



# RECENT FISHERY PUBLICATIONS

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.

SEP.- SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.

SSR.- FISH. - SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).

Number	Title
CFS-743	- Maine Landings, Annual Summary 1951, By Counties, 12 p.
CFS-764	- Pacific Coast Fisheries, Annual Summary 1950, 8 p.
CFS-771	- Frozen Fish Report, July 1952, Final, 8 p.
CFS-772	- Canned Fish & Byproducts, 1951 Annual Summary, 20 p.
CFS-775	- Texas Landings, June 1952, 4 p.
CFS-776	- Fish Meal and Oil, June 1952, 4 p.
CFS-777	- Maine Landings, May 1952, 4 p.
CFS-778	- Florida Landings, May 1952, 6 p.
CFS-779	- New Jersey Landings, January 1952, 2 p.
CFS-780	- New Jersey Landings, February 1952, 2 p.
FL -254	- List of Fishery Associations in the United States, Alaska and Hawaii (revised), 8 p.
FL -404	- Tilefish Recipes, 3 p.

Number	Title
SSR-Fish. No. 68	- Sea Lamprey Spawning Runs in Great Lakes, 1951, by Vernon C. Applegood, Bernard R. Smith, Alberton L. McLain, Matt Patterson, 40 p., illus., March 1952.
SSR-Fish. No. 70	- Sea Lamprey Spawning: Michigan Streams of Lake Superior, by Howard A. Loeb and Albert E. Hall, Jr., 71 p., illus., February 1952.
Sep. No. 319	- Georges Bank Haddock Fishery--1951 Part I--Analysis of 1951 Fishery. Part II--Accuracy of 1951 Prediction.
Sep. No. 320	- Potential Markets for Alaska Salmon Cannery Waste.

THE FOLLOWING SERVICE PUBLICATIONS ARE AVAILABLE ONLY FROM THE SPECIFIC OFFICE MENTIONED IN THE REVIEW.

Landings and Prices of Fishery Products, Boston Fish Pier, 1951 (Includes an Analysis of Boston Fishery Landings and Trends), by John J. O'Brien, 26 p., processed, August 1952. (Available free from the Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) A review of the fish marketing trends and conditions in Boston for 1951 is found in this publication. Detailed data on landings and weighted average prices of fish and shellfish landed at the Boston Fish Pier during 1951 are given. Statistics are presented by months and species, together with comparative data for previous years.

Landings and Receipts at Seattle--1951, by Charles M. Reardon, 30 p., processed, July 1952. (Avail-

able free from the Market News Service, U. S. Fish and Wildlife Service, 421 Bell Street Terminal, Seattle 1, Washington.) This publication contains an article which reviews the Seattle fisheries trends and conditions for 1951. The balance of the report is made up of tables giving the landings and wholesale receipts (including approximate values) at Seattle for 1951 by species, by months, and by points of origin; halibut fishery landings by months; a monthly index of receipts of certain fishery products at Seattle; carload shipments of fishery products by months; and names, classifications, and approximate standards for fresh and frozen fish products sold on the Seattle market.

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

"Public Sentiment: An Important Factor in Fishery Management (with Special Reference to the St. Johns River and Lake Okeechobee, Florida)," by John F. Dequine, article, pp. 98-103, illus. (From The Progressive Fish-Culturist, vol. 14, no. 3, July 1952, processed.) The history of a controversy between sportsmen and commercial fishermen regarding the management of the fisheries of the St. Johns River and Lake Okeechobee, the major conclusions of a survey, recommendations for the management of the commercial fisheries, and the present status of Florida's problem are presented. The author states that "the modern fishery manager cannot confine his activities to gathering facts, drawing conclusions, and making recommendations. He must, in addition, become a salesman and an educator if he is to accomplish his objective, whether it be removal of an unnecessary regulation, adoption of a new program, or other. The problem of creating favorable public sentiment must be attacked with the same vigor and care applied to a fish-population analysis, a food-habits study, or a creel census. In Florida," the author continues, "fishery biologists are convinced that controlled commercial fishing operations form the only practi-

cal method available to provide more successful fishing trips and better utilization of the fishery resources of the State's large natural fresh waters."

