



RECENT FISHERY PUBLICATIONS

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.
 FL - FISHERY LEAFLETS.
 MNL - REPRINTS OF REPORTS ON FOREIGN FISHERIES.
 SSR - FISH. - SPECIAL SCIENTIFIC REPORTS--FISHERIES (LIMITED DISTRIBUTION).
 SEP. - SEPARATES (REPRINTS) FROM COMMERCIAL FISHERIES REVIEW.

Number	Title
CFS-2669	- Massachusetts Landings, May 1961, 5 pp.
CFS-2675	- Maine Landings, July 1961, 4 pp.
CFS-2676	- Frozen Fish Report, August 1961, 8 pp.
CFS-2677	- California Landings, May 1961, 4 pp.
CFS-2678	- Shrimp Landings, April 1961, 6 pp.
CFS-2682	- Mississippi Landings, June 1961, 2 pp.
CFS-2683	- Virginia Landings, July 1961, 4 pp.
CFS-2684	- Minnesota Landings, July 1961, 2 pp.
CFS-2686	- Ohio Landings, July 1961, 2 pp.
CFS-2687	- Louisiana Landings, February 1961, 2 pp.
CFS-2689	- New York Landings, July 1961, 5 pp.
CFS-2690	- Mississippi Landings, July 1961, 2 pp.
CFS-2691	- Louisiana Landings, March 1961, 2 pp.
CFS-2692	- Rhode Island Landings, June 1961, 3 pp.
CFS-2693	- Rhode Island Landings, July 1961, 3 pp.
CFS-2696	- North Carolina Landings, August 1961, 4 pp.

FL-293 - List of Fishermen's and Fish Shore Workers' Unions in the United States, 8 pp., revised August 1961.

FL-452 - Fishery Motion Pictures, 22 pp., illus., revised July 1961. Lists the Bureau of Commercial Fisheries films and explains how to borrow them and from whom. Currently available films are, "Sponge--Treasure from the Sea," "Salmon--Catch to Can," "Take a Can of Salmon," "Fish Cookery with Savoir," and "Outdoor Fish Cookery." Also available are, "Sardines from Maine, Down East Style," "It's the Maine Sardine," "Shrimp Tips from New Orleans," and several others.

SSR-Fish. No. 379 - Stomach Content Analysis of Troll-Caught King and Coho Salmon, Southeastern Alaska, 1957-58, by Gerald M. Reid, 10 pp., illus., July 1961.

SSR-Fish. No. 383 - Second Survey of the Occurrence of Parasites and Blemishes in Pacific Ocean Perch, *Sebastes alutus*, May-June 1959, by John Liston and Charles R. Hitz, 9 pp., illus., July 1961.

SSR-Fish. No. 384 - Graphic Presentation of Pacific Sardine Age Composition Data, by Robert S. Wolf, 35 pp., illus., July 1961.

SSR-Fish. No. 387 - Downstream Movement of Lampreys and Fishes in the Carp Lake River, Michigan, by Vernon C. Applegate, 75 pp., August 1961.

Sep. No. 631 - Investigation of the Potential Albacore Resource of the Central North Pacific.

Sep. No. 632 - Financial Assistance to Fishing Industries in Various Countries.

THE FOLLOWING MARKET NEWS LEAFLETS ARE AVAILABLE FROM THE BRANCH OF MARKET NEWS, BUREAU OF COMMERCIAL FISHERIES, U. S. FISH AND WILDLIFE SERVICE, WASHINGTON 25, D. C.

Number	Title
MNL-59	- Survey of Shrimp Potential in Southern Brazil, 1961, 16 pp.
MNL-58	- Republic of Korea's Fishing Industry, 1960, 4 pp.
MNL-44	- Icelandic Fisheries, 1960, 14 pp.
MNL-60	- Netherlands' Fisheries, 1960, 16 pp.

THE FOLLOWING ENGLISH TRANSLATIONS OF FOREIGN LANGUAGE ARTICLES ARE AVAILABLE ONLY FROM THE U. S. FISH AND WILDLIFE SERVICE, BUREAU OF COMMERCIAL FISHERIES, P. O. BOX 3830, HONOLULU, HAWAII.

On the Interrelationship Between Bluefin Tuna and Coastal Fishes, by Takeyuki Doi, 8 pp., illus., processed, August 1961. (Translated from Japanese, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 2, 1960, pp. 99-102.)

On the Structure of Yellowfin Tuna Schools as Seen from the Distribution of the Catch on the Tuna Longline, by Nobuo Hirayama, 4 pp., illus., processed, August 1961. (Translated from Japanese, Bulletin of the Japanese Society of Scientific Fisheries, vol. 23, no. 7/8, 1957, pp. 373-375.)

Studies on the Eggs, Larvae, and Juvenile of Japanese Fishes. Series I, by Keitaro Uchida and others, 8 pp., processed, September 1961. (Translated from Japanese, extracts of Studies on the Eggs, Larvae, and Juvenile of Japanese Fishes, Series I, 1958, pp. 26-27, 30-31, 65.)

