



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
CFS-774	- Mississippi Landings, May 1952, 2 p.
CFS-781	- South Atlantic and Gulf Fisheries, 1950, Annual Summary, 11 p.
CFS-783	- Mississippi Landings, June 1952, 2 p.
CFS-784	- Texas Landings, July 1952, 4 p.
CFS-785	- Fish Meal and Oil, July 1952, 2 p.
CFS-787	- Florida Landings, June 1952, 6 p.
CFS-788	- Massachusetts Landings, 1951, Annual Summary, 16 p.
CFS-789	- New Jersey Landings, March 1952, 2 p.
CFS-790	- New Jersey Landings, April 1952, 2 p.
CFS-791	- New Jersey Landings, May 1952, 2 p.
CFS-792	- New Jersey Landings, June 1952, 2 p.
CFS-793	- Frozen Fish Report, September 1952, 8 p.
CFS-794	- Mississippi Landings, July 1952, 2 p.
CFS-795	- Massachusetts Landings, June 1952, 14 p.
CFS-796	- Maine Landings, July 1952, 4 p.
CFS-797	- Texas Landings, August 1952, 4 p.
CFS-798	- Fish Meal and Oil, August 1952, 2 p.
CFS-799	- Florida Landings, July 1952, 8 p.
CFS-800	- New England Fisheries, 1950, Annual Summary, 8 p.

Number	Title
CFS-801	- Massachusetts Landings, July 1952, 7 p.
FL -336n-	Quarterly Outlook for Marketing Fishery Products, October-December 1952, 32 p.
FL -406	- Exploratory Shrimp Fishing in the Gulf of Mexico, 1950-51, 36 p.
FL -408	- Fish and Shellfish Preferences of Household Consumers - 1951, Part II - Regional Summary, 67 p.

Wholesale Dealers in Fishery Products:

SL - 1	- Maine (revised), 6 p.
SL - 13	- North Carolina (revised), 7 p.
SL - 30	- Pennsylvania, 1 p.
SL - 34	- Wisconsin, 2 p.

Sep. 323	- Hard-Clam Fishery of the Atlantic Coast
Sep. 324	- Project Reviews: Freezing Fish at Sea, Defrosting, Filleting, & Refreezing the Fillets--Review for the Period Dec. 1950-Sept. 1952
Sep. 325	- Electrical-Fishing Experiments in Salt-Water Reported Successful

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

Alaska Fishery and Fur-Seal Industries: 1948, by Seton H. Thompson, Statistical Digest No. 23, 63 p., illus., printed, 20 cents, 1952. This report was compiled from detailed information submitted by field representatives of the Fish and Wildlife Service's Branch of Alaska Fisheries, and from sworn statistical returns submitted by all fishery operators in Alaska in compliance with law. Detailed reports and statistical tables concerning the operation and yield of the various fishery industries are presented, with added data

on certain related matters, particularly the condition of the fishery resources. Under the section on fishery industries, the following subjects are covered: administration; management; and general statistics on salmon, herring, halibut, shellfish, and miscellaneous fishery products. The second section on the Pribilof Islands fur-seal industry covers administration, fur-seal population studies, and general statistics on the fur seals taken in 1948.

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.

Annual Report of the Marine Laboratory, (Sept. 1, 1950 to Aug. 31, 1951--Together with Supplementary Material and Reports), 127 p., illus., processed, limited distribution. The Texas Game and Fish Commission, Marine Laboratory, Rockport, Texas. The following reports are included: "Fish Trap Investigation," by Ernest G. Simmons; "Baffin Bay Survey," by Joseph P. Breuer; "The Life Histories of the Sea Trout, Cynoscion nebulosus, and the Redfish, Sciaenops ocellatus--Sexual Development," by Dewey W. Miles; "Shrimp Investigation," by E. D. McRae, Jr.; "Progress Report on the Shrimp Investigation," by E. D. McRae, Jr.; and "The Cedar Bayou Fish Trap," by Ernest G. Simmons.

