



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 AND ALASKA.
 FL - FISHERY LEAFLETS.
 SL - BRANCH OF STATISTICS LISTS OF DEALERS IN AND PRODUCERS OF FISHERY PRODUCTS AND BYPRODUCTS.
 SSR - FISH. - SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).
 SEP. - SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.

- | Number | Title |
|----------|---|
| CFS-2246 | - Massachusetts Landings, 1959 Annual Summary, 16 pp. |
| CFS-2250 | - Florida Landings, 1959 Annual Summary, 10 pp. |
| CFS-2256 | - Maine Landings, 1959 Annual Summary, 11 pp. |
| CFS-2268 | - Frozen Fish Report, March 1960, 8 pp. |
| CFS-2289 | - Alabama Landings, 1959 Annual Summary, 3 pp. |
| CFS-2292 | - New York Landings, February 1960, 4 pp. |
| CFS-2294 | - Texas Landings, February 1960, 3 pp. |
| CFS-2295 | - Louisiana Landings, November 1959, 2 pp. |
| CFS-2296 | - Louisiana Landings, December 1959, 2 pp. |
| CFS-2297 | - Virginia Landings, March 1960, 3 pp. |
| CFS-2298 | - Maryland Landings, March 1960, 3 pp. |
| CFS-2300 | - Massachusetts Landings, January 1960, 4 pp. |
| CFS-2302 | - Louisiana Landings, January 1960, 2 pp. |
| CFS-2307 | - Georgia Landings, March 1960, 2 pp. |
| CFS-2311 | - Florida Landings, March 1960, 6 pp. |
| CFS-2313 | - New York Landings, March 1960, 4 pp. |
| FL-393 | - Fisheries of the United States, 1959 (A Preliminary Review), by E. A. Power, 52 pp., illus., revised April 1960. A preliminary review of commercial fishery activities in 1959, well illustrated with graphs and charts. In addition to data on production, consumption, prices, manufactured fishery products, value of industry and capital investments, and supplies of certain fishery products, this leaflet contains information on fishery imports and exports, and world fisheries. |

Wholesale Dealers in Fishery Products, 1959 (Revised):

- SL-7 - New Jersey, 1959.
 SL-13 - North Carolina, 1959.
 SL-14 - South Carolina, 1959.
 SL-15 - Georgia, 1959.
 SL-17 - Alabama (Coastal Area), 1959.

- SL-18 - Mississippi (Coastal Area), 1959.
 SL-26 - Illinois (Great Lakes Area), 1959.
 SL-27 - Indiana (Great Lakes Area), 1959.

Firms Canning, 1959 (Revised):

- SL-102 - Maine Sardines (Including Sea Herring).
 SL-102A - Pacific Sardines.
 SL-104 - Mackerel.
 SL-111 - Clam Products.
 SL-116 - Food for Animals, From Marine-Animal Products.

Firms Manufacturing, 1959 (Revised):

- SL-154 - Seaweed Products.
 SL-160 - Menhaden Products.

SSR-Fish. No. 292 - North Pacific and Bering Sea Oceanography, 1957, by Felix Favorite and Glenn M. Pedersen, 110 pp., illus., May 1959.

SSR-Fish. No. 312 - North Pacific and Bering Sea Oceanography, 1958, by Felix Favorite and Glenn Pedersen, 333 pp., illus., November 1959.

SSR-Fish. No. 327 - Herring of the North European Basin and Adjacent Seas (Translations from Russian), edited by Leslie W. Scattergood, 286 pp., illus., November 1959. Includes articles on "The Fundamental Stage of the Life-Cycle of Atlantic-Scandinavian Herring," by Y. Y. Marti; "Chart of Consonant Currents in the Norwegian and Greenland Seas," by A. P. Alekseev and B. V. Istoshin; "Plankton as an Indicator of Waters of Different Origins," by V. D. Abramova; "Seasonal Changes in Plankton and Feeding Migrations of Herring," by E. A. Pavstiks; "Data on the Food of the Atlantic Herring," by V. A. Rudokova; "Investigation into the Life-Cycle of Summer-Spawning Herring of Iceland," by K. A. Liamin; "The Ovogenesis and Ecology of the Sexual Cycle of the Murmansk Herring (*Clupea harengus harengus* L.)," by V. M. Naumov; "Experimental Tagging of Herring in Kandalaksha Bay in 1953-1954," by A. P. Vilson; and "The Biological Foundation of the Fishery of the White Sea Herring," by B. M. Tambovtsev.

SSR-Fish. No. 328 - Sardine Eggs and Larvae and Other Fish Larvae, Pacific Coast, 1957, by Elbert Ahlstrom, 104 pp., illus., December 1959.

Annual Report of the Biological Laboratory, Woods Hole, Mass. (for the Year Ending June 30, 1959), Circular 80, 55 pp., illus., processed. This report, constituting part of the annual report of the Branch of Fishery Biology, presents a summary of research activities in the Northwest Atlantic Fishery Investigations program and a description of vessels and shore facilities.

ties. As in past years, the research program was directed primarily toward problems associated with the offshore groundfish and sea scallops upon which the New England fishing industry is mainly dependent. The major groundfish species concerned are cod, haddock, ocean perch, whiting, and the species taken by the industrial trawl fishery.

Annual Report of the Fish and Wildlife Service, Bureau of Commercial Fisheries, Bureau of Sport Fisheries and Wildlife, for the Fiscal Year 1959, 46 pp., illus., printed. (Reprinted from the Annual Report of the Secretary of the Interior, for the Fiscal Year Ended June 30, 1959.) Summarizes the various activities of the Service. Describes the activities of the Bureau of Commercial Fisheries; Industrial Research and Services; Columbia River Fisheries Program; Pribilof Islands fur-seal industry; and biological research (shellfish anadromous, inland, and marine fisheries). Bureau of Sport Fisheries and Wildlife activities discussed include Federal aid to the states for the restoration of fish and wildlife, fish hatcheries; fishery management services; and river basin studies.

