



Recent publications of interest to the commercial fishing industry are listed below.

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 - STATISTICAL SECTION LISTS OF DEALERS IN AND PRODUCERS OF FISHERY PRODUCTS AND BYPRODUCTS.
 SEP.- SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.

Number	Title	Number	Title
CFS-736	- Florida Landings, January 1952, 6 p.	FL -403	- Fishing Laws and Regulations of the District of Columbia, 2 p.
CFS-737	- Mississippi Landings, January 1952, 2 p.	SL -19	- Wholesale Dealers in Fishery Products Louisiana, 1952 (Revised), 10 p.
CFS-741	- Maine Landings, January 1952, 4 p.	SL -102	- Firms Canning Maine Sardines, 1951 (Revised), 1 p.
CFS-742	- Meal and Oil, February 1952, 2 p.	SL -102A	- Firms Canning California Sardines, (Revised), 1 p.
CFS-745	- Mississippi Landings, February 1952, 2 p.	SL -119	- Firms Canning Squid, 1951 (Revised)
CFS-751	- Meal and Oil, March 1952, 2 p.	SL -160	- Firms Manufacturing Menhaden Oil and Meal, 1951 (Revised), 2 p.
FL -108	- The Relative Productivity and Value of Fisheries of U. S. and Alaska (Revised), 10 p.	Sep. 313	- North Pacific Albacore Tuna Exploration--1951.
FL -362	- Sources of Information Concerning the Commercial Fisheries, 23 p.	Sep. 314	- Technical Note No. 20--Federal Specifications for Fishery Products.
FL -402	- North Pacific Albacore Tuna Exploration, 1950, 56 p.		
FL -395	- A Program for Japanese Coastal Fisheries, 73 p. (See <u>Commercial Fisheries Review</u> , May 1952, p. 56 for abstract.)		
FL -398	- Some Publications on Game-Fish and Sport Fishing (Revised), 6 p.		

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Gulf States Production of Fishery Products, 1951

(As Reported to the New Orleans Fishery Market News Service Office), by S. C. Denham, 42 p., processed. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 314 Customhouse, 423 Canal Street, New Orleans 16, La.) This is a review of the 1951 trends and conditions in the Gulf Coast fisheries. Among the subjects discussed are the shrimp fishery (landings, composition of catch, factors affecting production, utilization, cold-storage holdings, prices, and canned pack); the oyster fishery (production and canned pack); blue crabs; fin-fish landings; imports; how the fishing industries in the Gulf were affected by the defense program. The statistics presented in this report are a compilation of data collected daily from the principal fishing localities of the Gulf Coast and although they do not represent complete annual commercial fisheries production figures for the Gulf area or for any individual

Gulf state, they do give an idea of the trends included in the statistical tables are data on the closed shrimp seasons in the Gulf during 1951; landings of fish and shellfish by month for certain specified localities on the west coast of Florida, and in Alabama, Mississippi, Louisiana, and Texas; crab meat production by months and areas; fishery imports at certain ports; wholesale prices on the New Orleans French Market by months; a summary of the landings in the Gulf; the pack of canned oysters and shrimp; and market classifications and approximate weight of Gulf species.

Annual Report of the Director of Fish and Wildlife Service to the Secretary of the Interior, Year Ended June 30, 1951 (Reprinted from the Annual Report of the Secretary of the Interior, p., printed. Included in this report are summaries of the various activities of the Service. Specifically discussed are utilization of

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resources (describes the activities of the Branch of Commercial Fisheries); administration of Alaska fisheries; Pribilof Island fur-seal industry; research in fishery biology (river, marine, and inland fisheries); maintenance of inland fisheries; international cooperation in conservation (international conservation agree-

ments and technical cooperation); Federal aid to state projects for the restoration of wildlife; river basin development and wildlife needs; administration of Federal statutes for protection of fish and wildlife; and other activities. Under the Defense Fisheries Administration section, a concise description of that agency and its functions is presented.