The Book of Fishes, edited by John Oliver La Gorce, 340 p., illus., printed, \$6.50 postpaid in U. S. and possessions (elsewhere \$6.75 in U. S. funds). National Geographic Society, Dept. FBJ, Washington 6, D. C., 1952. "Fascinating" is the single word best suited to describe this revised and enlarged review of the more important food and game fishes of our marine and inland waters. Commercial fishermen, sport fishermen, non-fishermen--all will find enjoyment in reading its interesting text and examining its beautiful illustrations. In its 340 pages, 236 species of fish and other aquatic organisms are described in factual terms and pictured in 159 full-color pages, which include 116 color paintings and 24 color photographs. An additional 65 color and 170 black-and-white photographs are interspersed throughout almost equally graphic descriptive material.

Fifteen chapters have been contributed by experts in widely diverse fields. John Oliver La Gorce leads off with "America's Rich Harvest of the Sea," a long chapter crammed with observations on the fishing industry and the fish that contribute to its well being. In this and in the following chapters most of the important species are shown in their natural habitat, either in color paintings or color photographs. Popularly written sketches usually accompany each illustration. A later chapter by the same author describes his experiences with the huge manta ray in "Devilfishing in the Gulf Stream." In a brief chapter, Claude Haskins Townsend discusses "Our Heritage of the Fresh Waters." "Fishing in Pacific Coast Streams" is handled by Leonard P. Schultz, and a colorful chapter on "Angling in the United States" by Luis Marden. The latter also illustrated the chapter on "Marineland, Florida's Giant Fish Bowl" by Gilbert Grosvenor La Gorce. "Some Curious Inhabitants of the Gulf Stream" are mentioned by John T. Nichols. Paul A. Zahl's contribution is entitled "Man-of-War Fleet Attacks Bimini." "Certain Citizens of the Warm Seas," one of the longer chapters, has been revised by Louis L. Mowbray. It is illustrated with many striking color paintings and photographs of warm-water species. Dory fishing on the Grand Banks is pictured and described by Alan Villiers in "Portugal's Captains Courageous." Sportsmen will enjoy Van Campen Heilner's experiences in "The Lordly Tarpon--Angler's Delight," and beachcombers the short chapter on "Sea Creatures of Our Atlantic Shores" by Roy Waldo Miner.

Underwater exploration is reported upon in adjacent chapters, "Men Who Go Down to the Sea--In Aqua Lungs" by Commandant Jacques-Yves Cousteau of the French Navy, and "Goggle Fishing in California Waters" by David Hellyer. The final chapter is Hilary B. Moore's "Strange Babies of the Sea"--an absorbing report on plankton, beautifully illustrated with paintings in color. The volume concludes with a 15-page detailed index. Thus, in addition to a factual and absorbing text, and scores of interesting and unusual pictures, it is well equipped to serve as an excellent reference source on the library shelf.

--A. W. Anderson

(Canada) 1948 Landings of Fresh Groundfish by Off-shore Vessels at Nova Scotia Ports, by W. R. Martin and F. D. McCracken, Statistical Series No. 2, 10 p., illus., processed. Fisheries Research Board of Canada, Atlantic Biological Station, St. Andrews, N. B., August 1952. This statistical circular presents data for fresh groundfish landings by offshore vessels at Nova Scotia ports for 1948. It is the second of a series of circulars which, when brought up to date, will be published annually. Statistics of catch by species and size are recorded by months in relation to fishing method. Catch statistics for part of the offshore fleet are listed by quarters in relation to area fished. Special reference is made to haddock in this circular. Graphs record long-term fluctuations in the catch and charts denote the areas where major landings of haddock were caught during the years 1946-48.

(Canada) "Statistics of the Fisheries of Canada, 1930-1950," reprint from The Canadian Fisheries Annual, 1952, pp. 3-20. Markets and Economics Service, Department of Fisheries, Ottawa, Canada. Brings together pertinent historical statistical series for Canada on the catch, value, and output of the main fishery products and statistics of trade in fishery products. The material is arranged by areas and by provinces. Figures for Newfoundland are shown separately from the historical series for Canada, because it was only recently that Newfoundland became a province and, therefore, in certain respects the data are not altogether comparable with Canadian statistics throughout the period.

