

Fishery Publication Index, 1920-54

Publications of the Bureau of Fisheries

And Fishery Publications of the Fish and Wildlife Service

By Series, Authors, and Subjects

Circular 36

Fish and Wildlife Service, John L. Farley, *Director*

United States Department of the Interior, Douglas McKay, *Secretary*



UNITED STATES GOVERNMENT PRINTING OFFICE • WASHINGTON • 1955

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price \$1.50 (paper cover)

	Page
INTRODUCTION	v
PUBLICATION SERIES	1
Administrative Reports, 1	
Circulars, 3	
Conservation Bulletins, 4	
Current Fisheries Statistics, 5	
Documents, 30	
Economic Circulars, 40	
Fishery Bulletins, 41	
Fishery Circulars, 47	
Fishery Leaflets, 48	
Investigational Reports, 64	
Market Development Leaflets, 66	
Progressive Fish-Culturist, 68	
Regulatory Announcements, 83	
Research Reports, 85	
Separates, 86	
Special Scientific Reports, 103	
Special Scientific Reports--Fisheries, 106	
Statistical Digests, 112	
Statistical Lists, 113	
Test Kitchen Series, 116	
AUTHOR INDEX	117
SUBJECT INDEX	151

Compilation of this index was a joint undertaking of the Department of the Interior Library and the Fish and Wildlife Service. Participating in its preparation were Isabel D. Aldous and Elizabeth K. Abolin of the Library, Ruth Keefe of the Service's Branch of Commercial Fisheries, and Lola T. Dees of the Service's Branch of Fishery Biology.

INTRODUCTION

This index describes the publications of the United States Bureau of Fisheries from 1920 to 1940 and fishery publications of the Fish and Wildlife Service from 1940 to 1954.

The Fish and Wildlife Service was established June 30, 1940, by consolidation of the Bureau of Fisheries and the Bureau of Biological Survey. Both predecessor agencies were organized originally for research; in the course of years they were given added responsibilities for conservation-law enforcement and resource management. A basic function of each was to "gather and disseminate information," and this has continued as a basic responsibility of the Fish and Wildlife Service. Both predecessors issued reports and informational material in several publication series. Some of these series were continued by the Fish and Wildlife Service; others were succeeded by new series.

Some of the Service's publication series include both fishery and wildlife publications; only the fishery subjects in each series are listed in this index.

The index is in three parts; (1) A serial list of the numbers issued in each publication series, omitting numbers that did not pertain to fisheries; (2) an alphabetical index of authors; and (3) an alphabetical index of subjects. In the author index and in the subject index, the references are to numbers in the series lists.

The publications issued by the Bureau of Fisheries before 1920 were indexed in "An Analytical Subject Bibliography of the Publications of the Bureau of Fisheries, 1871-1920." by Rose M. E. MacDonald, Bureau of Fisheries Document 899. That document, though out of print, may be consulted in many libraries.

PUBLICATION SERIES LISTED

The following publication series are included in this index. The period covered by each series is shown; absence of a second year denotes that the series is still active.

Administrative Reports. 1931-1940. Included some of the annual reports of the Commissioner of Fisheries and annual issues of four appendixes to the Commissioner's Report: Alaska Fishery and Fur-Seal Industries, Fishery Industries of the United States, Progress in Biological Inquiries, and Propagation and Distribution of Food Fishes. The first 20 of these reports were originally issued without series designation. The Administrative Reports were distributed to depository libraries.

Circulars. 1941- . Popular and semitechnical publications of general and regional interest intended to aid conservation and management. Succeeded the Fishery Circular series and a former wildlife circular series. Circulars are usually distributed to depository libraries.

Conservation Bulletins. 1940- . A Department of the Interior series of popular informational or advisory booklets adapted to the interests of the people of the different sections of the country, with contributions from the Fish and Wildlife Service and other bureaus of the Department. Conservation Bulletins are distributed to depository libraries.

Current Fishery Statistics. 1941- . Data on fisheries of various regions of the United States and Alaska. Duplicated leaflets.

Documents. 1881-1930. This series contained most of the formal publications of the Bureau of Fisheries up to 1930, when assignment of a document number to every publication was discontinued; thereafter the Bureau publications were assigned numbers in various separate series. Earlier numbers in the Document series are indexed in Document 899.

Economic Circulars. 1912-1931. Brief advance reports on economic subjects, and information of interest to special industries or localities. Succeeded by Fishery Circular series. Economic Circulars were distributed to depository libraries. Economic Circulars Nos. 1-47 were issued before 1920; No. 20 and No. 42 were revised after 1920 and so are included in this list.

✓ Fishery Bulletins. 1931- . Separates from the Fishery Bulletin of the Fish and Wildlife Service--technical reports of scientific investigations of fishery biology. The Bulletin of the United States Fish Commission was begun in 1881; it became the Bulletin of the Bureau of Fisheries in 1904 and the Fishery Bulletin of the Fish and Wildlife Service in 1941. Paging is serially by volumes. Through volume 46, separates were issued as Documents, each with a Document number; beginning with volume 47, each separate was issued as a numbered Bulletin. Fishery Bulletins are distributed to depository libraries.

✓ Fishery Circulars. 1931-1939. Brief accounts of investigations of economic importance or general interest. Succeeded the Economic Circular series; succeeded by the Circular series of the Fish and Wildlife Service. Fishery Circulars were distributed to depository libraries.

✓ Fishery Leaflets. 1941- . Correspondence aids giving information on fishes and fisheries. Usually duplicated from typewritten text. The latest issue or revision of each leaflet is listed, without reference to the original issue.

Investigational Reports. 1931-1939. Results of research and applied science in the fields of biology, technology, economics, and statistics of fisheries. Succeeded by Research Reports. Investigational Reports were distributed to depository libraries.

Market Development Leaflets. 1949- . Lists of refrigerated locker plants and related data. Duplicated from typewritten text.

Progressive Fish-Culturist. 1934- . A periodical containing articles for fishery biologists and fish culturists. The periodical was issued monthly from 1934 to 1938 and bimonthly from 1939 to 1941; it was suspended from 1941 to 1946; it has been a quarterly since 1947. The most important articles in the Progressive Fish-Culturist are listed; they have been designated A, B, C, etc., to facilitate reference from the author and subject indexes. The Progressive Fish-Culturist is distributed to depository libraries.

Regulatory Announcements. 1941- . Informational pamphlets containing the text of current regulations. Only fishery Regulatory Announcements have been listed. Announcements and amendments to current regulations are issued throughout the year.

Research Reports. 1941- . Technical papers reporting the results of scientific investigations. Succeeded Investigational Reports (and a former wildlife research series). Research Reports are distributed to depository libraries.

Separates. 1942- . Reprints of articles from the Fish and Wildlife Service monthly journal, Commercial Fisheries Review (called Fishery Market News from 1942 to 1945). Duplicated from typewritten text.

✓ Special Scientific Reports. 1940-1949. Preliminary reports, progress reports, and reports on investigations of restricted scope, intended to aid management and utilization, and to help guide administrative or legislative action; issued in limited quantities for Federal, State, and

cooperating agencies. In 1949 the Special Scientific Reports series was split into a fishery series and a wildlife series, each with a new numerical sequence. Special Scientific Reports are usually duplicated from typewritten text.

✓ Special Scientific Reports--Fisheries. 1949- . See description of Special Scientific Reports, above.

Statistical Digest. 1942- . Statistical material for reference, chiefly tabular, sometimes with explanatory text. Succeeded Administrative Reports. Statistical Digests are distributed to depository libraries.

Statistical Lists. 1941- . Lists of dealers in fishery products. Duplicated from typewritten text.

Test Kitchen Series. 1950- . Pamphlets on buying and cooking fish and shellfish. The Test Kitchen Series is distributed to depository libraries.

PUBLICATION DISTRIBUTION

Printed publications of the Fish and Wildlife Service are generally sold by the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C. Purchase orders should be sent direct to that office (never to the Fish and Wildlife Service); remittances may be by money order, check, or cash. These publications are distributed free to libraries that have been designated depository libraries for government publications; a list of depository libraries may be obtained from the Government Printing Office. In addition the Service distributes its publications free to various libraries, state agencies, and cooperators.

Duplicated publications of the Service are those that are reproduced from typewritten text by office-type machines. These publications are not generally distributed to depository libraries. They are not available for sale, but are supplied by the Service on request. Requests should be addressed to the Director, Fish and Wildlife Service, Department of the Interior, Washington 25, D. C., and should include a statement of the special need for the material.

REFERENCE SYMBOLS

An asterisk (*) before a publication number indicates that the publication is out of print.

The symbol (§) after a publication number indicates omission of one or more titles because they (a) were issued before 1920, (b) had not been issued at the time the list was compiled, (c) did not pertain to fisheries.

The several series are abbreviated as follows:

- AR - Administrative Reports
- Cir - Circulars
- CB - Conservation Bulletins
- CFS - Current Fisheries Statistics
- Doc - Documents
- EC - Economic Circulars
- FB - Fishery Bulletins
- FC - Fishery Circulars
- FD - *Fishery Document*
- FL - Fishery Leaflets
- IR - Investigational Reports
- MDL - Market Development Leaflets
- PFC - Progressive Fish-Culturist
- RA - Regulatory Announcements
- RR - Research Reports
- Sep - Separates
- SSR - Special Scientific Reports

ABBREVIATIONS--Continued

SSR-F - Special Scientific Reports--Fisheries

SD - Statistical Digests

SL - Statistical Lists

TKS - Test Kitchen Series

PUBLICATION SERIES

- * Out of print; available only in libraries.
§ Title omitted; did not pertain to fisheries.

ADMINISTRATIVE REPORTS

- *AR 1. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1931. 1931. 33 p.
- *AR 2. Alaska fishery and fur-seal industries in 1930, by Ward T. Bower. 1931. 1-108 p., illus. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1931.
- *AR 3. Fishery industries of the United States; 1930, by R. H. Fiedler. 1931. 109-552 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1931.
- *AR 4. Progress in biological inquiries 1930; by Elmer Higgins. 1931. 553-626 p., illus. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1931.
- *AR 5. Propagation and distribution of food fishes, fiscal year 1931, by Glen C. Leach. 1932. 627-690 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1931.
- *AR 6. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1932. 1932. 27 p.
- *AR 7. Alaska fishery and fur-seal industries in 1931, by Ward T. Bower. 1932. 1-96 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1932.
- *AR 8. Fishery industries of the United States, 1931, by R. H. Fiedler. 1932. 97-440 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1932.
- *AR 9. Progress in biological inquiries, 1931, by Elmer Higgins. 1932. 441-529 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1932.
- *AR 10. Propagation and distribution of food fishes, fiscal year 1932, by Glen C. Leach. 1933. 531-569 p. Appendix 4 to report of Commissioner of Fisheries for the fiscal year 1932.
- *AR 11. Alaska fishery and fur-seal industries in 1932, by Ward T. Bower. 1933. 1-78 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1933.
- *AR 12. Progress in biological inquiries, 1932, by Elmer Higgins. 1933. 79-147 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1933.
- *AR 13. Fishery industries of the United States, 1932, by R. H. Fiedler. 1933. 149-449 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1933.
- *AR 14. Propagation and distribution of food fishes, fiscal year 1933, by Glen C. Leach. 1934. 451-484 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1933.
- *AR 15. Fishery industries of the United States, 1933, by R. H. Fiedler, John Ruel Manning and F. F. Johnson. 1934. 1-237 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1934.
- *AR 16. Alaska fishery and fur-seal industries in 1933, by Ward T. Bower. 1934. 239-312 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1934.
- *AR 17. Progress in biological inquiries, 1933, by Elmer Higgins. 1934. 313-383 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1934.
- *AR 18. Propagation and distribution of food fishes, fiscal year 1934, by Glen C. Leach and M. C. James. 1934. 385-417 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1934.

- *AR 19. Alaska fishery and fur-seal industries in 1934, by Ward T. Bower. 1935. 1-73 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1935.
- *AR 20. Fishery industries of the United States, 1934, by R. H. Fiedler. 1935. 75-330 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1935.
- *AR 21. Progress in biological inquiries, 1934, by Elmer Higgins. 1936. 331-399 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1935.
- *AR 22. Propagation and distribution of food fishes, fiscal year 1935, by Glen C. Leach and M. C. James. 1936. 401-427 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1935.
- *AR 23. Alaska fishery and fur-seal industries in 1935, by Ward T. Bower. 1936. 1-71 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1936.
- *AR 24. Fishery industries of the United States, 1935, by R. H. Fiedler. 1936. 73-348 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1936.
- *AR 25. Propagation and distribution of food fishes, fiscal year 1936, by Glen C. Leach and M. C. James. 1937. 349-379 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1936.
- *AR 26. Progress in biological inquiries, 1935, by Elmer Higgins. 1937. 381-452 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1936.
- *AR 27. Fishery industries of the United States, 1936, by R. H. Fiedler. 1938. 1-276 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1937.
- *AR 28. Alaska fishery and fur-seal industries in 1936, by Ward T. Bower. 1937. 277-347 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1937.
- *AR 29. Progress in biological inquiries, 1936, by Elmer Higgins. 1938. 61 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1937.
- *AR 30. Progress in biological inquiries, 1937, by Elmer Higgins. 1938. 1-70 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1938.
- *AR 31. Alaska fishery and fur-seal industries in 1937, by Ward T. Bower. 1938. 71-150 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1938.
- *AR 32. Fishery industries of the United States, 1937, by R. H. Fiedler. 1938. 151-460 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1938.
- *AR 33. Propagation and distribution of food fishes, fiscal year 1937, by Glen C. Leach and M. C. James. 1938. 461-492 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1937.
- *AR 34. Propagation and distribution of food fishes, fiscal year 1938, by Glen C. Leach, M. C. James and E. J. Douglass. 1939. 461-494 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1938.
- *AR 35. Progress in biological inquiries, 1938, by Elmer Higgins. 1939. 1-81 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1939.
- *AR 36. Alaska fishery and fur-seal industries in 1938, by Ward T. Bower. 1940. 83-168 p., illus. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1939.
- *AR 37. Fishery industries of the United States, 1938, by R. H. Fiedler. 1940. 169-554 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1939.
- *AR 38. Propagation and distribution of food fishes, fiscal year 1939, by Glen C. Leach, M. C. James and E. J. Douglass. 1940. 555-598 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1939.
- *AR 39. Progress in biological inquiries, 1939, by Elmer Higgins. 1940. 1-96 p. Appendix 1 to Report of Commissioner of Fisheries for the fiscal year 1940.
- *AR 40. Alaska fishery and fur-seal industries in 1939, by Ward T. Bower. 1941. 97-184 p. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1939.
- *AR 41. Fishery industries of the United States, 1939, by R. H. Fiedler. 1941. 185-554 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1940.
- *AR 42. Propagation and distribution of food fishes, fiscal year 1940, by Glen C. Leach, M. C. James and E. J. Douglass. 1941. 555-603 p. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1940.

CIRCULARS

- Cir 1-3. §
- Cir 4. A crisis in the haddock fishery, by William C. Herrington. 1941. 14 p., illus.
- Cir 5-10. §
- *Cir 11. DDT: Its effect on fish and wildlife, by Clarence Cottam and Elmer Higgins. 1946. 14 p.
- Cir 12. Propagation of minnows and other bait species by J. R. Dobie, O. L. Meehan, and G. N. Washburn. 1948. 113 p., illus.
- Cir 13. §
- Cir 14. English and local common names of Philippine fishes, by Albert W. Herre and Agustin F. Umali. 1948. 128 p.
- *Cir 15. Effects of DDT and other insecticides on fish and wildlife. Summary of investigations during 1947, by Joseph P. Linduska and Eugene W. Surber. 1948. 19 p.
- Cir 16. §
- Cir 17. Alaska's fish and wildlife, by Clarence J. Rhode and Will Barker. 1953. 60 p., illus. Supersedes Cir 3, Birds and mammals of Alaska (1942).
- Cir 18-19. §
- Cir 20. Fresh and frozen fish buying manual. In press. (1954)
- Cir 21. Survey of fishery activities 1953; a catalogue of current research and management projects pertaining to the sport fisheries of the United States, compiled by the Branch of Federal Aid. 1953. 133 p.
- Cir 22. §
- Cir 23. Indexes of transportation rates for fishery products, by M. J. Garfield. 1953. 12 p.
- Cir 24. Pacific salmon, hatchery propagation and its role in fishery management, by William Hagen, Jr. 1953. 56 p., illus.
- Cir 25. This is a salmon hatchery, producing salmon to maintain commercial and sport fisheries. 1953. 2 p.
- Cir 26. Survey of sport fishery projects, 1954, compiled in the Branch of Federal Aid. 1954. 143 p.
- Cir 27. §
- Cir 28. A visit to a Federal fish hatchery. 1954. 8 p., illus.
- Cir 29. Composition of cooked fish dishes, proximate analysis of dishes containing fish and shellfish, by Charles F. Lee. 1954. 8 [23] p.

CONSERVATION BULLETINS

CB 1-26. §

*CB 27. Wartime fish cookery, by Elizabeth Fuller Whiteman. 1943. 24 p., illus.

✓CB 28. Home canning of fishery products, by Norman D. Jarvis and Joseph F. Puncochar. 1946. 31 p., illus.

CB 29-32. §

CB 33. Food from the sea; fish and shellfish of New England, by Rachel L. Carson. 1943. 74 p., illus.

CB 34. Food from home waters: Fishes of the Middle West, by Rachel L. Carson. 1943. 44 p., illus.

CB 35. Fish stocking as related to the management of inland waters, by M. C. James, O. L. Meehan and E. J. Douglass. 1944. 22 p., illus.

CB 36. §

CB 37. Fish and shellfish of the South Atlantic and Gulf Coasts, by Rachel L. Carson. 1944. 45 p., illus.

✓CB 38. Fish and shellfish of the Middle Atlantic coast, by Rachel L. Carson. 1945. 32 p., illus.

CURRENT FISHERY STATISTICS

- CFS 1. Cold storage holdings of fishery products, Aug. 15, 1941. 2 p.
- CFS 2. Landings by fishing vessels at certain New England ports, Aug. 1941. 4 l.
- CFS 3. Cold storage holdings of fishery products, Sept. 15, 1941. 2 l.
- CFS 4. Landings by fishing vessels at certain New England ports, Sept. 1941. 4 l.
- CFS 5. Cold storage holdings of fishery products, Oct. 15, 1941. 2 p.
- CFS 6. Cold storage holdings of fishery products, Nov. 15, 1941. 2 p.
- CFS 7. Landings by fishing vessels at certain New England ports, Oct. 1941. 4 p.
- CFS 8. Cold storage holdings of fishery products, Dec. 15, 1941. 2 p.
- CFS 9. Landings by fishing vessels at certain New England ports, Nov. 1941. 4 p.
- CFS 10. Landings by fishing vessels at certain New England ports, Dec. 1941. 4 p.
- CFS 11. Cold storage holdings of fishery products, Jan. 15, 1942. 2 p.
- CFS 12. Landings by fishing vessels at certain New England ports, 1941. 7 p.
- CFS 13. Lake fisheries, 1940. 5 p.
- CFS 14. Landings by fishing vessels at certain New England ports, Jan. 1942. 4 p.
- CFS 15. Cold storage holdings of fishery products, Feb. 15, 1942. 2 p.
- CFS 16. Fishery products frozen and cold storage holdings of frozen and cured fishery products in the United States and Alaska, 1941. 5 p.
- CFS 17. Preliminary statement, Pacific salmon pack, 1941 summary. 4 p.
- CFS 18. Landings by fishing vessels at certain New England ports, Feb. 1942. 4 p.
- CFS 19. Fisheries of the Chesapeake Bay states, 1940. 3 p.
- CFS 20. Cold storage holdings of fishery products, Mar. 15, 1942. 2 p.
- CFS 21. Landings by fishing vessels at certain New England ports, 1941. 6 p.
- CFS 22. Preliminary statement of canned oyster pack, 1941. 1 p.
- CFS 23. Fisheries of the South Atlantic and Gulf States, 1940. 5 p.
- CFS 24. Fisheries of the Middle Atlantic States, 1940. 3 p.
- CFS 25. Fisheries of the New England States, 1940. 3 p.
- CFS 26. Fisheries of the Pacific Coast States, 1940. Rev. 3 p.
- CFS 27. Fisheries of the United States and Alaska, 1940. 6 p.
- CFS 28. Landings by fishing vessels at certain New England ports, Mar. 1942. 4 p.
- CFS 29. Cold storage holdings of fishery products, Apr. 15, 1942. 2 p.
- CFS 30. Manufactured fishery products of the United States and Alaska, 1940. 4 p.
- CFS 31. Cold storage holdings of fishery products, May 15, 1942. 2 p.
- CFS 32. Landings by fishing vessels at certain New England ports, Apr. 1942. 4 p.
- CFS 33. Cold storage holdings of fishery products, June 15, 1942. 2 p.
- CFS 34. Landings by fishing vessels at certain New England ports, May, 1942. 4 p.
- CFS 35. Production of fresh and frozen packaged fish in the United States, 1941. 2 p.
- CFS 36. Cold storage holdings of fishery products, July 15, 1942. 2 p.
- CFS 37. Landings by fishing vessels at certain New England ports, June 1942. 4 p.
- CFS 38. Cold storage holdings of fishery products, Aug. 15, 1942. 2 p.
- CFS 39. Landings by fishing vessels at certain New England ports, July 1942. 4 p.
- CFS 40. Cold storage holdings of fishery products, Sept. 15, 1942. 2 p.
- CFS 41. Landings by fishing vessels at certain New England ports, Aug. 1942. 4 p.