THE FOLLOWING PUBLICATIONS ARE AVAILABLE ONLY FROM THE SPECIFIC OFFICE MENTIONED:

California Fishery Market News Monthly Summary, Part I - Fishery Products Production and Market Data, August 1961, 16 pp. (Market News Service, U. S. Fish and Wildlife Service, Post Office Bldg., San Pedro, Calif.) California cannery receipts of tuna and tunalike fish and other species used for canning; pack of canned tuna, tunalike fish, mackerel, and anchovies; market fish receipts at San Pedro, Santa Monica, and Eureka areas; California and Arizona imports; canned fish and frozen shrimp prices; ex-vessel prices for cannery fish; Oregon and Washington receipts (domestic and imports) of fresh and frozen tuna and tunalike fish; for the month indicated.

(Chicago) Monthly Summary of Chicago's Wholesale Market Fresh and Frozen Fishery Products Receipts, Prices, and Trends, September 1961 (Great Lakes Edition), 20 pp. (Market News Service, U. S. Fish and Wildlife Service, 565 W. Washington St., Chicago 6, Ill.) Receipts at Chicago by species and by states and provinces for fresh- and salt-water fish and shellfish; and weekly wholesale prices for fresh and frozen fishery products; for the month indicated. A review of Great Lakes commercial fish landings for 1960 and part of 1961 with trends, developments, and highlights, is featured in this issue.

Gulf of Mexico Monthly Landings, Production and Shipments of Fishery Products, August 1961, 8 pp. (Market News Service, U. S. Fish and Wildlife Service, Rm. 609, 600 South St., New Orleans 12, La.) Gulf States shrimp, oyster, finfish, and blue crab landings; crab meat production; LCL express shipments from New Orleans; wholesale prices of fish and shellfish on the New Orleans French Market; fishery imports at Port Isabel and Brownsville, Texas, from Mexico; and sponge sales; for the month indicated.

Monthly Summary of Fishery Products Production in Selected Areas of Virginia, North Carolina, and Maryland, September 1961, 4 pp. (Market News Service, U. S. Fish and Wildlife Service, 18 S. King St., Hampton, Va.) Landings of food fish and shellfish and production of crab meat and shucked oysters for the Virginia areas of Hampton Roads, Chincoteague, Lower Northern Neck, and Lower Eastern Shore; the Maryland areas of Crisfield, Cambridge, and Ocean City; and the North Carolina areas of Atlantic, Beaufort, and Morehead City; together with cumulative and comparative data on fishery products and shrimp production; for the month indicated.

New England Fisheries--Monthly Summary, August 1961, 22 pp. (Market News Service, U. S. Fish and Wildlife Service, 10 Commonwealth Pier, Boston 10, Mass.) Review of the principal New England fishery ports. Presents data on fishery landings by ports and species; industrial-fish landings and ex-vessel prices; imports; cold-storage stocks of fishery products in New England warehouses; fishery landings and ex-vessel prices for ports in Massachusetts (Boston, Gloucester, New Bedford, Provincetown, and Woods Hole), Maine (Portland and Rockland), Rhode Island (Point Judith), and Connecticut (Stonington); frozen fishery products prices to primary wholesalers at Boston, Gloucester, and

New Bedford; and Boston Fish Pier and Atlantic Avenue fishery landings and ex-vessel prices by species; for the month indicated.

New York City's Wholesale Fishery Trade--Monthly Summary--July 1961, 18 pp. (Market News Service, U. S. Fish and Wildlife Service, 155 John St., New York 38, N. Y.) Includes summaries and analyses of receipts and prices on wholesale Fulton Fish Market, including both the salt- and fresh-water sections; imports entered at New York customs district; primary wholesalers' selling prices for fresh, frozen, and selected canned fishery products; marketing trends; and landings at Fulton Fish Market docks and Stonington, Conn.; for the month indicated.

(Seattle) Washington and Alaska Receipts and Landings of Fishery Products for Selected Areas and Fisheries, Monthly Summary, September 1961, 9 pp. (Market News Service, U. S. Fish and Wildlife Service, 706 Federal Office Bldg., 909 First Ave., Seattle 4, Wash.) Includes Seattle's landings by the halibut and salmon fleets reported through the exchanges; landings of halibut reported by the International Pacific Halibut Commission; landings of otter-trawl receipts reported by the Fishermen's Marketing Association of Washington; local landings by independent vessels; coastwise shipments from Alaska by scheduled and non-scheduled shipping lines and airways; imports from British Columbia via rail, motor truck, shipping lines, and ex-vessel landings; and imports from other countries through Washington customs district; for the month indicated.

Treatment of Culch to Collect Heavier Sets of Oysters, by V. L. Loosanoff, Bulletin No. 8, vol. 25, 6 pp., illus., processed. (U. S. Fish and Wildlife Service, Bureau of Commercial Fisheries, Biological Laboratory, Milford, Conn., October 3, 1961.) A report on treatment of culch to increase the sets of oysters in Long Island Sound. Studies showed that relatively poor production of seed oysters in Connecticut waters is due principally to light setting, fouling of culch, and poor survival of set. Extensive experiments demonstrated that oyster shells used as culch, if treated with certain chemicals, overcame some of the difficulties, especially fouling by marine organisms.

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Age Composition of the Pacific Sardine, 1932-1960, by Robert S. Wolf, Research Report 53, 39 pp., illus., printed, 20 cents, 1961.