Canadian Fishery Markets (Outlook for 1952: Review for 1951), Market Bulletin No. 6, 46 p., illus., processed. Department of Fisheries, Ottawa, Canada, July 1952. A brief summary of the current market outlook is followed by reviews of production and marketing in 1951 and a survey of some of the general factors which have a bearing on the market situation in 1952; the economic situation in the world and in Canada, in particular; the world food situation; and fish production in foreign countries. Included is a statistical appendix.

The Effect of Power Dams on Pacific Salmon Production, by R. E. Foerster, 15 p., printed. (Reprinted from the Transactions of the Fourth British Columbia Natural Resources Conference, Vic-

toria, B.C., 1951.) Pacific Biological Station, Fisheries Research Board of Canada, Nanaimo, B.C. The author states "It has perhaps unfortunately come to be the common impression that in the development and utilization of the potentialities of our rivers and streams for fisheries and power a choice must be made between the two rival interests." This publication endeavors to point out that by proper planning, close coordination, and a mutual regard for the circumstances and conditions under which each interest must operate, both fisheries and power can flourish. The following subjects are discussed: "Homing" tendency of Pacific salmon; catch to escapement ratio; spawning potential; natural propagation; treatment of obstructions; effect of power dam installation; power dams as obstructions; fish ladders over low dams; importance of collecting devices; high dam problems; influence of the reservoir area on adult migration and spawning; quality of water in reservoir; effect on seaward migration of young salmon; descent of migrating salmon; alternative or replacement salmon production projects; collection and removal of adult salmon to other streams; artificial propagation; and extension of salmon-producing areas.

Fisheries Mission to El Salvador (Agreement between the United States of America and El Salvador), in English and Spanish, Treaties and Other International Acts Series 2337, publication 4442, 8 p., printed, 5 cents. Department of State, Washington 25, D. C., July 19, 1951. (For sale by Superintendent of Documents, Washington, 25, D. C.). Text of an agreement between the United States and El Salvador, effected by exchange of notes signed at San Salvador on July 19, 1951, and entered into force on the same date.

"The Fitness of Nylon Thread for the Manufacture of Fishingtackle," by Gosta Molin, reprint from Institute of Fresh-Water Research Report No. 31, Drottningholm, Sweden, pp. 113-18, 1950. An account of the results of experiments begun in 1947 by the Swedish Institute of Fresh-Water Research on the suitability of the various kinds of nylon for the manufacture of different kinds of tackle. The experiments included the following tests: the strength of solid-drawn and spun nylon thread in dry, wet, and knotted condition; comparative strength tests with cotton yarn; rotting tests; the sensibility of nylon to boiling; and manufacture and test fishing with various kinds of nylon tackle. These experiments proved that nylon thread has good qualities which makes it suitable for fishing, above all its efficacy and its constancy against rot. A disadvantage is the fact that the knots tend to slip, which makes it impossible to use nylon thread with good results for fixed or movable tackle.

Freshwater Fishery Biology, by Karl F. Lagler, 360 p., illus., printed, \$5.75. Wm. C. Brown Co., Dubuque, Iowa, 1952. When the Chairman of the Department of Fisheries of a great university brings forth a textbook on fishery biology in fresh waters, professional fishery people are filled with great expectations, for such a text is greatly needed. One is put on his guard, however, by the publisher's statement on the dust-jacket flap, citing the book as "The first broadly comprehensive volume dealing with the principles and methods of modern fishery research and management on inland waters," including much of interest and

value to "serious anglers, commercial fishermen, and fish culturists of all lands."