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

Federal Aid in Fish Restoration, General Information, by R. M. Rutherford, Regulatory Announcement 34, 13 p., printed, 5 cents, January 1952. This report describes the purpose of the Federal Aid in Fish Restoration Act of August 9, 1950, which is designed to help the States solve their sport-fishery problems. It tells how the states

may qualify to participate in the restoration program. Types of suitable projects are outlined, as well as projects not contemplated by the Act. The method of allocating funds to the states is also described. The text of the federal laws and regulations pertaining to this Act appears in this report.

MISCELLANEOUS PUBLICATIONS

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

The American Ephemeris and Nautical Almanac (For the Year 1953), 642 p., with tables, printed, \$3.75. The Nautical Almanac Office, United States Observatory under the authority of the Secretary of the Navy, Washington, D. C., 1951. (Available only by purchase from the Superintendent of Documents, Washington 25, D. C.). This book provides in convenient form the astronomical data required by mariners; that is, the Greenwich hour angle and declination of the celestial bodies used in navigation, as well as miscellaneous tables of interest to navigators.

Australian Journal of Marine and Freshwater Research, February 1952, vol. 3, no. 1, 104 p., illus., printed, 7s6d per issue (approx. 85 cents). Commonwealth Scientific and Industrial Research Organization, 314 Albert Street, East Melbourne, C2, Victoria. An article of particular interest in this issue is "The Acclimatization and Growth of the Pacific Oyster (*Gryphaea gigas*) in Australia," by J. M. Thomson, pp. 64-73. This article deals with the successful transfer of the Pacific oyster (*G. gigas*) to a southern hemisphere environment. It describes the shipment of seed oysters, the acclimatization beds, rate of survival, growth and reproduction. Other articles in this issue are as follows: "The New South Wales Tiger Flat-head, *Neoplatycephalus macrodon* (Ogilby)," by the late W. S. Fairbridge; "Studies on the Ecology of the New Zealand Long-Finned Eel, *Anguilla dieffenbeckii* Gray," by A. M. R. Burnet; "A Preliminary Study of the Limnology of Lake Hayes," by Violet H. Jolly; "An Application of Visible Indexing to Systematic Zoology," by I. S. R. Munro.

"Average Lunar Month Catch by California Sardine Fishermen, 1949-50 and 1950-51," by Frances N. Clark and Anita E. Daugherty, article, California Fish and Game, January 1952, vol. 38, no. 1, pp. 85-97, illus., printed. Department of Fish and Game,

San Francisco, Calif. This report is a continuation of a summary, by the same authors, of the average lunar month catch of the California fishermen for the seasons 1932-33 through 1948-49. It contains calculations of fishing success for the 1949-50 and 1950-51 seasons and is presented to make current records available to other individuals and agencies studying the sardine.

"Canning 'Little Tuna' (*Euthynnus alletteratus*)," by N. D. Jarvis, article, Food Technology, vol. VI, no. 3, pp. 113-117, printed. Food Technology, 119-123 West Park Avenue, Champaign, Illinois, 1952. This article deals with a study made of all stages in canning little tuna. It covers the effect of precooking times and temperatures, acid dips and acid blanches, chemical bleaches, packing mediums, storage times and temperatures, type of fill, and processing and cooling on the flavor, texture, and color of canned little tuna. Recommendations for canning are given.

