



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
 SEP. - SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.
 SSR.-FISH. - SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).

Number	Title	Number	Title
CFS-671	- Canned Fish and Byproducts, 1950 Annual Summary (revised), 20 p.	Sep. 328	- Freezing Fish at Sea--New England - Part V - Freezing and Thawing Studies and Suggestions for Commercial Equipment.
CFS-813	- Massachusetts Landings, September 1952, 7 p.		Freezing and Cold Storage of Pacific Northwest Fish and Shellfish:
CFS-814	- Frozen Fish Report, November 1952, 8 p.	Sep. 329	- Part I - Storage Life of Various Rockfish Fillets.
CFS-815	- Lake Fisheries, 1950 Annual Summary, 10 p.	Sep. 330	- Part II - King Crab.
CFS-816	- South-Atlantic Fisheries, 1950 Annual Summary, 9 p.	Sep. 331	- Technical Note No. 22 - A New Liquid Medium for Freezing Round Fish.
CFS-817	- Gulf Fisheries, 1950 Annual Summary, 10 p.	Sep. 332	- Technological Publications, Fiscal Year 1951-52.
CFS-820	- Maine Landings, September 1952, 4 p.	Sep. 333	- Odor Control in Fish Processing Plants.
CFS-821	- Texas Landings, October 1952, 4 p.	Sep. 334	- A Minimum Net-Mesh Size for the New England Haddock Fishery.
CFS-822	- Fish Meal and Oil, October 1952, 2 p.	Sep. 335	- Further Experiments on the Escape of Undersized Haddock through Otter Trawls.
SSR-Fish. No. 87	- Doctoral Dissertations on the Management and Ecology of Fisheries (Additional Listings - 1952), by W. F. Carbine, 46 p., October 1952.		
Sep. 327	- Progress on Technological Research Projects of the Service's Branch of Commercial Fisheries, 1951-52.		

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

Effect of Floodwaters on Oysters in Mississippi Sound in 1950, by Philip A. Butler, Research Report 31, 23 p., illus., printed, 15 cents, 1952. Productive oyster reefs in Mississippi Sound are subject to seasonal floodwaters. In 1945, lowered salinity caused mass mortality on the reefs. The mortality at that time was attributed to fresh water discharged from the Bonnet Carre

spillway on the Mississippi River. This report discusses the biological and hydrographic data collected during the flood period in 1950. Comparison of 1950 with previous years indicates that salinity levels in Mississippi Sound result from a combination of factors, no one of which can reasonably be cited as the cause of the oyster mortalities.

MISCELLANEOUS PUBLICATIONS

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILD-LIFE 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 Earnings of Boston Fishermen in 1951, by Solomon Shapiro, 15 p., processed. Bureau of Labor Statistics, U. S. Department of Labor, Washington 25, D. C., July 1952. This report gives statistical data for 1951 on the average annual earnings of Boston fishermen by occupation, increase in employment opportunity, and variations in earnings among ships. A chart showing the percentage increase in annual earnings of Boston fishermen from 1948 to 1951 is also included. A comparison of the average annual earnings of Boston fishermen by number of days worked and average number of days worked by occupation is made for 1951 and 1948. Other tables show the 1951 distribution of fishermen in the Boston Fish Pier fleet by annual earnings and occupation; and distribution of fishermen, deckhands, cooks, captains, mates, chief engineers, and second engineers by annual earnings and number of days worked.

(California) The Commercial Fish Catch of California For the Year 1950, with a Description of Methods Used in Collecting and Compiling the Statistics, Fish Bulletin No. 86, 120 p., illus., printed. Bureau of Marine Fisheries, Department of Fish and Game, San Francisco, Calif., 1952. The report contains complete data available on the commercial catch of fish, mollusks, and crustaceans landed and shipped into California during 1950; information on the number of licensed fishermen in the State; the number of registered fishing boats; data on the marine catch made by sportsmen; and related information. In addition, it discusses the changes that have been made in the statistical forms and in the procedure of collecting and processing the statistics of California's fish catch. Since the State of California maintains the largest and most complete fishery statistical unit of any of the States, and has used the present statistical system for over 30 years, this section of the report will be of special interest to those concerned with the collection and tabulation of fishery data. A list of common and scientific names of California fish, crustaceans, and mollusks is included.

