academy of Sciences, vol. 24, no. 1, 1961, pp. 1-18, printed. Quarterly Journal of the Florida Academy of Sciences, University of Florida, Gainesville, Fla.

A Survey of the Number of Anglers and of Their Fishing Effort and Expenditures in the Coastal Recreational Fishery of Florida, by Robert W. Ellis, Albert Rosen, and Alan W. Moffett, Technical Series No. 24, 50 pp., printed. Florida State Board of Conservation, W. V. Knott Bldg., Tallahassee, Fla., 1958.

#### FLOUNDER:

"Length Shrinkage of Yellowtail Flounder between Live and Landed Condition," by Fred E. Lux, article, Transactions of the American Fisheries Society, vol. 89, no. 4, 1960, pp. 373-374, printed. Transactions of the American Fisheries Society, Librarian, Colorado A & M College, Fort Collins, Colo.

#### FLUKE:

"Age and Growth of the Fluke in Great South Bay and Their Significance to the Sport Fishery," by John C. Poole, article, New York Fish and Game Journal, vol. 8, no. 1, 1961, pp. 1-18, printed. New York Fish and Game Journal, New York Conservation Department, Albany 1, N. Y.

#### FOOD AND AGRICULTURE ORGANIZATION:

Informe al Gobierno de Chile sobre la Pesca en Aguas Continentales en la Region de los Lagos (Report to the Government of Chile on the Fishery in Inland Waters in the Lakes Region), by Cecil Miles, FAO Fisheries Biology Report No. 28, 87 pp., illus., processed in Spanish, limited distribution. Food and Agriculture Organization of the United Nations, Rome, Italy, September 1961.

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III presents data on the German deep-sea fishery in 1960, the lugger herring fishery, the cutter deep-sea and coastal fisheries, fresh-water fisheries, processing of fish and shellfish, propaganaa campaign, and promotional activities. Part IV gives data on foreign fisheries and whaling.

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"The Bait Shrimp Fishery of Galveston Bay, Texas," by Edward Chin, article, Transactions of the American Fisheries Society, vol. 89, no. 2, 1960, pp. 135-141, printed. The American Fisheries Society, P. O. Box 429, McLean, Va.

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"The Smelt Fishery of the Miramichi, 1960-61," by R. A. McKenzie, article, Trade News, vol. 14, nos. 5-6, November-December 1961, pp. 13-16, illus., processed. Information and Consumer Service, Department of Fisheries, Ottawa, Canada. Discusses smelt landings in the Miramichi River in recent years, the spring spawning runs, the Great Lakes smelt fishery, and a survey of smelt spawning conducted in 1961. Includes statistical tables showing smelt landings, 1946-1961.

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"Phenolic Content of Smoked Fish," by A. I. Yuditskaya and T. M. Lebedeva, Chemical Abstracts, vol. 55, 11696a, June 12, 1961.

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"The Stock of Soles (*Solea solea*) and the Sole Fishery on the Danish North Sea Coast," by Jorgen Moller Christensen, article, Meddelelser Fra Danmarks Fiskeri -og Havundersogelser, vol. 3, nos. 1-6, 1960-1961, pp. 19-63, printed in Danish. Fiskeriministeriets Forsoglaboratorium, 10 Oster Voldgade, Copenhagen, Denmark.

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Department of Nature Conservation, Report No. 17, 1960, 104 pp., illus., printed. Department of Nature Conservation, Provincial Administration of the Cape of Good Hope, Cape Town, Republic of South Africa. This report covers the activities of

the Department of Nature Conservation for 1960. It includes, among others, a section on the Division of Inland Fisheries which discusses the two Government hatcheries, stocking of public waters, tidal waters of the Cape, new type of pond for rearing trout, survey of dams in the northern Cape, comparison of the growth rate of 6 species of fish, and sale of angling licenses.

#### SOUTH-WEST AFRICA:

Shell in Industry (Special South West Africa Issue), no. 39, July/September 1961, 32 pp., illus., printed. Shell South Africa (Pty.) Ltd., P. O. Box 2231, Cape Town, South Africa Republic. Contains, among others, the following articles: "Four Million Pilchards a Day;" "Big Money in Guano;" and "Walvis Bay--Industrial Mushroom."

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"Comercio Exterior Pesquero en 1960" (Foreign Trade in Fishery Products in 1960), article, Boletin de Informacion, no. 37, October 1961, pp. 9-12, printed in Spanish. Sindicato Nacional de la Pesca, Paseo del Prado, 18-20, Madrid, Spain.