"Effects of Internal Temperature and of Oven Temperature on the Cooking Losses and the Palatability of Baked Salmon Steaks," by Helen Charley, article, Food Research, vol. 17, no. 2 (March-April 1952), pp. 136-43, printed, single copies of issue \$1.00 domestic, \$1.15 foreign. Food Research, 119-123 W. Park Ave., Champaign, Ill. Salmon steaks were baked to an internal temperature of 167° F. (75° C.) at oven temperatures varying from 350° F. (177° C.) to 500° F. (260° C.) and at an oven temperature of 400° F. (204° C.) to internal temperatures varying from 158° F. (70° C.) to 185° F. (85° C.). Raising the baking temperature from 350° F. to 400° F. shortened the baking time more than did increasing the baking temperature from 400° F. to 500° F. Higher drip losses and excessive spattering occurred when steaks were baked at 500° F. Considerable

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spattering occurred at 450° F. Oven temperature had no effect on the palatability scores of the baked salmon steaks. Increasing the internal temperatures from 176° F. to 185° F. prolonged the cooking period more and caused greater evaporation and total cooking losses than did a comparable rise in temperature above 158° F. or above 167° F. Steaks baked to 185° F. were ranked higher in flavor but lower in moistness than steaks baked to either 158° F. or 167° F. Steaks baked to 158° F. ranked lower in flavor and in over-all desirability than the other three treatments and were judged underdone. The judges found no differences in the palatability of steaks baked to 167° F. and those baked to 176° F. The last steak out of the oven, regardless of internal temperature, was rated higher in flavor and in desirability than steaks from the other 3 treatments.

Fish and Nutrition, by M. Rahimullah Qureshi, 4 p., printed. (Reprinted from the Pakistan Medical Journal, July 1951.) Central Fisheries Department, Karachi, Pakistan. Gives a comparative account of the consumption of fish in some of the countries of the world, and shows the comparative food value of some of the English fishes. An analysis of the food value of some of the fresh-water fish found in East and West Pakistan is also given.

The Food of Albacore (GERMO ALALUNGA) off California and Baja California, by J. L. McHugh (Bulletin of the Scripps Institution of Oceanography of the University of California, La Jolla, California, vol. 6, no. 4, pp. 161-172), 15 p., illus., printed, 25 cents. University of California Press, Berkeley, Calif., 1952. A study of the albacore (Germo alalunga) food is presented in this report. The fish were caught off California and Baja California. Examination of the stomach contents of 321 albacore indicated that the species feed on a wide variety of organisms that are mostly of small size. Fishes are dominant in the diet and the Pacific saury (Cololabis saira) is the most important species. As a group, squids constitute the most important invertebrate food. Included are discussions on food organisms, latitudinal variation, annual and seasonal variation, comparison with other food studies, and inferences on feeding habits.

The Herring, Alewife and Shad, by L. R. Day, Circular, General Series No. 19, 4 p., illus., processed. Fisheries Research Board of Canada, Atlantic Biological Station, St. Andrews, N. B., December 1951. This is a short account of the distribution, life history, and economic importance of the Atlantic herring (Clupea harengus), the alewife (Pomolobus pseudoharengus), and the shad (Alosa sapidissima). It is the third in a series of circulars being prepared to show how fishes which are often confused can readily be distinguished by means of their different external features.

(India) Annual Report of the Department of Fisheries Bombay State for the Year 1950-51, 61 p., illus.,

printed. Superintendent, Government Printing and Stationery, Bombay, India, 1952. Reports the marine fisheries, fish curing yards, fisheries schools, socio-economic work, fresh-water fisheries, and technological studies. Statistics are also included on the different varieties and quantities of fish landed in 1950-51.

(Canada) Landings of Fresh Groundfish by Offshore Vessels at Nova Scotia Ports, 1947, by W. R. Martin and F. D. McCracken, Statistical Series No. 1, 12 p., illus., processed. Fisheries Research Board of Canada, Atlantic Biological Station, St. Andrews, N. B., May 1952. This first statistical circular presents part of the data collected for the year 1947 on landings of fresh groundfish by offshore vessels at Nova Scotia ports. It is the first of a series which, when brought up to date, will be published annually. Special reference is made in this report to changes in the landings of cod during recent years. Graphs and charts are included showing the production of cod for the Canadian Atlantic coast and the long-term fluctuations in total catch and the importance of the offshore fishery. Charts are also included showing the areas from which cod landings were taken by certain dory schooners and other trawlers in 1946, 1947, and 1948. The major aim of these charts is to give an indication of the differences in groundfish caught by dory schooners and other trawlers, and by year.