National Wildlife Refuges in the Northeast (Region 5), 4 pp., illus., February 1960.

Report of the Secretary of the Interior to the President and the Congress on Fresh, Frozen, and Processed Shrimp, 112 pp., processed April 1960. A comprehensive report on the fresh, frozen, and processed shrimp industries prepared for the President and Congress in compliance with Section 9(b) of Public Law 1024, 84th Congress, the Fish and Wildlife Act of 1956 (70 Stat. 1119), enacted August 8, 1956. The investigation upon which this report is based was conducted at the request of a national shrimp organization whose members have accounted for over 70 percent of the U. S. production of shrimp. The request was prompted by a growing apprehension in the shrimp industry over its economic future. As important elements contributing to their concern, shrimp producers have cited (1) an increase in the total U. S. supply resulting mainly from high import volumes in 1958 and 1959, (2) a decrease since 1953 in the average annual catches of individual shrimp trawlers, (3) an increase in production costs during the 1950's, (4) record-high cold-storage holdings of shrimp in 1959, and (5) a sharp downturn in prices paid to shrimp fishermen during 1959. The shrimp industry is composed of many segments, such as trawler owners, fishermen, shore-plant operators, processors, shipbuilders and provisioners, importers, brokers, and distributors. Each group is affected differently by changing conditions in total supply, prices, production costs, and imports. This report is concerned principally with the factors affecting the producing segments of the domestic shrimp industry. Other factors, such as the impact of the present shrimp situation on the consumer, on U. S. trade interests, and on other matters of public interest, have not been considered.

Sep. No. 590 - Exploratory Fishing in Lake Erie, September 1958-November 1959.

Sep. No. 591 - Research in Service Laboratories (June 1960): Contained this article--"Fish Flour is Primarily a Protein Concentrate-- Not a Substitute for Grain Flour."

Sep. No. 592 - Equipment Note No. 4 - A Method of Making Electrical Trawl Cable Terminations and Connections.

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

Number	Title
MNL-17	Italian Fishing Industry, 1959.
MNL-19	Japanese Investments in Overseas Fishery Enterprises.

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.

Average Year's Fishing Condition of Tuna Long-Line Fisheries, 1958 Edition, edited by Nankai Regional Fisheries Research Laboratory, 44 pp., processed. (Translated from Tokyo Federation of Japan Tuna Fishermen's Co-Operative Associations, 1959, text volume, pp. 1-27.)

Culturing of a Copepoda, SINOCALANUS TENELLUS, by Chikayoshi Matsudaira, 6 pp., processed. (Translated from Information Bulletin on Planktology in Japan, no. 5, 1957, pp. 1-6.)

Noise of Creatures in Sea in Region of Ultrasound, by Tomiju Hashimoto and Yoshinobu Maniwa, 15 pp., illus., processed. (Translated from Technical Report of Fishing Boat No. 12, 1958, pp. 99-114.)

On the Gill-Rakers of SARDINIA MELANOSTICTA (Temminck & Schlegel), by Noboru Sako, 2 pp., processed. (Translated from Bulletin of the Japanese Society of Scientific Fisheries, no. 7, 1938, pp. 237-238.)

The Study of Finding the Reasons Why the Bonito Does Not Take to the Angling-Baits, by Yasou Suyehiro, 12 pp., processed. (Translated from Journal of the Imperial Fisheries Experimental Station (Tokyo), no. 9, 1938, pp. 87-102.)

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

Offshore Distribution of Plankton Produced in Coastal Water, by Masataka Kitou, 3 pp., processed. (Translated from Information Bulletin on Planktology in Japan, no. 5, 1957, pp. 7-8.)

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

California Fishery Products Monthly Summary March 1960; 13 pp. (Market News Service U. S. Fish and Wildlife Service, Post Office Bldg., San Pedro, Calif.) Califor-

nia cannery receipts of tuna and tunalike fish; mackerel, and anchovies; pack of canned tuna, mackerel, and anchovies; market fish receipts at San Pedro, Santa Monica, and Eureka areas; California imports; canned fish and frozen shrimp prices; ex-vessel prices for cannery fish; American Tuna Boat Association auction sales; for the month indicated.

(Chicago) Monthly Summary of Chicago's Fresh and Frozen Fishery Products Receipts and Wholesale Market Prices, March 1960, 12 pp. (Market News Service, U. S. Fish and Wildlife Service, 565 W. Washington St., Chicago 6, Ill.) Receipts at Chicago by species and by states and provinces for fresh- and salt-water fish and shellfish; and wholesale prices for fresh and frozen fishery products; for the month indicated.

Gulf Monthly Landings, Production, and Shipments of Fishery Products, March 1960, 8 pp. (Market News Service, U. S. Fish and Wildlife Service, 609-611 Federal Bldg., 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; sponge sales; and fishery imports at Port Isabel and Brownsville, Tex., from Mexico; for the month indicated.

Monthly Summary of Fishery Products Production in Selected Areas of Virginia, North Carolina, and Maryland, April 1960, 4 pp. (Market News Service, U. S. Fish and Wildlife Service, 18 So. King St., Hampton, Va.) Fishery landings and production for the Virginia areas of Hampton Roads, Lower Northern Neck, and 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; for the month indicated.

New England Fisheries--Annual Summary, 1959, by John J. O'Brien, 51 pp., processed. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) Reviews the fish marketing trends and conditions at the principal New England fishery ports, and highlights of fisheries in other nearby areas. Presents food-fish 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 by months 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 monthly landings and ex-vessel prices for fares landed at the Boston Fish Pier and sold through the New England Fish Exchange.

New England Fisheries--Monthly Summary, March, and April 1960, 22 pp. each. (Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) Reviews the principal New England fishery ports, and presents food fish landings by ports and species; indus-

trial 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 landings and ex-vessel prices for fares landed at the Boston Fish Pier and sold through the New England Fish Exchange; for the months indicated.