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#### STANDARDS:

"Biochemische Untersuchungen zur Frage der Aufstellung von Guteklassen bei Seefischen" (Biochemical Investigations into the Problem of Establishing Quality Standards for Seafishes), by F. Bramstedt and J. Wurzbacher, article, Fette-Seifen-Anstrichmittel, vol. 62, no. 6, 1960, pp. 513-517, printed in German. Fette-Seifen-Anstrichmittel, Industrieverlag von Hernhausen K. G., Hamburg 11, Germany.

What Consumers Should Know About Food Standards, Food and Drug Administration Publication No. 8, 12 pp. illus., printed, 15 cents. Food and Drug Administration, U. S. Department of Health, Education, and Welfare, Washington, D. C., 1961. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) Discusses standards of identity and quality, etc. for foods and how the consumer depends on such standards; and how the Food and Drug Administration collects market samples in a ceaseless watch for products that are below standard. The booklet is illustrated with photographs showing some of the scientific tests FDA makes to check samples of food products against the standards.

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## STORAGE:

"British Study Effect of Various Factors on Storage of AFD Cod Steaks," article, Food Engineering, vol. 33, June 1961, p. 91, printed. Food Engineering, Chilton Co., Chestnut and 56th Sts., Philadelphia 39, Pa.

"Frozen Fish Storage," by W. J. Dyer, article, Annual Review and Program for the 14th Annual Meeting of the Fisheries Council of Canada, pp. 33, 35, printed. Fisheries Council of Canada, P. O. Box 547, Ottawa, Canada, 1959.

"The Storage of Sea-Products with Antibiotics and Irradiation," by P. Vidal, article, Revue Generale du Froid, vol. 38, no. 1, January 1961, pp. 14-16, printed in French. Association Nationale des Ingenieurs et Techniciens du Froid et des Industries Connexes, 129 Boulevard St. Germain, Paris VI, France.

## STRIPED BASS:

Atlantic Coast Migration of Large Striped Bass as Evidenced by Fisheries and Tagging, by Robert B. Chapoton and James E. Sykes, 8 pp., illus., printed. (Reprinted from Transactions of the American Fisheries Society, vol. 90, no. 1, January 1961, pp. 13-20.) Transactions of the American Fisheries Society, Librarian, Colorado A & M College, Fort Collins, Colo. During studies of Atlantic Coast striped bass, Roccus saxatilis (Walbaum), by the U. S. Fish and Wildlife Service and cooperators from 1955 to 1959, 478 large fish ranging in weight from 6 to 54 pounds and in age from 3 to 18 years were tagged. Tagging locations were the North Carolina coast where 81 fish were tagged; Albemarle Sound and Roanoke River (N. C.) where 97 fish were tagged; and Chesapeake Bay and tributaries where 300 tags were applied. Catches by commercial and sport fisheries indicated that large striped bass concentrated on the coast of North Carolina in late fall and winter, on or near spawning areas for striped bass in North Carolina and Chesapeake Bay in late winter and spring, and along the coast north of Chesapeake Bay as far as Massachusetts in the summer and fall.

## SWEDEN:

Organizational Work Amongst Swedish West Coast Fishermen, by Georg Aberg, 7 pp., printed. Handelstryckeriet, Goteborg, Sweden, 1959. Discusses how fishermen are organized, work of the Swedish West Coast Fishermen's Central Organization, cooperative fish marketing, price controls, and cooperative salting. Also covers fish processing, economic activities of the Organization, collaboration with other fishermen's organizations, cultural and publicity work, organizing study activities, and the future of the Organization.

## TAGGING:

"An Electric Instrument for Brandmarking Fish," by Rom. Moav, article, Bamidgeh, vol. 12, no. 4, 1960, pp. 92-95, printed. Department of Fisheries and Fish Breeders' Association, Nir-David, D. N., Hakiryra, Israel.

"Radioactive Iron as a Fish Mark," by D. P. Scott, article, Journal of the Fisheries Research Board

of Canada, vol. 18, no. 3, 1961, pp. 383-391, printed. Queen's Printer & Controller of Stationery, Ottawa, Can.