New Jersey Fisheries, Survey, Lakes and Ponds, 1950, Report Number One, 194 p., illus., and Annex Maps, 28 p., printed, \$1.00. New Jersey Department of Conservation and Economic Development, Division of Fish and Game, State House Annex, Trenton, N. J. The following subjects are discussed in this report: lakes, fish and fishery; general discussion of lakes surveyed during 1950 fisheries survey; management of New Jersey lakes; parasites and diseases of fish; scale analysis; and weed control in lakes and ponds. This report also includes an annex of maps of the lakes surveyed.

"Observations on the Occurrence of Tunas in the Eastern and Central Pacific," by H. C. Goddard and E. C. Greenwood, article, California Fish and Game, April 1952, vol. 38, no. 2, pp. 249, illus., printed. Department of Fish and Game, San Francisco, Calif. This is a report of an investigation made in 1948 by the California Department of Fish and Game's research vessel N. B. Scofield. The area investigated was primarily the Hawaiian chain of islands banks, and the north Pacific lying between the Hawaiian islands and the American mainland. Data on the distribution and abundance of yellowfin, skipjack, and albacore tuna are included.

Operation of the Trade Agreements Program--Foreign Trade (July 1950-June 1951), 278 p., processed. United States Tariff Commission, Washington, D. C., 1952. This is the fourth report of

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Tariff Commission on the operation of the trade agreements program. Executive Orders required the Commission to submit to the President and to the Congress at least once each year a factual report of this subject. This present report, which discusses the operation of the trade agreements program from July 1950 through June 1951, covers much the same range of subjects as the previous reports. Among other things, it describes the multilateral negotiations held by the Contracting Parties to the General Agreement at Torquay, England, from September 1950 to April 1951, and gives a preliminary general analysis of the concessions that the United States there granted and obtained. The report discusses the United States trade agreements legislation of 1951; developments respecting the general provisions of the General Agreement on Tariffs and Trade (GATT); tariffs, quantitative import restrictions, and subsidies employed by contracting parties to GATT; tariffs, quantitative import restrictions, and exchange controls employed by countries with which the United States has bilateral trade agreements; and United States measures relating to imports of trade-agreement items.

(Pakistan) Marketing and Cold Storage Facilities for Fish in Pakistan, by M. R. Qureshi and Shaikh A. Jaleel, Investigation Report No. 2, 38 p., processed. (Reprinted from Co-operation & Marketing Review, vol. 5, no. 4, October 1951.) Ministry of Food & Agriculture, Government of Pakistan, Karachi, Pakistan. This report gives the number of fishermen and annual fish landings in Pakistan, and discusses distribution, marketing, and cold-storage facilities.

(Pakistan) A Preliminary Report on Trawling in Pakistan, by M. Rahimullah Qureshi and Masood Ahmed Burney, Investigation Report No. 1, 54 p., processed. Ministry of Food & Agriculture, Central Fisheries Department, Karachi, Pakistan. This is a short account of the trawling experiments in tropical waters. "The experiments show that trawling cannot be made a commercial success unless the shore installations are organized and proper arrangements made for the reduction of small and other non-edible fish into fish meal," the authors state. A list of the local, English, and scientific names of fish taken by otter trawls is included.

(Pakistan) Prospects of Marine Fisheries of Western Pakistan, by M. Rahimullah Qureshi, 10 p., printed. (Reprinted from The Bulletin of the Karachi Geographical Society, 2nd Issue 1950.) Central Fisheries Department, Government of Pakistan, Karachi, Pakistan. This paper evaluates the conditions of marine fisheries of Western Pakistan and suggests a plan for their development. Among the subjects covered are the types of fish found on the coast of Western Pakistan, total landings, boats and gear, and the fishing seasons.

