



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

Number	Title
CFS-894	- Chesapeake Fisheries, 1951 Annual Summary, 4 p.
CFS-896	- Mississippi Landings, May 1953, 2 p.
CFS-898	- Fish Meal and Oil, June 1953, 2 p.
CFS-901	- Massachusetts Landings, May 1953, 8 p.
CFS-904	- Middle Atlantic Fisheries, 1951 Annual Summary, 7 p.
CFS-905	- New Jersey Landings, June 1953, 2 p.
CFS-906	- Frozen Fish Report, August 1953 Final, 8 p.
CFS-907	- Mississippi Landings, June 1953, 2 p.
CFS-908	- Maine Landings, June 1953, 4 p.
Sep. No. 355	- Report on the Norwegian Frozen Fish Fillet Industry.
Sep. No. 356	- Trap Lift Net for Catching Tuna Bait Fishes.
SSR-Fish. No. 104	- <u>Survey of the Domestic Tuna Industry</u> , by A. W. Anderson, W. H. Stoltzing, and Associates, 451 p., processed, 1953. Specialists of the Fish and Wildlife Service teamed together to produce this detailed report requested by six Pacific Coast Senators. The report pertains to the tuna industry's position in the domestic economy. Subjects covered include: history of the industry; consumption; world production; domestic production; processing; relationship of the industry to the national inter-

est; distribution; Government assistance in the United States and competing countries; and recommendations for action by both the tuna industry and the Federal Government. Each part covers considerable detail, and it represents the results of exhaustive analysis by experts in specialized fields after having worked for months on the subject. For the principal subjects covered the report contains the following observations: consumption—outlook bright; world production—landings can be maintained and increased; domestic production and processing—prospects of large relative cost reduction rather bleak; distribution—no great prospects of cost savings. The report also contains several recommendations. Many tables and charts, interspersed throughout, provide a wealth of statistical detail on various subjects related to the tuna industry. The report does not purport to contain all economic information for this industry. It refers to a contemporary study completed by the U. S. Tariff Commission which also contains excellent detail, particularly on volume of international trade in the products of this industry, costs of production, etc. Both of these reports taken together will furnish readers with a broad insight into the economics of the tuna industry.

—W. H. Stoltzing



## 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.

Bibliography of the Noises Made by Marine Organisms, by W. N. Kellogg, American Museum Novitates, No. 1611, 5 p., printed. American Museum of Natural History, New York, March 20, 1953. This is contribution no. 6 from the Florida State University Oceanographic Institute. The author has attempted to bring together the most important references to work which has been done on the production of sound by fishes and crustaceans. Nearly all the work in this field has been carried out since the beginning of World War II when our Navy was particularly interested in listening for enemy ships. Additional sources of underwater biological sounds are continually being discovered, and the field encompasses some of the most exciting developments in marine research in recent years. Fifty-three references are given. The government reports listed are only those which have been declassified.

Commodity Standards for Fishery Products, prepared by Ernest Hess, FAO Fisheries Study No. 2, 163 p., printed, US\$2. Food and Agriculture Organization of the United Nations, Rome, Italy, April 1953. (Sold by Columbia University Press, International Documents Service, New York 27, N. Y.) The report is a digest of standardization regulations, and grading and inspection systems in existence in the various countries of the United Nations. It should be of particular interest to the importer or exporter of fishery products. The book is divided into three main chapters as follows: I. Introduction: A. Previous FAO work; B. International Trade in Fisheries Products; C. International Standardization Efforts. II. Present National Standards: A. Standards of Containers and Packaging; B. Standards of Weights; C. Standards of Quality; D. Standards of Description. III. Control of Production and Trade: A. Control of Production for Export; B. Export Control; C. Import Control. Included are 59 valuable tables covering information on such subjects as: capacity, size, and standards for containers and packages for fresh, frozen, cured, and canned fishery products; grade requirements and standards; standardization of fish meal and oils; requirements for cold storage of fish; etc.

--F. T. Fiskur

Conversions of the Standard, Fork, and Total Lengths of the Maine Herring, by Leslie W. Scattergood, Technical Bulletin No. 2, 16 p., illus., printed. Department of Sea and Shore Fisheries, Augusta, Maine, November 1952. This is the fifth report resulting from the Maine sardine or herring (*Clupea harengus*) investigation carried on jointly by the U. S. Fish and Wildlife Service, Department of Sea and Shore Fisheries, Maine Sardine Packers' Association, and the Maine sar-

dine industry. This report discusses the various methods of measuring the length of a herring, and presents the conversion tables necessary to determine the comparative values of various length measurements.