New York City's Wholesale Fishery Trade--Monthly Summary for January and March 1960, 16 and 22 pp. respectively. (Market News Service, 155 John St., New York 38, N. Y.) Includes summaries and analyses of receipts and prices on Wholesale Fulton Fish Market, imports entered at New York City, primary wholesaler prices for frozen products, and marketing trends; for the months indicated.

(New York) List of Primary Brokers and Importers of Fishery Products and Byproducts, New York City, 1959-1960, 16 pp. (Market News Service, U. S. Fish and Wildlife Service, 155 John St., New York 38, N. Y.)

(Seattle) Washington, Oregon, and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, April 1960, 9 pp. (Market News Service, U. S. Fish and Wildlife Service, Pier 42 South, Seattle 4, Wash.) Includes landings and local receipts, with ex-vessel and wholesale prices in some instances, as reported by Seattle and Astoria, (Ore.) wholesale dealers; also Northwest Pacific halibut landings; and Washington shrimp landings; for the month indicated.

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 ORGANIZATION OR PUBLISHER MENTIONED. DATA ON PRICES, IF READILY AVAILABLE, ARE SHOWN.

BRAZIL:

Pesca 1958 (Fisheries 1958), 16 pp., processed in Portuguese. Ministerio da Agricultura, Servico de Estatistica da Producao, Rio de Janeiro, Brazil, December 1959.

CALIFORNIA:

California Fish and Game, vol. 46, no. 2, April 1960, 124 pp., illus., printed. Department of Fish and Game, 722 Capitol Ave., Sacramento 14, Calif. Includes, among others, these articles: "Exploratory Longline Fishing for Tunas in the Eastern Tropical Pacific, September 1955 to March 1956," by Kenneth F. Mais and Tom Jow; "Observations on the Growth Rate of the Spiny Lobster," by John Backus; "Age Composition of the Southern California Catch of Pacific Mackerel, *Pneumatophorus diego* for the

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1957-1958 Season," by Harold Hyatt; "Age and Length Composition of the Sardine Catch off the Pacific Coast of the United States and Mexico in 1957-58," by Anita Daugherty and Robert S. Wolf; "Notes on Four Specimens of the Pacific Sardine Taken in August 1957 off British Columbia and Oregon," by Charles F. Reid; and "An Economic Evaluation of California's Sport Fisheries," by John Mahoney.

Digest of Commercial Fish Laws, 1959-61, 28 pp., illus., printed. California Department of Fish and Game, 722 Capitol Ave., Sacramento 14, Calif., 1959. A booklet explaining the California commercial fishing laws. This booklet is not intended to replace the Fish and Game Code but to explain the Code to the fishing industry. It contains information on license provisions, species covered, the commercial fishing districts, provisions of the Code affecting the commercial fisheries, calendar of the seasons, and use or possession of nets in certain districts. Laws governing the catch of fish and shellfish are restrictive; those governing fishing gear are permissive.

A Field Guide to Some Common Ocean Sport Fishes of California, Pt. 1, by Daniel J. Miller, 40 pp., illus., printed. California Department of Fish and Game, Marine Resources Operations, Sacramento, Calif., 1960.

CANADA:

The Canadian Fish Culturist, no. 26, March 1960, 34 pp., illus., printed. The Queen's Printer and Controller of Stationery, Ottawa, Canada. Includes the following articles: "Homing Behavior in Spawning Lake Trout," by N. V. Martin; "Further Observations on the Survival of Yearling Lake Trout Planted in South Bay, Lake Huron," by J. C. Budd and F. E. J. Fry; "Comparative Tagging Returns Employing Three Different Anaesthetics," by R. A. Ryder; "A Possible Source of Error in Assessing the Survival of Pacific Salmon Eggs by Redd Sampling," by J. G. McDonald; and "A Modified Roller Press for Scale Impressions," by M. H. Baker and H. H. Brohm.

CEYLON:

Administration Report of the Director of Fisheries for 1958, 80 pp., printed in Sinhalese and English. Government Publications Bureau, Colombo, Ceylon. February 1960.

CONNECTICUT:

A Fishery Survey of the Lakes and Ponds of Connecticut, 395 pp., illus., printed. State Board of Fisheries and Game, Lake and Pond Survey Unit, Hartford, Conn., 1959.

CONSERVATION:

The Exploitation and Conservation of the Resources of the Sea: A Study of Contemporary International Law, by Francisco V. Garcia Amador, second and enlarged edition, 226 pp., printed, Fl 26.75 (about US\$7.09). A. W. Sijthoff, Leiden, Netherlands, 1959. Presents a discussion of the work of the first United Nations Conference on the Law of the Sea held in Ge-

neva in the spring of 1958. The author believes that the recent advances in exploration and exploitation of the riches of the sea and the rise of new national needs and interests necessitate the making of adjustments in traditional international law. The emerging new system must recognize and secure "the legitimate interest of all in the rational utilization of the resources of the sea." The author discusses recent developments with regard to the continental shelf, territorial sea, contiguous zones, and the new baseline technique. He states the view that the plan adopted at Geneva in 1958 properly recognizes the rights and interests of both the coastal states and the nations traditionally fishing on the high seas.

CUBA:

Mar y Pesca, vol. 3, nos. 4, 5, and 6, January-March 1960, 50 pp., illus., printed in Spanish. Departamento de Pesca del I. N. R. A., Noveno Piso, Plaza Cívica, Havana, Cuba. Includes, among others, these articles: "Industrialización de la Pesca de Agua Dulce" (Commercial Development of the Fresh-Water Fishery), by Federico Gomez de la Maza; "Los Alimentos Marinos en su Aspecto Medicinal" (Seafood and Its Medicinal Potentiality); "Año del Pescado" (Seafood Year); "Adelantos Pesqueros en Jamaica" (Progress in Jamaica's Fisheries); "Probabilidad Comercial de la Sardina en Cuba" (Commercial Possibilities of the Cuban Sardine), by Armando Perez Gattini; "Cooperativas de Pescadores" (Fisherman's Cooperatives); "Visitando los Fondos de los Abismos Marinos" (Exploring the Depths of the Oceans); and "La Industria de la Pesca en Rusia" (The Russian Fishery Industry), by Fidel de Varona C.