1960 National Survey of Fishing and Hunting, Circular 120, 77 pp., illus., printed, 50 cents, September 1961. The second nationwide economic survey of sport fishing and hunting in the United States. A detailed study of participation in these sports, including types of fishing and hunting, expenditures, mileage traveled, and similar topics; was made of the more active sport fishermen and hunters. This study revealed an estimated 30 million sport fishermen or hunters in 1960, about 23 percent of the population 12 years old and over. These people reported around 650 million recreation days of fishing and hunting and an expenditure of close to 4 billion dollars. As compared with a similar survey in 1955, the number of sportsmen had increased by over 5 million and their expenditures by 1 billion dollars. In 1960, 3 billion dollars were spent on fishing, as

compared with 1.9 billion dollars in 1955. The remainder of this report is confined to the results of the detailed study with appropriate comparisons with the 1955 results. An attractively illustrated and easy-to-read booklet.

MISCELLANEOUS PUBLICATIONS

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ALABAMA:

"Some Interesting Records of Marine Fishes from Alabama," by H. T. Boschung, Jr., article, Journal of Alabama Academy of Science, article, vol. 29, 1957, pp. 33-34, printed. Medical College of Alabama, Birmingham, Ala.

ANADROMOUS FISH:

"Anadromous Fish Conservation in a Swedish Salmon River," by Arne Lindroth, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 308-315, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

ANCHOVIES:

"Generalidades sobre a Fabricacao dos Filetes de Anchova em Azeite, em Espanha" (Report on the Processing of Canned Anchovy Fillets in Oil in Spain), by Emilio Rodriguez Alonso, article, Conservas de Peixe, vol. 16, no. 184, July 1961, pp. 15, 22, printed in Portuguese. Conservas de Peixe, Sociedade Astoria, Lda., Regueirao dos Anjos, 68, Lisbon, Portugal.

AQUATIC RESOURCES:

"The Effect of Various Conservational Measures or Works on the Aquatic Environment and on the Stocks of that Environment," by P. A. Larkin, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 44-52, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C. Points out how man's activities can change aquatic environments.

"The Influence of Drainage Works, Levees, Dykes, Dredging, etc., on the Aquatic Environment and Stocks," by T. A. Stuart, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 337-345, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

"The Influence of Soil and Water Conservation on Natural Aquatic Resources," by E. B. Worthington, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 363-364, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

"An Introduction to the Theme and a Summary of the Background and Experience Papers," by Umberto

d'Ancona, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 7-31, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C. This review paper deals with the conservation of aquatic resources from the point of view of conservation of the habitat and the natural biological equilibrium.

"Methods of Minimizing the Deleterious Effects of Water- and Land-Use Practices on Aquatic Resources," by William A. Dill, and G. L. Kesteven, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 271-307, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

"Multiple Purpose Planning for Aquatic Resources," by Lloyd O. Meehan, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 53-60, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C. States that the valuable aquatic resources can be preserved provided they are given adequate consideration in the basic planning for conservation of other resources such as soil and water. Generally, aquatic resources are a nonconsumptive use of water as opposed to consumptive use by irrigation, for example.

BALTIC SEA:

Nauchnaia Konferetsiia po Izucheniiu Vnutrennikh Vodoemov Pribaltiki (Transactions of the Fifth Conference on the Study of Inland Waters on the Baltic Sea Region), 280 pp., printed in Russian. Trudy po Red. G. G. Vinberga, Minst, Izd-vo Gelgosuviv. im V. I. Lenina, U.S.S.R., 1959.

BARENTS SEA:

"Causes of Seasonal and Annual Variations in the Density of Cod and Haddock Shoal Concentrations in the Barents Sea," by M. M. Kamshilov, N. V. Mironova, and O. F. Kondratsova, article, Trudy Soveshchanii Ikhtiologicheskoi Komissii, no. 10, 1960, pp. 117-121, 122-124, printed in Russian. Trudy Soveshchanii Akademiia Nauk SSSR, Ikhtiologicheskoi Komissii, Moscow, U.S.S.R.

BATHYSPHERE:

"Bathysphere for Operation to a Depth of 600 Meters," by M. N. Diomidov, article, Sudostroyeniye, vol. 26, no. 9, September 1960, pp. 11-13, printed in Russian. Sudostroyeniye, Sovet Ministrov SSR, Sudpromgiz, Suvarooski, Leningrad S-15, U.S.S.R.

BILLFISHES:

"Maryland Billfishes," by Frank Schwartz, article, Maryland Conservationist, vol. 38, no. 4, July-August 1961, pp. 20-24, illus., printed, single copy 25 cents. Department of Game and Inland Fish, State Office Bldg., Box 231, Annapolis, Md. Discusses the blue marlin, white marlin, swordfish, long-billed spearfish, and Atlantic sailfish found in Maryland Waters.

BLACK SEA:

English Translation of Agreement Between the Governments of the Union of Soviet Socialist Republics, the People's Republic of Bulgaria, and the Rumanian People's Republic, Concerning the Fisheries of the Black Sea, FAO Fisheries Biology Technical Paper No. 6, 9 pp., processed, limited distribution. Fish-

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eries Division, Biology Branch, Food and Agriculture Organization of the United Nations, Rome, Italy, February 1961.