European Markets for United States Fats and Oils, by Paul E. Quintus, Foreign Agriculture Report No. 75, 33 p., processed. Foreign Agricultural Service, U. S. Department of Agriculture, Washington, D. C., June 1953. Western Europe is the large fat-deficit area of the world, and provides the most important foreign outlet for surplus fats and oils (including fish oils) from the United States. This report summarizes the present market conditions in Austria, Belgium, Denmark, France, Western Germany, Italy, the Netherlands, Spain, Switzerland, and the United Kingdom, and discusses the export prospects for 1953. Among the statistics included in this report are average and annual figures on exports of fish oil, by area and European countries of destination.

"Fisheries of the Indo-Pacific Region, 1951/52," article, FAO Fisheries Bulletin, Jan.-Feb./March-April 1953, vol. 6, nos. 1-2, pp. 27-35, printed, single copy 30 cents. Food and Agriculture Organization of the United Nations, Rome, Italy. (For sale by International Documents Service, Columbia University Press, New York 27, N. Y.) Describes the inland and marine fisheries resources of the Indo-Pacific region, fishing operations, harbor facilities, marketing, processing, trade in fish and fishery products, estimates of production, and government programs. There has been a quickening interest in the fisheries of the Indo-Pacific region during the last few years. The fishermen have become extremely active in effecting a change in their methods and organization, and in consequence important developments have taken place in mechanization of fishing and in the formation of fishermen's associations. National and international programs have contributed substantially towards this development, which has included the provision of equipment, funds, and personnel for the industry and for governmental research, as well as various projects in technical instruction.

Home Freezing of Foods (How to Prepare, Store, Thaw, and Cook Frozen Foods), by Vera Greaves Mrak, Circular 420, 39 p., illus., printed. The College of Agriculture, University of California, Berkeley, Calif. This circular is planned to help the home-maker decide whether or not it is practical to store frozen foods for home use, what methods of freezing storage are available, and what size home-freezing unit is essential. It also gives general instructions in home-freezing techniques; and how to prepare, store, thaw, and cook various kinds of foods (including fish and shellfish). Directions for freezing precooked foods are also included.

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(International Pacific Salmon Fisheries Commission) Annual Report 1952, 39 p., illus., printed. International Pacific Salmon Fisheries Commission, New Westminster, Canada, 1953. A report of the Commission, an international agency, appointed under a Convention between Canada and the United States for the protection, preservation, and extension of the sockeye salmon fisheries in the Fraser River system. Discussed in this report are the various activities of the Commission during 1952, the regulations, the United States fishery, the Canadian fishery, Indian catch statistics, escapement, the 1953 cycle, rehabilitation of barren areas, and general investigations.

"Japan: Pearls to Order," by J. C. Britton, article, Foreign Trade, vol. 14, no. 343 (July 25, 1953), pp. 14-16, illus., printed, single copy 10 cents. Department of Trade and Commerce, Ottawa, Canada. (Available from The Queen's Printer, Government Printing Bureau, Ottawa, Canada.) Describes Japan's cultured pearl industry, particularly in the Toba Bay area which is responsible for 50 percent of the world's production. Producing cultured pearls requires continuous day and night supervision for from 2 to 7 years. Even with expert culture, an estimated 20 percent of production will not be marketable, 30 percent will not be suitable for necklaces, and only 10 percent will be top quality. The statistics covering pearl exports show that the United States is by far the largest market for Japanese cultured pearls. However, there are a number of other important markets, including Canada, and the demand is growing in other countries as Japanese cultured pearls become more widely known. The article touches upon the origin and stabilization of the industry.

The Maturity of the Maine Herring (CLUPEA HARENGUS) by Leslie W. Scattergood, Research Bulletin No. 7, 11 p., illus., printed. Department of Sea and Shore Fisheries, Augusta, Maine, December 1952. This report is the sixth of a series concerning the Maine sardine or herring (Clupea harengus). It presents further biological observations collected during a cooperative fishery investigation sponsored by the Maine Department of Sea and Shore Fisheries, U. S. Fish and Wildlife Service, Maine Sardine Packers Association, Inc., and the Maine sardine industry. The purpose of this report is to discuss the maturity of the herring with particular reference to the size of the fish.