In 25 chapters and 5 appendices, Dr. Lagler presents a great variety of subjects, including fish taxonomy, fish anatomy, fish embryology, fish pathology, and general limnology, ecology, and natural history. The treatment of these subjects varies from an elementary outline of the biological subject matter (anatomy, embryology, pathology, life history stages) to no subject matter at all but a general or sometimes detailed instruction on method of study (making and recording observations on natural history and ecology, food habits, calculating rate of growth, estimating fish populations, stream and lake surveys, installing stream and lake improvement devices). There follow brief chapters on freshwater commercial fisheries and recreational fisheries, the appendices, and an index.

The most notable parts of the book are the excellent summaries of techniques for field and laboratory studies and the very useful guide to the scattered fishery literature. The bibliographies are classified according to subject matter and become a part of nearly every chapter.

Dr. Lagler leaves to other authors and to other times the task of setting landmarks for the course of development of fishery biology. His book is a study guide, rather than a textbook—a set of sharp, shiny tools for fishery research, but neatly packed without instructions how or when to use them. A serious fault is his failure to point out the subordinate role of gadgetry, manual operations, and mathematical manipulation or analysis in the fundamental processes of scientific inquiry.

The synoptic treatment of some of the 25 chapters is the result of embracing too wide a field, selecting some material of little interest to the biologist, and condensing much of it below the point of usefulness (Chapters 1-6, 13, 24, and 25; Appendix A). Some of the brief chapters become the subject of courses of study for a quarter term at one of our distinguished schools of fisheries. Roughly, half of the subject matter of the book covers the curriculum in this field of fisheries for the junior and senior years. There is no short cut to technical competence.

Despite the possible misuses of the book which disturb your reviewer, it is true that nearly everyone in the wide audience addressed will find something of interest and use in the well-classified bibliographies, the tables, and mathematical formulae, and the numerous clear and informative illustrations. The publishers have done a quality job of bookmaking at a reasonable price (considering the present value of the dollar).

--Elmer Higgins

(Groundfish) Summary of Information Obtained During the Investigation on Groundfish Fillets (A Report on Escape-Clause Investigation Under Section 7 of the Trade Agreements Extension Act of 1951), 191 p., processed. U. S. Tariff Commission, Washington, D. C., September 1952. This report, prepared by the staff of the Tariff Commission, is a summary of the information collected in the "Escape Clause" investigation on groundfish fillets con-

ducted under provisions of Section 7 of the Trade Agreements Extension Act of 1951. It includes a history of the investigation, a description of the product and its tariff history, facts relating to the trade and industry at home and abroad, and pertinent considerations in the production, marketing, distribution, and consumption of groundfish fillets. It contains 58 tables of detailed supporting data, useful in analyzing the many intricate factors involved in the operation of this industry. It is the most recent, as well as the most complete summary of information available on groundfish fillets.

--A. M. Sandberg

Groundfish Fillets Report on Escape-Clause Investigation Under Section 7 of the Trade Agreements Extension Act of 1951, 38 p., processed. United States Tariff Commission, Washington, D. C., September 1952. Reports the findings and conclusions of the Tariff Commission in the "Escape Clause" investigation for groundfish fillets (cod, haddock, hake, pollock, cusk, and ocean perch, fresh or frozen, filleted, skinned, boned, sliced, or divided into portions). The Commission found (Commissioners Brossard and Gregg dissenting) that groundfish fillets are not being imported into the United States in such increased quantities as a result of a concession granted in the General Agreement on Tariffs and Trade so as to cause or threaten serious injury to the domestic industry producing like or directly competitive products. Accordingly, in the judgment of the Commission, no sufficient reason existed for a recommendation to the President for the withdrawal or modification of the concession.