(Pakistan) Trout in Pakistan, by M. Rahimullah Qureshi, 3 p., printed. (Reprinted from The Pakistan Journal of Forestry, vol. 1, no. 3, July 1951, pp. 244-46.) Central Fisheries Department,

Government of Pakistan, Karachi, Pakistan. Describes the introduction of trout in India, natural spawning, and artificial hatching.

A Racial Study of the Pacific Mackerel (PNEUMATOPHORUS DIEGO), by Phil M. Roedel, Fish Bulletin No. 84, 57 p., illus., printed. Bureau of Marine Fisheries, Department of Fish and Game, San Francisco, Calif., 1952. This is a report of a racial study made to determine whether the Pacific mackerel (Pneumatophorus diego), taken in different regions along the coast from Alaska into the Gulf of California, formed physically distinguishable groups. Four physical characteristics were selected for detailed study. Three related to the initial position of vertebral structures: the haemal arch, the haemal brace either single or paired, and the paired haemal brace; the fourth to the head length relative to fork length. According to the author, the commercial catch in recent seasons has been dependent largely on fish one to three years old and the fish do not mature until their second or third year. The future of the fishery is, consequently, not bright, and the magnitude of the catch is and probably will remain a function of spawning success from year to year.

"Recent Changes in Purse Seine Gear in California," by Anita E. Daugherty, article, California Fish and Game, January 1952, vol. 38, no. 1, pp. 125-131, illus., printed. Department of Fish and Game, San Francisco, Calif. This article is based on personal observations by the author in the San Pedro, California, region from October 1942 onward, and from information supplied by fishermen and others connected with the industry. It is an attempt to put on record the most important changes in seine fishing gear or seiner equipment in the last 10 or 15 years. The date of first use of each of these features, rate of spread, and present status in the fishery is given. It contains discussions on boat and net types, net preservation, corks, cork purse line, steel cable purse lines, chain lead lines, brine tanks, dragger winches, and other devices, as well as the use of depth sounders, radar, and radio-telephones by vessels using purse seines.

"A Review of the Pacific Mackerel (Pneumatophorus diego) Fishery of the Los Angeles Region with Special Reference to the Years 1939-1951," by Phil M. Roedel, article, California Fish and Game, April 1952, vol. 38, no. 2, pp. 253-73, illus., printed. Department of Fish and Game, San Francisco, Calif. This article reviews the Los Angeles Pacific mackerel (Pneumatophorus diego) fishery over the period 1928-51, with special emphasis on the years since 1938. It describes the fishing ports, fishing methods, prices paid by the canners to the fishermen, fishing season, the seine fishery, the scoop fishery, and fishing grounds. Statistical data are also given on annual landings of Pacific mackerel, trends of the total catch, and within-season trends. The author states that "Although Pacific mackerel were canned on an experimental basis as early as 1904, it was not until 1928

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that the present-day industry got its start. The first few years were fraught with economic troubles but since 1933 the fishery has been one of major importance in California."

"The Scottish Seaweed Research Association," by F. N. Woodward, article, Journal of the Marine Biological Association of the United Kingdom, vol. XXIX, no. 3, pp. 719-25, printed, 22s.6d. net (US\$3.15). Cambridge University Press, London, England, 1951. This is a report on the Scottish Seaweed Research Association which was formed in 1944 at the instigation of the Scottish Council on Industry, the Ministry of Supply, the Scottish Office, the Department of Scientific and Industrial Research, the Marine Stations, and semi-official and independent organizations interested in seaweed utilization, to provide the basic information on which it was hoped that non-governmental interests could build up an industry based on Scottish seaweed, primarily with a view to bringing useful employment to the crofter population of the Scottish Highlands and Islands. The Association's research and development programs are described in this report. A list of publications so far issued or submitted for publication under the auspices of the Scottish Seaweed Research Association is also included.