- CFS 42. Canned fishery products and byproducts of the United States and Alaska, 1941. 10 p.
- CFS 43. Cold storage holdings of fishery products, Oct. 15, 1942. 2 p.
- CFS 44. Landings by fishing vessels at certain New England ports, Sept. 1942. 4 p.
- CFS 45. Cold storage holdings of fishery products, Nov. 15, 1942. 2 p.
- CFS 46. Landings by fishing vessels at certain New England ports, Oct. 1942. 4 p.
- CFS 47. Landings by fishing vessels at certain New England ports, Nov. 1942. 4 p.
- CFS 48. Cold storage holdings of fishery products, Dec. 15, 1942. 2 p.
- CFS 49. Cold storage holdings of fishery products, Jan. 1, 1943. 2 p.
- CFS 50. Landings by fishing vessels at certain New England ports, Dec. 1942. 4 p.
- CFS 51. Landings by fishing vessels at certain New England ports, 1942. 6 p.
- CFS 52. Cold storage holdings of fishery products, Feb. 1, 1943. 2 p.
- CFS 53. Landings by fishing vessels at certain New England ports, Jan. 1943. 4 p.
- CFS 54. Fisheries of Alaska, 1941. 4 p.
- CFS 55. Landings by fishing vessels at certain New England ports, 1942. 7 p.
- CFS 56. Cold storage holdings of fishery products, Mar. 1, 1943. 2 p.
- CFS 57. Landings by fishing vessels at certain New England ports, Feb. 1943. 4 p.
- CFS 58. Cold storage holdings of fishery products, Apr. 1, 1943. 2 p.
- CFS 59. Preliminary statement of canned oyster pack, 1942. 1 p.
- CFS 60. Preliminary statement, Pacific salmon pack, 1942 summary. 4 p.
- CFS 61. Landing by fishing vessels at certain New England ports, Mar. 1943. 4 p.
- CFS 62. Vitamin A report, Dec. 1942. 1 p.
- CFS 63. Vitamin A report, Jan. 1943. 1 p.
- CFS 64. Vitamin A report, Feb. 1943. 1 p.
- CFS 65. Cold storage holdings of fishery products, May 1, 1943. 2 p.
- CFS 66. Fisheries of the Chesapeake Bay States, 1941. 3 p.
- CFS 67. Vitamin A report, Mar. 1943. 1 p.
- CFS 68. Manufactured fishery products of the United States and Alaska. 4 p.
- CFS 69. Landings by fishing vessels at certain New England ports, Apr. 1943. 4 p.
- CFS 70. Cold storage holdings of fishery products, June 1, 1943. 2 p.
- CFS 71. Vitamin A report, Apr. 1943. 1 p.
- CFS 72. Lake fisheries, 1941. 2 p.
- CFS 73. Landings by fishing vessels at certain New England ports, May 1943. 4 p.
- CFS 74. Cold storage holdings of fishery products, July 1, 1943. 2 p.
- CFS 75. Vitamin A report, May 1943. 1 p.
- CFS 76. Vitamin A report, June 1943. 1 p.
- CFS 77. Landings by fishing vessels at certain New England ports, June 1943. 4 p.
- CFS 78. Fishery products frozen and cold storage holdings of frozen and cured fishery products in the United States and Alaska, 1942. 6 p.
- CFS 79. Cold storage holdings of fishery products, Aug. 1, 1943. 2 p.
- CFS 80. Vitamin A report, July 1943. 1 p.
- CFS 81. Landings by fishing vessels at certain New England ports, July 1943. 4 p.
- CFS 82. Production of fresh and frozen packaged fish in the United States, 1942. 2 p.
- CFS 83. Cold storage holdings of fishery products, Sept. 1, 1943. 2 p.
- CFS 84. Landings by fishing craft at New Bedford, Massachusetts, July 1943. 2 p.
- CFS 85. Landings by fishing vessels at certain New England ports, Aug. 1943. 4 p.

- CFS 86. Vitamin A report, Aug. 1943. 1 p.
- CFS 87. Cold storage holdings of fishery products, Oct. 1, 1943. 2 p.
- CFS 88. Vitamin A report, Sept. 1943. 1 p.
- CFS 89. Landings by fishing vessels at certain New England ports, Sept. 1943. 4 p.
- CFS 90. Fisheries of the United States and Alaska. 6 p.
- CFS 91. Cold storage holdings of fishery products, Nov. 1, 1943. 2 p.
- CFS 92. Vitamin A report, Oct. 1943. 1 p.
- CFS 93. Canned fishery products and byproducts of the United States and Alaska, 1942. 10 p.
- CFS 94. Landings by fishing craft at New Bedford, Massachusetts, Aug. 1943. 2 p.
- CFS 95. Landings by fishing vessels at certain New England ports, Oct. 1943. 4 p.
- CFS 96. Cold storage holdings of fishery products, Dec. 1, 1943. 2 p.
- CFS 97. Fisheries of Alaska, 1942. 4 p.
- CFS 98. Vitamin A report, Nov. 1943. 1 p.
- CFS 99. Landings by fishing vessels at certain New England ports, Nov. 1943. 4 p.
- CFS 100. Cold storage holdings of fishery products, Jan. 1, 1944. 2 p.
- CFS 101. Landings by fishing craft at New Bedford, Massachusetts, Sept. 1943. 2 p.
- CFS 102. Landings by fishing craft at New Bedford, Massachusetts, Oct. 1943. 2 p.
- CFS 103. Landings by fishing craft at New Bedford, Massachusetts, Nov. and Dec. 1943. 3 p.
- CFS 104. Landings by fishing vessels at certain New England ports, Dec. 1943. 3 p.
- CFS 105. Landings by fishing vessels at certain New England ports, 1943. 8 p.
- CFS 106. Vitamin A report, Dec. 1943. 4 p.
- CFS 107. Cold storage holdings of fishery products, Feb. 1, 1944. 2 p.
- CFS 108. Landings of fishery products at New Bedford, Massachusetts, 1942. 2 p.
- CFS 109. Landings by fishing vessels at certain New England ports, Jan. 1944. 4 p.
- CFS 110. Landings of fishery products at New Bedford, Massachusetts, 1943. 2 p.
- CFS 111. Vitamin A report, Jan. 1944. 2 p.
- CFS 112. Landings by fishing craft at New Bedford, Massachusetts, Jan. 1944. 2 p.
- CFS 113. Cold storage holdings of fishery products, Mar. 1, 1944. 2 p.
- CFS 114. Lake fisheries, 1942. 2 p.
- CFS 115. Landings by fishing craft at New Bedford, Massachusetts, Feb. 1944. 2 p.
- CFS 116. Preliminary statement of canned oyster pack, 1943. 1 p.
- CFS 117. Fisheries of the Pacific Coast States, 1941. 2 p.
- CFS 118. Landings by fishing vessels at certain New England ports, 1943. 6 p.
- CFS 119. Vitamin A report, Feb. 1944. 1 p.
- CFS 120. Landings by fishing vessels at certain New England ports, Feb. 1944. 5 p.
- CFS 121. Cold storage holdings of fishery products, Apr. 1, 1944. 2 p.
- CFS 122. Vitamin A report, Mar. 1944. 2 p.
- CFS 123. Landings by fishing vessels at certain New England ports, Mar. 1944. 5 p.
- CFS 124. Landings by fishing craft at New Bedford, Massachusetts, Mar. 1944. 2 p.
- CFS 125. Cold storage holdings of fishery products, May 1, 1944. 2 p.
- CFS 126. Landings by fishing vessels at certain New England ports, Apr. 1944. 6 p.
- CFS 127. Vitamin A report, Apr. 1944. 2 p.
- CFS 128. Landings by fishing craft at New Bedford, Massachusetts, Apr. 1944. 2 p.
- CFS 129. Landings by fishing craft at New Bedford, Massachusetts, 1943. 4 p.
- CFS 130. Cold storage holdings of fishery products, June 1, 1944. 2 p.

- CFS 131. Vitamin A report, May 1944. 2 p.
- CFS 132. Landings by fishing vessels at certain New England ports, May 1944. 6 p.
- CFS 133. Production of fresh and frozen packaged fish in the United States, 1943. 2 p.
- CFS 134. Landings by fishing craft at New Bedford Massachusetts, May 1944. 2 p.
- CFS 135. Preliminary statement, Pacific salmon pack, 1943 summary. Rev. 4 p.
- CFS 136. Cold storage holdings of fishery products, July 1, 1944. 2 p.
- CFS 137. Landings by fishing vessels at certain New England ports, June 1944. 6 p.
- CFS 138. Landings by fishing craft at New Bedford, Massachusetts, June 1944. 2 p.
- CFS 139. Vitamin A report, June 1944. 2 p.
- CFS 140. Cold storage holdings of fishery products, Aug. 1, 1944. 2 p.
- CFS 141. Landings by fishing vessels at certain New England ports, July 1944. 6 p.
- CFS 142. Landings by fishing craft at New Bedford, Massachusetts, July 1944. 4 p.
- CFS 143. Fisheries of Alaska, 1943. Rev. 4 p.
- CFS 144. Landings by fishing vessels at certain New England ports, Aug. 1944. 6 p.
- CFS 145. Cold storage holdings of fishery products, Sept. 1, 1944. 2 p.
- CFS 146. Vitamin A report, July 1944. 2 p.
- CFS 147. Landings by fishing craft at New Bedford, Massachusetts, Aug. 1944. 4 p.
- CFS 148. Fishery products frozen and cold storage holdings of frozen and cured fishery products in the United States and Alaska, 1943. 6 p.
- CFS 149. Cold storage holdings of fishery products, Oct. 1, 1944. 2 p.
- CFS 150. Vitamin A report, Aug. 1944. 2 p.
- CFS 151. Landings by fishing craft at New Bedford, Massachusetts, Sept. 1944. 4 p.
- CFS 152. Landings by fishing vessels at certain New England ports, Sept. 1944. 6 p.
- CFS 153. Cold storage holdings of fishery products, Nov. 1, 1944. 2 p.
- CFS 154. Landings by fishing craft at New Bedford, Massachusetts, Oct. 1944. 4 p.
- CFS 155. Landings by fishing vessels at certain New England ports, Oct. 1944. 6 p.
- CFS 156. Canned fish and byproducts, 1943 annual summary. Rev. 20 p., illus.
- CFS 157. Cold storage holdings of fishery products, Dec. 1, 1944. 2 p.
- CFS 158. Landings by fishing vessels at certain New England ports, Nov. 1944. 6 p.
- CFS 159. Landings by fishing craft at New Bedford, Massachusetts, Nov. 1944. 4 p.
- CFS 160. Vitamin A report, Sept. 1944. 2 p.
- CFS 161. Vitamin A report, Oct. 1944. 2 p.
- CFS 162. Vitamin A report, Nov. 1944. 2 p.
- CFS 163. Cold storage holdings of fishery products, Jan. 1, 1945. 2 p.
- CFS 164. New England Fisheries - 1942 annual summary. Rev. 5 p., illus.
- CFS 165. Middle Atlantic fisheries - 1942. 5 p., illus.
- CFS 166. Landings by fishing vessels at certain New England ports, Dec. 1944. 6 p.
- CFS 167. Landings by fishing craft at New Bedford, Massachusetts, Dec. 1944. 4 p.
- CFS 168. Landings by fishing craft at New Bedford, Massachusetts, 1944. 2 p.
- CFS 169. Landings by fishing vessels at certain New England ports, 1944. 8 p.
- CFS 170. Cold storage holdings and freezings of fishery products, Feb. 1, 1945. 8 p., illus.
- CFS 171. Landings by undertonnage boats at certain New England ports, 1944. 26 p.
- CFS 172. Landings by fishing craft at New Bedford, Massachusetts, Jan. 1945. 4 p.
- CFS 173. Frozen fish report, Mar. 1945. 10 p., illus.
- CFS 174. Vitamin A report, Dec. 1944. 2 p.
- CFS 175. Vitamin A report, Jan. 1945. 2 p.

- CFS 176. Frozen fish - 1944. 7 p., illus.
- CFS 177. New England landings - 1944 annual summary. 15 p., illus.
- CFS 178. New England landings, Boston, Gloucester, Portland, Jan. 1945. 5 p., illus.
- CFS 179. Frozen fish report, Apr. 1945. 10 p., illus.
- CFS 180. Pacific coast fisheries - 1942. 5 p., illus.
- CFS 181. Chesapeake Fisheries - 1942. 5 p., illus.
- CFS 182. Manufactured fishery products, summary for 1942. 9 p., illus.
- CFS 183. Fisheries of the United States and Alaska, annual summaries, 1942-44. 17 p., illus.
- CFS 184. Canned salmon - 1944, annual summary. 7 p., illus.
- CFS 185. New England landings, Boston, Gloucester, Portland, Feb. 1945. 13 p., illus.
- CFS 186. New England landings, New Bedford, Feb. 1945. 5 p., illus.
- CFS 187. Frozen fish report, May 1945. 9 p., illus.
- CFS 188. New England landings, Boston, Gloucester, Portland, Mar. 1945. 13 p., illus.
- CFS 189. Imports and exports of fishery products, 1942 annual summary. 7 p., illus.
- CFS 190. New England landings, New Bedford, Mar. 1945. 5 p., illus.
- CFS 191. Vitamin A report, Feb. 1945. 2 p.
- CFS 192. Vitamin A report, Mar. 1945. 2 p.
- CFS 193. New York City landings, annual summaries, 1938-1944. 15 p., illus.
- CFS 194. Vitamin A report, Apr. 1945. Rev. 2 p.
- CFS 195. New England landings, New Bedford, Apr. 1945. 5 p., illus.
- CFS 196. Canned oysters - 1944 annual summary. 1 p., illus.
- CFS 197. Frozen fish report, June 1945. 11 p., illus.
- CFS 198. New England landings, Boston, Gloucester, Portland, Apr. 1945. 13 p., illus.
- CFS 199. New England landings, Boston, Gloucester, Portland, May 1945. 13 p., illus.
- CFS 200. Vitamin A report, May 1945. 3 p., illus.
- CFS 201. New England landings, New Bedford, May 1945. 5 p., illus.
- CFS 202. Alaska fisheries - 1944 annual summary. 9 p., illus.
- CFS 203. Frozen fish report, July 1945. 11 p., illus.
- CFS 204. Current fishery trade, monthly summary, Jan. - Mar. 1945. 13 p., illus.
- CFS 205. New England landings - 1944, New Bedford, by gear and area, annual summary. 9 p., illus.
- CFS 206. Fish meal and oil, June 1945. 3 p., illus.
- CFS 207. Lake fisheries - 1943 annual summary. 7 p., illus.
- CFS 208. Current fishery trade, monthly summary, Jan. - Apr. 1945. 12 p., illus.
- CFS 209. New England landings, New Bedford, June 1945. 5 p., illus.
- CFS 210. Vitamin A report, June 1945. 3 p., illus.
- CFS 211. Frozen fish report, Aug. 1945. 11 p., illus.
- CFS 212. New England landings, Boston, Gloucester, Portland, June 1945. 13 p., illus.
- CFS 213. Current fishery trade, monthly summary, May 1945. 12 p., illus.
- CFS 214. Fish meal and oil, July 1945. 3 p., illus.
- CFS 215. Vitamin A report, July 1945. 3 p., illus.
- CFS 216. Current fishery trade, monthly summary, Sept. 1945. 12 p., illus.

- CFS 217. New England landings, New Bedford, July 1945. 5 p., illus.
- CFS 218. Frozen fish report, Sept. 1945. 11 p., illus.
- CFS 219. New England landings, Boston, Gloucester, Portland, July 1945. 13 p., illus.
- CFS 220. Canned fish and byproducts - 1944 annual summary. Rev. 24 p., illus.
- CFS 221. Current fishery trade, monthly summary, June 1945. 10 p., illus.
- CFS 222. Current fishery trade, monthly summary, July 1945. 12 p., illus.
- CFS 223. Vitamin A report, Aug. 1945. 3 p., illus.
- CFS 224. Fish meal and oil, Aug. 1945. 5 p., illus.
- CFS 225. Frozen fish report, Oct. 1945. 11 p., illus.
- CFS 226. New England landings, New Bedford, Aug. 1945. 5 p., illus.
- CFS 227. New England landings, Boston, Gloucester, Portland, Aug. 1945. 13 p., illus.
- CFS 228. New England landings, Boston, Gloucester, Portland, Sept. 1945. 13 p., illus.
- CFS 229. Fish meal and oil, Sept. 1945. 3 p., illus.
- CFS 230. Packaged fish - 1944 annual summary. 5 p., illus.
- CFS 231. Frozen fish report, Nov. 1945. 11 p., illus.
- CFS 232. Current fishery trade, monthly summary, Aug. 1945. 14 p., illus.
- CFS 233. New England landings, New Bedford, Sept. 1945. 5 p., illus.
- CFS 234. Vitamin A report, Sept. 1945. 3 p., illus.
- CFS 235. Frozen fish report, Dec. 1945. 13 p., illus.
- CFS 236. Fish meal and oil, Oct. 1945. 5 p., illus.
- CFS 237. New England landings, Boston, Gloucester, Portland, Oct. 1945. 13 p., illus.
- CFS 238. Vitamin A report, Oct. 1945. 3 p., illus.
- CFS 239. Current fishery trade, monthly summary, Oct. 1945. 12 p., illus.
- CFS 240. New England landings, New Bedford, Oct. 1945. 5 p., illus.
- CFS 241. Frozen fish report, Jan. 1946. 13 p., illus.
- CFS 242. Fish meal and oil, Nov. 1945. 3 p., illus.
- CFS 243. New England landings, New Bedford, Nov. 1945. 5 p., illus.
- CFS 244. New England landings, Boston, Gloucester, Portland, Nov. 1945. 11 p., illus.
- CFS 245. Frozen fish - 1945 annual summary. 13 p., illus.
- CFS 246. Current fishery trade, monthly summary, Nov. 1945. 12 p., illus.
- CFS 247. New England landings, New Bedford, Dec. 1945. 5 p., illus.
- CFS 248. New England landings, Boston, Gloucester, Portland, Dec. 1945. 7 p., illus.
- CFS 249. Vitamin A report, Nov. 1945. 3 p., illus.
- CFS 250. New England landings, Boston, Gloucester, New Bedford, Portland, annual summary, 1945. 11 p., illus.
- CFS 251. Fish meal and oil, Dec. 1945. 5 p., illus.
- CFS 252. Frozen fish report, Feb. 1946. 11 p., illus.
- CFS 253. Vitamin A report, Dec. 1946. 3 p., illus.
- CFS 254. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Jan. 1946. 11 p., illus.
- CFS 255. Current fishery trade, monthly summary, Dec. 1945. 11 p., illus.
- CFS 256. Fish meal and oil, Jan. 1946. 1 p., illus.
- CFS 257. Frozen fish report, Mar. 1946. 11 p., illus.
- CFS 258. Fish meal and oil, Feb. 1946. 1 p., illus.

- CFS 259. Current fishery trade, summary for 1945. 3 p., illus.
- CFS 260. Canned oysters - 1945 annual summary. 1 p., illus.
- CFS 261. Frozen fish report, Apr. 1946. 11 p., illus.
- CFS 262. Canned fish - 1945. Preliminary report. 11 p., illus.
- CFS 263. Fish meal and oil, Mar. 1946. 4 p., illus.
- CFS 264. New England landings, 1945, by gear and area, annual summary. 15 p., illus.
- CFS 265. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Feb. 1946. 13 p., illus.
- CFS 266. Vitamin A report, Jan. 1946. 1 p., illus.
- CFS 267. Vitamin A report, Feb. 1946. 1 p., illus.
- CFS 268. Frozen fish report, May 1946. 11 p., illus.
- CFS 269. New York City landings - 1945 annual summary. 3 p., illus.
- CFS 270. Fish meal and oil, Apr. 1946. 1 p., illus.
- CFS 271. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Mar. 1946. 13 p.
- CFS 272. Frozen fish report, June 1946. 11 p., illus.
- CFS 273. Vitamin A report, Mar. 1946. 1 p., illus.
- CFS 274. Current fishery trade, monthly summary, Jan. - Mar. 1946. 13 p., illus.
- CFS 275. Frozen fish report, July 1946. 11 p., illus.
- CFS 276. Pacific coast fisheries - 1943 annual summary. 5 p., illus.
- CFS 277. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Apr. 1946. 13 p., illus.
- CFS 278. Fish meal and oil, May 1946. 1 p., illus.
- CFS 279. Canned salmon - 1945 annual summary. 7 p., illus.
- CFS 280. New England landings - 1945, New Bedford, by gear and area, annual summary. 9 p., illus.
- CFS 281. Frozen fish report, Aug. 1946. 11 p., illus.
- CFS 282. Vitamin A report, Apr. 1946. 1 p., illus.
- CFS 283. Current fishery trade, monthly summary, Apr. 1946. 11 p., illus.
- CFS 284. Vitamin A report, May 1946. 1 p., illus.
- CFS 285. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, May 1946. 13 p., illus.
- CFS 286. Fish meal and oil, June 1946. 1 p., illus.
- CFS 287. Frozen fish report, Sept. 1946. 11 p., illus.
- CFS 288. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, June 1946. 13 p., illus.
- CFS 289. Current fishery trade, monthly summary, May 1946. 11 p., illus.
- CFS 290. Fish meal and oil, July 1946. 1 p., illus.
- CFS 291. Frozen fish report, Oct. 1946. 11 p., illus.
- CFS 292. Vitamin A report, June 1946. 1 p.
- CFS 293. Vitamin A report, July 1946. 1 p.
- CFS 294. Current fishery trade, monthly summary, June 1946. 11 p., illus.
- CFS 295. Fish meal and oil, Aug. 1946. 1 p., illus.
- CFS 296. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, July 1946. 13 p., illus.
- CFS 297. Current fishery trade, monthly summary, July 1946. 11 p., illus.
- CFS 298. Vitamin A report, Aug. 1946. 1 p.
- CFS 299. Maine landings, July and Aug. 1946. 5 p.
- CFS 300. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Aug. 1946. 13 p., illus.