BONITO:

"Materials on the Development of Bonito in the Barents Sea," by Iu. F. Pozdniakov, article, Trudy Moskovskogo Mekhaniko Baumaua Imeni, no. 2, 1960, pp. 211-225, printed in Russian. Trudy Moskovskogo Mekhaniko-Mashino-Stroitel'nogo, Institututa Imeni Baumaua, Moscow, U.S.S.R.

CANADA:

Fisheries Statistics of Canada, 1959 (New Brunswick), 32 pp., illus., printed in French and English, 75 Canadian cents. Queen's Printer and Controller of Stationery, Ottawa, Canada, September 1961. Consists of tables giving the quantity and value of the principal species of fish and shellfish landed in New Brunswick, 1944-59; quantity and value of manufactured fishery products, 1944-59; quantity and value of landings by species and fisheries districts, 1958-59; capital equipment in the primary fisheries operations, 1958-59; classification of powered fishing craft by over-all length, 1958-59; number of persons engaged in primary operations by fisheries districts, 1958-59; and persons engaged in the major fisheries, 1958-59.

"Resources for Tomorrow" (A Natural Resources Conference, Montreal--October 23-28, 1961), articles, Trade News, vol. 14, no. 2, August 1961, pp. 3-13, illus., printed. Information and Educational Service, Department of Fisheries, Ottawa, Canada. Contains a summary of each of the papers on fisheries and related topics which were especially prepared for the Natural Resources Conference: "The Role of the Fisheries in the Canadian Economy," by J. A. Crutchfield; "Productive Capacity of Canadian Fisheries," by W. E. Ricker; "The Demand Outlook for the Canadian Fisheries," by W. C. MacKenzie; "Survey of Legislation and Treaties Affecting Fisheries," by S. V. Ozere; "Information and Extension Work in the Atlantic Fisheries," by A. F. Laidlaw; "The Management of Atlantic Salmon," by C. J. Kerswill; "Requirements in Fisheries Research," by W. A. Clemens; "The Organization of Wildlife and Fisheries Research in Canada," by J. R. Dymond; "The Effect of Man-Made Changes on the Environment of Fishes," by P. A. Larkin; and "Multi-Purpose Development of the Fraser River," by A. F. Paget and C. H. Clay.

"Some Freshwater Fishes From Northeastern Quebec and Labrador," by D. E. McAllister, and Sherman Bleakney, article, National Museum of Canada Bulletin, vol. 166, 1959, pp. 31-39, printed. National Museum of Canada, Ottawa, Canada.

CARP:

"Genetic Improvement of Carp. II-Marking Fish by Branding," by Moav Rom, G. Wohlfarth, and M. Lahman, article, Bamidgeh (Bulletin of Fish Culture in Israel), vol. 12, no. 2, 1960, pp. 49-53, printed. Department of Fisheries and Fish Breeders' Association, Nir-David, D. N., Hakiryah, Israel.

"Reactions of Aquarium Carp to Food and Flavors," by Howard A. Loeb, article, New York Fish and

Game Journal, vol. 7, no. 1, 1960, pp. 60-71, printed. New York Conservation Department, Albany 1, N. Y.

CHESAPEAKE BAY:

Chesapeake Science, vol. 2, nos. 1-2, March-June 1961, 111 pp., illus., printed, single copy, 75 cents. Department of Research and Education, Chesapeake Biological Laboratory, Solomons, Md. Includes, among others, these articles: "The Chesapeake Bay Cooperative Striped Bass Program," by James E. Sykes; "Comparison of Three Tags on Striped Bass in the Chesapeake Bay Area," by Robert M. Lewis; "Age, Growth, and Movements of the Striped Bass, *Roccus saxatilis*, taken in Size Selective Fishing Gear in Maryland," by Romeo J. Mansueti; "Movements of Striped Bass Tagged in Virginia Waters of Chesapeake Bay," by William H. Massmann and Anthony L. Pacheco; "Reduced Oxygen Tolerance and Toxicity of Petroleum Products to Juvenile American Shad," by Marlin E. Tagatz; and "A Potomac River Shad Fishery, 1814-1824," by William H. Massmann.

COD:

"La Campagne du Navire Oceanographique G.O. Sars--a Permis de Recueillir un Grand Nombre de Renseignements sur les Bancs de Morues du Groenland" (Cruise of the Oceanographic Vessel G. O. Sars--Collected a Large Amount of Data on Greenland's Cod Banks), article, La Peche Maritime, vol. 40, no. 1001, August 1961, pp. 577-578, illus., printed in French, 10 NF (about US\$2). La Peche Maritime, 190 Boulevard Haussmann, Paris, France.

"Long Lasting Group Migrations of the Codfish of the Barents Sea According to Tagging Data," by K. G. Konstantinov and V. P. Ponomarenko, article, Trudy Moskovskogo Mekhaniko Baumaua Imeni, no. 2, 1960, pp. 207-210, printed in Russian. Trudy Moskovskogo Mekhaniko-Mashino-Stroitel'nogo, Institututa Imeni Baumaua, Moscow, U.S.S.R.

"State of the Stocks and Abundance of Codfish in the Southern Part of the Barents Sea," by N. A. Maslov, article, Trudy Soveshchanii Ikhtiologicheskaiia Komissiia, no. 10, 1960, pp. 106-116, printed in Russian. Trudy Soveshchanii Akademiiia Nauk SSSR, Ikhtiologicheskaiia Komissiia, Moscow, U.S.S.R.