Flounders of the Genus PARALICHTHYS and Related Genera in American Waters, by Isaac Ginsburg, Fishery Bulletin 71 (From Fishery Bulletin of the Fish and Wildlife Service, Volume 52), 88 p., illus., printed, 60 cents, 1952. An account of the important group of flatfishes belonging to the genus Paralichthys, and the closely related genera Hippoglossina and Pseudorhombus, which occur in American waters and, in the aggregate, are food fishes of great economic importance, is presented. Proportional measurements of the several species are given in tabular form. Analysis of the data reveals remarkable changes in form with growth, and changes in proportional measurements at different stages of growth. For example, medium-sized specimens of Paralichthys albigutta average a relatively deeper body than P. lethostigma, while in the larger specimens the latter species averages the deeper body. In addition to questions involved in the proper distinction of the species, the facts known about the biology of the species are summarized.

## 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.

"Age and Length Composition of the Sardine Catchoff the Pacific Coast of the United States in 1951-52," by Frances E. Felin, Ray Anas, Anita E. Daugherty and Leo Pinkas, article, California Fish and Game, July 1952, vol. 38, no. 3, p. 427, printed. Department of Fish and Game, San Francisco, Calif. This is the sixth report on the age and length composition of the catch of sardine (Sardinops caerulea) off the Pacific Coast of North America. During the 1951-52 season there was no fishery for sardines off the British Columbia, Washington, and Oregon coasts and no interseason fishery in California. The tables, therefore, give length and age composition for the regular California fishing season only. Included are tables showing, by sex and region of catch, the length-frequency distributions of fish of each year class from the random scale samples taken in the 1951-52 season; the mean length and standard error of the mean for each year class sampled in the 1951-52 season, by sex and region of catch; the calendar dates for the lunar months in the season; and the numbers of fish, by region of catch and in each year class, caught during the season.

"Anybody Can Smoke Fish," by Herbert J. Fisher, article, Missouri Conservationist, June 1952, vol. 13, no. 6, pp. 12-13, illus., printed. Missouri Conservation Commission, Jefferson City, Missouri. Methods of smoking fish described in this article pertain to home smokers. Details of the construction of a smoker and the preparation of the fish for smoking are included.

"Carp: Control and Utilization," by Nicholas J. Miller, article, Wisconsin Conservation Bulletin, May 1952, vol. 17, no. 5, pp. 3-7, illus., printed. Wisconsin Conservation Department, Madison 2, Wisconsin. This article describes the carp management program of the State of Wisconsin and the necessity of removal operations to prevent overabundance and resultant destruction of game-fish habitat. The Wisconsin Conservation Department is attempting to effect greater utilization of this resource through liberalizing the regulations permitting the taking of carp by spears and bow and arrow, as well as sponsoring cooperative removal projects with groups of sportsmen, and disseminating information on facts concerning carp and its utilization for food and sport. In addition, both contract fishermen and State crews continue to work together in removing carp from Wisconsin waters. Carp weighing 2½ pounds and over are generally sold for human food and those weighing less than 2½ pounds are canned at the Wisconsin Conservation Department's cannery and used to feed trout in hatcheries. Small carp are also sold to mink and fox ranchers for feed. The major portion of the carp production of 4,500,000 pounds for 1951 was used as food for human consumption and the wholesale proceeds to the fisherman derived from the sale of these fish amounted to \$265,000.

"Cleaning Losses in King and Silver Salmon," by Donald H. Fry, Jr., article, California Fish and Game, July 1952, vol. 38, no. 3, pp. 425-26, printed. Department of Fish and Game, San Fran-

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cisco, Calif. This report gives data on a study of the factors affecting cleaning losses in king and silver salmon, i.e., the loss in dressing the fish.

"Conflicting Interests in Marine Fisheries," by Nelson Marshall, article, Transactions of the Fourteenth North American Wildlife Conference, March 7, 8 and 9, 1949, pp. 429-40, printed. Wildlife Management Institute, Investment Bldg., Washington 5, D. C. (This article is contribution No. 29 from the Virginia Fisheries Laboratory, Gloucester Point, Va.) Discusses the controversies between conflicting interests in marine fisheries.

"The Decline of the Pacific Mackerel Fishery," by John E. Fitch, article, California Fish and Game, July 1952, vol. 38, no. 3, pp. 381-89, illus., printed. Department of Fish and Game, San Francisco, Calif. Describes the history of the Pacific mackerel (Pneumatophorus diego) fishery, its decline and attempts at regulation, and the future outlook for the Pacific mackerel. This report also discusses the age composition of the Southern California catch of Pacific mackerel, the mortality rates, and the story behind the catch.

"Designed for Fishery Research," article, Pacific Motor Boat, June 1952, vol. 44, no. 7, p. 30, illus., printed. Publication Office, 815 S. Witmer St., Los Angeles 17, Calif. Describes the new U. S. Fish and Wildlife Service vessel Charles H. Gilbert which was designed for fishery research. This vessel will operate in conjunction with the Pacific Oceanic Fishery Investigations out of Honolulu and is built to fish in the Japanese long-line manner. It is hoped by the researchers that this craft will be able to adapt to western mechanical standards a method of fishing which has been used for hundreds of years by the Japanese fishermen who operate more or less by hand.