- CFS 301. Frozen fish report, Nov. 1946. 10 p., illus.
- CFS 302. Fish meal and oil, Sept. 1946. 1 p., illus.
- CFS 303. Vitamin A report, Sept. 1946. 1 p., illus.
- CFS 304. Canned fish and byproducts - 1945 annual summary. 21 p., illus.
- CFS 305. Maine landings, Sept. 1946. 4 p., illus.
- CFS 306. Frozen fish report, Dec. 1946. 8 p., illus.
- CFS 307. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Sept. 1946. 13 p., illus.
- CFS 308. Fish meal and oil, Oct. 1946. 1 p., illus.
- CFS 309. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Oct. 1946. 13 p., illus.
- CFS 310. Maine landings, Oct. 1946. 4 p., illus.
- CFS 311. Current fishery trade, monthly summary, Aug. 1946. 10 p., illus.
- CFS 312. Fish meal and oil, Nov. 1946. 1 p., illus.
- CFS 313. Frozen fish report, Jan. 1947. 9 p., illus.
- CFS 314. Vitamin A report, Oct. 1946. 1 p., illus.
- CFS 315. Maine landings, Nov. 1946. 4 p., illus.
- CFS 316. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Nov. 1946. 13 p., illus.
- CFS 317. Canned fish meal and oil - 1946 preliminary report. 3 p., illus.
- CFS 318. Frozen fish - 1946 annual summary. 13 p., illus.
- CFS 319. New England landings, Boston, Gloucester, New Bedford, Cape Cod, Portland, Dec. 1946. 13 p., illus.
- CFS 320. New England landings - 1946, Boston, Gloucester, New Bedford, Cape Cod, Portland, annual summary. 19 p., illus.
- CFS 321. Fish meal and oil, Dec. 1946. 1 p., illus.
- CFS 322. Frozen fish report, Feb. 1947. 9 p., illus.
- CFS 323. Vitamin A report, Nov. 1946. Rev. 1 p., illus.
- CFS 324. Vitamin A report, Dec. 1946. 1 p., illus.
- CFS 325. Maine landings, Dec. 1946. 6 p., illus.
- *CFS 326. Lake fisheries, 1944. 7 p.
- CFS 327. Fish meal and oil, Jan. 1947. 5 p., illus.
- CFS 328. Frozen fish report, Mar. 1947. 9 p., illus.
- CFS 329. Maine landings, Jan. 1947. 4 p., illus.
- CFS 330. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Jan. 1947. 11 p., illus.
- CFS 331. Alaska fisheries - 1945 annual summary. 9 p., illus.
- CFS 332. Pacific coast fisheries - 1944 annual summary. 7 p., illus.
- CFS 333. Fish meal and oil, Feb. 1947. 1 p., illus.
- CFS 334. Middle Atlantic fisheries - 1943 annual summary. 4 p., illus.
- CFS 335. Frozen fish report, Apr. 1947. 9 p., illus.
- CFS 336. Maine landings, Feb. 1947. 4 p., illus.
- CFS 337. Vitamin A report, Jan. 1947. 1 p., illus.
- CFS 338. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Feb. 1947. 13 p., illus.
- CFS 339. Middle Atlantic fisheries - 1944 annual summary. 4 p., illus.
- CFS 340. Vitamin A report, Feb. 1947. 1 p., illus.
- CFS 341. New England fisheries - 1943 annual summary. 4 p., illus.
- CFS 342. Chesapeake fisheries - 1944 annual summary. 4 p., illus.

- CFS 343. Fish meal and oil, Mar. 1947. 1 p., illus.
- CFS 344. Frozen fish report, May 1947. 8 p., illus.
- CFS 345. Maine landings, Mar. 1947. 4 p., illus.
- CFS 346. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Mar. 1947. 13 p., illus.
- CFS 347. Fish meal and oil, Apr. 1947. 1 p., illus.
- CFS 348. Frozen fish report, June 1947. 9 p., illus.
- CFS 349. Maine landings, Apr. 1947. 4 p., illus.
- *CFS 350. New England fisheries, 1944. 6 p.
- *CFS 351. Lake fisheries - 1945. 7 p., illus.
- *CFS 352. Frozen fish, July 1947. 8 p.
- *CFS 353. Maine landings, May 1947. 6 p.
- *CFS 354. Fisheries of the United States and Alaska, 1943. 14 p.
- *CFS 355. Manufactured fishery products, 1943. 6 p.
- *CFS 356. Manufactured fishery products, 1944. 6 p.
- *CFS 357. Fisheries of the United States and Alaska. 16 p.
- CFS 358. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Apr. 1947. 13 p., illus.
- CFS 359. Fish meal and oil, May 1947. 1 p., illus.
- CFS 360. Fish meal and oil, June 1947. 1 p., illus.
- CFS 361. Frozen fish report, Aug. 1947. 9 p., illus.
- CFS 362. Maine landings, June 1947. 4 p., illus.
- CFS 363. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, May 1947. 13 p., illus.
- CFS 364. Frozen fish report, Sept. 1947. 9 p., illus.
- CFS 365. Maine landings, July 1947. 4 p., illus.
- CFS 366. Fish meal and oil, July 1947. 1 p., illus.
- CFS 367. New York City landings - 1946 annual summary. 3 p., illus.
- CFS 368. Imports and exports of fishery products - 1942 - 1946 annual summaries. 9 p.
- CFS 369. Fish meal and oil, Aug. 1947. 1 p., illus.
- CFS 370. Frozen fish report, Oct. 1947. 9 p., illus.
- CFS 371. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, June 1947. 13 p., illus.
- CFS 372. Maine landings, Aug. 1947. 4 p., illus.
- CFS 373. Canned fish and byproducts - 1946 annual summary. 22 p., illus.
- CFS 374. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, July 1947. 13 p., illus.
- CFS 375. Frozen fish report, Nov. 1947. 8 p., illus.
- CFS 376. Fish meal and oil, Sept. 1947. 1 p., illus.
- CFS 377. Maine landings, Sept. 1947. 4 p., illus.
- CFS 378. South Atlantic and Gulf fisheries - 1945 annual summary. 9 p., illus.
- CFS 379. Fish meal and oil, Oct. 1947. 1 p., illus.
- CFS 380. Frozen fish report, Dec. 1947. 9 p., illus.
- CFS 381. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Aug. 1947. 13 p. illus.
- CFS 382. Maine landings, Oct. 1947. 4 p., illus.
- CFS 383. Fish meal and oil, Nov. 1947. 1 p., illus.
- CFS 384. Frozen fish report, Jan. 1948. 8 p., illus.
- CFS 385. Pacific coast fisheries - 1945 annual summary. 5 p., illus.

- CFS 386. Maine landings, Nov. 1947. 4 p., illus.
- CFS 387. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Sept. 1947. 13 p., illus.
- CFS 388. Packaged fish - 1945 annual summary. 2 p., illus.
- CFS 389. Packaged fish - 1946 annual summary. 5 p., illus.
- CFS 390. Fish meal and oil, Dec. 1947. 1 p., illus.
- CFS 391. Frozen fish - 1947 annual summary. 13 p., illus.
- CFS 392. Frozen fish report, Feb. 1948. 9 p., illus.
- CFS 393. Maine landings, Dec. 1947. 4 p., illus.
- CFS 394. Fish meal and oil, Jan. 1948. 1 p., illus.
- CFS 395. Frozen fish report, Mar. 1948. 9 p., illus.
- CFS 396. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Oct 1947. 13 p., illus.
- CFS 397. Fish meal and oil, Feb. 1948. 3 p., illus.
- CFS 398. Maine landings, Jan. 1948. 4 p., illus.
- CFS 399. Frozen fish report, Apr. 1948. 8 p., illus.
- CFS 400. Maine landings, Feb. 1948. 4 p., illus.
- CFS 401. Alaska fisheries - 1946 annual summary. 9 p., illus.
- CFS 402. New England landings, 1946, by gear and area, annual summary. 21 p., illus.
- CFS 403. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Nov. 1947. 13 p., illus.
- CFS 404. Frozen fish report, May 1948. 9 p., illus.
- CFS 405. Fish meal and oil, Mar. 1948. 1 p., illus.
- CFS 406. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Dec. 1947. 13 p., illus.
- CFS 407. Maine landings, Mar. 1948. 4 p., illus.
- CFS 408. Fish meal and oil, Apr. 1948. 1 p., illus.
- CFS 409. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Jan. 1948. 11 p., illus.
- CFS 410. Frozen fish report, June 1948. 9 p., illus.
- CFS 411. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, 1947 annual summary. 15 p., illus.
- CFS 412. Maine landings, Apr. 1948. 4p., illus.
- CFS 413. Lake fisheries - 1946 annual summary. 7 p., illus.
- CFS 414. Fish meal and oil, May 1948. 1 p., illus.
- *CFS 415. Frozen fish report, July 1948. 9 p., illus.
- CFS 416. Maine landings, May 1948. 4 p., illus.
- CFS 417. Chesapeake fisheries - 1945 annual summary. 3 p., illus.
- CFS 418. Fish meal and oil, June 1948. 1 p., illus.
- CFS 419. Frozen fish report, Aug. 1948. 9 p., illus.
- CFS 420. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Feb. 1948. 13 p., illus.
- CFS 421. Maine landings, June 1948. 3 p., illus.
- CFS 422. Middle Atlantic fisheries - 1945 annual summary. 5 p., illus.
- CFS 423. Frozen fish report, Sept. 1948. 9 p., illus.
- CFS 424. Fish meal and oil, July 1948. 1 p., illus.

- CFS 425. Massachusetts landings, Boston, Gloucester, New Bedford, Cape Cod, Mar. 1948. 13 p., illus.
- CFS 426. New England fisheries - 1945 annual summary. 5 p., illus.
- CFS 427. Maine landings, July 1948. 4 p.
- CFS 428. Frozen fish report, Oct. 1948. 9 p., illus.
- CFS 429. Fish meal and oil, Aug. 1948. 1 p., illus.
- CFS 430. Maine landings, Aug. 1948. 3 p., illus.
- CFS 431. Massachusetts landings, Apr. 1948. 13 p., illus.
- CFS 432. Massachusetts landings, May 1948. 13 p., illus.
- CFS 433. Fisheries of the United States and Alaska, 1945 annual summary. 11 p., illus.
- CFS 434. Manufactured fishery products, 1945 annual summary. 6 p., illus.
- CFS 435. Frozen fish report, Nov. 1948. 9 p., illus.
- CFS 436. Fish meal and oil, Sept. 1948. 3 p., illus.
- CFS 437. Maine landings, 1947 annual summary. 9 p., illus.
- CFS 438. Alaska fisheries - 1947 annual summary. Rev. 5 p., illus.
- CFS 439. Packaged fish - 1947 annual summary. Rev. 3p., illus.
- CFS 440. Massachusetts landings, June 1948. 13 p., illus.
- CFS 441. Maine landings, Sept. 1948. 3 p., illus.
- CFS 442. Massachusetts landings, July, 1948. 13p., illus
- CFS 443. Frozen fish report, Dec. 1948. 9 p., illus.
- CFS 444. Canned fish and byproducts - 1947. 18 p., illus.
- CFS 445. Fish meal and oil, Oct. 1948. 1 p., illus.
- CFS 446. Fish meal and oil, Nov. 1948. 1 p., illus.
- CFS 447. Massachusetts landings, Aug. 1948. 13 p., illus.
- CFS 448. Maine landings, Oct. 1948. 3 p., illus.
- CFS 449. Fish meal and oil, Dec. 1948. 1 p., illus.
- CFS 450. Frozen fish report, Jan. 1949. 8 p., illus.
- CFS 451. Maine landings, Nov. 1948. 3 p., illus.
- CFS 452. Massachusetts landings, Sept. 1948. 13 p., illus.
- CFS 453. Frozen fish report, Feb. 1949. 9 p., illus.
- CFS 454. Massachusetts landings, Oct. 1948. 13 p., illus.
- CFS 455. Fish meal and oil, Jan. 1949. 1 p., illus.
- CFS 456. Maine landings, Dec. 1948. 3 p., illus.
- CFS 457. Frozen fish - 1948 annual summary. 15 p., illus.
- CFS 458. Maine landings - 1948 annual summary. 5 p., illus.
- CFS 459. Frozen fish report, Mar. 1949. 9 p., illus.
- CFS 460. Massachusetts landings, Nov. 1948. 13 p., illus.
- CFS 461. Massachusetts landings, Dec. 1948. 13 p., illus.
- CFS 462. Maine landings, Jan. 1949. 3 p., illus.
- CFS 463. Fish meal and oil, Feb. 1949. 1 p., illus.
- CFS 464. Frozen fish report, Apr. 1, 1949. 9 p., illus.
- CFS 465. Fish meal and oil, Mar. 1949. Rev. 1 p., illus.
- CFS 466. Massachusetts landings, Jan. 1949. 11 p., illus.

Series

- CFS 467. Maine landings, Feb. 1949. 3 p., illus.
- CFS 468. Chesapeake fisheries - 1946 annual summary. 3 p., illus.
- CFS 469. New York fisheries - 1946 annual summary. 3 p., illus.
- CFS 470. Massachusetts landings, Feb. 1949. 13 p., illus.
- CFS 471. Frozen fish report, May 1949. 8 p., illus.
- CFS 472. Massachusetts landings - 1948, by ports, annual summary. 15 p., illus.
- CFS 473. Maine landings, Mar. 1949. 3 p., illus.
- CFS 474. Fish meal and oil, Apr. 1949. 1 p., illus.
- CFS 475. Massachusetts landings, Mar. 1949. 13 p., illus.
- CFS 476. Imports and exports of fishery products - 1944-1948 annual summaries. 9 p., illus.
- CFS 477. Frozen fish report, June 1949. 9 p., illus.
- CFS 478. Fish meal and oil, May 1949. 2 p., illus.
- CFS 479. Maine landings, Apr. 1949. 3 p., illus.
- CFS 480. New England fisheries - 1946 annual summary. 7 p., illus.
- CFS 481. Pacific coast fisheries - 1946 annual summary. 3 p., illus.
- CFS 482. Massachusetts landings, Apr. 1949. 13 p., illus.
- CFS 483. Frozen fish report, July 1949. 9 p., illus.
- CFS 484. Maine landings - 1948, by counties, annual summary. 10 p., illus.
- CFS 485. Maine landings, May 1949. 3 p., illus.
- CFS 486. Fish meal and oil, June 1949. 3 p., illus.
- CFS 487. Fisheries of the United States and Alaska - 1946 annual summary. 11 p., illus.
- CFS 488. Pacific coast fisheries - 1947 annual summary. Rev. 5 p., illus.
- CFS 489. Frozen fish report, Aug. 1949. 9 p., illus.
- CFS 490. Massachusetts landings, May 1949. 13 p., illus.
- CFS 491. Maine landings, June 1949. 3 p., illus.
- CFS 492. Packaged fish - 1948 annual summary. Rev. 3 p., illus.
- CFS 493. Fish meal and oil, July 1949. 2 p., illus.
- CFS 494. Frozen fish report, Sept. 1949. 9 p., illus.
- CFS 495. Fish meal and oil, Aug. 1949. 1 p., illus.
- CFS 496. Maine landings, July 1949. 3 p., illus.
- CFS 497. Canned fish and byproducts - 1948 annual summary. 18 p., illus.
- CFS 498. Massachusetts landings, June 1949. 13 p., illus.
- CFS 499. Frozen fish report, Oct. 1949. 9 p., illus.
- CFS 500. Massachusetts landings, July 1949. 13 p., illus.
- CFS 501. Maine landings, Aug. 1949. 3 p., illus.
- CFS 502. Fish meal and oil, Sept. 1949. 2 p., illus.
- CFS 503. Texas landings, Sept. 1949. 3 p., illus.
- CFS 504. Manufactured fishery products - 1946 annual summary. 6 p.
- CFS 505. Massachusetts landings - 1947, by gear and area, annual summary. 15 p., illus.
- CFS 506. Massachusetts landings - 1948, by gear and area, annual summary. 13 p., illus.
- CFS 507. Frozen fish report, Nov. 1949. 9 p., illus.
- CFS 508. Maine landings, Sept. 1949. 3 p., illus.
- CFS 509. Texas landings, Oct. 1949. 3 p., illus.
- CFS 510. Fish meal and oil, Oct. 1949. 1 p., illus.

- CFS 511. Frozen fish report, Dec. 1949. 9 p., illus.
- CFS 512. Maine landings, Oct. 1949. 3 p., illus.
- CFS 513. Texas landings, Nov. 1949. 3 p., illus.
- CFS 514. Massachusetts landings, Aug. 1949. 13 p., illus.
- CFS 515. Fish meal and oil, Nov. 1949. 1 p., illus.
- CFS 516. Frozen fish - 1949 annual summary. 13 p., illus.
- CFS 517. Frozen fish report, Jan. 1950. 9 p., illus.
- CFS 518. Lake fisheries - 1947 annual summary. 7 p., illus.
- CFS 519. Maine landings, Nov. 1949. 3 p., illus.
- CFS 520. Fish meal and oil, Dec. 1949. 2 p., illus.
- CFS 521. Texas landings, Dec. 1949. 3 p., illus.
- CFS 522. Massachusetts landings, Sept. 1949. 13 p., illus.
- CFS 523. Frozen fish report, Feb. 1950. 9 p., illus.
- CFS 524. Chesapeake fisheries - 1947 annual summary. 3 p.
- CFS 525. Middle Atlantic fisheries - 1947 annual summary. 5 p., illus.
- CFS 526. Maine landings, Dec. 1949. 3 p., illus.
- CFS 527. Fish meal and oil, Jan. 1950. 2 p., illus.
- CFS 528. Texas landings, Jan. 1950. 3 p., illus.
- CFS 529. Frozen fish report, Mar. 1950. 9 p., illus.
- CFS 530. Maine landings, Jan. 1950. 3 p., illus.
- CFS 531. Texas landings, Feb. 1950. 3 p., illus.
- CFS 532. Fish meal and oil, Feb. 1950. 2 p., illus.
- CFS 533. Massachusetts landings, Oct. 1949. 13 p., illus.
- CFS 534. New England fisheries - 1947 annual summary. 5 p., illus.
- CFS 535. Massachusetts landings, Nov. 1949. 13 p., illus.
- CFS 536. Fisheries of the United States and Alaska - 1947 annual summary. 11 p., illus.
- CFS 537. Massachusetts landings, Dec. 1949. 13 p., illus.
- CFS 538. Frozen fish report, Apr. 1950. 9 p., illus.
- CFS 539. Manufactured fishery products - 1947 annual summary. 7 p., illus.
- CFS 540. Fish meal and oil, Mar. 1950. 2 p., illus.
- CFS 541. Maine landings, Feb. 1950. 3 p., illus.
- CFS 542. Texas landings, Mar. 1950. 3 p., illus.
- CFS 543. Massachusetts landings - 1949, by parts, annual summary. 15 p., illus.
- CFS 544. Maine landings - 1949, by months, annual summary. 5 p., illus.
- CFS 545. Massachusetts landings, Jan. 1950. 11 p., illus.
- CFS 546. Frozen fish report, May 1950. 9 p., illus.
- CFS 547. Maine landings, Mar. 1950. 3 p., illus.
- CFS 548. Maine landings - 1949, by counties, annual summary. 10 p., illus.
- CFS 549. Fish meal and oil, Apr. 1950. 2 p., illus.
- CFS 550. Texas landings, Apr. 1950. 3 p., illus.
- CFS 551. Imports and exports of fishery products - 1945-1949 annual summaries. 9 p., illus.
- CFS 552. Frozen fish report, June 1950. 9 p., illus.
- CFS 553. Massachusetts landings, Feb. 1950. 13 p., illus.
- CFS 554. Maine landings, Apr. 1950. 3 p., illus.
- CFS 555. Fish meal and oil, May 1950. 2 p., illus.