DIRECTORIES:

Amendments to a Directory of White Fish Exporters in the United Kingdom, 4 pp., printed. White Fish Authority, Lincoln's Inn Chambers, 2-3 Cursitor St., London EC4, England.

ECHO-SOUNDING DEVICES:

"Fishing with Sound," by Yu. A. Shemanskiy, article, Priroda, no. 2, pp. 104-105, printed in Russian. Priroda, Akademiya Nauk SSSR, M. Khariton'yevski per. 4, Moscow, U.S.S.R., 1958.

EELS:

"The Atlantic Eel Problem," by C. L. Deelder and Denys W. Tucker, article, Nature, vol. 185, no. 4713, February 27, 1960, pp. 589-592, printed. Nature, MacMillan & Co., Ltd., St. Martin's St., London WC2, England.

ELECTRICAL FISHING:

The Development and Evaluation of Interrupted Direct Current Electro-Fishing Equipment, by Max Dean Rollefson, Cooperative Research Project No. 1, 123 pp., illus., processed. Colorado Cooperative Fisheries Research Unit, 243 Forestry Bldg., Colorado State University, Fort Collins, Colo., May 1958. This project was conducted jointly by the Colorado

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State University, Wyoming Game and Fish Commission, and Colorado Game and Fish Department. Quantitative evidence of electrofishing success under field conditions with direct current, alternating current, and pulsed direct current was compared. In addition, electrocution experiments were performed to ascertain the approximate minimum lethal exposure periods of carp to electric fields of several conditions of alternating current voltage and current density.

"A Direct-Current Electrofishing Apparatus Using Separate Excitation," by A. R. Murray, article, The Canadian Fish Culturist, no. 23, pp. 27-32, printed. The Canadian Fish Culturist, Department of Fisheries, Ottawa, Canada, 1958.

EUROPEAN ECONOMIC COOPERATION:

Seefischerei und Außenhandel mit Fischen und Fischwaren der OEEC-Länder im Hinblick auf die Europäische Wirtschaftsgemeinschaft (Gemeinsamer Markt) und den Europäischen Freihandelsbund (Marine Fisheries and Foreign Trade in Fish and Fishery Products of the OEEC Countries with Special Reference to the European Common Market and the European Free Trade Area), by Wilhelm Blanke, 156 pp., processed in German. Forschungsstelle für Fischereiwirtschaft, Bremer Ausschuss für Wirtschaftsforschung, Parkstrasse 50, Bremen, Germany, 1959.

FISH POPULATIONS:

"Estimation of Fish Populations," by J. A. Timmermans, Travaux de Station de Recherches, Series D. Hydrobiologie, No. 21, 84 pp., printed in French. Groenendael Station de Recherches, Jette, Belgium.

FISH PROCESSING INDUSTRIES:

1958 Census of Manufactures--Cured Fish Industry, Industry and Product Reports No. MC(P)-20C-1, 4 pp., processed, 10 cents. Bureau of the Census, U. S. Department of Commerce, Washington 25, D. C., February 1960. Advance information on industries and products covered in the 1958 Census of Manufactures, to be superseded by a final report which will be included in vol. II, Industry Statistics. Describes firms reporting, value of production, general statistics, and publication program and background for this census. Statistical tables are included on employment in the cured fish industry, 1958 and 1954, and quantity and value of cured fish produced by all producers in the United States for the same period.

FISH SILAGE:

Ensilado de Pescado, Variaciones en la Fuente Energetica (Fish Silage, Variations in the Source of Energy), by Victor H. Bertullo and Fernando Perez Hettich, 12 pp., illus., printed in Spanish with brief English summary. (Reprinted from Anales de la Facultad de Veterinaria, vol. 8, no. 6, August 1959, pp. 121-132.) Facultad de Veterinaria, Montevideo, Uruguay.

FLORIDA:

Notes on the Marine Flora of the Marquesas Keys, Florida, by Ronald C. Phillips, Contribution

No. 35, 8 pp., illus., printed. State Board of Conservation, Marine Laboratory, St. Petersburg, Fla., 1959.

FOOD AND AGRICULTURE ORGANIZATION:

Approved Budget 1960-61 as Approved by the Conference at Its 10th Session, 63 pp., printed. Food and Agriculture Organization of the United Nations, Vialle delle Terme di Caracalla, Rome, Italy, 1960.

FRANCE:

"La Campagne du President-Theodore-Tissier a l'Ouest et au Nord-Ouest des Iles Britanniques" (The Cruise of the President Theodore Tissier to the West and Northwest of the British Isles), article, La Peche Maritime, vol. 39, no. 985, April 1960, pp. 220-222, illus., printed in French. La Peche Maritime, 190 Boulevard Haussmann, Paris, France.

FRESH-WATER FISH:

Survival and Migration of Fresh-Water Fishes in Salt Water, by William C. Renfro, Contribution No. 44, 9 pp., illus., printed. (Reprinted from The Texas Journal of Science, vol. 11, no. 2, June 1959, pp. 172-180.) Texas Game and Fish Commission, Seabrook, Tex.

"The Tolerance of Some Fresh-Water Fish for Sea Water," by D. W. M. Herbert and H. T. Mann, article, The Salmon and Trout Magazine, no. 153, pp. 99-101, printed. The Salmon and Trout Association, Fishmongers' Hall, London Bridge, London EC4, England, 1958.