--E. A. Power

"Commercial Shrimps of the Pacific," article, Trade News, September 1952, vol. 5, no. 3, pp. 5-6, 11, illus., processed. Department of Fisheries, Ottawa, Canada. Five commercial species of shrimp which are found in the waters off the British Columbia coast are described: "side-stripe" or "giant-red" (Pandalopsis dispar); "pink" (Pandalus borealis); "prawn" or "spot" (Pandalus platyceros); "hump-back" or "king" (Pandalus hypsinotus); and "coon-stripe" shrimp (Pandalus danae). Pictures are included showing features used in identification.

Handbook of Emergency Defense Activities, October 1952-March 1953, 125 p., printed, 30 cents. General Services Administration, Washington, D. C. (For sale by Superintendent of Documents, Washington 25, D. C.) This is a guide to Federal agencies whose activities are primarily devoted

to mobilization or to other related phases of the defense program. It includes brief organizational outlines and the names and addresses of officials of emergency defense agencies, the Department of Defense, and the United States Coast Guard. The Defense Fisheries Administration is also listed. It also includes a separate list of officials from whom information may be obtained concerning other Federal agencies.

Harp Seals of the Northwest Atlantic, by H. D. Fisher, General Series No. 20, 4 p., illus., processed. Fisheries Research Board of Canada, Atlantic Biological Station, St. Andrews, N. B., September 1952. A brief resume of the life history and movements of the northwest Atlantic stocks of harp seals (Phoca groenlandica) during the course of a year.

An Investigation of Fresh Clam (MYA ARENARIA) Meats with Respect to Criteria of Adulteration, by Donald M. Harriman, Research Bulletin No. 3, 21 p., illus., processed. Department of Sea and Shore Fisheries, Augusta, Maine, April 1950. Describes an investigation of clam meat solids and free liquids. Free liquid is itself a diluent, and while it has not been shown to be an index of absorbed water, it should be limited as representing one type of adulteration. That free liquids can be kept below 10 percent in the commercial pack has been demonstrated. It is, therefore, recommended by the author that free liquids in excess of 10 percent be accepted as a criterion of adulteration. Other recommendations by the author were: (1) total solids should not be considered as a criterion of adulteration; (2) if a minimum solids content is to be stipulated, 11 percent is considered the least objectionable. This report discusses the history of Maine clam standards; clam quality variables as determined by meat assays; total solids; free liquid; effect of various washing methods on the free-liquid content of clam packs; and the problem of standards.

I. Lobster Plugs and Their Effect on the Meat of the Lobster's Claw, by Frederick T. Baird, Jr., Research Bulletin No. 2, 12 p., illus., printed; and II. A Device for Determining Lobster Weights, by Clyde C. Taylor, Fisheries Circular No. 6, pp. 13-16, illus., printed. Department of Sea and Shore Fisheries, Vickery-Hill Bldg., Augusta, Maine, March 1950. The first part of this bulletin covers experiments made with various types of lobster plugs to determine their effect on the meat of the lobster's claws. It was found that no plug was effective in reducing or preventing bacterial action or discoloration. Sterilization of plugs and claws followed by sealing prevented the formation of discoloration, indicating discoloration is caused by a factor not associated with the plug itself. The second part of this bulletin describes the construction and accuracy of a measuring device used for determining lobster weights. Determinations of the weight and length of lobsters have shown that, within the legal size range, the average weight in pounds can be mathematically expressed as a

function of the length of the lobster, the weight varying approximately as the cube of the total length or of the carapace (body shell) length.

Marine Game Fishes of the World, by Francesca LaMonte, 190 pages, illus., printed, \$3.50. Doubleday and Company, Garden City, New York, 1952. A book for anglers, but also a handy reference for those interested in any other aspect of fisheries. It is essentially a guide for the identification of marine game fishes throughout the world. Sharks and rays, tuna, bonito, and mackerels, grunts, snappers, croakers, flatfishes, and many others are described in such a way that the average person will have no difficulty in identifying them. The groups are catalogued effectively with information on the distribution, color, distinguishing characters, size, food, habits, and means of angling for each species. The book is generously illustrated with 138 plates, arranged for easy reference in the text. There are 80 illustrations in full color and 58 in black and white. The artist is Janet Roemhild. A small part of the book is devoted to a geographical section where condensed information may be found on types of angling and facilities for sport fishing in various localities throughout the world. The book is well indexed--a real boon to those readers who will make constant use of the index in a reference book of this type. International Game Fish Association charts list record sport-fishing catches. The author is Secretary of the Association and also the Associate Curator of Fishes at the American Museum of Natural History. This book aptly demonstrates her qualification as an authority in game-fish identification.