Series

- CFS 556. Texas landings, May 1950. 3 p., illus.
- CFS 557. Frozen fish report, July 1950. 9 p., illus.
- CFS 558. Massachusetts landings, Mar. 1950. 13 p., illus.
- CFS 559. Maine landings, May 1950. 3 p., illus.
- CFS 560. Fish meal and oil, June 1950. 5 p., illus.
- CFS 561. Texas landings, June 1950. 3 p., illus.
- CFS 562. Massachusetts landings - 1949, by gear and area, annual summary. 15 p., illus.
- CFS 563. Gulf fisheries - 1948 annual summary. 3 p., illus.
- CFS 564. Chesapeake fisheries - 1948 annual summary. 3 p., illus.
- CFS 565. Alaska fisheries - 1948 annual summary. 5 p., illus.
- CFS 566. Frozen fish report, Aug. 1950. 9 p., illus.
- CFS 567. Maine landings, June 1950. 3 p., illus.
- CFS 568. Fish meal and oil, July 1950. 3 p., illus.
- CFS 569. Texas landings, July 1950. 3 p., illus.
- CFS 570. Massachusetts landings, Apr. 1950. 13 p., illus.
- CFS 571. Lake fisheries - 1948 annual summary. 6 p., illus.
- CFS 572. Frozen fish report, Sept. 1950. 9 p., illus.
- CFS 573. Texas landings, Aug. 1950. 3 p., illus.
- CFS 574. Maine landings, July 1950. 3 p., illus.
- CFS 575. Fish meal and oil, Aug. 1950. 2 p., illus.
- CFS 576. Massachusetts landings, May 1950. 13 p., illus.
- CFS 577. Canned fish and byproducts - 1949 annual summary. 19 p., illus.
- CFS 578. Manufactured fishery products - 1948 annual summary. 7 p.
- CFS 579. Packaged fish - 1949 annual summary. 3 p., illus.
- CFS 580. Pacific coast fisheries - 1948 annual summary. 7 p., illus.
- CFS 581. Frozen fish report, Oct. 1950. 9 p., illus.
- CFS 582. Texas landings, Sept. 1950. 3 p., illus.
- CFS 583. Maine landings, Aug. 1950. 3 p., illus.
- CFS 584. Fish meal and oil, Sept. 1950. 2 p., illus.
- CFS 585. Massachusetts landings, June 1950. 13 p., illus.
- CFS 586. Middle Atlantic fisheries - 1948 annual summary. 5 p., illus.
- CFS 587. Alabama landings, Sept. 1950. 3 p., illus.
- CFS 588. Frozen fish report, Nov. 1950. 9 p., illus.
- CFS 589. Texas landings, Oct. 1950. 3 p., illus.
- CFS 590. Maine landings, Sept. 1950. 3 p., illus.
- CFS 591. Fish meal and oil, Oct. 1950. 2 p., illus.
- CFS 592. Massachusetts landings, July 1950. 13 p., illus.
- CFS 593. New England fisheries - 1948 annual summary. 6 p., illus.
- CFS 594. Alabama landings, Oct. 1950. 3 p., illus.
- CFS 595. Florida landings, Sept. 1950. 2 p., illus.
- CFS 596. Massachusetts landings, Aug. 1950. 13 p., illus.
- CFS 597. Frozen fish report, Dec. 1950. 9 p., illus.
- CFS 598. Texas landings, Nov. 1950. 3 p., illus.
- CFS 599. Maine landings, Oct. 1950. 3 p., illus.
- CFS 600. Fish meal and oil, Nov. 1950. 2 p., illus.

- CFS 601. Massachusetts landings, Sept. 1950. 13 p., illus.
- CFS 602. Alabama landings, Nov. 1950. 3 p., illus.
- CFS 603. Florida landings, Oct. 1950. 3 p., illus.
- CFS 604. Fisheries of the United States and Alaska - 1948 annual summary. 13 p., illus.
- CFS 605. Florida landings, Nov. 1950. 3 p., illus.
- CFS 606. Frozen fish - 1950 annual summary. 13 p., illus.
- CFS 607. Frozen fish report, Jan. 1951. 9 p., illus.
- CFS 608. Texas landings, Dec. 1950. 3 p., illus.
- CFS 609. Maine landings, Nov. 1950. 3 p., illus.
- CFS 610. Fish meal and oil, Dec. 1950. 2 p., illus.
- CFS 611. Massachusetts landings, Oct. 1950. 13 p., illus.
- CFS 612. Alabama landings, Dec. 1950. 3 p., illus.
- CFS 613. Florida landings, Dec. 1950. 3 p., illus.
- CFS 614. Frozen fish report, Feb. 1951. 9 p., illus.
- CFS 615. Massachusetts landings, Nov. 1950. 13 p., illus.
- CFS 616. Massachusetts landings, Dec. 1950. 13 p., illus.
- CFS 617. Texas landings, Jan. 1951. 3 p., illus.
- CFS 618. Maine landings, Dec. 1950. 3 p., illus.
- CFS 619. Fish meal and oil, Jan. 1951. 2 p., illus.
- CFS 620. Alabama landings, Jan. 1951. 3 p., illus.
- CFS 621. Florida landings, Jan. 1951. 3 p., illus.
- CFS 622. Maine landings - 1950, by months, annual summary. 5 p., illus.
- CFS 623. Maine landings - 1950, by counties, annual summary. 11 p., illus.
- CFS 624. Massachusetts landings - 1950, by ports, annual summary. 17 p., illus.
- CFS 625. Massachusetts landings - 1950, by gear and area, annual summary. 15 p., illus.
- CFS 626. Frozen fish report, Mar. 1951. 9 p., illus.
- CFS 627. Massachusetts landings, Jan. 1951. 11 p., illus.
- CFS 628. Texas landings, Feb. 1951. 3 p., illus.
- CFS 629. Maine landings, Jan. 1951. 3 p., illus.
- CFS 630. Fish meal and oil, Feb. 1951. 2 p., illus.
- CFS 631. Alabama landings, Feb. 1951. 3 p., illus.
- CFS 632. Florida landings, Feb. 1951. 3 p., illus.
- CFS 633. Frozen fish report, Apr. 1951. 9 p., illus.
- CFS 634. Massachusetts landings, Feb. 1951. 13 p., illus.
- CFS 635. Texas landings, Mar. 1951. 3 p., illus.
- CFS 636. Maine landings, Feb. 1951. 3 p., illus.
- CFS 637. Fish meal and oil, Mar. 1951. 2 p., illus.
- CFS 638. Alabama landings, Mar. 1951. 3 p., illus.
- CFS 639. Florida landings, Mar. 1951. 3 p., illus.
- CFS 640. Alaska fisheries - 1949 annual summary. 5 p., illus.
- CFS 641. Frozen fish report, May 1951. 9 p., illus.
- CFS 642. Massachusetts landings, Mar. 1951. 13 p., illus.
- CFS 643. Texas landings, Apr. 1951. 3 p., illus.
- CFS 644. Maine landings, Mar. 1951. 3 p., illus.

Series

- CFS 645. Fish meal and oil, Apr. 1951. 2 p., illus.
- CFS 646. Alabama landings, Apr. 1951. 3 p., illus.
- CFS 647. Florida landings, Apr. 1951. 3 p., illus.
- CFS 648. Mississippi landings, Jan. 1951. 1 p., illus.
- CFS 649. Mississippi landings, Feb. 1951. 1 p., illus.
- CFS 650. Mississippi landings, Mar. 1951. 1 p., illus.
- CFS 651. Imports and exports of fishery products 1946-1950 annual summary. 9 p., illus.
- CFS 652. Mississippi landings, Apr. 1951. 1 p., illus.
- CFS 653. Pacific coast states fisheries - 1949 annual summary. 5 p., illus.
- CFS 654. Frozen fish report, June 1951. 9 p., illus.
- CFS 655. Massachusetts landings, Apr. 1951. 13 p., illus.
- CFS 656. Texas landings, May 1951. 3 p., illus.
- CFS 657. Maine landings, Apr. 1951. 3 p., illus.
- CFS 658. Fish meal and oil, May 1951. 2 p., illus.
- CFS 659. Alabama landings, May 1951. 3 p., illus.
- CFS 660. Florida landings, May 1951. 3 p., illus.
- CFS 661. Mississippi landings, May 1951. 2 p., illus.
- CFS 662. Lake fisheries, 1949 annual summary. 5 p., illus.
- CFS 663. Frozen fish report, July 1951. 9 p., illus.
- CFS 664. Massachusetts landings, May 1951. 13 p., illus.
- CFS 665. Texas landings, June 1951. 3 p., illus.
- CFS 666. Maine landings, May 1951. 3 p., illus.
- CFS 667. Fish meal and oil, June 1951. 3 p., illus.
- CFS 668. Alabama landings, June 1951. 3 p., illus.
- CFS 669. Florida landings, June 1951. 3 p., illus.
- CFS 670. Mississippi landings, June 1951. 2 p., illus.
- CFS 671. Canned fish and byproducts - 1950 annual summary. Rev. 19 p., illus.
- CFS 672. Packaged fish - 1950 annual summary. Rev. 3 p., illus.
- CFS 673. Frozen fish report, Aug. 1951. 9 p., illus.
- CFS 674. Massachusetts landings, June 1951. 13 p., illus.
- CFS 675. Texas landings, July 1951. 3 p., illus.
- CFS 676. Maine landings, June 1951. 3 p., illus.
- CFS 677. Fish meal and oil, July 1951. 2 p., illus.
- CFS 678. Alabama landings, July 1951. 3 p., illus.
- CFS 679. Florida landings, July 1951. 3 p., illus.
- CFS 680. Mississippi landings, July 1951. 2 p., illus.
- CFS 681. Florida landings - 1950 annual summary. 3 p., illus.
- CFS 682. Gulf fisheries - 1949 annual summary. 5 p., illus.
- CFS 683. Chesapeake fisheries - 1949 annual summary. 3 p., illus.
- CFS 684. Frozen fish report, Sept. 1951. 9 p., illus.
- CFS 685. Massachusetts landings, July 1951. 13 p., illus.
- CFS 686. Texas landings, Aug. 1951. 3 p., illus.
- CFS 687. Maine landings, July 1951. 3 p., illus.
- CFS 688. Fish meal and oil, Aug. 1951. 2 p., illus.
- CFS 689. Alabama landings, Aug. 1951. 3 p., illus.
- CFS 690. Florida landings, Aug. 1951. 3 p., illus.

- CFS 691. Mississippi landings, Aug. 1951. 2 p., illus.
- CFS 692. New England fisheries - 1949 annual summary. 5 p., illus.
- CFS 693. Middle Atlantic fisheries - 1949. 5 p., illus.
- CFS 694. Frozen fish report, Oct. 1951. 9 p., illus.
- CFS 695. Massachusetts landings, Aug. 1951. 13 p., illus.
- CFS 696. Texas landings, Sept. 1951. 3 p., illus.
- CFS 697. Maine landings, Aug. 1951. 3 p., illus.
- CFS 698. Fish meal and oil, Sept. 1951. 2 p., illus.
- CFS 699. Alabama landings, Sept. 1951. 3 p., illus.
- CFS 700. Florida landings, Sept. 1951. 3 p., illus.
- CFS 701. Mississippi landings, Sept. 1951. 2 p., illus.
- CFS 702. Manufactured fishery products - 1949 annual summary. 7 p., illus.
- CFS 703. Fisheries of the United States and Alaska - 1949 annual summary. 11 p., illus.
- CFS 704. Frozen fish report, Nov. 1951. 9 p., illus.
- CFS 705. Massachusetts landings, Sept. 1951. 13 p., illus.
- CFS 706. Texas landings, Oct. 1951. 3 p., illus.
- CFS 707. Maine landings, Sept. 1951. 3 p., illus.
- CFS 708. Fish meal and oil, Oct. 1951. 2 p., illus.
- CFS 709. Alabama landings, Oct. 1951. 3 p., illus.
- CFS 710. Florida landings, Oct. 1951. 3 p., illus.
- CFS 711. Mississippi landings, Oct. 1951. 2 p., illus.
- CFS 712. Alaska fisheries - 1950 annual summary. 5 p., illus.
- CFS 713. Frozen fish report, Dec. 1951. 9 p., illus.
- CFS 714. Massachusetts landings, Oct. 1951. 13 p., illus.
- CFS 715. Texas landings, Nov. 1951. 3 p., illus.
- CFS 716. Maine landings, Oct. 1951. 3 p.
- CFS 717. Fish meal and oil, Nov. 1951. 2 p., illus.
- CFS 718. Alabama landings, Nov. 1951. 3 p., illus.
- CFS 719. Florida landings, Nov. 1951. 3 p., illus.
- CFS 720. Mississippi landings, Nov. 1951. 2 p., illus.
- CFS 721. Frozen fish - 1951 annual summary. 13 p., illus.
- CFS 722. Frozen fish report, Jan. 1952. 9 p., illus.
- CFS 723. Massachusetts landings, Nov. 1951. 13 p., illus.
- CFS 724. Texas landings, Dec. 1951. 3 p., illus.
- CFS 725. Maine landings, Nov. 1951. 3 p., illus.
- CFS 726. Fish meal and oil, Dec. 1951. 2 p., illus.
- CFS 727. Alabama landings, Dec. 1951. 3 p., illus.
- CFS 728. Florida landings, Dec. 1951. 3 p., illus.
- CFS 729. Mississippi landings, Dec. 1951. 2 p., illus.
- CFS 730. Frozen fish report, Feb. 1952. 7 p.
- CFS 731. Massachusetts landings, Dec. 1951. 13 p., illus.
- CFS 732. Texas landings, Jan. 1952. 3 p., illus.
- CFS 733. Maine landings, Dec. 1951. 3 p., illus.
- CFS 734. Fish meal and oil, Jan. 1952. 2 p., illus.
- CFS 735. Packaged fish - 1951 annual summary. 3 p., illus.
- CFS 736. Florida landings, Jan. 1952. 5 p., illus.
- CFS 737. Mississippi landings, Jan. 1952. 2 p., illus.

Series

- CFS 830. Frozen fish report, Jan. 1953. 7 p., illus.
- CFS 831. New Jersey landings, Sept. 1952. 2 p., illus.
- CFS 832. New Jersey landings, Oct. 1952. 2 p., illus.
- CFS 833. Manufactured fishery products - 1951 annual summary. 5 p.
- CFS 834. Massachusetts landings, Nov. 1952. 6 p., illus.
- CFS 835. Mississippi landings, Nov. 1952. 2 p., illus.
- CFS 836. Florida landings, Nov. 1952. 5 p., illus.
- CFS 837. Maine Landings, Nov. 1952. 3 p., illus.
- CFS 838. Texas landings, Dec. 1952. 3 p., illus.
- CFS 839. Fish meal and oil, Dec. 1952. 2 p., illus.
- CFS 840. Mississippi River fisheries - 1950 annual summary. 6 p., illus.
- CFS 841. Fisheries of the United States and Alaska - 1950 annual summary. 11 p.
- CFS 842. Frozen fish report, Feb. 1953. 7 p., illus.
- CFS 843. Frozen fish - 1952 annual summary. 12 p., illus.
- CFS 844. Massachusetts landings, Dec. 1952. 7 p., illus.
- CFS 845. Maine landings, Dec. 1952. 3 p., illus.
- CFS 846. Mississippi landings, Dec. 1952. 2 p., illus.
- CFS 847. Florida landings, Dec. 1952. 5 p., illus.
- CFS 848. Texas landings, Jan. 1953. 3 p., illus.
- CFS 849. Fish meal and oil, Jan. 1953. 2 p., illus.
- CFS 850. New Jersey landings, Nov. 1952. 2 p., illus.
- CFS 851. New Jersey landings, Dec. 1952. 2 p., illus.
- CFS 852. Maine landings - 1952, by counties, annual summary. 12 p., illus.
- CFS 853. Frozen fish report, Mar. 1953. 7 p., illus.
- CFS 854. Massachusetts landings, Jan. 1953. 6 p., illus.
- CFS 855. Maine landings, Jan. 1953. 2 p., illus.
- CFS 856. Mississippi landings, Jan. 1953. 2 p., illus.
- CFS 857. Florida landings, Jan. 1953. 5 p., illus.
- CFS 858. Texas landings, Feb. 1953. 3 p., illus.
- CFS 859. Fish meal and oil, Feb. 1953. 2 p., illus.
- CFS 860. Lake fisheries - 1951 annual summary. 4 p., illus.
- CFS 861. Frozen fish report, Apr. 1953. 7 p., illus.
- CFS 862. Maine landings, Feb. 1953. 2 p., illus.
- CFS 863. Packaged fish - 1952 annual summary. 3 p., illus.
- CFS 864. Massachusetts landings, Feb. 1953. 7 p., illus.
- CFS 865. Mississippi landings, Feb. 1953. 2 p., illus.
- CFS 866. Florida landings, Feb. 1953. 5 p., illus.
- CFS 867. Texas landings, Mar. 1953. 3 p., illus.
- CFS 868. Fish meal and oil, Mar. 1953. 2 p., illus.
- CFS 869. Maine landings - 1952, by months, annual summary. 5 p., illus.
- CFS 870. New Jersey landings, Jan. 1953. 2 p., illus.
- CFS 871. New Jersey landings, Feb. 1953. 2 p., illus.
- CFS 872. Frozen fish report, May 1953. 7 p., illus.
- CFS 873. New Jersey landings, Mar. 1953. 2 p., illus.
- CFS 874. Maine landings, Mar. 1953. 3 p., illus.
- CFS 875. Mississippi landings, Mar. 1953. 3 p., illus.

- CFS 876. Pacific Coast States fisheries - 1951 annual summary. 6 p., illus.
- CFS 877. Massachusetts landings - 1952, by ports, annual summary. 14 p., illus.
- CFS 878. Fish meal and oil, Apr. 1953. 2 p., illus.
- CFS 879. Florida landings, Mar. 1953. 5 p., illus.
- CFS 880. Texas landings, Apr. 1953. 3 p., illus.
- CFS 881. New Jersey landings, Apr. 1953. 2 p., illus.
- CFS 882. Canned fish and byproducts - 1952 United States, Alaska, and Hawaii, annual summary. 19 p., illus.
- CFS 883. Frozen fish report, June 1953. 7 p., illus.
- CFS 884. Mississippi landings, Apr. 1953. 2 p., illus.
- CFS 885. Maine landings, Apr. 1953. 3 p., illus.
- CFS 886. Fish meal and oil, May 1953. 2 p., illus.
- CFS 887. Florida landings, Apr. 1953. 5 p., illus.
- CFS 888. Texas landings, May 1953. 2 p., illus.
- CFS 889. Imports and exports of fishery products - 1948-1952 annual summaries. 7 p., illus.
- CFS 890. Massachusetts landings, Mar. 1953. 7 p., illus.
- CFS 891. Massachusetts landings, Apr. 1953. 7 p., illus.
- CFS 892. Alaska fisheries - 1952 annual summary. 6 p., illus.
- CFS 893. New England fisheries - 1951 annual summary. 7 p., illus.
- CFS 894. Chesapeake fisheries - 1951 annual summary. 3 p., illus.
- CFS 895. Frozen fish report, July 1953. 7 p., illus.
- CFS 896. Mississippi landings, May 1953. 2 p., illus.
- CFS 897. Maine landings, May 1953. 3 p., illus.
- CFS 898. Fish meal and oil, June 1953. 1 p., illus.
- CFS 899. Florida landings, May 1953. 5 p., illus.
- CFS 900. Texas landings, June 1953. 2 p., illus.
- CFS 901. Massachusetts landings, May 1953. 7 p., illus.
- CFS 902. New Jersey landings, May 1953. 2 p., illus.
- CFS 903. Massachusetts landings - 1952, by gear and area, annual summary. 15 p., illus.
- CFS 904. Middle Atlantic fisheries - 1951 annual summary. 6 p., illus.
- CFS 905. New Jersey landings, June 1953. 2 p., illus.
- CFS 906. Frozen fish report, Aug. 1953. 7 p., illus.
- CFS 907. Mississippi landings, June 1953. 2 p., illus.
- CFS 908. Maine landings, June 1953. 3 p., illus.
- CFS 909. Fish meal and oil, July 1953. 2 p., illus.
- CFS 910. Florida landings, June 1953. 5 p., illus.
- CFS 911. Texas landings, July 1953. 2 p., illus.
- CFS 912. Massachusetts landings, June 1953. 7 p., illus.
- CFS 913. Gulf fisheries - 1951 annual summary. 8 p., illus.
- CFS 914. South Atlantic fisheries - 1951 annual summary. 7 p., illus.
- CFS 915. Fisheries of the United States and Alaska - 1951 annual summary. Rev. 15 p.
- CFS 916. Mississippi landings, July 1953. 2 p., illus.