The Commission's report includes statements of the majority and minority views and a summary of information supporting these views. The majority report, among its considerations, states that United States consumption of groundfish fillets has continued to increase, that there also has been no discernable diminution, thus far, in the rate of increase, and that it was presumed that the increase will continue. The total of 236 million pounds required by United States consumers in 1951 was more than double the consumption in 1939. The upward trend of United States consumption of groundfish fillets has been accompanied by upward trends in both domestic production and imports. Imports have increased to a greater degree than production and thus supplied an increasing share of the total consumption. Notwithstanding in the increase in imports of groundfish fillets from 9½ million pounds to 87½ million pounds in 1951, domestic production was at a much higher level in postwar than in prewar years. Domestic production was the highest on record in 1951. It was pointed out, however, that the upward trend of total landings of all groundfish species was largely accounted for by the increased catch of ocean perch. The domestic groundfish fishing and filleting industry had suffered no decline but, on the contrary, shared significantly in the great progress which the filleting business has made during the past 20 years. It was further stated that most, if not all, of the factors which might be taken as measuring improvement or deterioration in the condition of a particular industry indicated that conditions had substantially improved since prewar years. Although in the past

two or three years the position of the domestic industry had been in some respects not quite as satisfactory as was its highly favorable position during World War II and immediate postwar years, the Commission reported that the industry could not be said to have experienced in recent years, or to be now experiencing, serious injury. A discussion of the factors of production, prices, incomes, wages, and employment is also given.

--A. M. Sandberg

"The Louisiana Crab Fishery," by James Nelson Gowanloch, article, Louisiana Conservationist, May-June 1952, pp. 6-9, illus., printed. Louisiana Department of Wildlife and Fisheries, New Orleans, La. An account of certain crab-fishing methods used in the United States, but unknown in Louisiana, which methods not only are more efficient and capture larger quantities of crabs of legal size, but also have the merit of conserving both the crab stock and inflicting the least possible damage on the crab environment. Three categories of crab-catching equipment are described: first, a crab pot; second, a more or less automatic method of running a trotline; and third, the use of a "crab scraper" to harvest soft shell crabs.

(Maryland) Annual Report, 1951, by R. V. Truitt, Educational Series No. 29, 35 p., illus., printed. (Reprinted from Eighth Annual Report, Maryland Board of Natural Resources, 1951.) Chesapeake Biological Laboratory, Department of Research and Education, Solomons Island, Md., December 1951. The organization and functions of the Department of Research and Education are described. While much of the program of the Department and its Chesapeake Biological Laboratory is concerned with researches on conservation problems in which the applied side is stressed, there has been a sustained effort to promote abstract study; that is, to gain knowledge regardless of possible immediate use in the furtherance of resource management. Progress reports are presented on the following: hydrographic program; economic and biological investigations of the blue crab; investigations on the composition of oyster populations, rate of setting, growth, condition of the meats, mortality, and presence of oyster enemies and competitors on the natural bars of the State of Maryland; pond rearing of shad; and a comparative survey of the Potomac, Patuxent, and Susquehanna Rivers.

The Maryland Crab Industry, 1950, by David G. Cargo and Lewis Eugene Cronin, Publication No. 92, 23 p., illus., printed. Chesapeake Biological Laboratory, Department of Research and Education, Board of Natural Resources, Solomons Island, Md., December 1951. The most complete figures available on Maryland's crab industry for 1950 are presented in this booklet. The amount and value of crabs have been recorded by months, gear, and area. Also included are records on crabs imported for processing and sale by Maryland packers. A brief description is presented of the blue crab (Callinectes sapidus, Rathbun), its spawning and larval stages, feeding habits, regeneration of lost legs, movement, mating, life span, and conservation practices.

"Nylon contra Cotton," by Gosta Molin, reprint from Institute of Fresh-Water Research, Report No. 32, Drottningholm, Sweden, pp. 59-65, 1951. This is the second of two accounts describing the results

of investigations conducted at the Swedish Institute of Fresh-Water Research on the fitness of nylon thread for the manufacture of fishing tackle and experiments with cotton yarn to determine the differences in strength and serviceability under various conditions. Experiments with fishing nets made of spun nylon have evidently given satisfactory results and catches have generally been at least twice as large as when similar cotton nets were used. Experiments with nets made of drawn nylon thread have been carried on in different lakes and streams in Sweden and the results of these tests have been excellent. When comparing the results obtained from nets made of cotton, spun nylon, and drawn nylon, they were in the ratio of 1, 2, and 7, respectively. One difficulty found with the drawn nylon nets is that no machines are as yet available for tying the net knots, and for this reason the nets must be made by hand. The experiments to date show that the possibilities of fishing with drawn nylon nets are undoubtedly most promising and results have been far above expectations.