## TARIFFS:

Tariff Classification Study, First Supplemental Report, (Report to the President and to the Chairmen of the Committee on Ways and Means of the House and the Committee on Finance of the Senate Pursuant to Title I of the Customs Simplification Act of 1954), 1,113 pp., illus., processed, \$6. United States Tariff Commission, Washington, D. C., January 1962. Embodies the changes in the headnotes and tariff schedules of the Tariff Classification Study, published November 15, 1960, which, in the judgment of the Commission, are necessary to bring them down to date, to correct error, or to further the objectives of the Study. The report also contains a full explanation of each proposed change as well as a statement of reasons for not accepting certain of the suggestions received from interested parties.

Submitting Report, 89 pp., printed, 35 cents. November 15, 1960.

Alphabetical Index of Commodities Provided for in the Proposed Revised Tariff Schedule of the United States, 130 pp., printed, 65 cents, May 20, 1961. Fishery products are among the commodities listed.

Proposed Revised Tariff Schedules of the United States, 831 pp., processed, \$4.25, November 15, 1960. Includes fishery products.

Explanatory and Background Materials. Schedule 1--Animal and Vegetable Products, 495 pp., printed, \$2.25, November 15, 1960. Includes a section on fish and shellfish.

Explanatory and Background Materials. Schedule 2--Wood and Paper; Printed Matter, 309 pp., printed, \$1.50, November 15, 1960.

Explanatory and Background Materials. Schedule 3--Textile Fibers and Textile Products, 630 pp., printed, \$3.25, November 15, 1960. Contains a section pertaining to fishing nets.

Explanatory and Background Materials. Schedule 4--Chemicals and Related Products, 473 pp., processed, \$2.25, November 15, 1960.

Explanatory and Background Materials. Schedule 5--Nonmetallic Minerals and Products, 416 pp., printed, \$2, November 15, 1960.

Explanatory and Background Materials. Schedule 6--Metals and Metal Products, 916 pp., illus., processed, \$4.75, November 1960.

Explanatory and Background Materials. Schedule 7--Specified Products; Miscellaneous and Nonenumerated Products, 909 pp., processed, \$5, November 15, 1960. Includes fishing tackle and pearls.

Explanatory and Background Materials. Schedule 8--Special Classification Provisions Appendix to the Tariff Schedules, 186 pp., processed, \$1,

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#### TILAPIA:

"Adaptability of *Tilapia nilotica* to Various Saline Conditions," by Ruth Lotan, article, *Bamidgeh*, vol. 12, no. 4, 1960, pp. 96-100, printed. Department of Fisheries and Fish Breeders' Association, Nir-David, D. N., Hakiryah, Israel.

"The Culture of *Tilapia nigra* (Gunther) in Ponds. II--The Influence of Water Depth and Turbidity on the Growth of Male *T. nigra*; III--The Early Growth of Males and Females at Comparable Stocking Rates, and the Length/Weight Relationship," by Vernon D. van Someren and Peter J. Whitehead, articles, *East African Agricultural Journal*, vol. 25, no. 2, 1959, pp. 66-72; vol. 25, no. 3, 1960, pp. 169-173, respectively, printed. East African Agricultural Journal, Government Printer, Nairobi, Kenya.

"Laboratory Experiments on the Growth of *Tilapia* Spp. I--The Value of Various Foods," by C. C. Cridland, article, *Hydrobiologia*, vol. 15, nos. 1/2, 1960, pp. 135-160, printed. *Hydrobiologia*, Uitgeverij Dr. W. Junk, The Hague, Netherlands.

#### TRANSPORTATION:

"Conditions for Use of Aeroplanes for the Transport of Perishable Foodstuffs," article, *Bulletin de L'Institut International du Froid*, vol. 41, no. 1, 1961, pp. 302-308, printed. International Institute of Refrigeration, 177 Blvd. Malesherbes, Paris 17, France.

#### TRAWLER-FREEZER:

"La Congelation du Poisson sur 1'Autumn Sun, Chalutier Anglais de 33,5M." (Freezing of Fish Aboard the 33.5-M. English Trawler, Autumn Sun), article, *La Peche Maritime*, vol. 39, no. 984, 1960, pp. 153-155, illus., printed in French. *La Peche Maritime*, 190, Boulevard Haussmann, Paris, France.

"The MFV Autumn Sun - Freezer-Trawler," by R. E. Adams, article, *Journal of Refrigeration*, vol. 3, no. 3, 1960, pp. 59-62, illus., printed. *Journal of Refrigeration*, Foxlow Publications Ltd., 19 Harcourt St., London W1, England.