Series

- | | |
|---|--|
| <p>CFS 917. Frozen fish report, Sept. 1953. 7 p., illus.</p> <p>CFS 918. New Jersey landings, July 1953. 2 p., illus.</p> <p>CFS 919. Maine landings, July 1953. 3 p., illus.</p> <p>CFS 920. Fish meal and oil, Aug. 1953. 2 p., illus.</p> <p>CFS 921. Florida landings, July 1953. 5 p., illus.</p> <p>CFS 922. Texas landings, Aug. 1953. 3 p., illus.</p> <p>CFS 923. Massachusetts landings, July 1953. 7 p., illus.</p> <p>CFS 924. Frozen fish report, Oct. 1953. 7 p., illus.</p> <p>CFS 925. Mississippi landings, Aug. 1953. 2 p., illus.</p> <p>CFS 926. New Jersey landings, Aug. 1953. 2 p., illus.</p> <p>CFS 927. Maine landings, Aug. 1953. 5 p., illus.</p> <p>CFS 928. Fish meal and oil, Sept. 1953. 2 p., illus.</p> <p>CFS 929. Florida landings, Aug. 1953. 5 p., illus.</p> <p>CFS 930. Texas landings, Sept. 1953. 2 p., illus.</p> <p>CFS 931. Massachusetts landings, Aug. 1953. 7 p., illus.</p> <p>CFS 932. Frozen fish report, Nov. 1953. 7 p., illus.</p> <p>CFS 933. Mississippi landings, Sept. 1953. 2 p., illus.</p> <p>CFS 934. New Jersey landings, Sept. 1953. 2 p., illus.</p> <p>CFS 935. Maine landings, Sept. 1953. 4 p., illus.</p> <p>CFS 936. Fish meal and oil, Oct. 1953. 2 p., illus.</p> | <p>CFS 937. Florida landings, Sept. 1953. 5 p., illus.</p> <p>CFS 938. Texas landings, Oct. 1953. 2 p., illus.</p> <p>CFS 939. Massachusetts landings, Sept. 1953. 7 p., illus.</p> <p>CFS 940. Frozen fish report, Dec. 1953. 7 p., illus.</p> <p>CFS 941. Mississippi landings, Oct. 1953. 2 p., illus.</p> <p>CFS 942. New Jersey landings, Oct. 1953. 2 p., illus.</p> <p>CFS 943. Maine landings, Oct. 1953. 4 p., illus.</p> <p>CFS 944. Fish meal and oil, Nov. 1953. 2 p., illus.</p> <p>CFS 945. Florida landings, Oct. 1953. 5 p., illus.</p> <p>CFS 946. Texas landings, Nov. 1953. 2 p., illus.</p> <p>CFS 947. Massachusetts landings, Oct. 1953. 7 p., illus.</p> <p>CFS 948. Frozen fish report, Jan. 1954. 7 p., illus.</p> <p>CFS 949. Mississippi landings, Nov. 1953. 2 p., illus.</p> <p>CFS 950. Maine landings, Nov. 1953. 4 p., illus.</p> <p>CFS 951. Florida landings, Nov. 1953. 5 p., illus.</p> <p>CFS 952. New Jersey landings, Nov. 1953. 2 p., illus.</p> <p>CFS 953. Fish meal and oil, Dec. 1953. 2 p., illus.</p> <p>CFS 954. Massachusetts landings, Nov. 1953. 7 p., illus.</p> <p>CFS 955. Texas landings, Dec. 1953. 2 p., illus.</p> <p>CFS 956. Frozen fish - 1953 annual summary. 13 p., illus.</p> |
|---|--|

- CFS 957. Mississippi landings, Dec. 1953. 2 p., illus.
- CFS 958. Frozen fish report, Feb. 1954. 7 p., illus.
- CFS 959. Mississippi landings, Jan. 1954. 2 p., illus.
- CFS 960. Maine landings, Dec. 1953. 4 p., illus.
- CFS 961. Florida landings, Dec. 1953. 5 p.
- CFS 962. New Jersey landings, Dec. 1953. 2 p., illus.
- CFS 963. Fish meal and oil, Jan. 1954. 2 p., illus.
- CFS 964. Massachusetts landings, Dec. 1953. 8 p., illus.
- CFS 965. Texas landings, Jan. 1954. 2 p., illus.
- CFS 966. New England fisheries - 1952 annual summary. Rev. 6 p., illus.
- CFS 967. Maine landings - 1953 annual summary. 9 p., illus.
- CFS 968. Massachusetts landings - 1953, by ports, annual summary. 15 p., illus.
- CFS 969. Maine landings - 1953, by months, annual summary. 5 p., illus.
- CFS 970. Massachusetts landings - 1953, by gear and area, annual summary. 16 p., illus.
- CFS 971. Florida landings - 1952, by months, annual summary. 9 p., illus.
- CFS 972. Frozen fish report, Feb. 1954. 7 p., illus.
- CFS 973. Maine landings, Jan. 1954. 3 p., illus.
- CFS 974. Massachusetts landings, Jan. 1954. 6 p., illus.
- CFS 975. New Jersey landings, Jan. 1954. 2 p., illus.
- CFS 976. Mississippi landings, Feb. 1954. 2 p., illus.
- CFS 977. Maine landings, Feb. 1954. 4 p., illus.
- CFS 978. Florida landings, Jan. 1954. 5 p., illus.
- CFS 979. Fish meal and oil, Feb. 1954. 2 p., illus.
- CFS 980. Texas landings, Feb. 1954. 2 p., illus.
- CFS 981. Massachusetts landings, Feb. 1954. 7 p., illus.
- CFS 982. New Jersey landings, Feb. 1954. 2 p., illus.
- CFS 983. Lake fisheries - 1952 annual summary. 5 p., illus.
- CFS 984. Frozen fish report, Mar. 1954. 7 p., illus.
- CFS 985. Packaged fish - 1953 annual summary. 3 p., illus.
- CFS 986. Maine landings, Mar. 1954. 2 p., illus.
- CFS 987. Massachusetts landings, Mar. 1954. 7 p., illus.
- CFS 988. New Jersey landings, Mar. 1954. 2 p., illus.
- CFS 989. Mississippi landings, Mar. 1954. 2 p., illus.
- CFS 990. Florida landings, Feb. 1954. 5 p., illus.
- CFS 991. Fish meal and oil, Mar. 1954. 2 p., illus.
- CFS 992. Texas landings, Mar. 1954. 2 p., illus.
- CFS 993. Alaska fisheries - 1953 annual summary. 5 p., illus.
- CFS 994. Frozen fish report, Apr. 1954. 7 p., illus.
- CFS 995. Maine landings, Apr. 1954. 2 p., illus.
- CFS 996. Massachusetts landings, Apr. 1954. 7 p., illus.

Series

- CFS 997. New Jersey landings, Apr. 1954. 2 p., illus.
- CFS 998. Mississippi landings, Apr. 1954. 2 p., illus.
- CFS 999. Florida landings, Mar. 1954. 5 p., illus.
- CFS 1000. Fish meal and oil, Apr. 1954. 2 p., illus.
- CFS 1001. Texas landings, Apr. 1954. 2 p., illus.
- CFS 1002. Chesapeake fisheries - 1952 annual summary. 3 p., illus.
- CFS 1003. Imports and exports of fishery products - 1949-1953 annual summaries. 7 p., illus.
- CFS 1004. Canned fish and byproducts - 1953, United States, Alaska, Hawaii, and Puerto Rico, annual summary. 19 p., illus.
- CFS 1005. Gulf fisheries - 1952 annual summary. 9 p., illus.
- CFS 1006. Middle Atlantic fisheries - 1952 annual summary. 6 p., illus.
- CFS 1007. Frozen fish report, May 1954. 7 p., illus.
- CFS 1008. Maine landings, May 1954. 3 p., illus.
- CFS 1009. Massachusetts landings, May 1954. 7 p., illus.
- CFS 1010. New Jersey landings, May 1954. 2 p., illus.
- CFS 1011. Mississippi landings, May 1954. 2 p., illus.
- CFS 1012. Florida landings, Apr. 1954. 5 p., illus.
- CFS 1013. Fish meal and oil, May 1954. 2 p., illus.
- CFS 1014. Texas landings, May 1954. 2 p., illus.
- CFS 1015. Alabama landings, Apr. 1954. 2 p., illus.
- CFS 1016. Florida landings - 1953, by months, annual summary. 9 p., illus.
- CFS 1017. New York landings, Marine District, Jan. 1954. 3 p., illus.
- CFS 1018. New York landings, Marine District, Feb. 1954. 3 p., illus.
- CFS 1019. New York landings, Marine District, Mar. 1954. 3 p., illus.
- CFS 1020. New York landings, Marine District, Apr. 1954. 3 p., illus.
- CFS 1021. South Atlantic fisheries - 1952 annual summary. 8 p., illus.
- CFS 1022. Alabama landings, May 1954. 2 p., illus.
- CFS 1023. Frozen fish report, June 1954. 7 p., illus.
- CFS 1024. New York landings, Marine District, May 1954. 4 p., illus.
- CFS 1025. Texas landings, June 1954. 2 p., illus.
- CFS 1026. Pacific Coast States fisheries - 1952 annual summary. 6 p., illus.
- CFS 1027. Massachusetts landings, June 1954. 7 p., illus.
- CFS 1028. Frozen fish report, July 1954. 7 p., illus.
- *CFS 1029. Maryland landings - 1953 annual summary. 3 p., illus.
- CFS 1030. Fish meal and oil, June 1954. 1 p., illus.
- CFS 1031. Texas landings, July 1954. 2 p., illus.
- CFS 1032. Florida landings, May 1954. 5 p., illus.
- CFS 1033. Mississippi landings, June 1954. 2 p., illus.
- CFS 1034. Maine landings, June 1954. 3 p., illus.
- CFS 1035. New Jersey landings, June 1954. 1 p., illus.
- CFS 1036. New York landings, Marine District, June 1954. 3 p., illus.

- CFS 1037. Alabama landings, June 1954. 2 p., illus.
- CFS 1038. Mississippi landings, July 1954. 2 p., illus.
- CFS 1039. Fish meal and oil, July 1954. 1 p., illus.
- CFS 1040. Frozen fish report, Aug. 1954. 7 p., illus.
- CFS 1041. Fish meal and oil, Aug. 1954. 1 p., illus.
- CFS 1042. Texas landings, Aug. 1954. 2 p., illus.
- CFS 1043. Florida landings, June 1954. 5 p., illus.
- CFS 1044. Mississippi landings, Aug. 1954. 2 p., illus.
- CFS 1045. Maine landings, July 1954. 3 p., illus.
- CFS 1046. New Jersey landings, July 1954. 1 p., illus.
- CFS 1047. New York landings, Marine District, July 1954. 3 p., illus.
- CFS 1048. Alabama landings, July 1954. 2 p., illus.
- CFS 1049. Massachusetts landings, July 1954. 7 p., illus.
- CFS 1050. Fisheries of the United States and Alaska - 1952 annual summary. 11 p.
- CFS 1051. Manufactured fishery products - 1952 annual summary. 6 p.
- CFS 1052. Florida landings, July 1954. 5 p., illus.
- CFS 1053. Maine landings, Aug. 1954. 3 p., illus.
- CFS 1054. New Jersey landings, Aug. 1954. 1 p., illus.
- CFS 1055. Alabama landings, Aug. 1954. 2 p., illus.
- CFS 1056. Texas landings, Sept. 1954. 2 p., illus.
- CFS 1057. Frozen fish report, Sept. 1954. 7 p., illus.
- CFS 1058. Fish meal and oil, Sept. 1954. 1 p., illus.
- CFS 1059. Texas landings, Oct. 1954. 2 p., illus.
- CFS 1060. Florida landings, Aug. 1954. 5 p., illus.
- CFS 1061. Mississippi landings, Sept. 1954. 2 p., illus.
- CFS 1062. Maine landings, Sept. 1954. 3 p., illus.
- CFS 1063. New York landings, Marine District, Aug. 1954. 3 p., illus.
- CFS 1064. Massachusetts landings, Aug. 1954. 7 p., illus.
- CFS 1065. Frozen fish report, Oct. 1954. 7 p., illus.
- CFS 1066. Massachusetts landings, Sept. 1954. 7 p., illus.
- CFS 1067. New York landings, Marine District, Sept. 1954. 3 p., illus.
- CFS 1068. Mississippi landings, Oct. 1954. 2 p., illus.
- CFS 1069. Fish meal and oil, Oct. 1954. 1 p., illus.
- CFS 1070. Alabama landings, Sept. 1954. 2 p., illus.
- CFS 1071. New Jersey landings, Sept. 1954. 1 p., illus.
- CFS 1072. Rhode Island landings, Jan. -Mar. 1954. 5 p., illus.
- CFS 1073. Rhode Island landings, Apr. -June 1954. 6 p., illus.

DOCUMENTS

Doc 1-898. §

- *Doc 899. An analytical subject bibliography of the publications of the Bureau of Fisheries, 1871-1920, by Rose M. E. MacDonald. 1921. 306 p. Appendix 5 to Report of the U. S. Commissioner of Fisheries for 1920.
- *Doc 900. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the year ended June 30, 1921. 1921. 50 p.
- *Doc 901. Peritoneal membranes, ovaries, and oviducts of salmonoid fishes and their significance in fish-cultural practices, by William Converse Kendall. 1921. 185-208 p., illus. From Bulletin of the Bureau of Fisheries, v. 37, 1919-20.
- *Doc 902. Pacific salmon fisheries, by John N. Cobb. 1921. 268 p., illus. 3d ed. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 903. Improvements in process of salting river herring, especially adapted to warm climates, by Harden F. Taylor. 1921. 7 p. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 904. Fishes of the Yellowstone National Park; with description of the Park waters and notes on fishing, by Hugh M. Smith and William C. Kendall. 1921. 30 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 905. Further limnological observations on the Finger Lakes of New York, by Edward A. Birge and Chancey Juday. 1921. 211-252 p., illus. From Bulletin of the Bureau of Fisheries, v. 37, 1919-20.
- *Doc 906. Distribution and food of the fishes of Green Lake, Wisconsin, in summer, by A. S. Pearse. 1921. 254-272 p., illus. From Bulletin of the Bureau of Fisheries, v. 37, 1919-20.
- *Doc 907. Food of young winter flounders, by Edwin Linton. 1921. 14 p. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 908. Fishery industries of the United States; report of the Division of Statistics and Methods of the Fisheries for 1920, by Lewis Radcliffe. 1921. 187 p., illus. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 909. Alaska fishery and fur-seal industries in 1920, by Ward T. Bower. 1921. 1-127 p., illus. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 909a. Investigation of the salmon fisheries of the Yukon River, by Charles H. Gilbert and Henry O'Malley. 1921. 128-154 p. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 910. Danger to fisheries from oil and tar pollution of waters, by J. S. Gutsell. 1921. 10 p. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 911. Progress in biological inquiries, 1921; report of the Division of Scientific Inquiry for the fiscal year 1921, by R. E. Coker. 1922. 38 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 912. Propagation and distribution of food fishes, 1921; report of the Division of Fish Culture for the fiscal year 1921, by Glen C. Leach. 1922. 94 p., illus. Appendix 9 to the Report of the U. S. Commissioner of Fisheries for 1921.
- *Doc 913. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1922. 1922. 50 p.
- *Doc 914. Fresh-water crustacea as food for young fishes, by William Converse Kendall. 1921. 32 p., illus. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 915. Ecological study of aquatic midges and some related insects with special reference to feeding habits, by Adelbert L. Leathers. 1922. 1-61 p., illus. From Bulletin of the Bureau of Fisheries, v. 38, 1921-22.
- *Doc 916. Experiments in the culture of fresh-water mussels, by Arthur Day Howard. 1922. 63-89 p., illus. From Bulletin of the Bureau of Fisheries, v. 38, 1921-22.

- *Doc 917. Further notes on the natural history and artificial propagation of the diamond-back terrapin, by R. L. Barney. 1922. 91-111 p., illus. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 918. Notes on habits and development of eggs and larvae of the silversides Menidia menidia and Menidia beryllina, by Samuel F. Hildebrand. 1922. 113-120 p. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 919. Principles involved in the preservation of fish by salt, by Harden F. Taylor. 1922. 22 p. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 920. Shellfish resources of the northwest coast of the United States, by Charles H. Edmondson. 1922. 21 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 921. Deductions concerning the air bladder and the specific gravity of fishes, by Harden F. Taylor. 1922. 121-126 p. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 922. Biology and economic value of the sea mussel, Mytilus edulis, by Irving A. Field. 1922. 127-259 p., illus. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 923. Use of fishes for control of mosquitoes in northern fresh waters of the United States, by J. Percy Moore. 1922. 60 p., illus. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 924. A new bacterial disease of freshwater fishes, by H. S. Davis. 1922. 261-280 p., illus. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 925. The spiny lobster, Panulirus argus, of southern Florida; its natural history and utilization, by D. R. Crawford and W. J. J. De Smidt. 1922. 281-310 p., illus. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 926. Mortality in pike-perch eggs in hatcheries, by Franz Schrader and Sally Hughes Schrader. 1922. 11 p., illus. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 927. Some embryonic and larval stages of the winter flounder, by C. M. Breder, Jr. 1922. 311-315 p., illus. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 928. The salmon of the Yukon River, by Charles H. Gilbert. 1922. 317-332 p., illus. From Bulletin of the Bureau of Fisheries, v.38, 1921-22.
- *Doc 929. Sources, preparation, and properties of some algal gelatines, by Irving A. Field. 1922. 7 p. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 930. Trade in fresh and frozen fishery products and related marketing considerations in Seattle, Wash., by L. T. Hopkinson and W. P. Studdert. 1922. 16 p. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 931. Fisheries and market for fishery products in Mexico, Central America, South America, West Indies, and Bermudas, compiled by Lewis Radcliffe. 1922. 105 p., map. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 932. Fishery industries of the United States; report of the Division of Fishery Industries for 1921, by Lewis Radcliffe. 1922. 136 p., illus. Appendix 9 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 933. Alaska fishery and fur-seal industries in 1921, by Ward T. Bower. 1922. 85 p., illus. Appendix 10 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 934. The Kentucky River and its mussel resources, by Ernest Danglade. 1922. 8 p., illus. Appendix 11 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 935. Goldfish; their care in small aquaria, by E. C. Fearnow. 1923. 10 p., illus. Appendix 12 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 936. Progress in biological inquiries, 1922, report of the Division of Scientific Inquiry for the fiscal year 1922, by R. E. Coker. 1923. 26 p. Appendix 13 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 937. Fisheries prosecuted by California fishermen in Mexican waters, by R. A. Coleman. 1923. 9 p. Appendix 14 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 938. Life history and ecology of the orangespotted sunfish, Lepomis humilis, by R. L. Barney and B. J. Anson. 1923. 16 p., illus. Appendix 15 to the Report of the U. S. Commissioner of Fisheries for 1922.

- *Doc 939. Trade in fresh and frozen fishery products and related marketing considerations in Boston, Mass., by L. T. Hopkinson. 1923. 27 p., illus. Appendix 16 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 940. Annotated list of fishes collected in vicinity of Augusta, Georgia, with description of a new darter, by Samuel F. Hildebrand. 1923. 1-8 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 941. Propagation and distribution of food fishes, 1922; report of the Division of Fish Culture for the fiscal year 1922, by Glen C. Leach. 1923. 116 p., illus. Appendix 17 to the Report of the U. S. Commissioner of Fisheries for 1922.
- *Doc 942. Life history of the scavenger water beetle Hydrous (Hydrophilus) triangularis, and its economic relation to fish breeding, by Charles Branch Wilson. 1923. 9-38 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 943. Experiment in tagging adult red salmon, Alaska peninsula fisheries reservation, summer of 1922, by Charles H. Gilbert. 1923. 39-50 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 944. Northwestern lakes of the United States; biological and chemical studies with reference to possibilities in production of fish, by George Kemmerer, J. F. Bovard, and W. R. Boorman. 1923. 51-140 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 945. Contributions to life histories of Sciaenidae of the eastern United States coast, by William W. Welsh and C. M. Breder, Jr. 1923. 141-201 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 946. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1923. 1923. 47 p.
- *Doc 947. Properties and values of certain fish-net preservatives, by Harden F. Taylor and Arthur W. Wells. 1923. 69 p., illus. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 948. Aquatic plants in pond culture, by John W. Titcomb. 1923. 24 p., illus. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 949. Artificial propagation of whitefish, grayling, and lake trout, by Glen C. Leach. 1923. 32 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 950. Significance of larval mantle of freshwater mussels during parasitism, with notes on a new mantle condition exhibited by Lampsilis luteola, by Chester N. Blystad. 1923. 203-219 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 951. Alaska fishery and fur-seal industries in 1922, by Ward T. Bower. 1923. 118 p., illus. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 952. Toxicities of coal tar creosote, creosote distillates, and individual constituents for the marine wood borer, Limnoria lignorum, by L. F. Shackell. 1923. 221-230 p. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 953. Water beetles in relation to pondfish culture, with life histories of those found in fishponds at Fairport, Iowa, by Charles Branch Wilson. 1923. 231-345 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 954. Fishery industries of the United States; report of the Division of Fishery Industries for 1922, by Harden F. Taylor. 1923. 111 p., illus. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 955. Artificial propagation of brook trout and rainbow trout, with notes on three other species, by Glen C. Leach. 1923. 74 p., illus. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1923. Rev. July 15, 1939.
- *Doc 956. Progress in biological inquiries, 1923; report of the Division of Scientific Inquiry for the fiscal year 1923, by Willis H. Rich. 1924. 27 p. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 957. A new myxosporidian parasite, the cause of "wormy" halibut, by H. S. Davis. 1924. 5 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 958. Limnological observations in the upper Mississippi, 1921, by P. S. Galtsoff. 1924. 347-438 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.