The Ocean River, by Henry Chapin and F. G. Walton Smith, 325 p., illus., printed. Charles Scribner's Sons, New York, N. Y., 1952. The lore and legend of the Atlantic area, the early history its development, and a scientific account of the natural forces and life in the gigantic water mass of the Atlantic Ocean--all these are skillfully combined in this book by two authors with an intimate knowledge of the subject. The Ocean River is the story of the Gulf Stream. This life-giving ocean current stirs the curiosity of all who know of its existence. For those who are not acquainted with the complexities or the direct effects of the stream on the regions in which it flows, this book will be a revelation.

The authors hew to an easy style which provides the average reader with a fascinating and educational account of the Atlantic Ocean currents. It is a story of the daring explorers Cabot, Cabral, Columbus, and others that ventured into the great Atlantic knowing little of the Ocean River except that the beer in the hold of the vessels turned bad and fermented because of the warmth below deck caused by the sudden rise of temperature as the ship entered the River. Successive chapters explain the nature of the "engine of the air," the maintenance of marine life in the sea, the codfish frontier, and the fierce competition in exploiting the valuable oceanic resources at that time in history when Europeans were first looking westward. There is a final chapter on the Atlantic and the ultimate relationship to Western man. The authors have documented the information exceptionally well. The book carries an extensive bibliography which will be of exceptional interest to those who may wish to know more about the fascinating subject of the ocean and the oceanic river.

--R. T. Whiteleather

Planning a Wholesale Frozen Food Distribution Plant, by James A. Mixon and J. Stanford Larson, Marketing Research Report No. 18, 66 p., illus., printed, 35 cents. Production and Marketing Administration, U. S. Department of Agriculture, Washington, D. C., June 1952. (For sale by Superintendent of Documents, Washington 25, D. C.) This report is intended to aid wholesalers in

planning improved distribution plant facilities. In selecting facilities in which to operate, the wholesaler has at least three choices: (1) obtain space and set up operations in a public refrigerated warehouse; (2) construct his own facilities; or (3) get together with other frozen food wholesalers in a specially-designed warehouse that might be termed a "frozen food market." These possibilities are discussed in this report together with a comparison of methods and facilities for assembling orders, suggestions for planning the plant layout, and considerations for selecting and using materials-handling equipment. Primary consideration is given to methods and facilities involved in wholesale plant operations.

Preliminary Observations on Spawning Potential in the Striped Bass (*ROCCUS SAXATILIS* Walbaum), by H. W. Jackson and R. E. Tiller, Publication No. 93, 16 p., illus., printed. Chesapeake Biological Laboratory, Department of Research and Education, Board of Natural Resources, Solomons Island, Md., May 1952. Describes a study based on analysis of 58 ovaries from striped bass caught in Chesapeake Bay and two ovaries from fishtaken off the coast of New York. The following observations are presented: striped bass first spawn in Chesapeake Bay during their fourth or fifth year, at a length ranging from 45 to 55 cm., at which time they weigh from 4 to 6 pounds; once established, spawning was observed in all year classes up to the fourteenth year; and indication of curtailed spawning was observed in one-third of all specimens over 10 years of age from the Chesapeake Bay; the production of large eggs increase with age and size, ranging from approximately 65,000 in a four-year old to 4,500,000 in a thirteen- or fourteen-year old; high correlations exist between age, length, weight, and the number of large eggs produced; microscopic examination showed no difference between large eggs of young and old fish. There is, however, no basis for speculation on comparative viability.