FROZEN FISH:

"Comercio y Consumo de Pescado Congelado en los Países de la O.E.C.E." (Trade and Consumption of Frozen Fish in the O.E.E.C. Countries), article, Industrias Pesqueras, vol. 34, no. 790, March 15, 1960, pp. 90-91, printed in Spanish. Industrias Pesqueras, Policarpo Sanz, 21-2^o, Vigo, Spain.

GEAR:

Relative Selectivity of Freshwater Commercial Fishing Devices Used in Louisiana, by James Davis and Lloyd Posey, Jr., 27 pp., illus., printed. Fisheries Section, Wild Life and Fisheries Commission, Wildlife and Fisheries Bldg., 400 Royal St., New Orleans, La., 1959.

GENERAL:

Journal du Conseil, vol. 25, no. 1, October 1959, 106 pp., illus., printed. Conseil Permanent International pour l'Exploration de la Mer, Charlottenlund Slot, Denmark. Includes, among others, these articles: "The Multiplane Kite-Otter as a Depressor for High-Speed Plankton Samplers," by John B. Colton, Jr.; "A Quantitative Multiple Opening-and-Closing Plankton Sampler for Vertical Towing," by Allan W. H. Be, M. Ewing, and L. W. Linton; "The Scientific Name of the Common Cod," by Daniel M. Cohen; "How the Tag Return Rate is Affected by the Condition of Fish When Tagged," by R. J. H. Beverton, J. A. Gulland, and A. R. Margetts; "A Method of Analysis of

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Some Tagged Haddock Returns," by R. Jones; "Fecundities of Winter-Spring and Summer-Autumn Herring Spawners," by I. G. Baxter; "Otolith Types Amongst Summer-Autumn Spawning Herring in the Northern North Sea," by B. B. Parrish and D. P. Sharman; and "Temperature and Growth--The Pacific Razor Clam," by Clyde C. Taylor.

"Some Simple Mathematical Models as Aids in Interpreting the Effect of Fishing," by Kenneth D. Carlander, article, Iowa State College Journal of Science, vol. 32, no. 3, pp. 395-417, printed. Iowa State College, Ames, Iowa, 1958.

GREECE:

"Alarma en Grecia ante la Competencia Pesquera Japonesa" (Greek Concern over Japanese Fishery Competition), by E. Simos, article, Puntal, vol. 7, no. 70, January 1960, p. 20, printed in Spanish. Puntal, Ramon y Cajal, 3, Apartado 316, Alicante, Spain.

HONG KONG:

Hong Kong Annual Departmental Reports by the Director of Agriculture, Fisheries & Forestry (for the Financial Year 1958/59), 102 pp., illus., printed, HK\$4 (about 70 U. S. cents). Government Press, Java Road, Hong Kong. Contains the annual reports of the various divisions of the Department of Agriculture, Fisheries, and Forestry. Included in the report of the Fisheries Division is a review of its activities during the year, which were directed chiefly to the marine fisheries and mechanization of the fleet, fishery investigations, fisheries education, fresh-water fisheries, loans to fish farmers, and oyster and pearl culture. Statistical data are included on mechanization of new vessels during 1958/59, landings and value of fish landed in Hong Kong, and other pertinent information.

Hong Kong Annual Departmental Reports by the Registrar of Co-Operatives and Director of Marketing (for the Financial Year 1958/59), 47 pp., illus., printed, HK\$3.50 (about 61 U. S. cents). Government Press, Java Road, Hong Kong. Discusses the cooperative societies, credit facilities, and marketing organizations provided in the Colony for the fishermen and farmers. The section covering the Government-sponsored Fish Marketing Organization includes information on legislation; species of fish marketed and exported; the mechanized fishing fleet; wholesale markets; the marketing of shrimp; transportation of fish; education of fishermen and their children; and financial assistance to fishermen.

IMPORTS:

United States Imports of Merchandise for Consumption (Commodity by Country of Origin), Calendar Year 1959, Report No. FT 110, 193 pp., processed, \$1. Bureau of the Census, U. S. Department of Commerce, Washington, D. C., April 1960. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) The import statistics include government as well as nongovernment

shipments of merchandise (including fish, shellfish, and fishery byproducts) from foreign countries.

ISRAEL:

Fishermen's Bulletin, vol. 3, no. 3 (23), March 1960, 36 pp., illus., printed in Hebrew with English abstracts. Fishermen's Bulletin, Ministry of Agriculture, Division of Fisheries, Sea Fisheries Research Station, P. O. B. 699, Haifa, Israel. Contains, among others, articles on "Exploratory Trawling in the Neighborhood of Cyprus," by A. Ben-Tuvia, O. H. Oren, and M. Ben-Yami; "Sardinella Fishery During the Year 1959 and the Forecast for the Year 1960," by A. Ben-Tuvia; "Underwater Television and Fisheries," by E. Gottlieb; "A Motor-Boat for Sardine Fishing," by J. Bejerano; and "The Kishon Fishing Harbour," by Z. Fried.

ITALY:

"Industria de la Pesca en Italia" (Italy's Fishing Industry, 1951-57), article, Boletin de Informacion, no. 15, December 1959, pp. 14-16, printed in Spanish. Sindicato Nacional dela Pesca, Paseo del Prado, 18-20, 6^a Planta, Madrid, Spain.

JAMAICA:

"FAO Report Points Way to Future Fisheries Development," article, The Caribbean, vol. 14, no. 2, February 1960, pp. 30-31, illus., printed. The Central Secretariat, Caribbean Commission, Kent House, Port-of-Spain, Trinidad, B.W.I. Discusses the report on the mechanization of fishing boats in Jamaica, recently published by the Food and Agriculture Organization of the United Nations in Rome. Points covered include proposals for improved design and operation of fishing vessels; the prototype 35-foot boats being designed; and the training program for fishermen.