CONSERVATION:

"Wildlife and Water Conservation," by Clarence Cottam, article, Journal of Soil and Water Conservation, vol. 13, 1958, pp. 65-69, printed. Soil Conservation Society of America, Box 1392, Fairmont, W. Va.

CRUSTACEA:

A Biology of Crustacea, by James Green, 195 pp., illus., printed, \$5.75. Quadrangle Books, 119 W. Lake St., Chicago, Ill.

DAMS:

"Dams as Barriers or Deterrents to the Migration of Fish," by C. J. McGrath, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 81-92, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

"Dams as Barriers or Deterrents to the Migration of Fish," by Lloyd A. Royal and A. C. Cooper, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 93-100, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

"Dams and Drowned-Out Stream Fisheries in Southern Rhodesia," by A. Marr, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 139-151, printed. International Union of Conservation, 2144 P St. NW., Washington 6, D. C.

"The Effects of Water Diversions on Fish," by J. H. Wales, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 158-164, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

DOLPHIN:

"Egg Development and Hatched Larvae of the Common Dolphin-Fish, *Coryphaena hippurus* Linne," by Satoshi Mito, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 3, 1960, pp. 223-226, printed. Society of Scientific Fisheries, c/o Tokyo University of Fisheries, Shiba-kaigandori, 6-chome, Tokyo, Japan.

"Fishing for Dolphins in the Western Part of the Japan Sea. V--Species of Fishes Attracted to Bamboo Rafts," by Shumpei Kojima, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 4, 1960, pp. 379-382, printed. Society of Scientific Fisheries, c/o Tokyo University of Fisheries, Shiba-kaigandori, 6-chome, Tokyo, Japan.

"Fishing for Dolphins in the Western Part of the Japan Sea. VI--Behaviours of Fish Gathering Around Bamboo Rafts," by Shumpei Kojima, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 4, 1960, pp. 383-388, printed. Society of Scientific Fisheries, c/o Tokyo University of Fisheries, Shiba-kaigandori, 6-chome, Tokyo, Japan.

EELS:

"Conservation of Elver Migration Routes into the Inland Water System of the Netherlands," by C. L. Deelder, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 321-322, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

"Distribution of the Sexes and Environmental Influence in the European Eel," by Umberto D'Ancona, Archives d'Anatomie Microscopique et de Morphologie Experimentale, 48 bis, 1959, pp. 61-71, printed in French. Archives d'Anatomie Microscopique et de Morphologie Experimentale, Masson et Cie., 120 Blvd. Saint-Germain, Paris 6, France.

"La Peche a l'Anguille en Pologne" (The Eel Fishery in Poland), by Georges Leszczynski, article, La Peche Maritime, vol. 40, no. 1001, August 1961, pp. 579-583, illus., printed in French, 10 NF (about

US\$2). La Peche Maritime, 190. Boulevard Hausmann, Paris, France.

ELECTRIC FISHING:

Fish Population Analyses in Some Small Danish Trout Streams by Means of D. C. Electro-Fishing, by Knud Larsen, Meddelelser Fra Danmarks Fiskeri-Og Havundersogelser, Ny serie, bind 1, no. 10, 1955, 69 pp., printed in Danish. Meddelelser Fra Danmarks Fiskeri-Og Havundersogelser, C. A. Reitzel, Norregade 20, Copenhagen K. Denmark.

FAIR LABOR STANDARDS ACT:

Handy Reference Guide to the Fair Labor Standards Act (Federal Wage-Hour Law), 17 pp., processed, 10 cents. Wage and Hour and Public Contracts Divisions, U. S. Department of Labor, Washington 25, D. C., September 3, 1961. Intended to give information about the principal provisions of the Federal Wage-Hour Law, this pamphlet explains the Act and changes made by the 1961 amendments.

THE FOLLOWING PROCESSED PUBLICATIONS ARE AVAILABLE FREE FROM THE WAGE AND HOUR AND PUBLIC CONTRACTS DIVISIONS, U. S. DEPARTMENT OF LABOR, WASHINGTON 25, D. C.

Highlights of the Fair Labor Standards Act as Amended, 1961, 2 pp., 1961.

Summary, Fair Labor Standards Amendments of 1961 (Effective September 3, 1961), 4 pp., May 17, 1961.

Retail and Service Enterprises and Establishments under the Fair Labor Standards Act, as Amended 1961, 7 pp., 1961.

FARM PONDS:

Owner Experiences with Farm Ponds in East-Central Alabama, by James A. Hutchinson and Morris White, Circular 129, 12 pp., printed. Agricultural Experiment Station of the Alabama Polytechnic Institute, Auburn, Ala., May 1959.

Trout Pond Management in Massachusetts, by James W. Mullan and William A. Tompkins, 132 pp., printed. Massachusetts Division of Fisheries and Game, Westboro, Mass.

FEEDS:

"Natural Resources of Feed Proteins in Waters of the U.S.S.R. and Their Utilization in Animal Husbandry," by A. V. Fediushin, article, Zoologicheskii Zhurnal, vol. 40, no. 2, February 1961, pp. 159-163, printed in Russian with English summary. Redaktsiia Zoologicheskogo Zhurnala, Podsosenskii per. d. 21, Moscow B-64, U.S.S.R.