Proceedings of the United Nations Scientific Conference on the Conservation and Utilization of Resources (17 August-6 September 1949, Lake Success, New York), Volume VII, Wildlife and Fish Resources, 1950 II B 8, 259 p., printed in English, US\$2.50. Department of Economic Affairs, United Nations, New York, 1951. This is the seventh volume of the Proceedings of the United Nations Scientific Conference on the Conservation and Utilization of Resources, which brought together over 700 scientists from 50 countries to consider more than 500 scientific papers. This particular volume contains wildlife and fish resources papers presented on the following subjects: Changes in Abundance of Fish Populations; Developing Fishery Resources; Fisheries Statistics and Technological Development; Management and Cultivation of Fresh-Water Fish; Research in the Conservation and Utilization of Marine Resources; Game and Fur Conservation; and Management of Wildlife Resources.

Resource-Use Problems in British Columbia Fisheries, 28 p., printed. Pacific Biological Station, Fisheries Research Board of Canada, Nanaimo, B. C. This pamphlet reviews the value and importance of British Columbia's commercial fishery. Described are the objectives and functions of the agencies involved in the administration of the important fishery resources of British Columbia and in the

scientific research field. Among the subjects discussed are: utilization of products, administration and management, biological and technological research, and education in the utilization of fishery products. Statistical data are also given on the landed and marketed values of fishery products in the year 1948 in British Columbia, and the number and value of fishing vessels, boats, and gear used in the 1948 operations.

Resources for Freedom (Summary of Volume I--President's Materials Policy Commission Report), 83 p., printed, 25 cents. President's Materials Policy Commission, Washington, D. C., June 1952. (For sale by Superintendent of Documents, Washington 25, D. C.) This summary outlines the materials problem. Subsections deal with: domestic resources; energy needs; technology of materials; materials and security; foreign resources; preparing for future policy. In these subsections most, but not all, of the Commission's recommendations will be found. Throughout the summary cross-references are made to Volume I which should in all cases be consulted as the official document of the Commission. This summary is provided for quick reference, and is accordingly indexed.

Schedule A Statistical Classification of Commodities Imported into the United States (with Rates of Duty and Tariff Paragraphs and Code Classification for Countries/Schedule C/, United States Customs Districts and Ports /Schedule D/, and Flag of Vessel Registry /Schedule J/), August 1, 1950, edition corrected to May 1, 1952, 320 p., printed, \$3.00 to domestic and \$4.00 to foreign subscribers. Bureau of the Census, U. S. Department of Commerce, Washington 25, D. C. (Copies sold by the Superintendent of Documents, Washington, D. C., and by Field Offices of the Department of Commerce and Collectors of Customs.) This is a corrected reprint of the August 1, 1950, edition of Schedule A, which is the statistical classification of commodities imported into the United States used in compiling the official United States import statistics. It shows for each commodity description the commodity code numbers to be shown on import entries and withdrawal forms. In addition, it shows the country, customs district, subgroup, economic class, unit of quantity, and flag of vessel classifications used in compiling the statistics. This is printed in looseleaf form and a subscription to the Schedule includes the cost of supplemental bulletins and pages to keep it up to date for at least a year from the time of issuance.

Surveys through 1951 of the Distribution and Abundance of Young Sardines (SARDINOPS CAERULEA), by Julius B. Phillips and John Radovich, Fish Bulletin No. 87, 67 p., illus., printed. Bureau of Marine Fisheries, Department of Fish and Game, San Francisco, Calif., 1952. The sardine population along the Pacific Coast of North America is subject to large fluctuations in the survival of sardines from each season's spawning. This results in some very abundant year classes, some very sparse, and some of intermediate strengths. The relative abundance of each year class can be measured in its second or third year when it is first taken in the commercial fishery, but it is

of material help to the industry and to the biologist to know the abundance of each year class as early as possible. The California Department of Fish and Game has attempted to measure such abundance by surveys along the coast in the late summer and fall months when a new year class of sardines is about six months old. This bulletin covers the following reports: "The Young Sardine Surveys of 1938, 1939, 1940, 1950, and 1951," by Julius B. Phillips and John Radovich; "Report on the Survey for Young Sardines, *Sardinops caerulea*, in California and Mexican Waters, 1938-40," by Julius B. Phillips; and "Report on the Young Sardine, *Sardinops caerulea*, Survey in California and Mexican Waters, 1950 and 1951," by John Radovich.