JAPAN:

Technical Report of Fishing Boat, No. 14, March 1960, 217 pp., illus., printed in Japanese with English abstracts. Fishing Boat Laboratory, Production Division, Fisheries Agency, Ministry of Agriculture and Forestry, Kasumigaseki, Chiyodaku, Tokyo, Japan. Contains, among others, articles on: "Self-Propulsion Test in Waves with European Wooden Trawlers," by N. Yokoyama, T. Kobayashi, and E. Imanari; "Anticorrosion of a Propeller (The Practical Test of Neoprene Coating for a Propeller Shaft Part 1)," by R. Hata, K. Kusama, and T. Yamada; and "The Measurement of Shapes of One-Boat Trawl Nets Operated in Mid-Water Layer and the Catch Results with the Aid of the Depth Telemeter Trially Manufactured," by C. Hamuro and K. Ishii.

JELLYFISH:

The Occurrence of the Jellyfish CHIROPALMUS QUADRUMANUS in Matagorda Bay, Texas, by William C. Guest, Contribution no. 46, 5 pp., printed. (Reprinted from Bulletin of Marine Science of the Gulf and Caribbean, vol. 9, no. 1, March 1959, pp. 70-83.) Texas Game and Fish Commission Laboratory, Rockport, Tex.

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

LAW OF THE SEA CONFERENCE:

2nd United Nations Conference on the Law of the Sea. United Nations, New York, N. Y.

The following processed reports are available from the United Nations, New York, N. Y., distribution limited:

A/CONF.19/C.1/L.1., Union of Soviet Socialist Republics: proposal to the Committee of the Whole, 1 p., March 21, 1960.

A/CONF.19/C.1/L.2., Mexico: proposal to the Committee of the Whole, 4 pp., March 21, 1960.

A/CONF.19/C.1/L.3., USA: proposal to the Committee of the Whole, 4 pp., March 23, 1960.

A/CONF.19/C.1/L.4., Canada: proposal to the Committee of the Whole, 1 p., March 24, 1960.

A/CONF.19/L.1., Adoption of the rules of procedure, Mexico: amendments to the provisional rules of procedure (A/CONF.19/2.), 5 pp., March 16, 1960.

A/CONF.19/L.2., Officers of the Conference, 1 p., March 22, 1960.

The following processed reports are available from the International Documents Service, Columbia University Press, 2960 Broadway, New York 27, N. Y.:

A/CONF.19/5., Supplement to Laws and Regulations on the Regime of the Territorial Sea, UN Legislative Series, 36 pp., February 10, 1960.

A/CONF.19/6., Supplement to the Bibliography Guide to the Law of the Sea (A/CONF.13/17.), 27 pp., February 16, 1960.

A/CONF.19/7., Rules of Procedure, as adopted by the Conference, 18 pp., March 18, 1960.

LOUISIANA:

"Requirements for Taking Fresh Water Commercial Fish in Louisiana," article, Louisiana Conservationist, vol. 12, nos. 2-3, February-March 1960, pp. 19-20, printed. Louisiana Wild Life and Fisheries Commission, Wildlife and Fisheries Bldg., 400 Royal St., New Orleans, La.

MANAGEMENT:

"Some Economic Aspects of Control by Quota," by W. C. MacKenzie, article, Canadian Fish Culturist, no. 22, pp. 21-24, printed. Canadian Fish Culturist, Department of Fisheries, Ottawa, Canada, 1958.

"Some Sociological Effects of Quota Control of Fisheries," by J. L. Hart, article, The Canadian Fish Culturist, no. 22, pp. 17-19, printed. The Canadian Fish Culturist, Department of Fisheries, Ottawa, Canada, 1958.

MARLIN:

"Races of the Striped Marlin, Makaira mitsukurii, in the Pacific," by James E. Morrow, article, Bulletin of the Bingham Oceanographic Collec-

tion, vol. 16, no. 2, pp. 72-87, printed. Peabody Museum of Natural History, Yale University, New Haven, Conn., 1957.

MOLLUSKS:

Sea Shells of Tropical West America. Marine Mollusks from Lower California to Columbia, by A. Myra Keen, illus., printed, E 5 (about US\$14.05). Stanford University Press, Stanford University, Calif.

NORTH SEA:

Atlas Rybachi Morza Polnocnego (Fishing Atlas of the North Sea), by A. Klimaj St. Rutkiewicz, 37 charts, printed in Polish. Morski Instytut Rybacki, Gdynia, Poland, 1957.

NORWAY:

"Merkeforsøk pa Brisling 1959" (Tagging of Brisling 1959), article, Fiskets Gang, vol. 46, no. 12, March 24, 1960, pp. 178-182, illus., printed in Norwegian. Fiskets Gang, Postgiro 691 81, Bergen, Norway.

"Norges Fiskerier 1959" (Norwegian Fisheries 1959), article, Fiskets Gang, vol. 45, no. 53, December 31, 1959, pp. 706-710, printed in Norwegian with table in English. Fiskets Gang, Postgiro nr. 691 81, Bergen, Norway. Includes statistical data on quantities and values of principal species landed in Norway during 1959.

"Smatralernes Fiske i 1958" (Small Trawler Fishery in 1958), by Sverre Mollestad, article, Fiskets Gang, vol. 46, no. 10, March 10, 1960, pp. 146-152, illus., printed in Norwegian. Fiskets Gang, Postgiro nr. 691 81, Bergen Norway.

"Vintersildfiskets Lønnsomhet 1959" (Production of the Winter Herring Fishery 1959), by Georg Oppedal, article, Fiskets Gang, vol. 46, no. 9, March 3, 1960, pp. 125-136, illus., printed in Norwegian. Fiskets Gang, Postgiro nr. 691 81, Bergen, Norway.