--R. T. Whiteleather

Maryland's Natural Resources at a Glance, 2 p., illus., printed. Board of Natural Resources, State Office Building, Annapolis, Md., August 1951. This leaflet gives a few facts and figures to illustrate the variety and value of the natural resources of Maryland. Charts showing the yield of Maryland's commercial fisheries for 1949, and the number of Maryland hunters and freshwater fishermen for 1949-50 are included. The State agencies which have been established to protect, preserve, and develop Maryland's natural resources are listed.

(MSA) Monthly Report of the Mutual Security Agency to the Public Advisory Board, (Data as of August 31, 1952), 74 p., illus., processed. Division of Statistics and Reports, Mutual Security Agency, Washington 25, D. C. Included are charts and tables summarizing important activities under the economic assistance and defense support programs of the Mutual Security Agency and its predecessor, the Economic Cooperation Administration, through August 31, 1952. Charts and appendix tables on the European program cover MSA/ECA operations beginning with April 3, 1948. Charts and appendix tables on the Far East program cover MSA/ECA operations under the China Area Aid Act of 1950. A section of the report deals with U. S. foreign trade.

North Carolina's Natural Resources, North Carolina Resource Bulletin Series No. 4, 54 p., illus., printed. North Carolina Department of Conservation and Development, Raleigh, N. C., 1952. This bulletin is intended to help the public in gen-

eral, and especially the school children who are studying the resources of the State of North Carolina, to understand how the Department of Conservation and Development is organized and the means it uses in conserving and developing the resources under its supervision. The commercial fisheries of North Carolina and the problems of the industry are discussed. A chart on the development of State agencies administering natural resources in North Carolina, an organization chart of the Department of Conservation and Development, and descriptions of the work of the various divisions of the Department are included.

Prospects for the 1952-53 Herring Fishing Season, by J. C. Stevenson, Circular No. 25, October 1952, 7 p., with map, processed. Pacific Biological Station, Fisheries Research Board of Canada, Nanaimo, B. C. This is the eighth in an annual series of circulars dealing with the prospects for the British Columbia herring fishery. Various studies of the adult herring populations form the basis of these annual predictions of the success of fishing. The studies provide information on (1) the relative abundance of the different age groups in the fishing and spawning runs, (2) the size of the catch and the fishing effort expended, and (3) the relative size of the part of the population which escaped the fishery and spawned.

Ranch Fish Ponds in Montana (Their Construction and Management), by C. J. D. Brown and Nels A. Thoreson, Bulletin 480, 30 p., illus., printed. Montana State College, Agricultural Experiment Station, Bozeman, Montana, December 1951. This bulletin brings together from all sources the information which is applicable to Montana on the development and management of a ranch fish pond. Instructions are given for choosing a suitable site, preparation of the dam and pond sites, constructing the dam, determining the kind of fish to be planted, pond fertilization, and related subjects. Laws pertaining to the regulation of fish ponds in Montana are quoted.

Regulation and Investigation of the Pacific Halibut Fishery in 1950, Report of the International Fisheries Commission No. 16, 16 p., illus., printed. International Fisheries Commission, Seattle, Wash., 1951. A brief review of the Commission's activities in 1950 with reference to the Pacific Coast halibut fishery. Presented in the booklet are data on the 1950 fishery and the regulations for that year, statistics of landings, abundance of halibut in certain areas, changes in composition of stocks, and the marking program.

A Revision of the Family EMBIOTOCIDAE (The Surfperches), by Fred Harald Tarp, Fish Bulletin No. 88, 103 p., illus., printed. Bureau of Marine Fisheries, Department of Fish and Game, San Francisco, Calif., October 1952. Includes an outline of the general history of the surfperches (family Embiotocidae) and their viviparity. Because of their rather close relationships, the Embiotocidae have been a problem for the angler, the ecologists, the parasitologist, and others, to identify and even, occasionally, have proved to be difficult for the professional ichthyologist to determine. An attempt has been made in this revision to remedy this situation by including full descriptions based on populations rather

than on individual specimens, and by including a key which will prove adequate for juvenile specimens, as well as for adults.