- *Doc 959. The ichthyophthirius disease of fishes, and methods of control, by Herbert F. Prytherch. 1924. 6 p., illus. Appendix 9 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 960. Oyster-cultural problems of Connecticut, by J. S. Gutsell. 1924. 10 p., illus. Appendix 10 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 961. Experiments in the artificial propagation of oysters, by Herbert F. Prytherch. 1924. 14 p., illus. Appendix 11 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 962. Fisheries of Key West and the clam industry of southern Florida, by William C. Schroeder. 1924. 74 p., illus. Appendix 12 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 963. Food and feeding in fresh-water mussels, by E. P. Churchill, Jr., and Sara I. Lewis. 1924. 439-471 p., illus. From Bulletin of the Bureau of Fisheries, v.39, 1923-24.
- *Doc 964. Propagation and distribution of food fishes; fiscal year 1923, by Glen C. Leach. 1924. 108 p. Appendix 13 to the Report of the U. S. Commissioner of Fisheries for 1923.
- *Doc 965. Fishes of Gulf of Maine (with bibliography and addenda); by Henry B. Bigelow and William W. Welsh. 1925. 567 p., illus. Bulletin of the Bureau of Fisheries, v.40, 1924, Part 1.
- *Doc 966. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1924. 1924. 40 p.
- *Doc 967. Iodine content of sea foods, by Donald K. Tressler and Arthur W. Wells. 1924. 1-12 p. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 968. Plankton of the offshore waters of the Gulf of Maine, by Henry B. Bigelow. 1926. 1-509 p., illus. From Bulletin of the Bureau of Fisheries, v.40, 1924, Part 2.
- *Doc 969. Physical oceanography of the Gulf of Maine, by Henry B. Bigelow. 1927. 511-1027 p., illus. From Bulletin of the Bureau of Fisheries, v.40, 1924, Part 2.
- *Doc 970. Variation in the maximum depth at which fish can live during summer in a moderately deep lake with a thermocline, by Frank Smith. 1924. 1-7 p. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 971. Progress in biological inquiries; fiscal year, 1924, by Willis H. Rich. 1925. 13-46 p. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 972. Black tumor of the catfish, by Raymond C. Osburn. 1925. 9-13 p. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 973. Alaska fishery and fur-seal industries in 1923, by Ward T. Bower. 1925. 47-140 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 974. Growth and degree of maturity of chinook salmon in the ocean, by Willis H. Rich. 1925. 15-90 p., illus. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 975. Seasonal distribution of the plankton of the Woods Hole region, by Charles J. Fish. 1925. 91-179 p., illus. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 976. Fishery industries of the United States; 1923, by Oscar E. Sette. 1925. 141-359 p. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 977. Digestive enzymes in poikilothermal vertebrates; an investigation of enzymes in fishes, with comparative studies on those of amphibians, reptiles, and mammals, by Walter A. Kenyon. 1925. 181-200 p. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 978. Propagation and distribution of food fishes; fiscal year 1924, by Glen C. Leach. 1925. 361-440 p., illus. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 979. Iodine content of preserved sea foods, by Arthur W. Wells. 1925. 441-444 p. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 980. Goldfish; their care in small aquaria and ponds, by E. C. Fearnow. 1925. 445-458 p., illus. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 981. Artificial propagation of shad, by Glen C. Leach. 1925. 459-486 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1924.
- *Doc 982. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1925. 1925. 40 p.

- *Doc 983. Mild curing of salmon in California, by W. L. Scofield. 1925. 1-14 p. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 984. Growth and age at maturity of the Pacific razor clam, *Siliqua patula* (Dixon), by F. W. Weymouth, H. C. McMillin and H. B. Holmes. 1925. 201-236 p., illus. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 985. Fishes of the Republic of El Salvador, Central America, by Samuel F. Hildebrand. 1925. 237-287 p., illus. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc. 986. Fur-seal industry of the Commander Islands, 1897 to 1922, by Leonhard Stejneger. 1925. 289-332 p., illus. From Bulletin of the Bureau of Fisheries, v.41, 1925.
- *Doc 987. *Schizamoeba salmonis*, a new ameba parasitic in salmonid fishes, by H. S. Davis. 1925. 1-8 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 988. *Octomitus salmonis*, a parasitic flagellate of trout, by H. S. Davis. 1925. 9-26 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 989. Pearl essence; its history, chemistry and technology, by Harden F. Taylor. 1925. 15-36 p., illus. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 990. Progress in biological inquiries; July 1 to December 31, 1924, by Willis H. Rich. 1925. 37-64 p. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 991. Second experiment in tagging salmon in the Alaska peninsula fisheries reservation, summer of 1923, by Charles H. Gilbert and Willis H. Rich. 1925. 27-75 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 992. Alaska fishery and fur-seal industries in 1924, by Ward T. Bower. 1925. 65-169 p., illus. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 993. Distinguishing characters of two species of red snappers of the Atlantic coast of North America, by Samuel F. Hildebrand and Isaac Ginsburg. 1925. 77-85 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 994. Crayfishes of the genus *Cambarus* in Nebraska and eastern Colorado, by Earl Theron Engle. 1925. 87-104 p. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 995. Effect of oil pollution on marine and wild life, by F. W. Lane, A. D. Bauer, H. F. Fisher and P. N. Harding. 1925. 171-181 p. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 996. Wholesale trade in fresh and frozen fishery products and related marketing considerations in New York City, by R. H. Fiedler and J. H. Matthews. 1926. 183-217 p., illus. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 997. Fishery industries of the United States, 1924, by Oscar E. Sette. 1926. 219-408 p. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 998. Further experiments on the preservation of fish nets, by Harden F. Taylor and Arthur W. Wells. 1926. 409-437 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 999. Propagation and distribution of food fishes; fiscal year 1925, by Glen C. Leach. 1926. 439-500 p., illus. Appendix 9 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 1000. Nutritive value of fish and shellfish. 1926. 501-552 p., Appendix 10 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 1001. Fishing industry of the Great Lakes, by Walter Koelz. 1926. 553-617 p., illus. Appendix 11 to the Report of the U. S. Commissioner of Fisheries for 1925.
- *Doc 1002. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1926. 1926. 46 p.
- *Doc 1003. Progress in biological inquiries, 1925, by Willis H. Rich. 1926. 1-36 p. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1926.
- *Doc 1004. New genus of darter from western North Carolina, by R. E. Coker. 1926. 105-108 p. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 1005. Salmon-tagging experiments in Alaska, 1924 and 1925, by Willis H. Rich. 1926. 109-146 p., map. From Bulletin of the Bureau of Fisheries, v.42, 1926.

- *Doc 1006. Fisheries of Siberia, by Boris Baievsky. 1926. 37-64 p., maps. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1926.
- *Doc 1007. Development, growth, and food habits of the white sucker, Catostomus commersonii LeSueur, by Norman Hamilton Stewart. 1926. 147-184 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- *Doc 1008. Alaska fishery and fur-seal industries in 1925, by Ward T. Bower. 1926. 65-166 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1926.
- Doc 1009. Preliminary report on the marine fisheries of Texas, by Elmer Higgins and Russell Lord. 1926. 167-199 p. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1926.
- Doc 1010. Fishery industries of the United States, 1925, by Oscar E. Sette. 1926. 201-322 p. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1926.
- Doc 1011. Propagation and distribution of food fishes; fiscal year 1926, by Glen C. Leach. 1927. 323-384 p. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1926.
- Doc 1012. Organic content of lake water, by Edward A. Birge and Chancey Juday. 1926. 185-205 p. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- Doc 1013. Descriptions of two new species of fishes from Key West, Fla., with notes on nine other species collected in the same locality, by Samuel F. Hildebrand and Isaac Ginsburg. 1926. 207-215 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- Doc 1014. Pacific cod fisheries, by John N. Cobb. 1927. 385-499 p., illus. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1926. Rev. ed., 1926.
- Doc 1015. The smelts, by William Converse Kendall. 1927. 217-375 p., illus. From Bulletin of the Bureau of Fisheries, v.42, 1926.
- Doc 1016. Refrigeration of fish, by Harden F. Taylor. 1927. 501-633 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1926.
- *Doc 1017. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1927. 1927. 33 p.
- *Doc 1018. Artificial propagation of pike perch, yellow perch, and pikes, by Glen C. Leach. 1927. 1-27 p., illus. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1019. Examination of the summer fisheries of Pamlico and Core Sounds, N. C., with special reference to the destruction of undersized fish and the protection of the gray trout Cynoscion regalis, (Block and Schneider) by Elmer Higgins and John C. Pearson. 1927. 29-65 p., illus. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1020. Preparation of fish for canning as sardines, by Harry R. Beard. 1927. 67-223 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1021. Investigations concerning the red-salmon runs to the Karluk River, Alaska, by Charles H. Gilbert and Willis H. Rich. 1927. 1-69 p., illus. From Bulletin of the Bureau of Fisheries, v.43, 1927, Part 2.
- *Doc 1022. Salmon-tagging experiments in Alaska, 1926, by Willis H. Rich and Arnie J. Suomela. 1927. 71-104 p., illus. From Bulletin of the Bureau of Fisheries, v.43, 1927, Part 2.
- *Doc 1023. Alaska fishery and fur-seal industries in 1926, by Ward T. Bower. 1927. 225-336 p., illus. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1024. Fishes of Chesapeake Bay, by Samuel F. Hildebrand and William C. Schroeder. 1928. 366 p., illus. Bulletin of the Bureau of Fisheries, v.43, 1927, Part 1.
- *Doc 1025. Fishery industries of the United States, 1926, by Oscar E. Sette. 1928. 337-483 p. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1026. Trade in fresh and frozen fishery products and related marketing considerations in greater St. Louis, Missouri, by R. H. Fiedler. 1928. 485-514 p., illus. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1927.

- *Doc 1027. Annotated list of fishes collected in the vicinity of Greenwood, Miss., with descriptions of three new species, by Samuel F. Hildebrand and Irving L. Towers. 1928. 105-136 p., illus. From Bulletin of the Bureau of Fisheries, v. 43, 1927, Part 2.
- *Doc 1028. Biological survey of the upper Mississippi River with special reference to pollution, by A. H. Wiebe. 1928. 137-167 p. From Bulletin of the Bureau of Fisheries, v. 43, 1927, Part 2.
- *Doc 1029. Progress in biological inquiries, 1926, including proceedings of the Divisional Conference, January 4 to 7, 1927, by Elmer Higgins. 1928. 517-681 p., illus. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1030. Quantitative study of the changes produced by acclimatization in the tolerance of high temperatures by fishes and amphibians, by Edward S. Hathaway. 1928. 169-192 p., illus. From Bulletin of the Bureau of Fisheries, v. 43, 1927, Part 2.
- *Doc 1031. Nature and extent of fouling of ships' bottoms, by J. Paul Visscher. 1928. 193-252 p., illus. From Bulletin of the Bureau of Fisheries, v. 43, 1927, Part 2.
- *Doc 1032. Production and distribution of cod eggs in Massachusetts Bay in 1924 and 1925, by Charles J. Fish. 1928. 253-296 p., illus. From Bulletin of the Bureau of Fisheries, v. 43, 1927, Part 2.
- *Doc 1033. Propagation and distribution of food fishes; fiscal year 1927, by Glen C. Leach. 1928. 683-736 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1034. Statistics of the catch of cod off the east coast of North America to 1926, by Oscar E. Sette. 1928. 737-748 p. Appendix 9 to the Report of the U. S. Commissioner of Fisheries for 1927.
- *Doc 1035. Experimental study of the function of the oyster gills and its bearing on the problems of oyster culture and sanitary control of the oyster industry, by Paul S. Galtsoff. 1928. 1-39 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1036. Trade in fresh and frozen fishery products and related marketing considerations in Jacksonville, Fla., by R. H. Fiedler. 1928. 1-26 p., illus. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1037. Food of bullheads, by Louella E. Cable. 1928. 27-41 p. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1038. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1928. 1928. 32 p.
- *Doc 1039. Trade in fresh and frozen fishery products and related marketing considerations in Atlanta, Georgia, by R. H. Fiedler. 1928. 43-60 p. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1040. Alaska fishery and fur-seal industries in 1927, by Ward T. Bower. 1928. 61-171 p., illus. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1041. Statistical review of the Alaska salmon fisheries. Part 1: Bristol Bay and the Alaska peninsula, by Willis H. Rich and Edward M. Ball. 1928. 41-95 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1042. Electric fish screen, by F. O. McMillan. 1928. 97-128 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1043. Scallop industry of North Carolina, by James S. Gutsell. 1928. 173-197 p., illus. Appendix 5 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1044. Progress in biological inquiries, 1927, by Elmer Higgins. 1928. 199-247 p. Appendix 6 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1045. The public aquarium, its construction, equipment, and management, by Charles Haskins Townsend. 1928. 249-337 p., illus. Appendix 7 to the Report of the U. S. Commissioner of Fisheries for 1928.

- *Doc 1046. Natural history and conservation of the redfish and other commercial sciaenids on the Texas coast, by John C. Pearson. 1929. 129-214 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1047. Experiments in marking young chinook salmon on the Columbia River, 1916 to 1927, by Willis H. Rich and Harlan B. Holmes. 1929. 215-264 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1048. Coregonid fishes of the Great Lakes, by Walter Koelz. 1929. 297-643 p., illus. From Bulletin of the Bureau of Fisheries, v. 43, 1927, Part 2.
- *Doc 1049. Propagation and distribution of food fishes, fiscal year 1928, by Glen C. Leach. 1929. 339-399 p., illus. Appendix 8 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1050. Fishery industries of the United States, 1927, by Oscar E. Sette and R. H. Fiedler. 1929. 401-547 p. Appendix 9 to the Report of the U. S. Commissioner of Fisheries for 1928.
- *Doc 1051. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1929. 1929. 30 p.
- *Doc 1052. Shrimp fishery of southeast Alaska, by Frank W. Hynes. 1929. 1-18 p., illus. Appendix 1 to the Report of the U. S. Commissioner of Fisheries for 1929.
- *Doc 1053. Life history of the lake herring (*Leucichthys artedii* Le Sueur) of Lake Huron as revealed by its scales, with a critique of the scale method, by John Van Oosten. 1929. 265-428 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1054. Investigation of the physical conditions controlling spawning of oysters and the occurrence, distribution, and setting of oyster larvae in Milford Harbor, Connecticut, by Herbert F. Prytherch. 1929. 429-503 p., illus. From Bulletin of the Bureau of Fisheries, v. 44, 1928.
- *Doc 1055. Check list of the fishes and fishlike vertebrates of North and Middle America north of northern boundary of Venezuela and Colombia, by David Starr Jordan, Barton Warren Evermann, and Howard Walton Clark. 1930. 670 p. Report of the U. S. Commissioner of Fisheries for the fiscal year 1928, Part 2.
- *Doc 1056. Propagation of pondfishes, by M. C. James. 1929. 19-50 p., illus. Appendix 2 to the Report of the U. S. Commissioner of Fisheries for 1929.
- *Doc 1057. Salmon-tagging experiments in Alaska, 1927 and 1928, by Willis H. Rich and Frederick G. Morton. 1929. 1-23 p., illus. From Bulletin of the Bureau of Fisheries, v. 45, 1929.
- *Doc 1058. Review of the weakfishes (*Cynoscion*) of the Atlantic and Gulf coasts of the United States, with a description of a new species, by Isaac Ginsburg. 1929. 71-85 p., illus. From Bulletin of the Bureau of Fisheries, v. 45, 1929.
- *Doc 1059. Fishing grounds of the Gulf of Maine, by Walter H. Rich. 1929. 51-117 p., illus. Appendix 3 to the Report of the U. S. Commissioner of Fisheries for 1929.
- *Doc 1060. Review of experiments on artificial culture of diamond-back terrapin, by Samuel F. Hildebrand. 1929. 25-70 p., illus. From Bulletin of the Bureau of Fisheries, v. 45, 1929.
- *Doc 1061. Care and diseases of trout, by H. S. Davis. 1929. 119-171 p., illus. Appendix 4 to the Report of the U. S. Commissioner of Fisheries for 1929.
- *Doc 1062. Whitefish, grayling, trout, and salmon of the intermountain region, by S. B. Locke. 1929. 173-190 p., illus. Appendix 5 to Report of Commissioner of Fisheries for the fiscal year 1929.
- *Doc 1063. Keokuk Dam and the fisheries of the upper Mississippi River, by Robert E. Coker. 1929. 87-139 p., illus. From Bulletin of the Bureau of Fisheries, v. 45, 1929.
- *Doc 1064. Alaska fishery and fur-seal industries in 1928, by Ward T. Bower. 1929. 191-332 p., illus. Appendix 6 to Report of Commissioner of Fisheries for the fiscal year 1929.

- *Doc 1065. Bibliography on cod-liver oil in animal feeding with noncritical comments and abstracts, by John Ruel Manning. 1929. 333-365 p. Appendix 7 to Report of the Commissioner of Fisheries for the fiscal year 1929.
- *Doc 1066. Oyster industry of the Pacific coast of the United States, by Paul S. Galtsoff. 1929. 367-400 p., illus. Appendix 8 to Report of Commissioner of Fisheries for the fiscal year 1929.
- *Doc 1067. Fishery industries of the United States, 1928, by R. H. Fiedler. 1929. 401-625 p. Appendix 9 to Report of Commissioner of Fisheries for the fiscal year 1929.
- *Doc 1068. Progress in biological inquiries, 1928, including extracts from the proceedings of the Divisional Conference, January 2 to 5, 1929, by Elmer Higgins. 1930. 627-739 p. Appendix 10 to report of Commissioner of Fisheries for the fiscal year 1929.
- *Doc 1069. Destruction of oyster bottoms in Mobile Bay by the flood of 1929, by Paul S. Galtsoff. 1930. 741-758 p., maps. Appendix 11 to the Report of the U. S. Commissioner of Fisheries for 1929.
- *Doc 1070. Propagation and distribution of food fishes, fiscal year 1929, by Glen C. Leach. 1930. 759-823 p., illus. Appendix 12 to Report of Commissioner of Fisheries for the fiscal year 1929.
- *Doc 1071. Annual report of the Commissioner of Fisheries to the Secretary of Commerce for the fiscal year ended June 30, 1930. 1930. 32 p.
- *Doc 1072. Studies of common fishes of the Mississippi River at Keokuk, by Robert E. Coker. 1930. 141-225 p., illus. From Bulletin of the Bureau of Fisheries, v. 45, 1929.
- *Doc 1073. Report of the International Fisheries Commission appointed under Northern Pacific Halibut Treaty, by John Pease Babcock, et al. 1930. 1-25 p., illus. Appendix 1 to Report of U. S. Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1074. Statistics of the haddock fishery in North American waters, by A. W. H. Needler. 1930. 27-40 p., illus. Appendix 2 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1075. Net preservative treatments, by W. T. Conn. 1930. 41-45 p. Appendix 3 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1076. Improved methods for the collection of seed oysters, by Herbert F. Prytherch. 1930. 47-59 p., illus. Appendix 4 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1077. Oyster investigations in Georgia, by Paul S. Galtsoff and R. H. Luce. 1930. 61-100 p., illus. Appendix 5 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1078. Utilization of shrimp waste, by F. C. Vilbrandt and R. F. Abernethy. 1930. 101-122 p., illus. Appendix 6 to the Report of the Commissioner of Fisheries for 1930.
- *Doc 1079. Experiments with meat and meat substitutes as trout food, by H. S. Davis and R. F. Lord, Jr. 1930. 123-147 p., illus. Appendix 7 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1080. Contribution to the biology of the Pacific herring, *Clupea pallasii*, and the condition of the fishery in Alaska, by George A. Rounsefell. 1930. 227-320 p., illus. From Bulletin of the Bureau of Fisheries, v. 45, 1929.
- *Doc 1081. Migrations and other phases in the life history of the cod off southern New England, by William C. Schroeder. 1930. 1-136 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1082. Investigations on plankton production in fish ponds, by A. H. Wiebe. 1930. 137-176 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1083. Investigations upon the deterioration of nets in Lake Erie, by A. C. Robertson and W. H. Wright. 1930. 149-176 p., illus. Appendix 8 to Report of Commissioner of Fisheries for the fiscal year 1930.

- *Doc 1084. Salmon-tagging experiments in Alaska, 1929, by Seton H. Thompson. 1930. 177-195 p., maps. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1085. Experiments in the culture of the black bass and other pondfish, by H. S. Davis and A. H. Wiebe. 1930. 177-203 p., illus. Appendix 9 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1086. Alaska fishery and fur-seal industries in 1929, by Ward T. Bower. 1930. 205-339 p., illus. Appendix 10 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1087. Review of the fisheries of California, by R. H. Fiedler. 1930. 341-369 p., illus. Appendix 11 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1088. An experimental study in production and collection of seed oysters, by P. S. Galtsoff, H. F. Prytherch, and H. C. McMillin. 1930. 197-263 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1089. Commercial snappers (Lutianidae) of Gulf of Mexico, by Isaac Ginsburg. 1930. 265-276 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1090. Fish meal in animal feeding with bibliography, by John Ruel Manning. 1930. 371-407 p. Appendix 12 to Report of the Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1091. A biological study of the offshore waters of Chesapeake Bay, by R. P. Cowles. 1930. 277-381 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1092. Pacific salmon fisheries, by John N. Cobb. 1930. 409-704 p., illus. Appendix 13 to the Report of the Commissioner of Fisheries for 1930.
- *Doc 1093. Development and life history of fourteen teleostean fishes at Beaufort, N. C., by Samuel F. Hildebrand and Louella E. Cable. 1930. 383-488 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1094. Oxygen consumption of normal and green oysters, by Paul S. Galtsoff and Dorothy V. Whipple. 1931. 489-508 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc. 1095. Fishery industries of the United States, 1929, by R. H. Fiedler. 1931. 705-1068 p., illus. Appendix 14 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1096. Progress in biological inquiries, 1929, by Elmer Higgins. 1931. 1069-1121 p., illus. Appendix 15 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1097. The blood of North American fresh-water mussels under normal and adverse conditions, by M. M. Ellis, Amanda D. Merrick, and Marion D. Ellis. 1931. 509-542 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1098. Propagation and distribution of food fishes, fiscal year 1930, by Glen C. Leach. 1931. 1123-1191 p., illus. Appendix 16 to Report of Commissioner of Fisheries for the fiscal year 1930.
- *Doc 1099. Relative growth and mortality of the Pacific razor clam (Siliqua patula, Dixon) and their bearing on the commercial fishery, by F. W. Weymouth and H. C. McMillin. 1931. 543-567 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1100. Natural history of the bay scallop, by James S. Gutsell. 1931. 569-632 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1101. The age and growth of the Pacific cockle (Cardium corbis, Martyn), by F. W. Weymouth and Seton H. Thompson. 1931. 633-641 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1102. Statistical review of the Alaska salmon fisheries, Part 2 - Chignik to Resurrection Bay, by Willis H. Rich and Edward M. Ball. 1931. 643-712 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.
- *Doc 1103. Annual growth of fresh-water mussels, by Thomas K. Chamberlain. 1931. 713-739 p., illus. From Bulletin of the Bureau of Fisheries, v. 46, 1930.