(MSA) Monthly Report of the Mutual Security Agency to the Public Advisory Board (Data as of April 30, 1953), 109 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 April 30, 1953. 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 European industrial projects.

(New York) Forty-first Annual Report of the Conservation Department of the State of New York for the Year 1951, Legislative Document (1952) No. 78, 338 p., illus., printed. New York State Conservation Department, Albany, N. Y. This report gives details of the accomplishments of all branches of the Conservation Department during 1951, which includes, among others, the Bureau of Fish and Wildlife Investigations, Bureau of Fish Culture, Bureau of Inland Fisheries, and Bureau of Marine Fisheries. The Bureau of Fish and Wildlife Investigations maintains five fisheries districts which provide statewide coverage from centers at Rochester, Poughkeepsie, Saranac Lake, Norwich, and Watertown. This decentralized coverage makes it possible to handle field studies of a large number of individual waters each year and to make information available to interested persons or agencies in the interest of developing a progressively more effective management of the waters. Field investigations involve a survey of the New York City water supply; Adirondack trout restoration program; fish population control studies; landlocked salmon study; Mongaup Creek fish population study; trout tagging, WSYR project; Unadilla River marked brown trout experiment; Stillwater Pond study; Cranberry Lake brook trout study; Chataouqua Lake muskallonge investigations; and North Sandy Pond pike study. The Bureau of Fish Culture describes the work being conducted at the various fish hatcheries. In order to operate the expanded hatchery facilities, it was necessary to make some changes in hatchery management practices during 1951. The most outstanding advancements were the central refrigeration and freezing plant at Rome, the small electric refrigeration units that were installed in many of the hatcheries, an increase in egg production, early egg production, and the use of blended dry-food ingredients in fish-food diets. The Bureau of Inland Fisheries describes the developments in the commercial fisheries of the Great Lakes and the Hudson River and the Hudson River shad study. The Bureau of Marine Fisheries describes the discovery of a large bed of surf clams in the Atlantic Ocean, the transplanting of hard clams, and the salt-water fisheries. Previous annual reports of the Conservation Department for the years 1949 and 1950, numbered Legislative Document (1950) No. 76 and Legislative Document (1951) No. 48, respectively, have also been issued.

Proceedings of National Food and Nutrition Institute, Agriculture Handbook No. 56, 163 p., illus., processed, 65 cents. U. S. Department of Agriculture, Washington, D. C., July 1953. (For sale by the Superintendent of Documents, Washington 25, D. C.) A report of the proceedings of the National Food and Nutrition Institute which was held in Washington, D. C., on December 8-10, 1952, for the purpose of reviewing nutrition progress and determining ways of strengthening existing nutrition programs. More than 400 representatives of governmental and nongovernmental agencies carrying responsibilities for various phases of current food and nutrition programs attended. Papers presented at the general sessions covered the following subjects: (1) nutrition and health; (2) the national food situation; (3) nutritional health in the United States; (4) nutrition as a factor in disease; (5) food laws and food protection; and (6) emergency food planning. Discussion-group reports are also presented.



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Shellfish Survey Methods, by Robert L. Dow, Technical Bulletin No. 1, 15 p., printed. Department of Sea and Shore Fisheries, Augusta, Maine, November 1952. The three principal survey methods used as a basis for population estimates are discussed: (1) compass and chain; (2) plane table; and (3) photo-enlarged shoreline survey. In 1952 experiments were begun in the use of vertical aerial photographs. The objective of these experiments is to establish a reliable and yet comparatively cheap method of completing an intertidal hydrographic survey which would furnish a basis for population and productivity estimates as well as a record of hydrographic changes occurring from time to time. The accuracy of any survey method is governed by the skill of the manipulator. For one lacking experience and skill in the manipulation of the telescopic alidade, or even in the sketching table, the compass and chain method is more practical, particularly if stakes or rods are used for control purposes in establishing base lines and in turning angles. The selection of method to be used should be made only after a reconnaissance of the area to be surveyed has been made. The plane table, the sketching table, the compass and chain, and the photo-enlarged shoreline survey all have their limitations. Reconnaissance of the area to be surveyed will permit the selection of the method which will give optimum results for that particular area. Discusses the results of estimates where it has been possible to check them with actual production figures. The author points out that it appears from the estimates summarized on a sampling-fraction basis that, if the sampling fraction is approximately 1/12,000 or greater, the error of estimate may be anticipated to be no greater than plus or minus 10 percent. It may further be anticipated that, if the sampling fraction is approximately 1/4,500 or greater, the error of estimate will be no greater than plus or minus 5 percent.