"The Smallest Trawler-Freezer in the World," article, *Modern Refrigeration*, vol. 63, no. 744, 1960, pp. 267-269, illus., printed. *Modern Refrigeration*, Refrigeration Press Ltd., Maclaren House, Great Suffolk St., London SE1, England.

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"Development of a New Stern Trawler," by J. Venus, article, *The Motor Ship*, vol. 40, no. 474, 1960, pp. 376-378, illus., printed. *The Motor Ship*, Temple Press Ltd., Bowling Green Lane, London EC4, England.

"A New German High-Seas Trawler," by H. Offerdinger, article, *Die Kalte*, vol. 14, no. 1, January 1961, pp. 20-21, printed in German. *Die Kalte*, Hans A. Keune Verlag, Pressehaus, 1 Speersport, Hamburg 1, Germany.

"The Stern Trawler *Universal Star*," article, *Ship and Boat Builder*, vol. 13, no. 17, 1960, pp. 254-255, illus., printed. *Ship and Boat Builder*, John Trundell Ltd., St. Richards House, Eversholt St., London NW1, England.

"*Universal Star*, Chalutier de 31 Metres, Equipe pour la Peche par l'Arriere" (*Universal Star*, a 31-M. Vessel for Stern Trawling), article, *La Peche Maritime*, vol. 39, no. 983, 1960, pp. 106-107, 109, illus., printed in French. *La Peche Maritime*, 190 Boulevard Haussmann, Paris, France.

#### TRAWLING:

"New Type Otter-Boards for Mid-Water Trawl," by Kiichioo Kobayashi and Navichi Inoue, article, *Bulletin of the Faculty of Fisheries, Hokkaido University*, vol. 11, May 1960, pp. 20-21, printed. Faculty of Fisheries, Hokkaido University, Hakodate, Japan.

"Trawl Fishing in the Tropical Atlantic," by R. H. Lowe and Alan R. Longhurst, article, *Nature*, vol. 192, no. 4803, November 18, 1961, pp. 620-621, printed, 2s. 6d. (about 40 U. S. cents). *Nature*, St. Martin's Press, Inc., 175 Fifth Ave., New York 10, N. Y. Discusses exploratory trawling operations in the western and eastern South Atlantic by the Colonial Office vessel, *Cape St. Mary*. Covers catch rates and composition, analysis of findings, and details of vessel construction.

"Trawling . . . a New Development in the Pennsylvania Commercial Fisheries of Lake Erie," by Alfred Larsen, article, *Pennsylvania Angler*, vol. 31, no. 1, January 1962, pp. 3-7, illus., printed, single copy 25 cents. Pennsylvania Fish Commission, South Office Bldg., Harrisburg, Pa. According to the author, "Recent trends in the Pennsylvania commercial fisheries have been toward a steady decline in availability of such choice fish as blue pike and whitefish and an increase in the less desirable species such as smelt, gizzard shad, and alewives." The recent introduction of trawling for smelt in the Great Lakes by the U. S. Bureau of Commercial Fisheries may be an answer to the present economic plight of all Lake Erie commercial fishermen. This article discusses recent exploratory fishing cruises for smelt in Lake Erie, operation of the trawl, handling of the fish after capture, processing of the fish, and opportunities for future development of the smelt fishery.

#### TROUT:

"Hepatoma (Liver Ailment Sparks Vast Research)," and "A Progress Report on Hepatoma," by Howard A. Tanner, articles, *U. S. Trout News*, vol. 6, no. 4, November-December 1961, pp. 4-5, 21-22, illus., printed. U. S. Trout Farmers Association, 110 Social Hall Ave., Salt Lake City 11, Utah. Discusses the occurrence and probable causes of trout hepatoma, or cancer of the liver, and programs initiated by various Federal and state agencies for its control. This costly disease, in the opinion of researchers, is probably caused by some element in the diet.

"Night Use of a Direct-Current Electric Shocker to Collect Trout in Lakes," by William C. Latta and Gerald F. Myers, article, *Transactions of the American Fisheries Society*, vol. 90, no. 1, 1961, pp. 81-83, printed. *Transactions of the American Fisheries*

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Society, Librarian, Colorado A & M College, Fort Collins, Colo.