ECONOMIC CIRCULARS

EC 1-19. §

- *EC 20. Caviar: what it is and how to prepare it, by Lewis Radcliffe. Rev. Oct. 1925. 8 p., illus.

EC 21-41. §

- *EC 42. Parasites of fresh-water fishes, comprising some general considerations, by H. S. Pratt. Rev. Feb. 1929. 10 p., illus.

EC 43-47. §

- *EC 48. Canned salmon; pink and chum, with 44 recipes, by Henry O'Malley. Rev. Apr. 1926. 7 p.

- *EC 49. Habits of the mud-puppy *Necturus*, an enemy of food fishes, by A. S. Pearse. May 1921. 8 p., illus.

- *EC 50. Trade in fresh and frozen fishery products and related marketing considerations in Louisville, Ky, by L. T. Hopkinson. Aug. 1921. 8 p.

- *EC 51. Sources, preparation, and properties of some algal gelatines, by Irving A. Field. Oct. 1921. 7 p.

- *EC 52. Trade in fresh and frozen fishery products and related marketing considerations in Pittsburgh, Pa., by L. T. Hopkinson. Sept. 1921. 9 p.

- *EC 53. Brine freezing of fish, by Harden F. Taylor. Nov. 1921. 8 p.

- *EC 54. Trade in fresh and frozen fishery products and related marketing considerations in Chicago, Ill., by L. T. Hopkinson. Dec. 1921. 21 p.

- *EC 55. Trade in fresh and frozen fishery products and related marketing considerations in Minneapolis and Saint Paul, Minn., by L. T. Hopkinson. Feb. 1922. 21 p.

- *EC 56. Care and feeding of buffalo fish in ponds, by H. L. Canfield. Dec. 1922. 3 p.

- *EC 57. Mussel survey of Lake Pepin in 1924, with a discussion of the effects of the system of the alternate closure of sections of the lake to the taking of mussels, by J. B. Southall. Apr. 1925. 3 p.

- *EC 58. Oysters: an important health food, with 98 recipes, by Lewis Radcliffe. July 1925. 15 p.

- *EC 59. Cooperative fish culture, by Glen C. Leach. Mar. 1926. 8 p.

- *EC 60. Diamond-back terrapin culture at Beaufort, N. C., by Samuel F. Hildebrand and Charles Hatsel. Oct. 1926. 20 p., illus.

- *EC 61. An investigation of the coastal waters of South Carolina with reference to oyster culture, by P. S. Galtsoff and H. F. Prytherch. 8 p., illus.

- *EC 62. Containers and packages used in shipping shucked oysters, results of a survey of shipping practices, with recommendations for improvements in the methods now used, by Gerald Arthur Fitzgerald. Feb. 1928. 16 p., illus.

- *EC 63. Trade in fresh and frozen package fish products, by R. H. Fiedler. May 1928. 12 p., illus.

- *EC 64. Condition of the razor-clam fishery of Washington, by H. C. McMillin. Dec. 1928. 7 p., illus.

- *EC 65. Stocking interior waters of the United States, by E. C. Fearnow and M. C. James. Dec. 1928. 16 p., illus.

- *EC 66. Oyster bottoms of North Carolina, by Paul S. Galtsoff and H. R. Seiwel. Dec. 1928. 11 p.

- *EC 67. Results of game-fish plantings by the United States Bureau of Fisheries, by E. C. Fearnow. June 1929. 75 p.

- *EC 68. Goldfish industry, by Thomas Quast. June 1929. 14 p., illus.

- *EC 69. Salmon - an economical and valuable food, by Ward T. Bower. Dec. 1929. 19 p., illus.

- *EC 70. Control of the common oyster drill, by Henry Federighi. Mar. 1930. 7 p., illus.

- *EC 71. Fur-seal industry of Pribilof Islands, Alaska, by Henry O'Malley. May 1930. 15 p., illus.

- *EC 72. The Bureau of Fisheries and its biological station at Beaufort, N. C., by Samuel F. Hildebrand. July 1930. 14 p., illus.

- *EC 73. A cursory survey of the Blue River system of Nebraska, by H. L. Canfield and A. H. Wiebe. Mar. 1931. 10 p.

- *EC 74. Application of preservatives to fishing nets, by W. T. Conn. Apr. 1931. 6 p., illus.

FISHERY BULLETINS

- *FB 1. Temperature and the shell movements of oysters, by A. E. Hopkins. 1931. 1-14 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 2. Fluctuations in the supply of herring (*Clupea pallasii*) in southeastern Alaska, by George A. Rounsefell. 1931. 15-56 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 3. Factors influencing the spawning and setting of oysters in Galveston Bay, Tex., by A. E. Hopkins. 1931. 57-83 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 4. Studies on the oyster drill (*Urosalpinx cinerea*, Say), by Henry Federighi. 1931. 85-115 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 5. Juvenile and sex characters of *Evothodus lyricus*. (Fam. Gobiidae), by Isaac Ginsburg. 1931. 117-124 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 6. Effects of pulp mill pollution on oysters, by A. E. Hopkins, Paul S. Galtsoff and H. C. McMillin. 1932. 125-186 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 7. Statistical review of the Alaska salmon fisheries. Part 3: Prince William Sound, Copper River and Bering River, by Willis H. Rich and Edward M. Ball. 1932. 187-247 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 8. Sensory stimulation of the oyster, *Ostrea virginica*, by chemicals, by A. E. Hopkins. 1932. 249-261 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 9. Fluctuations in the supply of herring, *Clupea pallasii*, in Prince William Sound, Alaska, by George A. Rounsefell and Edwin H. Dahlgren. 1932. 263-291 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 10. Contributions to the early life histories of sixty-two species of fishes from Lake Erie and its tributary waters, by Marie Poland Fish. 1932. 293-398 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 11. Salmon-tagging experiments in Alaska, 1930, by Willis H. Rich. 1932. 399-406 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 12. Limnological studies of Karluk Lake, Alaska, 1926-1930, by C. Juday, Willis H. Rich, G. I. Kemmerer and Albert Mann. 1932. 407-436 p., illus. From Bulletin of the United States Bureau of Fisheries, v.47.
- *FB 13. Statistical review of the Alaska salmon fisheries. Part 4: Southeastern Alaska, by Willis H. Rich, and Edward M. Ball. 1933. 437-673 p., illus. Includes Index to Parts 1-4. From Bulletin of the United States Bureau of Fisheries, 4.47.
- *FB 14. Preliminary report on the life history of the common shrimp; *Penaeus setiferus* (Linn.), by F. W. Weymouth, Milton J. Lindner and W. W. Anderson. 1933. 1-26 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 15. The homing instinct and age at maturity of the pink salmon (*Oncorhynchus gorbuscha*), by Frederick A. Davidson. 1934. 27-39 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 16. Reproduction and development of whittings or kingfishes, drums, spot, croaker, and weakfishes or sea trouts, family Sciaenidae, of the Atlantic Coast of the United States, by Samuel F. Hildebrand and Louella E. Cable. 1934. 41-117 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 17. Races of herring, *Clupea pallasii*, in southeastern Alaska, by George A. Rounsefell and Edwin H. Dahlgren. 1935. 119-141 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 18. Effects of crude oil pollution on oysters in Louisiana waters, by Paul S. Galtsoff, Herbert F. Prytherch, Robert O. Smith and Vera Koehring. 1935. 143-210 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 19. Age and growth of the cisco, *Leucichthys artedii* (Le Sueur), in the lakes of the northeastern highlands, Wisconsin, by Ralph Hile. 1936. 211-317 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 20. Supplemental notes on fishes of the Gulf of Maine, by Henry B. Bigelow and William C. Schroeder. 1936. 319-343 p. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 21. Adaptation of the feeding mechanism of the oyster (*Ostrea gigas*) to changes in salinity, by A. E. Hopkins. 1936. 345-364 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.

- *FB 22. Detection and measurement of stream pollution, by M. M. Ellis. 1937. 365-437 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 23. Experimental observations on spawning, larval development, and setting in the Olympia oyster, *Ostrea lurida*, by A. E. Hopkins. 1937. 439-503 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 24. Further notes on the development and life history of some teleosts at Beaufort, N. C., by Samuel F. Hildebrand and Louella E. Cable. 1938. 505-642 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 25. The migrations of pink salmon (*Oncorhynchus gorbuscha*) in the Clarence and Sumner straits regions of southeastern Alaska, by Frederick A. Davidson and Leroy S. Christey. 1938. 643-666 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 26. The geographic distribution and environmental limitations of the Pacific salmon (genus *Oncorhynchus*), by Frederick A. Davidson and Samuel J. Hutchinson. 1938. 667-692 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 27. The salmon and salmon fisheries of Swifsure Bank, Puget Sound, and the Fraser River, by George A. Rounsefell and George B. Kelez. 1938. 693-823 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 28. The life history of the striped bass, or rockfish, *Roccus saxatilis* (Walbaum), by John C. Pearson. 1938. 825-851 p., illus. From Bulletin of the United States Bureau of Fisheries, v.48.
- *FB 29. Effect of currents on distribution and survival of the eggs and larvae of the haddock (*Melanogrammus aeglefinus*) on Georges Bank, by Lionel A. Walford. 1938. 73 p., illus. From Bulletin of the United States Bureau of Fisheries, v.49.
- *FB 30. The early life histories of some American Penaeidae, chiefly the commercial shrimp, *Penaeus setiferus* (Linn.), by John C. Pearson. 1939. 1-73 p., illus. From Bulletin of the United States Bureau of Fisheries, v.49.
- *FB 31. Natural history and method of controlling the starfish, (*Asterias forbesi*, Desor), by Paul S. Galtsoff and Victor L. Loosanoff. 1939. 75-132 p., illus. From Bulletin of the United States Bureau of Fisheries, v.49.
- *FB 32. The history and development of the fisheries of the Columbia River, by Joseph A. Craig and Robert L. Hacker. 1940. 133-216 p., illus. From Bulletin of the United States Bureau of Fisheries, v.49.
- *FB 33. Spawning and setting of oysters in Long Island Sound in 1937, and discussion of the method for predicting the intensity and time of oyster setting, by Victor L. Loosanoff and James B. Engle. 1940. 217-255 p., illus. From Bulletin of the United States Bureau of Fisheries, v.49.
- *FB 34. Water conditions affecting aquatic life in Elephant Butte Reservoir, by M. M. Ellis. 1940. 257-304 p., illus. From Bulletin of the United States Bureau of Fisheries, v.49.
- *FB 35. Studies on the striped bass (*Roccus saxatilis*) of the Atlantic coast, by Daniel Merriman. 1941. 1-77 p., illus. From Fishery Bulletin of the Fish and Wildlife Service. v. 50.
- *FB 36. The young of some marine fishes taken in lower Chesapeake Bay, Virginia, with special reference to the gray sea trout, *Cynoscion regalis* (Bloch), by John C. Pearson. 1941. 79-102 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 50.
- *FB 37. The salmon runs of the Columbia river in 1938, by Willis H. Rich. 1942. 103-147 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 50. FB 37 is also Contribution no. 7, Dept. of Research, Fish Commission of Oregon.
- FB 38. Biology of the Atlantic mackerel (*Scomber scombrus*) of North America: Part 1 - Early life history, including growth, drift and mortality of the egg and larval populations, by Oscar Elton Sette. 1943. 149-237 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 50.
- *FB 39. Fluctuations in abundance of red salmon, *Oncorhynchus nerka* (Walbaum) of the Karluk River, Alaska, by Joseph T. Barnaby. 1944. 237-295 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 50.

- FB 40. The whitefish fishery of lakes Huron and Michigan with special reference to the deep trap-net fishery, by John Van Oosten, Ralph Hile and Frank W. Jobes. 1946. 297-394 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 50.
- FB 41. Studies of the protozoan parasites of fresh-water fishes, by H. S. Davis. 1947. 1-29 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 42. Effect of different concentrations of micro-organisms on the feeding of oysters; (*O. virginica*), by V. L. Loosanoff and James B. Engle. 1947. 31-57 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- *FB 43. Ecological and physiological studies of the effect of sulfate pulp mill wastes on oysters in the York River, Virginia, by Paul S. Galtsoff, Walter A. Chipman, Jr., James B. Engle and Howard N. Calderwood. 1947. 59-186 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 44. Contributions to the biology of the Pacific tunas, by Milner B. Schaefer and John C. Marr. 1948. 187-206 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 45. Age and growth of immature rosefish (*Sebastes marinus*) in the Gulf of Maine and off western Nova Scotia, by Alfred Perlmutter and George M. Clarke. 1949. 207-228 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 46. Notes on the Philippine frigate mackerels, family Thunnidae, genus *Auxis*, by Charles B. Wade. Illustrations by Pablo Bravo. 1949. 229-240 p., illus., From Fishery Bulletin of the Fish and Wildlife service, v. 51.
- FB 47. Definitions of body dimensions used in describing tunas, by John C. Marr and Milner B. Schaefer. 1949. 241-244 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 48. Observations on juvenile oceanic skipjack (*Katsuwonus pelamis*) from Hawaiian waters and Sierra mackerel (*Scomberomorus sierra*) from the eastern Pacific, by Howard H. Eckles. 1949. 245-250 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 49. Biology of the Atlantic mackerel (*Scomber scombrus*) of North America. Part 2 - Migrations and habits, by Oscar Elton Sette. 1950. 251-358 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 50. On the effectiveness of spermatozoa of the pink salmon (*Oncorhynchus gorbuscha*) at varying distances from point of dispersal, by Richard F. Shuman. 1950. 359-363 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 51. Fluctuations in abundance of Columbia River chinook salmon (*Oncorhynchus tshawytscha*), 1935-45, by Ralph P. Silliman. 1950. 365-383 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 52. Apparent abundance of the pilchard (*Sardinops caerulea*) off Oregon and Washington, 1935-43, as measured by the catch per boat, by John C. Marr. 1950. 385-394 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 53. Juvenile forms of *Neothunnus macropterus*, *Katsuwonus pelamis* and *Euthynnus yaito* from Philippine seas, by Charles B. Wade. Illustrations by Pablo Bravo. 1950. 395-404 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 54. Description of a projection device for use in age determination from fish scales, by Kenneth H. Mosher. 1950. 405-407 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 55. Observations on the spawning of Philippine tuna, by Charles B. Wade. 1950. 409-423 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.

- FB 56. Biometric comparison between yellowfin tunas (Neothunnus) of Angola and of the Pacific coast of Central America, by Milner B. Schaefer and Lionel A. Walford. 1950. 425-443 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 57. Larvae of tuna and tuna-like fishes from Philippine waters, by Charles B. Wade. Illustrations by Pablo Bravo. 1951. 445-485 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 51.
- FB 58. An annotated bibliography on the biology of Pacific tunas, by Bell M. Shimada. 1951. 1-58 p. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 59. Breeding habits of lake trout in New York, by William F. Royce. 1951. 59-76 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 60. Decline of the lake trout fishery in Lake Michigan, by Ralph Hile, Paul H. Eschmeyer, and George F. Lunger. 1951. 77-95 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 61. Characteristics of spawning nests of Columbia River salmon, by Clifford J. Burner. 1951. 97-110 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 62. Contributions to the biology of tunas from the western equatorial Pacific, by Bell M. Shimada. 1951. 111-119 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 63. Postlarval Neothunnus macropterus, Auxis thazard, and Euthynnus lineatus from the Pacific coast of Central America, by Giles W. Mead. Illustrations by Walter B. Schwarz. 1951. 121-127 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 64. Juvenile oceanic skipjack from the Phoenix Islands, by Bell M. Shimada. 1951. 129-131p. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 65. Estimation of age and growth of yellowfin tuna (Neothunnus macropterus) in Hawaiian waters by size frequencies, by Harvey L. Moore. 1951. 133-149 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 66. Studies of Georges Bank haddock. Part 1 - Landings by pounds, numbers, and sizes of fish, by Howard A. Schuck. 1951. 151-176 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 67. Comparison of haddock from Georges and Browns Banks, by Howard A. Schuck and Edgar L. Arnold, Jr. 1951. 177-185 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 68. A unique bacterium pathogenic for warm-blooded and cold-blooded animals, by Philip J. Griffin and Stanislas F. Snieszko. 1951. 187-190 p. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 69. Estimation of size of animal populations by marking experiments, by Milner B. Schaefer. 1951. 191-203 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 70. Age, growth, and production of yellow perch in Lake Erie, by Frank W. Jobs. 1952. 205-266 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 71. Flounders of the genus Paralichthys and related genera in American waters, by Isaac Ginsburg. 1952. 267-351 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 72. Comparison of yellowfin tuna of Hawaiian waters and of the American west coast, by Milner B. Schaefer. 1952. 353-373 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52.
- FB 73. Factors influencing the orientation of migrating anadromous fishes, by Gerald B. Collins. 1952. 375-396 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 52. FB 73 is also Contribution no. 585, Woods Hole Oceanographic Institution.

- FB 74. Fishes of the Gulf of Maine, by Henry B. Bigelow and William C. Schroeder. First revision. 1953. 577 p., illus. Fishery Bulletin of the Fish and Wildlife Service, v. 53. FB 74 is also Contribution no. 592. Woods Hole Oceanographic Institution.
- FB 75. Fluctuations in the fisheries of state of Michigan waters of Green Bay, by Ralph Hile, George F. Lunger and Howard J. Buettner. 1953. 1-34 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 76. A contagious disease of salmon, possibly of virus origin, by R. R. Rucker, W. J. Whipple, J. R. Parvin and C. A. Evans. 1953. 35-46 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 77. Spawning of yellowfin tuna in Hawaiian waters, by Fred C. June. 1953. 47-64 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 78. Estimation of growth rate in animals by marking experiments, by Milton J. Lindner. 1953. 65-69 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 79. Stabilization of the phosphate ratio of sea water by freezing, by Albert W. Collier and Kenneth T. Marvin. 1953. 71-76 p. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 80. Phosphorus exchange in marine phytoplankton, by Theodore R. Rice. 1953. 77-89 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 81. Food of yellowfin tuna in the central Pacific, by John W. Reintjes and Joseph E. King. 1953. 91-110 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 82. Zooplankton abundance in the Central Pacific, by Joseph E. King and Joan Demond. 1953. 111-144 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 83. Nature of variability in trawl catches, by Clyde C. Taylor. 1953. 145-166 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 84. Effect of dissolved organic substances on oysters, by Albert Collier, S. M. Ray, A. W. Magnitzky and Joe O. Bell. 1953. 167-185 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 85. Determining age of Atlantic shad from their scales, by James P. Cating. 1953. 187-199 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 86. Population heterogeneity in the Pacific pilchard, by Frances E. Felin. 1954. 201-225 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 87. Biotic influences affecting population growth of planktonic algae, by Theodore R. Rice. 1954. 227-245 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 88. Causes of fluctuations in abundance of Connecticut River shad, by Reynold A. Fredin. 1954. 247-259 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 54.
- FB 89. Gulf of Mexico, its origin, waters, and marine life, prepared by American scientists under the sponsorship of the Fish and Wildlife Service, United States Department of the Interior, coordinated by Paul S. Galtsoff. 1954. 604 p., illus. Fishery Bulletin of the Fish and Wildlife Service, v. 55.
- FB 90. Studies of Georges Bank haddock. Part 2: Prediction of the catch, by William F. Royce and Howard A. Schuck. 1954. 1-6 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.
- FB 91. Fluctuations in growth and year-class strength of the walleye in Saginaw Bay, by Ralph Hile. 1954. 7-59 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.
- FB 92. Mortality of salmon fingerlings exposed to pulsating direct current, by Gerald B. Collins, Charles D. Volz, and Parker S. Trefethen. 1954. 61-81 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.
- FB 93. Distribution and abundance of egg and larval populations of the Pacific sardine, by Elbert H. Ahlstrom. 1954. 83-140 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.
- FB 94. Method of estimating fish populations, with application to Pacific sardine, by T. M. Widrig. 1954. 141-166 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.