FISH BEHAVIOR:

"Do Fish Sleep?" by A. A. Klykov, article, Doshkol'noye Vospitaniye, vol. 33, no. 12, December 1960, pp. 68-69, printed in Russian. Doshkol'noye Vospitaniye, Ministerstvo Prosveshcheniya RSFSR, Uchpedgiz, 3-i Proyezd Mar'iuoi Roshclii 41, Moscow 1-18, U.S.S.R.

"The Reactions of Fishes to Toxic Substances. 1--New Designed Gradient Tank for Studying Avoidance Reactions of Fishes," by Shinya Ishio, article, Bulletin of the Japanese Society of Scientific Fisheries,

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vol. 26, no. 3, 1960, pp. 349-353, printed. Japanese Society of Scientific Fisheries, c/o Tokyo University of Fisheries, Shiba-kaigandori, 6-chome, Tokyo, Japan.

FISH DETECTION:

"Detection of Fish by Sonobuoy," by Tomiju Hashimoto, Minoru Nishimura, and Yoshinobu Maniwa, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 3, 1960, pp. 245-249, printed. Japanese Society of Scientific Fisheries, c/o Tokyo University of Fisheries, Shiba-kaigandori, 6-chome, Tokyo, Japan.

FISH FINDER:

"Current Status of Fish Finders in Japan," by S. Kawada, article, Indo-Pacific Fisheries Council Proceedings, Sixth Session, Sections II and III, vol. 6, nos. 2-3, 1956, pp. 265-267, printed. FAO Regional Office for Asia and the Far East, Bangkok, Thailand.

FISH PONDS:

"Change in Bacterial Forms in Fish Ponds as a Function of Type of Fertilizers," by A. G. Rodina, article, Mikrobiologiya, vol. 28, no. 3, 1959, pp. 392-398, printed in Russian. Izdatelstvo Akademii Nauk SSSR, Moscow, U.S.S.R.

FISH SCREEN:

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Preliminary Discussion of the Sponges of Brazil, by M. W. de Laubenfels, Contribuicoes Avulsas do Instituto Oceanografico, Oceanografia Biologia No. 1, 4 pp., printed in English with Portuguese summary. Instituto Oceanografico, Universidade de Sao Paulo, Sao Paulo, Brazil, 1956.

TAX GUIDE:

Tax Guide for Small Business, 1962 Edition, 144 pp., printed, 40 cents. Internal Revenue Service, Washington, D. C., December 1961. (For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.) The new tax guide (for use in filing the 1961 income tax returns, excise tax returns, and other returns for 1962) consists of explanations and answers to most of the tax problems of the small businessman. In addition it contains a tax calendar for 1962 which should prove helpful to all businessmen throughout the year, since it indicates what he should do and when he should do it in regard to the various Federal taxes. The booklet also has a checklist of special interest to the man just starting in business in that it affords a quick method for determining what Federal taxes for which he may be liable.

TIDE TABLES:

Tidal Current Tables 1962--Atlantic Coast of North America, 182 pp., printed, \$1. U. S. Department of Commerce, Coast and Geodetic Survey, Washington 25, D. C., 1961.

Tidal Current Tables 1962--Pacific Coast of North America and Asia, 238 pp., printed, \$1. U. S. Department of Commerce, Coast and Geodetic Survey, Washington 25, D. C., 1961.

TILAPIA:

"Comparative Evaluation of Two Tilapias as Pond-fishes in Alabama," by H. S. Swingle, article, Transactions of the American Fisheries Society, vol. 89, no. 2, 1960, pp. 142-148, printed. Secretary, The American Fisheries Society, P. O. Box 429, McLean, Va.

TRADE LISTS:

The Bureau of International Business Operations, U. S. Department of Commerce, Washington 25, D. C., has published the following mimeographed trade lists. Copies may be obtained by firms in the United States from that office or from Department of Commerce field offices at \$1 a copy.

Canneries and Frozen Foods--Producers and Exporters--Finland, 3 pp. (August 1961). Lists the names and addresses, size of firms, and types of products handled by each firm. Includes fish canneries, freezers, and exporters.

Canneries and Frozen Foods--Producers and Exporters--Uruguay, 6 pp. (August 1961). Lists the names and addresses, size of firms, and types of products handled by each firm. Includes fish and shellfish canneries, freezers, and exporters.

TROUT:

"Comportement Alimentaire de Truites Mouchetees (Salvelinus fontinalis) Elevees en Pisciculture et

Ensemencees en Riviere a l'Age Adulte" (Feeding Behavior of Speckled Trout Raised in a Hatchery and Released as Adults in a River), by Adrien Robert, article, Naturaliste Canadien, vol. 87, no. 4, 1960, pp. 113-116, printed. Naturaliste Canadien, L'Universite Laval, Quebec, Canada.

"Effect of Sorting Brown Trout on Sex Ratio and Growth," by D. C. Haskell, R. Davies, and J. Reckahn, article, New York Fish and Game Journal, vol. 7, no. 1, 1960, pp. 39-45, printed. New York Conservation Department, Albany 1, N. Y.