#### TUNA:

"Bestimmung des Altersaufbaues des Roten Thunes (*Thunnus thynnus* (Linnaeus)) in der Nordsee mit Hilfe des Allometrischen Wachstums der Augenhöhle" (Determination of Age in the Red Tuna (*Thunnus thynnus* (Linnaeus)) in the North Sea by the Allometric Growth of the Eye Socket), by Klaus Tiews, article, *Archiv für Fischereiwissenschaft*, vol. 11, no. 1, 1960, pp. 11-17, printed in German. Bundesforschungsanstalt für Fischerei, Hamburg, Germany.

The Migration, Age, and Growth of Pacific Albacore (THUNNUS GERMER), 1951-1958, by Harold B. Clemens, *Fish Bulletin* No. 115, 125 pp., illus., printed. California Department of Fish and Game, Printing Division, Documents Section, Sacramento 14, Calif., 1961. During January 1952, marine biologists developed the first successful tuna tag. It resembles a piece of spaghetti and has been employed as a research tool for studying the populations of important tuna species. Using these tags, scientists discovered that albacore migrate northward up the west American coast averaging at least 6 nautical miles per day; that they perform a transpacific migration between the American mainland and the Hawaiian Islands and Japan; that their growth rate is relatively rapid, averaging 7 pounds per year for the catch-dominating 13-pound fish; that the natural size groups in the fishery are successive year classes; that individuals and perhaps the same schools return to the American fishing grounds during several seasons; and that there is but one population in the North Pacific. Scientists have also determined the ages of albacore by studying rings on the scales; have obtained valuable data on the time and place of albacore spawning; and have determined their size at maturity. Data obtained from research cruises and specially designed fishermen's logbooks disclosed that albacore abundance is greatest where sea-surface temperatures are 60°-68° F. This information led to discovery of the albacore coastward migration routes and the successful prediction of vast migration route changes in 1958, 1959, and 1960.

"Studies on the Fluctuation in Catch of the Tuna-Fishing Fleet. II--On the Latitudinal Change of the Hooked-Rate of the Albacore and the Striped Marlin in the Fiji Area; III--On the Stomach Contents of Tuna in the Western South Pacific Ocean, Especially in the Fiji Area," by Sigeyuki Koga, article, *Bulletin of the Faculty of Fisheries, Nagasaki University*, no. 9, 1960, pp. 1-17, printed. Faculty of Fisheries, Nagasaki University, Nagasaki, Japan.

#### TURKEY:

Balık ve Balıkçılık (Fish and Fishery), vol. 9, no. 11-12, November-December 1961, 28 pp., illus., printed in Turkish with English table of contents. Balıkçılık Mudurluğu, Besiktas, Istanbul, Turkey. Includes, among others, the following articles: "Manufacturing of Anchovies of Different Types;" "Tortoisés (Testudénata);" and "The Characteristics and Standardization of Sea Origin Oils."

"Gıda - Nüfus Meselelerimiz" (Our Nutrition and Population Problems), by Suleyman Arisoy, article, *Türkiye İktisat Gazetesi*, no. 433, 1961, p. 5, printed in Turkish. Türkiye İktisat Gazetesi, Posta Kutusu 397, Ankara, Turkey.

"Türkiye'nin Gıda Problemi Hakkında 'Baade Raporu' Uzerinde Dusunceler" (A Thought on Baade's Report in Relation to the Nutrition Problems of Turkey), by Suleyman Arisoy, article, *Türkiye İktisat Gazetesi*, no. 400, 1960, p. 5, printed in Turkish. Türkiye İktisat Gazetesi, Posta Kutusu 397, Ankara, Turkey.

#### TURTLES:

Maryland Turtles, by Frank J. Schwartz, Educational Series No. 50, 42 pp., illus., printed. Maryland Department of Research and Education, Solomons, Md., May 1, 1961. Discusses the general anatomy and habits of turtles and describes in detail 18 species of turtles found in Maryland. Includes a table showing the volume and value of terrapin and snapper turtles, by gear, captured in Maryland, 1957 and 1958.

#### UNDERWATER CAMERA:

"A Pressurizing Device for a Camera Case Designed for Use in Shallow Water," by D. J. Scarratt, article, *Journal of the Marine Biological Association of the United Kingdom*, vol. 41, no. 1, 1961, pp. 77-80, printed. *Journal of the Marine Biological Association of the United Kingdom*, Cambridge University Press, 200 Euston Rd., London, NW1, England.