"Some Aspects of Fisheries Development Economics, by G. M. Gerhardsen and C. Beever, Monthly Bulletin of Agricultural Economics and Statistics, vol. II, no. 5 (May 1953), pp. 1-7, printed, single copies 50 U. S. cents. Food and Agriculture Organization of the United Nations, Rome Italy. The authors have set down on a relatively few pages an interesting article which covers in short, concise form important aspects of the whole range of fishery economics. This is done to stage the setting for their approach to suggestions for development of fisheries in underdeveloped areas. The authors aptly cram much of fisheries economics into a few pages and then make pertinent suggestions as guides or aids to setting up plans for technical assistance in underdeveloped fish-producing areas. The great risk involved in the vagaries of commercial fish production is noted. The tendency for development of large integrated firms to develop in order to lessen risks is observed for highly developed areas. The authors express the opinion that in these areas, the number of small individual operators is likely to decrease and larger organizations to expand their activities as a result of more comprehensive commercial policies and increasing interest of governments. The need for caution in going into the various types of

fish production is appropriately emphasized for underdeveloped areas. It is also noted that there must be some hope that the native operators themselves will respond energetically. These are things which should be carefully observed by any governmental planning agency. The article inspires thought and although some principals set down may be subject to considerable debate, it contains much valuable information.

—W. H. Stoltzing

Studies on Ecdysis in the American Lobster (HOMARUS AMERICANUS), 1. The Lobster Egg as a Source of Estrogenic Hormone, by J. Kenneth Donahue, Research Bulletin No. 8, 7 p., printed. Department of Sea and Shore Fisheries, Augusta, Maine, December 1952. This report, the first of a series of experimental reports, seeks to cast further light on the control of moulting (ecdysis) in the American lobster, Homarus americanus. The investigations described in this report give evidence that one of possibly several moult-controlling factors may reside in the reproductive organs of the female lobster. It would appear that the failure of the mature female lobster to moult while carrying eggs might in some way be related to an inhibitory action by the eggs themselves, an action essentially hormonal. The discovery and separation of a fraction from the lobster egg which, although not chemically identified, exhibits the characteristic behavior of estrogens of mammalian origin is the substance of this report. Includes a chart showing the fractionation procedure adopted for obtaining the best yield for both biological and fluorimetric methods of assay.

United States Imports and Exports of Herring and Sardines in Recent Years, by Leslie W. Scattergood, Research Bulletin No. 6, 51 p., illus., printed. Department of Sea and Shore Fisheries, Augusta, Maine, October 1952. This is the fourth report published by the Maine herring investigation, which was conducted under a cooperative agreement with the Maine Department of Sea and Shore Fisheries, Maine Sardine Packers Association, U. S. Fish and Wildlife Service, and the Maine sardine industry. This report gives statistical data for 1924-50 on the United States import and export trade in herring and sardines. It also discusses some of the factors which have influenced the world-wide sardine and herring markets, such as the pre-World War II depression, the War itself, the changes in consumers' seafood preferences, the developments of new sardine fisheries, the closing of some Eastern European and Asiatic markets, the import restrictions enacted by certain countries, and the increased importance of the United States as a market for foreign-produced sea foods. It covers imports of frozen sea herring, fresh sea herring, smoked or kippered herring, pickled or salted herring, canned herring and sardines (not in oil), and canned sardines in oil. It also covers exports of salted, pickled, smoked, and dry-cured herring and sardines; canned herring; and canned sardines.

"Weakfish Study on Long Island," by Alfred Perlmutter, article, The New York State Conservationist, June-July 1953, vol. 7, no. 6, pp. 6-7, illus., printed. New York State Conservation Dept., Albany, N. Y.