Economic Aspects of Wildlife Resources of the State of Washington, by Robert F. Wallace, Economic and Business Studies Bulletin No. 19, 49 p., printed, \$1.00. State College of Washington, Pullman, Wash., February 1952. The subject of this bulletin is currently pertinent and fast becoming of increasing interest. More and more of the states are assaying the value of their wildlife resources. This has been done in the subject publication. Scientific and basically sound technical theory appears to have been used in the methodology of obtaining the information for the estimates. Questionnaires were used with detailed follow-up procedures. Both the commercial and sport fisheries are included in the estimates of expenditures as well as the wildlife resources used by hunters. For the State of Washington in the year 1950 an estimated \$100 million expenditure within the state for, or in connection with, wildlife is reported. No attempt is made to capitalize the value of this expenditure. The latter omission is fortunate. It indicates at least that the author has not committed himself through this publication to the premise that sport fishing and hunting are a productive factor in the economic sense. This whole field of estimating

the value of wildlife resources has many facets and probably will be debated far into the future. The present author uses method and logic which appear to be basically sound in arriving at one type of evaluation of the wildlife resources of his state.

--W. H. Stolting

"FAO Fisheries Statistics," Reprint from Monthly Bulletin of Agricultural Economics and Statistics, vol. 1, no. 2, pp. 3-7. Food and Agriculture Organization of the United Nations, Rome, Italy, June 1952. Statistics on fish landings in selected countries and statistics on production of certain fisheries commodities in selected countries are presented. Includes statistics available up to June 15, 1952.

(FAO) World War Against Want (The Work of FAO 1950-51), C51/21, 67 p., printed. Food and Agriculture Organization of the United Nations, Rome, Italy, 1951. This is a reprint of the Director General's yearly progress report, prepared for the Sixth Session of the FAO Conference, which was held in Rome, November 19-December 7, 1951. Although it does not attempt to tell the complete story of FAO's activities and program, it does highlight the practical assistance designed to raise levels of nutrition and standards of living in its member countries by the increased production of food and forestry products. The field of FAO's activities, region by region and country by country, are surveyed. Described is the work being done to improve nutrition, to encourage wise use and conservation of land, to reduce or eliminate animal and plant diseases, to save grain and other foods, to introduce modern methods of production, to encourage the adoption of wise forestry policies, to improve fishing practices and to help governments to improve their statistical and other technical systems. The emphasis of the report is upon the practical assistance FAO is rendering to its member countries. Among the many projects reported upon are those on fisheries.

Food and Nutrition Services of Federal and Quasi-Official Agencies of the United States, HWHE-1163, 49 p., processed. Nutrition Program Service, Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture, Washington 25, D. C., July 1952. This is the sixth edition of a publication on the food and nutrition services of the Federal and quasi-official agencies of the United States. The following agencies are concerned with the national nutrition program: Department of Agriculture, Department of Defense, Department of the Interior (Fish and Wildlife Service), Department of Labor, Atomic Energy Commission, Economic Stabilization Agency, Federal Security Agency, Federal Trade Commission, Veterans Administration, The American National Red Cross, and National Research Council. The activities and services of the various agencies concerned with food and nutrition are described.

"Harvesters of the Sea Reaping Co-op Benefits," by Jack Jennings, article, June 1952 News for Farm Cooperatives, vol. 19, no. 3 (June 1952), pp. 1

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12, printed, 10 cents per issue. A general description of the activities of fishery cooperative associations in the United States, their growth in recent years, and some of their aims and objectives are given in this article. Much of the article is devoted to a description of the successful activities of two of the more outstanding organizations in this field. These two organizations are the Twin City Fishermen's Cooperative Association, Inc., and the Point Judith Fishermen's Cooperative Association, Inc. Technical descriptions are avoided by the author, easy and fast-moving style is used, and the article in general makes interesting reading. In addition, a few photographs of cooperative activities are shown.

--W. H. Stolting

"How to Make Life-like Model of Your Prize Catch," by Gustaf T. Sundstrom, article, Popular Homecraft, July-August 1952, vol. 22, no. 6, pp. 355-56, illus., printed, 35 cents per issue. General Publishing Co., Inc., 154 East Erie St., Chicago 11, Ill. Describes the simplest and most practical methods of making an artificial model of a fish. Instructions are given for making molds of plaster of Paris, rubber, and glue.