Things to Do in Conservation (Teacher's Guide to Activities and Source Material), by Byron L. Ashbaugh, Educational Series No. 28, 41 p., illus., printed, 25 cents. Board of Natural Resources, Department of Research and Education, Solomons Island, Md., December 1951. A list of suggested activities is set forth in this publication to aid teachers in presenting the conservation story to school children. Among the subjects covered is the study of fish, blue crabs, and oysters. Also describes a fresh-water aquarium which offers one of the easiest ways of keeping plants and animals in the classroom.

(United Kingdom) Sea Fisheries Statistical Tables, 1951, 36 p. (mostly tables), printed, 1s. 6d. net (about 21 cents U. S.), Ministry of Agriculture and Fisheries, London, England, 1952. (Available from Her Majesty's Stationery Office, London.) Included in this leaflet are statistics on the quantity, total value, and average value of fish and shellfish production in England and Wales by species, region, and other categories for 1951. Breakdowns by first-class British vessels (steam trawlers), demersal landings, and pelagic landings are presented in the tables. Data on imports and exports are included. Also given are the number of fishermen, number and net tonnage of vessels, and number of first-class vessels by stations and type of gear.

Washington Commercial Fisheries 1951 Statistics, 46 p. (almost entirely tables), printed. Washington State Department of Fisheries, 1308 Smith Tower, Seattle, Washington, 1952. The tables in this publication contain data on the landings of fish, shellfish, and livers in various districts of Washington, by species and gear for each month of 1951, and by species for each year from 1940 to 1951, inclusive. The number of each species of salmon caught in each district by various types of gear is shown for 1935 through 1951. Data on the pack of canned fish and shellfish are shown for 1951. In addition, there is included in the report historical data on the Washington and British Columbia packs of sockeye salmon, and the monthly salmon escapement over Booneville Dam. Data are likewise presented on the number of commercial fishing licenses issued by the Department from 1937 to 1951, inclusive, and the receipts from licenses, miscellaneous tax items, and fines for the years 1935 to 1951.

--E. A. Power

BERGEN, NORWAY, CENTER OF FISHERIES MUSEUM

The Bergen Museum of Fisheries as it stands today is held to be one of the most modern of its kind in the world. Recently the Museum unveiled its completely revamped basement display rooms, announced a November 6 release from the Norwegian Information Service. The equally interesting exhibits on the first floor were opened to the public in August 1950, after being closed for ten years. About half of the restoration cost--400,000 kroner (US\$56,000)--was paid equally by the Bergen municipality and the State. The remainder was covered by private donations.

Besides its function as a museum, the newly rearranged and refurbished basement rooms will also be used for lectures, especially in connection with the advanced fisheries courses offered in Bergen. During the annual herring fisheries off the West Coast, illustrated lectures will be presented to visiting fishermen. Collections on both floors will also serve as visual-aid material for all grades of school children, as well as for students at the Bergen Commercial College.

Unique features of the fisheries museum are eye-level displays in all street windows. Here, passersby may study all sorts of interesting things that have to do with the important Norwegian fishing industry. Highlighting various aspects of the main fisheries, the displays are changed with the fishing seasons.

The new and old museum collections combined comprise many thousands of items. Arranged in ultra-modern showcases and displays, they depict the history of Norwegian fisheries--their origin and development through the ages, as well as their present significance, techniques, methods, organization, import needs, and export markets.

One of the most popular stands on the first floor shows the first known fishermen's settlement in Norway, dating back to the Stone Age. In the same room, a 28- by 7-foot exhibit illustrates the location, extent, and depth of fishing banks off the Norwegian coast, as well as coastal lighthouses. Each fishing bank and lighthouse has its name plate along the edge of the stand and may be lit up by pressing a button.

Other sections of the Bergen Fisheries Museum feature graphs tracing the trends of Norwegian fish exports. There are also samples of modern fishing gear, equipment and instruments, including radar and sonar, which Norwegian oceanographers and purse seine-gangs have found extremely effective in locating fish schools.