TUNA:

"Australian Tuna Research," article, Fisheries News-letter, vol. 20, no. 9, September 1961, pp. 20-21, illus., printed. Commonwealth Fisheries Office, Department of Primary Industry, Canberra, Australia. Discusses the work of the Commonwealth Scientific and Industrial Research Organization's Division of Fisheries and Oceanography on tagging tuna. Three research vessels have carried on the work of trolling, collecting data on environmental conditions, and measuring bluefin and yellowfin tuna. Included are tables showing data on long-line landings and on releases and recaptures of fish, 1960/61.

"On the Predatory Relationships Among Bluefin Tuna and Coastal Fishes in the Southern Waters of Japan," by Takeyuki Doi, article, Bulletin of the Japanese Society of Scientific Fisheries, vol. 26, no. 2, 1960, pp. 99-102, printed. Japanese Society of Scientific Fisheries 6-chome, Shiba-kaigandori, Minato-ku, Tokyo, Japan.

The Sicilian Tuna Trap, by Vito Fodera, GFCM Studies and Reviews No. 15, 114 pp., illus., processed. General Fisheries Council for the Mediterranean, Secretariat, Food and Agriculture Organization of the United Nations, Rome, Italy, July 1961. A technical paper presented at the Sixth Session of the General Fisheries Council for the Mediterranean, held at Rome, September 22-28, 1960. Outlines the procedure for constructing a madrague (tuna trap) and the materials used. Also discusses setting and operation of the trap. Includes a glossary of terms used in tuna trap fishing in Sicily and a large section containing maps, photos, and detailed drawings of gear.

TURTLES:

"Pacific Turtle Problem," by Archie Carr, article, Natural History, vol. 70, no. 8, October 1961, pp. 64-71, illus., printed, single copy 50 cents. The American Museum of Natural History, Central Park W. at 79th St., New York 24, N.Y. The author describes his observations of the common sea turtles found off the west coast of Mexico. Identification of the turtles, their habitats, and breeding habits are described. Photos and drawings of the turtles add interest to the article.

UNITED KINGDOM:

The Fishing Industry, Cmnd. 1453, 11 pp., printed, 1s. (about 14 U. S. cents). Her Majesty's Stationery Office, York House, Kingsway, London WC2, England, August 1961. A report presented to Parliament by the Secretary of State for the Home Department, the Secretary of State for Scotland, and the Minister of Agriculture, Fisheries and Food by

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command of Her Majesty. Discusses financial assistance to the fishing industry: distant-, middle-, and near-water fleets; inshore and herring fleets; shellfish; grants and loans for vessel construction; and loans for processing plants. Also covers landings, processing, and distribution problems; research and experimental work; and organization of the White Fish Authority and Herring Industry Board. The British Government believes that, although the proposals outlined in this paper differ from the recommendations contained in the Fleck Report, they "... represent a constructive approach to the problems of the fishing industry, and provide the different sections of the industry with a reasonable opportunity to adjust themselves to the new conditions which they are now facing."

"Salmon and Freshwater Fishing in Great Britain," by J. W. Jones, article, *Nature*, vol. 191, no. 4792, September 2, 1961, pp. 962-963, printed. *Nature*, St. Martin's Press, 175 Fifth Ave., New York 10, N. Y.

U.S.S.R.:

Kaspliskala Fauna v Azovo-Chernomorskom Basseine (Caspian Fauna in the Azov-Black Sea Basin), by F. D. Mordukhai-Boltovskoi, 286 pp., printed in Russian. Izdatelstvo Akademii Nauk SSSR, Moscow, U.S.S.R.

"La Recherche pour les Peches en U.R.S.S. Est Axe sur l'Efficacite" (Fisheries Research in the U.S.S.R. is Based on Efficacy), article, *Le Marin*, vol. 15, no. 742, August 25, 1961, pp. 1, 10, printed in French. *Le Marin*, 38 rue du Pre-Botte, Rennes (I. & V.), France.

WATER UTILIZATION:

"Fishery Problems Created by Water Utilization Projects in Scotland and East Africa," by Vernon D. Van Someren, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 323-336, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

"Some Influences of Multi-Purpose Water Usage on Water Quality," by Robert O. Sylvester, Seventh Technical Meeting, International Union for Conservation of Nature and Natural Resources, Theme I, vol. IV, 1960, pp. 215-235, printed. International Union for Conservation, 2144 P St. NW., Washington 6, D. C.

WEST AFRICA:

"Primo Elenco di Pesci Raccolti in Atlantico nelle Acque della Mauritania, del Sahara Spagnolo e delle Canarie" (First Group of Fish Collected in Atlantic Waters of Mauritania, of Spanish Sahara, and of the Canary Islands), by Andrea Scaccini, article, *Thalassia*, vol. 4, no. 10, 1941, pp. 3-49, illus., printed in Italian. Istituto Italo-Germanico di Biologia Marian di Rovigno d'Istria, Venice, Italy.