(Louisiana) Fourth Biennial Report, Department of Wild Life and Fisheries, 1950-1951, 486 p., illus., printed. Department of Wild Life and Fisheries, New Orleans, Louisiana. A report of the Department, its work and activities, covering the calendar years ending December 31, 1950, and December 31, 1951. Pertinent information on expenditures, income, licenses, violations, statistics, and reports from the several departmental divisions are presented. The report on fresh- and salt-water fisheries deals with revenue derived from and the value (estimated at \$110,000,000 to the State of Louisiana) of the commercial fishing and shrimping industries. The Gulf States Marine Fisheries Compact, dealing with commercial fishing, shrimping and oysters, which was signed in 1948 by the five Gulf states is given major consideration. Production of shrimp by the Gulf states and comments on the compact are shown in tabulated statistics. Also included are reports from the Division of Oysters and Water Bottoms, whose chief function is to insure the productivity of the oyster bottoms of the State; and the Division of Fish and Game, whose activities have been greatly enlarged for a continued effort towards restoration of the fish and game resources of the State of Louisiana.

Oystershell and Grit Supplements for All-Mash Poultry Feeds, by Charles A. Dupras, William Robinson, and Clarence S. Platt, Bulletin 762, 8 p., printed. New Jersey Agricultural Experiment Station, Rutgers University, New Brunswick, New Jersey, February 1952. This circular is a continuation of the studies initiated at Rutgers University some years ago to determine the value of various calcium-containing supplements and of insoluble grit in poultry feeds. "Results indicated no significant difference between the various supplements when measured by egg production, efficiency of feed consumption, mortality, eggshell

strength, hatching quality of eggs, or gain in weight of the fowls," state the authors.

"Range and Habitat of the Clam POLYMESODA CAROLINIANA (Bosc) in Virginia (Family CYCLADIDAE)," by Jay D. Andrews and Catherine Cook, article, Ecology, vol. 32, no. 4 (October 1951), pp. 758-60, illus., printed. Ecological Society of America and the Duke University Press, Box 6697, College Station, Durham, N. C. (This article is Contribution No. 35 from the Virginia Fisheries Laboratory, Gloucester Point, Va.) A description of the distribution and habitat of the clam, Polymesoda caroliniana, in Tidewater Virginia is presented. "Polymesoda is limited to slightly brackish waters and the family is a brackish to fresh-water transition group. The species now has a discontinuous distribution and extension of its range appears to be precluded by salt- and fresh-water barriers," according to the authors.

"Repeated Semiannual Spawning of Northern Oysters," by V. L. Loosanoff and H. C. Davis, article, Science, June 20, 1952, vol. 115, no. 2999, pp. 675-6, printed. American Association for the Advancement of Science at the Business Press, 10 McGovern Ave., Lancaster, Pa. Describes studies designed to determine whether the gonad development and spawning of the northern oyster, Crassostrea virginica, were of the exogenous type--initiated and regulated by periodical seasonal changes of environment--or of the endogenous type--controlled by a pattern confined within the organism itself. The experiments have shown that the processes of gonad development and spawning of these oysters are not of the endogenous type; i.e., there is nothing in their physical pattern that will not permit reproduction often than once a year, provided the ecological conditions are favorable for all aspects of the physiological activities involved in this complex process. The experiments have also demonstrated that the oysters, in developing gonads, showed no dependency on seasonal changes in such factors as light, tidal rhythm, precipitation, small variations in salinity, or other changes that usually occur during the spring and early summer when the gonads of oysters are rapidly developing. It has also been shown that gonad development of oysters is not dependent on certain types of plankton organisms that are present in the water only during the spring and summer, the time of normal gametogenesis and spawning.

"Report on Experiments Designed to Determine Effects of Underwater Explosions on Fish Life," by Carl L. Hubbs and Andreas B. Rechnitzer, article, California Fish and Game, July 1952, vol. 38, no. 3, pp. 333-66, illus., printed. Department of Fish and Game, San Francisco, Calif. This investigation arose from a conflict between different interests involved in the exploitation of the marine resources of California. Seismographic exploration for submarine oil had been suspended, through the revocation of licenses, because the explosions had destroyed large numbers of fish. The purpose of the study covered by this report was to determine if the explosives might not be handled in such a way, as through a reduction in the size of charge or through altered methods, that most of the danger of killing fish would be eliminated. Black-powder explosions proved to

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be relatively innocuous in a series of experiments, even with charges as high as 20 to 45 pounds, whether the charge was buried in the sediments, resting on the bottom, or suspended near the surface. Indications were obtained that black-powder discharges do not even drive fish away or prevent them from feeding. The evidence leads to the conclusion that exploration for oil can be continued without the undue destruction of fish life.