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

"The Fishing Fleet of the Soviet Union," by Bernard M. Kassell, article, *U. S. Naval Institute Proceedings*, vol. 87, no. 11, November 1961, pp. 70-81, illus., printed. U. S. Naval Institute, Annapolis, Md. Describes the problem posed for the western world by the growth of Soviet high-seas fisheries. This seems to be a two-pronged problem--one economic and the other strategic. Increased catches by the Soviet wide-ranging fleets are expected to result in decreasing markets for such fish-exporting nations as Iceland. Of strategic concern are the 200 to 400 trawlers and other large Soviet vessels fishing the year round in Atlantic and Pacific waters near the coasts of North America. Plans call for the continued growth of the ocean-going fleet, including the building of 68 factoryships with freezer installations and 47 refrigerated transport ships. In addition, 26 base ships or floating canneries are to be obtained. The majority of the fleet, however, will continue to be comprised of trawlers and seiners.

THE FOLLOWING ENGLISH TRANSLATIONS OF FOREIGN LANGUAGE ARTICLES ARE AVAILABLE ONLY FROM THE FISHERIES RESEARCH BOARD OF CANADA, BIOLOGICAL STATION, ST. ANDREWS, N. B., CANADA.

Development of Methods for Distinguishing Different Kinds of Fishes on Echograms, by A. A. Lovetskaya, V. P. Övsiannikov, and N. I. Chugunova, Translation Series No. 255, 8 pp., processed, 1960. (Translated from Russian, *Voprosy İktiologii*, no. 7, 1956, pp. 139-148.)

A First Attempt at Using a Submarine for Observations on the Behaviour of Herring, by D. V. Radakov



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and B. S. Solovev, Translation Series No. 338, 6 pp., processed, 1961. (Translated from Russian, Rybnoe Khoziaistvo, vol. 35, no. 7, 1959, pp. 16-21.)

Quantitative Study of the Baltic Herring Eggs and Larvae in the Northern Part of the Gulf of Riga and Principal Factors Determining Their Survival, by L. A. Rannak, Translation Series No. 238, 15 pp., processed, 1959. (Translated from Russian, Trudy Vsesoiuznovo Nauchno-Issledovatel'skovo Instituta Morskovo Rybnovo Khoziaistva i Okeanografi (VNIRO), vol. 34, 1958, pp. 7-18.)

Submarine Research Expeditions of the SEVERIANKA, by V. P. Zaitsev and V. G. Azhazha, Translation Series No. 339, 7 pp., processed, 1961. (Translated from Russian, Rybnoe Khoziaistvo, vol. 35, no. 7, 1959, pp. 7-16.)

#### VENEZUELA:

"La Pesca de Esperanza de Venezuela" (Venezuela's Fishery of the Future), by C. R. Chavez, article, El Agricultor Venezolano, vol. 23, no. 216, 1960, pp. 29-31, printed in Spanish. El Agricultor Venezolano, Ministerio de Agricultura y Cria, Caracas, Venezuela.

#### VESSELS:

Oceanographic Vessels of the World, 700 pp., illus., processed, \$4.50, limited distribution. U. S. Navy Hydrographic Office, Washington 25, D. C., 1961. Describes the oceanographic vessels of the world, giving in detail their specifications, their equipment, and their scientific capabilities. Presents details of construction, performance, personnel, propulsion, electrical power, navigation, communication, and echo-sounding equipment, laboratories, habitability, and type of observation. Oceanographic vessels of 66 countries are covered.

#### VIRGINIA:

Sixty-Second and Sixty-Third Annual Reports of the Commission of Fisheries of Virginia (For the Fiscal Years Ending June 30, 1960, and June 30, 1961), 66 pp., illus., printed. Commission of Fisheries, Newport News, Va. A report showing the amount of revenue derived from the fish and shellfish industries, all the expenditures of the Commission, and the general condition of the fish and shellfish industries under the supervision of the Commission. Statistical tables and reports are included as follows: receipts from fish and shellfish industries; expenditures for administration, enforcement, and restocking work; list of recorded oyster planting ground; areas in which restocking was done; and comparative statements of expense for the past ten years. Includes reports covering the shad-hatching work on the Mattaponi and Pamunkey Rivers for 1960 and 1961. Because of the poor runs of shad, the hatchery on the Chickahominy River again did not operate during the period covered. A report of the Virginia Fisheries Laboratory, Gloucester Point, describes its activities, with special reference to investigations of oysters and oyster drills, blue crab, migratory fish, and the pollution problem.