WHALING:

"IWC Report: Antarctic Whaling," article, *Fisheries Newsletter*, vol. 20, no. 8, August 1961, pp. 23, 27, printed. Commonwealth Fisheries Office, Department of Primary Industry, Canberra, Australia. In

the 1960/61 Antarctic pelagic whaling season, 21 fleets from 5 nations took 16,427 blue-whale units, compared with 15,512 taken by 20 fleets in 1959/60. The catch quota for the 1960/61 season was 17,780 blue-whale units. The International Whaling Commission has responsibility for establishing a total quota for Antarctic pelagic whaling. The five countries (Japan, Netherlands, Norway, United Kingdom, and U.S.S.R.) engaged in Antarctic whaling held a series of meetings in London for the purpose of agreeing on a formula for division of the total quota.

"The World Catch 1960," article, *Norsk Hvalfangst-Tidende* (The Norwegian Whaling Gazette), vol. 50, no. 7, July 1961, pp. 293-300, 303-308, illus., printed. *Norsk Hvalfangst-Tidende*, Hvalfangerforeningen, Sandefjord, Norway. A detailed report on the whale catch in the Antarctic in the season 1959/60 and in grounds outside the Antarctic in the calendar year 1960 by companies of various nations. Discusses the whaling grounds and details of whaling activities in all areas of the world. Whaling fleets from 17 nations participated during 1960, operating in the North and South Pacific, the South Atlantic, and the Antarctic areas. A total of 63,205 whales were landed during the year. Included are statistical tables showing landings by geographical area and by company, by country, and by location of whaling grounds. Also included is a world map showing whaling areas during 1960.

WORLD TRADE:

The following printed World Trade Information Service Reports, published by the Bureau of Foreign Commerce, U. S. Department of Commerce, Washington, D. C., are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Import Tariff System of Portugal, Operations Report No. 61-41, WTIS Part 2, 2 pp., 10 cents, July 1961.

Foreign Government Purchasing Agencies in the United States, Operations Report No. 61-42, WTIS Part 2, 4 pp., printed. 10 cents, July 1961.

Licensing and Exchange Controls--New Zealand, Operations Report No. 61-45, WTIS Part 2, 7 pp., 10 cents, August 1961.

Economic Developments in Japan, 1960, Economic Report No. 61-46, WTIS Part 1, 10 pp., 15 cents, June 1961.

Import Tariff System of Egypt (UAR), Operations Report No. 61-46, WTIS Part 2, 2 pp., 10 cents, August 1961.

Licensing and Exchange Controls--Afghanistan, Operations Report No. 61-48, WTIS Part 2, 3 pp., 10 cents, August 1961.

Food Regulations of Sweden, Operations Report No. 61-50, WTIS Part 2, 8 pp., 10 cents, August 1961.

Licensing and Exchange Controls--Cambodia, Operations Report No. 61-53, WTIS Part 2, 6 pp., 10 cents, August 1961.

Import Tariff System of Spain, Operations Report No. 61-54, WTIS Part 2, 2 pp., 10 cents, August 1961.

THESE PUBLICATIONS ARE NOT AVAILABLE FROM THE FISH AND WILDLIFE SERVICE, BUT USUALLY MAY BE OBTAINED FROM THE ORGANIZATION ISSUING THEM.

Investment Factors in Thailand, Economic Report No. 61-61, WTIS Part 1, 8 pp., illus., 15 cents, August 1961.

YELLOW PIKE:

"First-Year Growth of the Walleye, Stizostedion vitreum vitreum (Mitchell), and Associated Factors in the Red Lakes, Minnesota," by Lloyd L. Smith Jr. and Richard L. Pycha, article, Limnology and Oceanography, vol. 5, no. 3, 1960, pp. 281-290, printed. Woods Hole Oceanographic Institution, Woods Hole, Mass.

CORRECTION

In the October 1961 issue, page 110, article "Plasma Proteins in the Blood of Fishes from the Gulf of Mexico," the address of the publisher of the American Journal of Physiology was given in error. The correct address is American Physiology Society, 9650 Wisconsin Ave. NW., Washington, D. C.



**PACIFIC NORTHWEST RAINBOW TROUT TRANSPLANTED
IN VENEZUELA AND HAWAII**

In Venezuelan waters sport fishermen are going to be casting for Pacific Northwest rainbow trout, nature willing and cooperative.

So will Hawaiians and their tourist guests who fish in the streams of those Pacific islands.

The Department of Interior's Bureau of Sport Fisheries and Wildlife rainbow trout hatchery in north central Washington (near Winthrop) early in 1961 sent 200,000 of the more than 4,000,000 rainbow trout eggs taken in that hatchery to Caracas, Venezuela and Honolulu, Hawaii. The eggs were carefully placed on trays, packed in ice, and sent by jet planes. The eggs have been planted in the fishing streams for hatching. The 200,000 eggs were evenly divided between Venezuela and Hawaii.

Bureau of Sport Fisheries and Wildlife officials say there is every reason to believe the project of transplanting trout from the Pacific Northwest to the warmer areas of Venezuela and Hawaii will be successful and the eggs moved those thousands of miles will produce fish for the anglers and the base stock for future natural production in the South American country and the new state of the United States.

The eggs to Hawaii, in the air only a few hours, arrived in excellent condition, according to the Division of Fish and Game of the State of Hawaii Department of Agriculture and Conservation.

The eggs were put in slotted plastic boxes and the boxes then placed in streams of the Kokee public fishing area. The slots in the boxes provide for escapement. They are small enough to hold the eggs, but large enough so the young fish can swim through them into the stream and start feeding. (Outdoor California, April 1961.)