"Review of the California Sardine Fishery," by Frances N. Clark, article, California Fish and Game, July 1952, vol. 38, no. 3, pp. 367-80, illus., printed. Department of Fish and Game, San Francisco, Calif. This report reviews the California sardine fishery, and gives data on the seasonal catch (in tons) and utilization of sardines along the Pacific Coast from 1916-17 to 1951-52. It also includes information on the biology of the Pacific sardine (Sardinops caerulea), the present status of the population, and management of the Pacific Coast sardine fishery.

Review of Kenya Fisheries, 1950, by Hugh Copley, 55 p., printed. The Government Printer, Nairobi, Kenya. Reviews the Kenya fisheries for 1950, with special reference to the river fisheries, freshwater fish (coastal areas), a fish-culture farm, sea fisheries research and investigation, and the marine fisheries. The report on the marine fisheries discusses production, prices, marketing and distribution, and types of gear.

Scottish Sea Fisheries Statistical Tables for 1951, 109 p., printed, 4 s. net (about 56 U.S. cents). Scottish Home Department, 1952. (Available from Her Majesty's Stationery Office, Edinburgh, Scotland.) Statistics on the Scottish fisheries for the year 1951 are presented. Number, net tonnage, and value of different types of fishing vessels; types and value of gear; number of fishermen employed; and the amount and value of the fish catch by species and by areas and type of vessels, average prices, utilization of the catch, and fishery products exports are some of the statistical data included.

"Study of Nylon and Cotton Gill-Nets," by L. C. Hewson, article, Trade News, June 1952, vol. 4, no. 12, pp. 3-4, illus., processed. Department of Fisheries, Ottawa, Canada. An investigation conducted by the Central Fisheries Research Station of the Fisheries Research Board of Canada at Winnipeg to compare nylon and cotton gill nets during a routine study of the winter commercial fishery on Lake Winnipeg is described. In the 1950-51 season it was found that of all species of fish combined, the nylon nets caught 57 pounds

per 100 yards of net as compared with 17 pounds for the cotton nets--a ratio of about 3:1. A similar comparison of data from the 1951-52 season showed the nylon nets to be more efficient. Of all species of fish combined, the nylon nets caught 67 pounds per 100 yards as compared with 31 pounds in the cotton nets.

A Ten-Stone Controlled Fish-Smoking Kiln, by C. Cutting and A. Bannerman, Food Investigation Report No. 14, 8 p., illus., printed, 9d. net (11 U.S. cents). Torry Research Station, Department of Scientific and Industrial Research, Aberdeen, Scotland, 1951. (Available from British Information Services, 30 Rockefeller Plaza, New York 20, N. Y.) The general principles and features of a small kiln, suitable for the small scale production of smoked fish, are described and illustrated. This kiln possesses all the essential features which provide control, uniformity, and reproducibility of smoking and drying. 140 pounds of fish can be smoked in this kiln in four hours.

"The Virginia Fisheries Laboratory," by J. L. Moore and Robert L. Marble, article, The Commonwealth, December 1951, pp. 2-4, illus., printed. Virginia State Chamber of Commerce, 111 North 5th Street, Richmond 19, Virginia. (This article is Contribution No. 36 from the Virginia Fisheries Laboratory, Gloucester Point, Va.) In 1940 funds were provided by the Virginia legislature to establish the Virginia Fisheries Laboratory. The laws of Virginia describe the functions of the laboratory as follows: "The Fisheries Laboratory shall conduct studies and investigations covering the food industry as a whole, and shall make annual reports of its findings to the Commission of Fisheries; and shall, in addition thereto, make special studies and investigations touching any part of the seafood industry as it may be requested to do by either the Commission of Fisheries, or the Governor of Virginia." Emphasis has been concentrated on investigations of fisheries of major importance--the oyster, the blue crab, the croaker, and the shad. Considerable progress has been made toward an understanding of the habits and lives of these important sea foods, and of the effects of the fisheries on natural and artificial conditions on their abundance. This article describes the activities of the Laboratory.

Washington State Shellfish, 7 p., printed. Washington State Department of Fisheries, 1308 Smith Tower, Seattle, Washington. The shellfish that thrive along the State's Pacific Ocean shores the coastal harbors, and the inland waters of Puget Sound--oysters, razor clams, hard-shell clams, shrimp, and Dungeness crabs--are discus-