#### VITAMIN A:

"Studies on the Economical Manufacture of Vitamin A Concentrate from Fish Liver Oil. II--The Es-

terification of Alcohol Concentrate and Stability Tests," by Hideo Higashi and others, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 25, July 1959, pp. 196-203, printed. Japanese Society of Scientific Fisheries, c/o Tokyo University of Fisheries, Shiba-Kaigandori, 6-Chome, Tokyo, Japan.

"Vitamin A Extracts," by R. Matheron, Chemical Abstracts, vol. 52, 665, January 10, 1958.

#### WATER SAMPLING:

"A Newly Designed Apparatus for Water Sampling at Shallow Depths," by Charles Gainor, article, Ecology, vol. 41, no. 4, 1960, pp. 794-797, printed. Ecological Society of America, Duke University Press, Box 6697, College Station, Durham, N. C.

#### WHALING:

"International Whaling Commission," by G. R. Clark, article, Norsk Hvalfangst-Tidende (The Norwegian Whaling Gazette), vol. 50, no. 10, October 1961, pp. 411-424, printed in Norwegian and English. Hvalfangerforeningen, Sandefjord, Norway. Comprises the Chairman's Report from the 13th Meeting of the International Whaling Commission, held at London, June 19-23, 1961. Reports on condition of the stocks, the Convention's conservation aims and extra-Convention discussions, the carry-over of Antarctic pelagic whaling quotas, opening date of Antarctic baleen whaling season, and observer plan. Also discusses Antarctic catch limitation, scientific appraisal of Antarctic whale stocks, review of previous season's catch, study of North Pacific stocks, size limits for sperm whales, minimum size of whales to be taken at land stations in Northeast Pacific area, protection of humpbacks, and Greenland whaling. Other subjects covered include humane killing of whales, infractions of regulations, implementing legislation, finances, and representation at meetings of other organizations.

"Statement from The Federation of Norwegian Whaling Companies," article, Norsk Hvalfangst-Tidende (The Norwegian Whaling Gazette), vol. 50, no. 11, November 1961, pp. 447-452, illus., printed in Norwegian and English. Hvalfangerforeningen, Sandefjord, Norway.

#### WHITEFISH:

"Age and Growth of the Whitefish, Coregonus clupeaformis, of Munising Bay, Lake Superior," by Thomas A. Edsall, article, Transactions of the American Fisheries Society, vol. 89, no. 4, 1960, pp. 323-332, printed. Transactions of the American Fisheries Society, Librarian, Colorado A & M College, Fort Collins, Colo.

#### WHITING:

"Growth and Feeding Habits of the Whiting or Silver Hake in the New York Bight," by Richard H. Schaefer, article, New York Fish and Game Journal, vol. 7, no. 2, 1960, pp. 85-98, printed. New York Fish and Game Journal, New York Conservation Dept., Albany 1, N. Y.

#### WORLD TRADE:

The following World Trade Information Service Reports, published by the Bureau of Foreign Commerce, U. S. Department of Commerce, Washington, D. C., are for sale by the Superintendent of Documents,

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U. S. Government Printing Office, Washington 25, D. C., at 10 cents a copy.

YELLOW PIKE:

"Age and Growth of Wall-Eyes in Clear Lake, Iowa, 1935-1957," by Kenneth D. Carlander and Richard R. Whitney, article, Transactions of the American Fisheries Society, vol. 90, no. 2, 1961, pp. 130-138 printed. Librarian, Colorado A & M College, Fort Collins, Colo.

Food Regulations of Panama, Operations Report No. 61-77, WTIS Part 2, 4 pp., printed, November 1961.

Import Tariff System of Argentina, Operations Report No. 61-82, WTIS Part 2, 2 pp., printed, November 1961.



PARTY SHRIMP PLATE



2 pounds cooked, peeled, de-veined shrimp, fresh or frozen

2 large cucumbers, sliced  
Lettuce

Thaw frozen shrimp. Arrange shrimp on crisp lettuce with cucumber slices. Serve with Party Shrimp Sauce. Yield: about 100 shrimp.

PARTY SHRIMP SAUCE

2 cups sour cream

1 teaspoon salt

2 tablespoons horse-radish

1 teaspoon paprika

2 tablespoons grated onion

Combine all ingredients and blend well.