Second Report to Congress on the Mutual Security Program...for a strong and free world, 51 p., illus., printed, 30 cents. Mutual Security Agency, Washington, D. C., June 30, 1952. (For sale by Superintendent of Documents, Washington 25, D. C.) This report reviews the steps that have been taken with other nations, during the first six months of 1952, to work for peace and security.

(Singapore) Fisheries Survey Report (No. 1--An Introduction to the Fisheries Survey of the Colony of Singapore with a Consideration of the Methodology Employed), by G. L. Kesteven and T. W. Burdon, Fisheries Bulletin No. 2, 126 p., illus., printed, British Malayan \$2.00 (approximately US\$.70). Government Publications Bureau, Singapore, 1952. This is the first report of a detailed and intensive study of the fishing industry of the Colony of Singapore commenced in 1950. Purpose of this report is to describe the steps which have been taken thus far to secure reliable documentation of the industry, and in particular to give an account of the statistical techniques employed to achieve a measure of reliability that will permit confident planning. Many of the elements of the industry are best regarded from the statistical viewpoint and much of the survey work has inevitably been and will continue to be concerned with the collection of statistical data. The series of such data are listed and described in this report and an account is given of the methods which are being employed in this survey. Also discussed are the general nature of the results which are emerging from this work and the directions in which these results point in respect to future work.

Trade with Norway (A Businessman's Guide and Directory), 130 p., illus., printed. Economic Cooperation Administration Special Mission to Norway, Oslo, April 1951. The purpose of this booklet is to tell the American businessman a little more about Norway and the way in which Norwegian-American trade is carried on. Among the subjects included are Norway's fishing industry, canned and frozen fishery products, and statistics on canned fish exports. The directory of Norwegian exporters includes the names and addresses of exporters of canned fishery products, frozen fishery products, dried and salted fish, fishery byproducts, fishing equipment, and pearl essence.

"The Useful Algae," by Francis Joseph Weiss, article, Scientific American, December 1952, vol. 187, no. 6, pp. 15-17, illus., printed. Scientific American, Inc., New York 36, N. Y. Describes

some of the algae most commonly known as seaweed. "Algae are responsible for much more of our mineral and organic resources than is generally realized," states the author. "The constant erosion and leaching of minerals from the land into the oceans during hundreds of millions of years has vastly enriched the seas' mineral content. Since algae have an extraordinary capacity to accumulate minerals, they have become steadily richer in sodium, potassium, calcium, magnesium, chlorine, sulfur, iron, copper, manganese, zinc, arsenic, cobalt, nickel, lead, tin, molybdenum, antimony, titanium, boron, bromine, and iodine." Algae of marine origin, therefore, make excellent fertilizers for depleted soils," continues the author. "Since time immemorial the larger seaweeds have served human beings as a food supplement." Algin (a processed product) and its derivatives have a great number of present and potential uses in industrial and food chemistry, the author points out. "Algin can be pressed into boards or other plastic products. Its mineral salts can be spun into noninflammable fibers. Algin makes many food products more appealing and palatable. It is estimated that no less than 75 percent of all the ice cream consumed in the United States is now emulsified with algin. In addition, it is used as a stabilizer in sherbets, chocolate milk, and cheese, and as a thickener for soups and salad dressings. And in the industrial field, algin is widely used in pharmaceutical emulsions, cosmetic preparations, sizing material, paper coating, paints and varnishes, latex creaming, leather finishing--in short wherever need exists for a gel-forming hydrophilic substance."

TRADE LISTS

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

Boat and Ship Builders - Repairers and Chandlers - Philippines, 6 p. (November 1952).

Lists the names and addresses of boat builders and repairers, and ship chandlers in the Philippine Islands. The size and type of vessel handled and the types of products and services offered by each firm are shown.

Boat and Ship Builders, Repairers and Chandlers - Portugal, 8 p. (November 1952).

Lists the names and addresses of boat builders and repairers, and ship chandlers in Portugal. Shown are the sizes and the types of vessel handled and the types of products and services offered by the firms listed.