OYSTERS:

The Texas Oyster Fishery, by Robert P. Hofstetter, Bulletin No. 40, Series No. 6, 44 pp., illus., printed. Texas Game and Fish Commission, Austin, Tex., August 1959. An illustrated booklet describing in detail the biology of the oyster, the oyster reef, cultivation or "farming," and the Texas oyster lease. The section on the industry discusses methods of harvesting, processing, and the annual harvest from the bay areas of Texas.

PARASITES:

Another Species of MICROPALLUS Ward, 1901, from the Pink Shrimp, PENAEUS DUORARUM Burkenroad, by Robert F. Hutton, Franklin Sogandares-Bernal, and Bonnie Eldred, Contribution No. 27, 1 p., illus., printed. State Board of Conservation, Marine Laboratory, St. Petersburg, Fla., 1959.

The Identity of Metacecaria B Reported from the Pink Shrimp, PENAEUS DUORARUM Burkenroad, by Woodburn et al in 1957, by Franklin

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

Sogandares-Bernal and Robert F. Hutton, Contribution No. 17, 2 pp., illus. printed. State Board of Conservation, Marine Laboratory, St. Petersburg, Fla., 1959.

PERU:

"Observations on the Biology of Anchovy (*Engraulis ringens* J.) in the Haucho Fishery Zone," by Romulo Jordan S., article, *Boletim da Companhia Administradora del Guano*, vol. 35, no. 11, November 1959, pp. 3-22, tables 1-5, printed in Spanish. Companhia Administradora del Guano, Casilla 2147, Lima, Peru.

"Peru Has Over Sixty Fish Meal Plants," article, *The South African Shipping News and Fishing Industry Review*, vol. 15, no. 3, March 1960, pp. 63, 65, printed. The South African Shipping News and Fishing Industry Review, Odhams Press, South Africa (Pty.), Ltd., P. O. Box 2598, Cape Town, Union of South Africa. Describes how Peru increased its fish production nearly thirtyfold in ten years and how the fish meal industry was developed to the point where Peru is now one of the world's leading exporters of fish meal.

PESTICIDES:

"Toxic or Non-Toxic to Fish?," by H. J. Bandt, article, *Deutsche Fischerei Zeitung*, vol. 4, pp. 170-171, printed in German. *Deutsche Fischerei Zeitung*, Berlin-Friedrichshagen, Muggelseedamm 310, East Berlin, Germany, 1957.

"The Toxicity of Insecticidal and Acaricidal Agents to Fish," by K. G. Adlung, article, *Naturwissenschaften*, vol. 44, pp. 471-472, printed in German. *Naturwissenschaften*, Springer-Verlag, Reichpietschufer 20, Berlin W. 35, Germany, 1957.

"The Toxicity of Insecticides to Fish and Its Dependence on Temperature," by K. G. Adlung, article, *Naturwissenschaften*, vol. 44, pp. 622-623, printed in German. *Naturwissenschaften*, Springer-Verlag, Reichpietschufer 20, Berlin W. 35, Germany, 1957.

PHILIPPINES:

Fisheries Statistics of the Philippines, 1958, 65 pp., processed. Department of Agriculture and Natural Resources, Bureau of Fisheries, Manila, Philippines. A complete report covering all aspects of fishery production in the Philippines during 1958, 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. Subdivision of the tables is made according to gear, kind of fish, caught, monthly production, and fishing grounds. The appendices include, among other items, information on the fishery districts, fishing grounds used by commercial fishing vessels, and forms used in collecting fishery statistics. Except for the table which presents fish production data since 1947, most of the information covers the five-year period 1954-58.

PORTUGAL:

Boletim da Pesca, vol. 13, no. 66, March 1960, 108 pp., illus., printed in Portuguese. Gabinete de Estudos das Pescas, R. S. Bento, 644, 4^o - Esq., Lisbon, Portugal. Contains, among others, these articles: "Pescarias de Baleias nas Provincias Africanas Portuguesas" (Whaling in the Portuguese African Provinces), by Jose M. de Figueiredo; "O Estado Actual da Industria de Pesca na Provincia Ultramarina da Guine e o Seu Provavel Incremento" (Concerning the Present Situation of the Fishery Industry in Portuguese Guinea and Its Probable Development), by Carlos A. de Figueiredo S. Rego; and "A Pesca de Atum--Suas Possibilidades em Angola" (The Possibilities of a Tuna Fishery in Angola), by Abel de O. Neves.

Gremio dos Armadores da Pesca da Sardinha, Relatorio e Contas do Exercicio de 1959 e Orçamento para 1960 (Sardine Vessel Owner's Guild, Statement of Operations for 1959 and Budget for 1960), 22 pp., printed in Portuguese. Comissao Revisora de Contas, Lisbon, Portugal, January 1960.

RED TIDE:

"Natural and Artificial 'Red Water' with Consequent Death of Fish in the Sea," by W. Numann, article, *Archiv fur Fischereiwissenschaft*, vol. 8, pp. 204-209, printed in German. *Archiv fur Fischereiwissenschaft*, Gustav Wenzel & Sohn, Braunschweig, Germany, 1957.

SALMON:

Come to Our Salmon Feast, by Martha Ferguson McKeown, 79 pp., illus., printed. Binfords & Mort Publishers, Portland, Oreg., 1959. An illustrated book for children describing the life and customs of the Wy-am Indians of Celilo Falls, Oreg. The construction of The Dalles Dam has now forced the tribe to relocate but formerly, a great feast was held each spring to celebrate the coming of the salmon. The photos are excellent and the story well enough written to be of interest also to adults.

"Notes on the Food of the Young of Three Species of Pacific Salmon in the Sea," by Murvel E. Annan, article, *The Canadian Fish Culturist*, no. 23, pp. 23-25, printed. *The Canadian Fish Culturist*, Department of Fisheries, Ottawa, Canada.