Strength for the Long Run (Fifth Quarterly Report to the President by the Director of Defense Mobilization), 52 p., illus., printed, 35 cents. Office of Defense Mobilization, Washington, D. C., April 1, 1952. (For sale by the Superintendent of Documents, Washington 25, D. C.). This is the fifth quarterly report on the defense mobilization program of the United States. It covers the work of all of the defense agencies and places emphasis on the long-range aspects of defense mobilization, particularly those related to the planning and development of the productive base that would be required for full mobilization. Included are discussions on the mobilization pattern, military production, industrial expansion, materials (supplies and allocations), agriculture, manpower, economic stabilization, the defense mobilization alliance, and protecting our people and production.

TRADE LISTS

The Commercial Intelligence Branch, Office of International Trade, U. S. Department of Commerce, has published the following mimeographed trade list. Copies of this list may be obtained by firms in the United States from that Office or from Department of Commerce field offices at \$1.00 per list.

Commercial Fishing Companies and Fish Exporters-Venezuela, 2 p. (April 1952). Lists the names and addresses of Commercial fishing companies and fish exporters in Venezuela. The size of the firms listed is indicated, as well as the type of business each firm conducts.

United States Exports of Domestic and Foreign Merchandise (Commodity by Country of Destination), Calendar Year 1951, Report FT 410, Part 1, 141 p.,

processed, 25 cents. Bureau of the Census, Department of Commerce, Washington 25, D. C. April 1952. (For sale by U. S. Department of Commerce at Washington, its field offices, the Superintendent of Documents, Washington D. C.) This publication contains a compilation of United States exports of all commodities included in Groups OO through 5. Included are fishery products by commodity. The statistics give quantity, value, and country to which shipped.

United States Imports of Merchandise for Consumption (Commodity by Country of Origin), Calendar Year 1951, Report No. FT 110, 180 p., processed, 70 cents. Bureau of the Census, U. S. Department of Commerce, Washington 25, D. C., April 1952. (For sale by U. S. Department of Commerce at Washington, its field offices, or the Superintendent of Documents, Washington 25, D. C.) This publication contains a compilation of United States imports of all merchandise for consumption (including fishery products, byproducts, and related products). The statistics by commodity give quantity, value, and country of origin.

The Value of North Carolina's Game and Fish, by Howard J. Stains and Frederick S. Barkalow, 33 p., illus., printed. Game Division, North Carolina Wildlife Resources Commission, Raleigh, N. C., October 1951. This bulletin is the result of a joint survey undertaken by the North Carolina Wildlife Resources Commission, the North Carolina Institute of Statistics, and the Division of Biological Sciences, North Carolina College of Agriculture and Engineering, to provide factual information on the value of game and fish to the State of North Carolina. It provides an impartial basis for evaluating the part that game and fish play in North Carolina's economy. Discusses the aesthetic, recreational, and economic values. A table lists the dollars received by all types of businesses in North Carolina dependent on hunting and fishing. Commercial fishermen are listed as receiving \$5,495,300. Survey procedures and techniques are also presented.

(Virginia) Fifty-second and Fifty-third Annual Reports of the Commission of Fisheries of Virginia (Fiscal Years Ending June 30, 1950 and June 30, 1951), 35 p., printed. Commission of Fish and Game, Newport News, Va., 1951. Describes the oyster and fishery industries of Virginia and presents statistical data on the number of bushels of oyster shells planted by the Commission of Fish and Game in its repletion program. Includes report of the Superintendent of Hatcheries covering shad-hatching work on the Chickahominy, Mattaponi, and Pamunkey Rivers for 1950 and 1951. Also includes a report from the Virginia Fisheries Laboratory describing its activities for the period July 1949 to June 1951, with special reference to the oyster, blue crab, croaker, and shad research studies. This report also shows the revenue derived from the fish and shellfish industries under the supervision of the Commission of Fisheries of Virginia and also the expenditures of the Commission.