"A Study of Fluctuations in Abundance, Growth, and Survival in the Early Life Stages of the Red Salmon (*Oncorhynchus nerka* Walbaum) of the Wood River Lakes, Bristol Bay, Alaska," by Robert Louis Burgner, article, *Dissertation Abstracts*, vol. 19, no. 4, p. 911, printed. *Dissertation Abstracts*, University Microfilms, University of Michigan, 313 N. 1st St., Ann Arbor, Mich., 1958.

"Variations in the Plasma-Level of Chloride in Hatchery-Reared Yearling Atlantic Salmon

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

During Parr-Smolt Transformation and Following Transfer into Sea-Water," by Arthur H. Houston, article, Nature, vol. 185, no. 4713, February 27, 1960, pp. 632-633, illus., printed. Nature, MacMillan & Co., Ltd., St. Martin's St., London WC2, England. This study tends to support the conclusions of Koch, Evans, and Bergstrom based upon sodium regulation in Atlantic salmon parr and smolt. A loss of regulatory capacity occurs while the fish become transformed from the fresh-water adapted parr stage to the potentially marine smolt stage, while adaptation to seawater appears to be dependent upon both size and stage.

SARDINES:

"La Fabricacion de Conservas de Sardina con Pescado Congelado" (The Production of Canned Sardines with Frozen Fish), article, Industria Conservera, vol. 26, no. 248, February 1960, pp. 36-38, printed in Spanish. Industria Conservera, Calle Marques de Valladares, 41, Vigo, Spain.

"Le Grand Probleme de la Sardine" (The Great Problems Relating to Sardine Fishing), by Robert Lenier, article, France Peche, vol. 5, no. 36, January 1960, pp. 21-25, illus., printed in French. France Peche, Tour Sud-Est, Rue de Guemene, Lorient, France.

SEA TROUT:

"Some Aspects of the Development and the Ecology of the Pelagic Phase of the Gray Squeteague, Cynoscion regalis (Bloch and Schneider), in the Delaware Estuary," by Jay L. Harmic, article, Dissertation Abstracts, vol. 19, p. 1142, printed. Dissertation Abstracts, University Microfilms, University of Michigan, 313 N. 1st St., Ann Arbor, Mich., 1958.

SHRIMP:

MEIOCERAS LERMONDI as Food for PENAEUS DUORARUM?, by B. Eldred, Scientific Contribution No. 8, 1 p., printed. (Reprinted from The Nautilus, vol. 71, no. 4, 1958, p. 152.) Director of Research, Florida State Board of Conservation, W. V. Knott Bldg., Tallahassee, Fla.

SMELT:

"Age and Growth of Smelt, Osmerus mordax (Mitchill), of the Miramichi River, New Brunswick," by R. A. McKenzie, article, Journal of the Fisheries Research Board of Canada, vol. 15, no. 6, pp. 1313-1327, printed. Journal of the Fisheries Research Board of Canada, Queen's Printer and Controller of Stationery, Ottawa, Canada, 1958.

SPAIN:

Estadistica de Pesca, Ano 1958 (Fishery Statistics, 1958), 272 pp., illus., printed in Spanish. Ministerio de Comercio, Direccion General de Pesca Maritima, Madrid, Spain, October 1959.

"Posibilidades de Exportacion a Estados Unidos de Anchoas y Sardinas Espanolas" (Possibilities of Exporting Spanish Anchovies and Sardines to the United States), article, Industria Conservera,

vol. 26, no. 248, February 1960, p. 49, printed in Spanish. Industria Conservera, Calle Marques de Valladares, 41, Vigo, Spain.

SPINY LOBSTERS:

"The Australian Crayfishery is a Money Spinner," by L. T. Sardone, article, World Fishing, vol. 9, no. 4, April 1960, pp. 29-31, illus., printed. World Fishing, John Trundell Ltd., St. Richards House, Eversholt St., London, NW1, England. Describes the tremendous developments in the spiny lobster industry in Australia in recent years and possible expansion if demand continues to increase. During 1957/58, spiny lobster exports were valued at a record \$5.9 million.

TENNESSEE VALLEY AUTHORITY:

TVA Fish and Game Activities, 16 pp., illus., printed. Fish and Game Branch, Division of Forestry Relations, Tennessee Valley Authority, Norris, Tenn., November 1959. Describes the development of sport and commercial fisheries in the TVA reservoirs during the past 20 years. A thriving commercial fishery exists today. However, there is a need for better utilization of both finfish and mussels. As the author puts it: "Even with year-round fishing, more fish die of old age than end up in the frying pan."

TEXAS:

A Partially Annotated Checklist of the Marine Fishes of Texas, by Hinton D. Hoese, 41 pp., printed. (Reprinted from Institute of Marine Science, vol. 5, December 1958, pp. 312-352.) Marine Laboratory, Texas Game and Fish Commission, Rockport, Tex.

TRAWLING:

"Spanish Pair-Trawler Operations," by W. R. Martin, article, Trade News, vol. 12, no. 6, December 1959, pp. 3-6, illus., processed. Information and Educational Service, Department of Fisheries, Ottawa, Canada. A report on observations made by a group of Canadians while on board a Spanish pair-trawler operating on the Southeast Shoal of the Grand Banks in September 1959. The author states that "A pair of Spanish trawlers appears to take about the same catch as a single Canadian otter trawler of similar size or a larger Spanish otter trawler.... On the basis of limited observations, it is difficult to see how pair trawlers could pay in the Canadian offshore fishery.... However, further observations are needed, particularly in late winter, before the feasibility of Canadian offshore pair-trawler trials can be seriously considered."

TUNA:

Approved Deviation to Interim Purchase Description IP/DES CS-5-9 (17 July 1959) for Tuna Fish, Canned, dated 16 March 1960, 7 pp., processed. Contracting Officer, Military Subsistence Supply Agency, 929 So. Broadway, Los Angeles 15, Calif., April 6, 1960. A deviation and inspection notice pertaining to canned tuna. The provisions of these deviations affect the inspection and labeling of canned tuna.