Series

- | | |
|---|---|
| <p>FB 95. Intertidal spawning of pink salmon, by Mitchell G. Hanavan and Bernard Einar Skud. 1954. 167-185 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.</p> <p>FB 96. Whittings on the coasts of the American continents, by Isaac Ginsburg. 1954. 187-208 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.</p> | <p>FB 97. Description of eggs and larvae of jack mackerel (<i>Trachurus symmetricus</i>) and distribution and abundance of larvae in 1950 and 1951, by Elbert H. Ahlstrom and Orville P. Ball. Drawings by George Mattson. 1954. 209-245 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.</p> <p>FB 98. Feeding mechanism of the sea lamprey and its effect on host fishes, by Robert E. Lennon. 1954. 247-293 p., illus. From Fishery Bulletin of the Fish and Wildlife Service, v. 56.</p> |
|---|---|

FISHERY CIRCULARS

- *FC 1. Sport fishing in Chesapeake Bay, by John C. Peason. June 1931. 19 p., illus.
- *FC 2. Review of the fish-farming industries of the United States, by Clarence R. Lucas. June 1931. 16 p., illus.
- *FC 3. Market for fresh oysters in fourteen cities of the United States, by J. M. Lemon. June 1931. 25 p., illus.
- *FC 4. Outlook for the mackerel fishery in 1931, by Oscar E. Sette. Aug. 1931. 20 p., illus.
- *FC 5. A survey of conditions affecting fisheries in the upper Mississippi River, by M. M. Ellis. Sept. 1931. 18 p.
- *FC 6. Goldfish; their care in small aquaria and ponds, by E. C. Fearnow. Oct. 1931. 16 p., illus.
- *FC 7. Some factors affecting the replacement of the commercial fresh-water mussels, by M. M. Ellis. Dec. 1931. 10 p.
- *FC 8. Stocking interior waters of the United States, by M. C. James. Rev. Sept. 1936. 18 p., illus.
- *FC 9. A summary of game fish laws for 1932, with special reference to black bass, by Talbott Denmead. Mar. 1932. 48 p.
- *FC 10. Outlook for the mackerel fishery in 1932, by Oscar E. Sette. June 1932. 25 p., illus.
- *FC 11. Some unusual markets for fish and shellfish, by F. F. Johnson. July 1932. 13 p., illus.
- *FC 12. Introduction of Japanese oysters into the United States, by Paul S. Galtsoff. Aug. 1932. 16 p., illus.
- *FC 13. Sport fishing in Alaska, by Henry O'Malley. Jan. 1933. 18 p., illus.
- *FC 14. Outlook for the mackerel fishery in 1933, by Oscar E. Sette. May 1933. 23 p., illus.
- *FC 15. Aquatic shell industries, by F. F. Johnson. Apr. 1934. 17 p., illus.
- *FC 16. A summary of game fish laws for 1933-34, with special reference to black bass, by Talbott Denmead. Apr. 1934. 43 p.
- *FC 17. Outlook for the mackerel fishery, 1934, by Oscar E. Sette. Apr. 1934. 6 p., illus.
- *FC 18. Conditions affecting the southern winter trawl fishery, by Robert A. Nesbit and William C. Neville. Jan. 1935. 12 p., illus.
- *FC 19. Practical fish cookery, by Agnes I. Webster and W. T. Conn. 1935. 26 p.
- *FC 20. A summary of game fish laws for 1935-36 with special reference to black bass, by Talbott Denmead. Oct. 1935. 48 p.
- *FC 21. The story of oysters, by R. H. Fiedler. 1936. 29 p., illus.
- *FC 22. Organizing and incorporating fishery cooperative marketing associations, by L. C. Salter. 1936. 38 p. Superseded by FL 277
- *FC 23. Decline in haddock abundance on Georges Bank and a practical remedy, by William C. Herrington. July 1936. 22 p., illus.
- *FC 24. A summary of game fish laws for 1936-37 with special reference to black bass, by Talbott Denmead. Dec. 1936. 49 p.
- *FC 25. Natural history and methods of controlling the common oyster drills (Urosalpinx cinerea Say and Eupleura caudata Say), by Paul S. Galtsoff, Herbert F. Prytherch and James B. Engle. July 1937. 24 p., illus.
- *FC 26. Instructions for conducting stream and lake surveys, by H. S. Davis. 1938. 55 p., illus.
- *FC 27. A summary of game fish laws for 1937-38 with special reference to black bass, by Talbott Denmead. Dec. 1938. 50 p.
- *FC 28. Propagation of bait and forage fish, by Henry C. Markus. Apr. 1939. 19 p., illus.

FISHERY LEAFLETS

- *FL 1. Black bass angling laws, prepared in the Division of Game Management. Apr. 1941. 3 p.
- *FL 2. Aquatic products in the arts and industries, prepared in the Division of Fishery Industries. July 1941. 4 p.
- FL 3. Shipworms and other marine borers, by Paul S. Galtsoff. May 1945. 4 p.
- FL 4. Sponges, by Paul S. Galtsoff. Apr. 1946. (Rev.) 7 p.
- FL 5. Sardines, prepared in the Division of Fishery Biology. May 1945. 12 p.
- FL 6. Some publications on fish culture and related subjects, prepared in the Branch of Gamefish and Hatcheries. Rev. Aug. 1950. 9 p.
- *FL 7. Anglers' license data for the year 1941-42, compiled by Harold T. Smither. Rev. July 1943. 2 p.
- *FL 8. Fishes with fins and scales. The anatomy of fishes in its bearing on the requirements of certain religious dietary regulations, with a note on the source of cod and other liver oils, by Isaac Ginsburg. Apr. 1946. 8 p. Rev. by FL 418.
- FL 9. Available publications on fisheries, compiled in the Division of Information. First issued Aug. 1942; brought up to date at intervals by revisions.
- FL 10. Use of sodium arsenite for controlling submerged vegetation in fishponds, prepared in the Division of Game-fish and Hatcheries. Jan. 1943. 5 p.
- FL 11. Sea mussels, a potential source of attractive low-cost sea food from the Atlantic coast, by Wm. C. Herrington and Leslie W. Scattergood. Dec. 1942. 5 p.
- *FL 12. Fertilization of fish ponds, prepared in the Division of Fishery Biology. Jan. 1943. 7 p.
- FL 13. Commercial clams of the Atlantic Coast of the United States, by V. L. Loosanoff. Rev. Dec. 1946. 14 p.
- FL 14. Pacific salmons. Rev. Mar. 1954. 8 p.
- FL 15. Lake trout, by John Van Oosten. Rev. July 1944. 8 p.
- *FL 16. Outlook for the Alaska herring fishery in 1943, by E. H. Dahlgren and L. N. Kolloen. Mar. 1943. 16 p.
- FL 17. Construction of farm ponds, prepared in the Branch of Game-fish and Hatcheries. Rev. Feb. 1951. 13 p., illus.
- ✓ FL 18. Home preservation of fishery products, salting, smoking, and other methods of curing fish at home, by Norman D. Jarvis. Re-issued Apr. 1945. 22 p., illus.
- ✓ FL 19. Cooking carp, by Edith E. Hopkins and Catherine M. Ritchie. Reissued Sept. 1951. 8 p.
- *FL 20. Canning tuna, by Norman D. Jarvis. June 1943. 7 p.
- *FL 21. How to cook the burbot, by Edith E. Hopkins and Catherine M. Ritchie. June 1943. 6 p.
- FL 22. Increasing the production of oysters and other shellfish in the United States, by Paul S. Galtsoff. June 1943. 14 p.
- FL 23. Earthworms for bait, prepared in the Branch of Game-fish and Hatcheries. Rev. June 1952. 3 p.
- *FL 24. List of publications on farm fish ponds, compiled in the Branch of Game-fish and Hatcheries. Rev. Mar. 1948. 6 p.
- *FL 25. List of publications on Irish moss (*Chondrus crispus*), prepared by Victor B. Scheffer. Reissued May 1945. 4 p.
- FL 26. Salting river herring (alewives) in Chesapeake Bay, by Norman D. Jarvis and R. W. Hines. May 1945. 4 p.
- FL 27. Farm fish ponds and their management, by O. Lloyd Meehan. Rev. Sept. 1945. 9 p.
- FL 28. Fish baits; their collection, care, preparation and propagation, compiled in the Branch of Game-fish and Hatcheries. Rev. Mar. 1950. 26 p., illus.
- *FL 29. Crab scrap as poultry feed, by John Ruel Manning. Aug. 1943. 3 p.
- ✓ *FL 30. Preparation of three fishes of the Pacific Coast, shark, shad, and lingcod, prepared in the Branch of Commercial Fisheries. Reissued Sept. 1951. 4 p.
- ✓ *FL 31. Some South American fish recipes, by Norman D. Jarvis. Reissued May 1948. 9 p.
- *FL 32. Consider the fishes, by Reginald H. Fiedler. Sept. 1943. 3 p.

- *FL 33. Whalemeat, prepared in the Division of Commercial Fisheries. May 1945. 2 p.
- *FL 34. A manual for demonstrating the cooking of carp, by Edith E. Hopkins. Sept. 1943. 10 p.
- FL 35. Fish cookery in the open, by W. T. Conn. Reissued Nov. 1945. 27 p.
- FL 36. The food value of fish and shellfish, by Hugo W. Nilson. Reissued June 1948. 2 p.
- FL 37. Canning Atlantic and Gulf oyster, by Norman D. Jarvis. May 1945. 3 p.
- FL 38. Brine-salted herring, by Norman D. Jarvis. Sept. 1943. 2 p.
- FL 39. The utilization of echinoderms and of gasteropod mollusks, by H. P. Kjerskog-Agersborg. Oct. 1943. 7 p. In American Naturalist, v. 54, no. 634, Sept.-Oct. 1920.
- *FL 40. The transportation of frozen live fishes by Eugene Mir and J. Audigé. Oct. 1943. 5 p., From Bulletin de la Société Centrale d'Agriculture et de Pêche, t. 25, Paris, 1913. Translated by Jessie E. Drayton.
- FL 41. List of state-owned fish hatcheries and rearing stations, prepared in the Branch of Game-fish and Hatcheries. Rev. Sept. 1954. 2-4 p.
- *FL 42. Restoration and management of the New England alewife fisheries with special reference to Maine, by George A. Rounsefell and Louis D. Stringer. Dec. 1943. 33 p.
- *FL 43. Care of aquarium fishes, prepared in the Branch of Fishery Biology. Rerun May 1950. 9 p.
- *FL 44. How to make bloaters, from the Art of Fish Curing, by "Viking," (R. J. Duthrie) Aberdeen. 1911, 45-46 p. Dec. 1943. 2 p.
- FL 45. Brine-cured cod, by Norman D. Jarvis. May 1945. 2 p.
- FL 46. Dealers in trout and pondfishes, prepared in the Division of Fish Culture. Rev. Feb. 1944. 7 p. Superseded by Trout and pondfish dealers, compiled by U.S. Dept. of the Interior, Fish and Wildlife Service, published by Sport Fishing Institute, Washington, D. C., Oct. 1952. 14 p.
- *FL 47. Fisheries of North America with special reference to the United States, by R. H. Fiedler. Jan. 1944. 12 p. Reprinted from the Geographical Review, v. 30, no. 2, Apr. 1940.
- *FL 48. Striped mullet and their preparation for the table, prepared in the Branch of Commercial Fisheries. reissued Feb. 1952. 4 p.
- *FL 49. Otter trawl net for small fishing boats, by B. O. Knake and R. T. White-leather. Mar. 1945. 23 p., illus. From Fishery Bulletin of Puerto Rico, v. 9, no. 2, June 1943.
- FL 50. Preparation of fresh eastern oysters for market, by S. R. Pottinger. Mar. 1944. 8 p.
- FL 51. Brine-salted mullet, by Norman D. Jarvis. Rev. Sept. 1945. 4 p., illus. Replaces Sep no. 24.
- FL 52. Planting and marketing oysters in the Pacific Northwest, by Lynn G. McKee. Reissued May 1948. 6 p.
- FL 53. Sauces for seafoods, prepared in the Branch of Commercial Fisheries. Reissued July 1948. 4 p.
- *FL 54. Scaler boosts fish production, by L. V. Burton. 2 p., illus. Reprinted from Food Industries, Jan. 1944.
- FL 55. Breathing in fishes, by James S. Gutsell. Rev. Mar. 1947. 3 p.
- FL 56. Fish distribution boat, by Roy D. Noble and C. H. Bennett. Apr. 1944. 4 p., illus.
- FL 57. Care of goldfish, prepared in the Branch of Game-fish and Hatcheries. Rev. July 1952. 5 p.
- FL 58. Some publications on diseases and parasites of fishes, compiled in the Division of Fishery Biology. Rev. Mar. 1947. 6 p.
- FL 59. Construction of a garden fish pool, prepared in the Division of Game Fish and Hatcheries. Oct. 1946. 4 p.
- FL 60. Mild curing, pickling, dry salting, and smoking salmon, by Norman D. Jarvis. Reissued Sept. 1948. 13 p.
- FL 61. Capture and marketing of garfish (with special reference to those of Louisiana) and recipes for their preparation, prepared in the Division of Fishery Industries. June 1944. 6 p.

- *FL 62. Preserving the angler's catch, prepared in the Division of Fish Culture. June 1944. 2 p.
- *FL 63. The body oil from menhaden (Brevoortia tyrannus). A. Low temperature crystallization of glycerides. B. Some of the 18 and 20 carbon atom acids, by W. H. Baldwin and L. E. Parks. Reissued June 1944. 4 p. Reprinted from Oil and Soap, June 1943, v. 20, no. 6.
- FL 64. Construction and operation of lobster fishing gear, by Frank E. Firth. Reissued Jan. 1950. 14 p., illus.
- FL 65. An outlet gate for farm fish ponds, prepared in the Division of Fish Culture. June 1944. 4 p., illus.
- FL 66. Preservation and care of fish nets, by Frank E. Firth and Carl B. Carlson. Reissued Dec. 1949. 6 p.
- FL 67. The top minnow, Gambusia - the mosquito destroyer. Rev. July 1944. 5 p.
- FL 68. Sea nettles or jellyfishes, prepared in the Division of Fishery Biology. July 1944. 4 p.
- FL 69. Markets and recipes for fresh-water turtles, prepared by the Educational and Market Development Section, Branch of Commercial Fisheries. Rev. Sept. 1954. 4 p.
- FL 70. The treatment of fish diseases, by H. S. Davis. July 1944. 5 p.
- FL 71. Edible crabs. Rev. July 1945. 4 p.
- FL 72. Culture of hard clams, prepared in the Division of Fishery Biology. July 1944. 2 p.
- FL 73. Culture of soft clams, prepared in the Branch of Fishery Biology. Reissued Sept. 1948. 2 p.
- FL 74. The American lobster (Homarus americanus), prepared in the Division of Biology. Dec. 1944. 8 p.
- FL 75. The Peruvian fisheries, by Reginald H. Fiedler. Reissued Sept. 1952. 13 p., illus. Reprinted from Geographical Review, v. 34, no. 1, Jan. 1944.
- FL 76. The black basses, prepared in the Division of Fishery Biology. Aug. 1944. 4 p.
- *FL 77. The fur-seal industry of the Pribilof Islands, Alaska, by Ward T. Bower. Rev. July 1945. 8 p.
- *FL 78. Historical outline of the canning of fishery products, by Norman D. Jarvis. Reprinted from RR 7. 1-13 p., illus.
- FL 79. Operations involved in canning, by Norman D. Jarvis. Reprinted from RR 7, 1944. 93-111 p.
- FL 80. Pacific salmon, prepared by R. W. Clough, E. D. Clark and Norman D. Jarvis. Reprinted from RR 7. 117-145 p., illus.
- FL 81. Sardines, by Norman D. Jarvis. Reprinted from RR 7. 147-174 p., illus.
- FL 82. Tuna, prepared by O. W. Lang and N. D. Jarvis. Reprinted from RR 7. 175-198 p., illus.
- FL 83. Mackerel, by Norman D. Jarvis. Reprinted from RR 7. 199-224 p., illus.
- FL 84. Shellfish, by Norman D. Jarvis. Reprinted from RR 7. 225-257 p., illus.
- FL 85. Crustacea, by Norman D. Jarvis. Reprinted from RR 7. 259-283 p., illus.
- FL 86. Specialty products, by Norman D. Jarvis. Reprinted from RR 7. 285-297 p., illus.
- FL 87. Fish roe and caviar, by Norman D. Jarvis. Reprinted from RR 7. 299-308 p.
- FL 88. Canned products hermetically sealed but not processed, by Norman D. Jarvis. Reprinted from RR 7. 309-322 p.
- FL 89. Spoilage in canned fishery products, by Norman D. Jarvis. Reprinted from RR 7. 323-354 p., 89-93 p.
- FL 90. Canned fishery products as food, by Norman D. Jarvis. Reprinted from RR 7. 355-362 p., illus.
- FL 91. Turtles in the home aquarium, prepared in the Branch of Game-fish and Hatcheries. Rev. Feb. 1951. 2 p.
- FL 92. Fishways for small streams, by George A. Rounsefell. Oct. 1944. 6 p., illus.

- *FL 93. New foods from salmon cannery waste, by Lyle Anderson and Frank Piskur. Oct. 1944. 2 p., illus. Reprinted from Apr. 1944 issue of the Pacific Fisherman.
- ✓ FL 94. Judging the quality and freshness of fish by organoleptic methods, by Maurice E. Stansby. Reissued Feb. 1952. 6 p.
- *FL 95. The latent fisheries of Washington and Alaska, by Wilbert McLeod Chapman. Oct. 1944. 9 p. From California Fish and Game, v. 28, no. 4, Oct. 1942.
- *FL 96. Biological positions in the Division of Fishery Biology. Oct. 1944. 4 p.
- FL 97. Fish culture as a livelihood, prepared in the Branch of Game-fish and Hatcheries. Rev. Feb. 1954. 3 p.
- FL 98. Loch Leven trout (*Salmo trutta levenensis*), by George A. Rounsefell. Sept. 1946 (Rev.) 1 p.
- FL 99. Extraction of vitamin A from dogfish livers, by R. W. Harrison and Wm. S. Hamm. Oct. 1944. 2 p. From Pacific Fisherman 39(9) July 1941.
- *FL 100. Determination of the age of fishes, prepared in the Division of Fishery Biology. Nov. 1944. 4 p.
- *FL 101. A survey of academic qualifications for fishery biologists and of institutional facilities for training fishery biologists, by H. J. Deason. p. 128-142. Reprinted from v. 70 (1940) Transactions of the American Fisheries Society.
- FL 102. Frog culture and the frog industry, prepared in the Division of Fishery Biology. Rev. Dec. 1944. 4 p.
- ✓ FL 103. Suggestions for storing frozen fish, by J. M. Lemon. Re-issued Mar. 1947. 4 p.
- FL 104. The canning of Maine sea herring, by Buell W. Blair, E. J. Cameron and Norman D. Jarvis. Dec. 1944. 2 p. Replaces Sep. 7.
- FL 105. §
- ✓ FL 106. Basic recipes for cooking fish, by Rose G. Kerr. Reissued Sept. 1949. 7 p.
- ✓ FL 107. Opportunities for small business in the fisheries of the Pacific Northwest and Alaska, by M. E. Stansby. Feb. 1945. 6 p.
- *FL 108. The relative productivity and value of the fisheries of the United States and Alaska, by Bob Finley. Rev. Apr. 1952. 10 p., illus.
- *FL 109. The fisheries of the world, by Arthur M. Sandberg. Feb. 1945. 8 p., illus. Supersedes Sep 70.
- *FL 110. The steelhead and rainbow trouts, prepared in the Division of Fishery Biology. Mar. 1945. 2 p.
- *FL 111. Fighting fibers and comparable values of fibers for use in commercial fisheries, by Frank E. Firth. Feb. 1945. 6 p. Supersedes Sep 54 and Sep 73.
- FL 112. Mortality of fishes in fresh water ponds and lakes, prepared in the Division of Fishery Biology. Mar. 1945. 2 p.
- FL 113. Tagging and marking fish, by Lawrence N. Kolloen. July 1945. 5 p.
- *FL 114. Crustaceans as food for fishes in fish culture, prepared in the Division of Fishery Biology. Mar. 1945. 4 p.
- ✓ FL 115. Handling fresh fish, by Maurice E. Stansby. Reissued Feb. 1952. 4 p.
- ✓ FL 116. Composition of fish, by M. E. Stansby. Reissued Dec. 1953. 16 p.
- *FL 117. Positions in the Division of Commercial Fisheries. Rev. Feb. 1946. 6 p.
- FL 118. Agar, agaroids, and the American agar industry, by Horace H. Selby. Reissued June 1948. 4 p.
- *FL 119. Summary of the game fish laws for 1945, prepared in the Division of Game-fish and Hatcheries. Apr. 1945. 15 p.
- *FL 120. Dehydration of fishery products, by Maurice E. Stansby. Rev. Oct. 1946. 7 p.
- *FL 121. Observations on the shark fishery in the central part of the Gulf of California with records of vitamin potency of liver oils and with keys to the identification of commercially important sharks, by Lionel A. Walford. Apr. 1945. 6 p., illus. Supersedes Sep. 68.
- ✓ FL 122. Smoking lake herring, whitefish, lake trout and carp, by Norman D. Jarvis. Reissued June 1949. 6 p., illus.

- FL 123. Sharks, and skates or rays, by Samuel F. Hildebrand. Rev. Mar. 1947. 4 p.
- ✓ FL 124. Dermatitis in the fish industry, by Louis Schwartz and Irving R. Tabershaw. Reissued Dec. 1949. 7 p. Reprinted from Journal of Industrial Hygiene and Toxicology, v. 27, no. 1, Jan. 1945.
- FL 125. How to make and mend fish nets. Reissued Jan. 1952. 7 p., illus. Reprinted from Atlantic Fisherman, Feb. 1945.
- ✓ FL 126. Fish reduction processes, by Charles Butler. Rev. Apr. 1949. 16 p., illus.
- FL 127. Eel fishing and eel pots, by Frank E. Firth. July 1945. 9 p., illus.
- ✓ FL 128. Refrigerated locker storage of fish and shellfish, by Martin Heerdt, Dorris L. Bucher and Maurice E. Stansby. Rev. June 1949. 20 p., illus.
- FL 129. The Pacific sardine fishery, prepared by the staff of the South Pacific Section of the Division of Fishery Biology. Rev. May 1947. 6 p.
- FL 130. Rains of fishes, toads, and frogs, prepared in the Division of Fishery Biology. July 1945. 2 p.
- FL 131. Crayfish, prepared in the Division of Fishery Biology. July 1945. 7 p.
- FL 132. Structure and senses of fish, by Ralph Hile. Feb. 1949. 13 p., illus.
- FL 133. Catfishes, prepared in the Division of Fishery Biology. July 1945. 3 p.
- FL 134. The black drum (*Pogonias cromis*), prepared in the Division of Fishery Biology. July 1945. 2 p.
- FL 135. Guide to commercial shark fishing in the Caribbean area, prepared by the Anglo-American Caribbean Commission. 1945. 149 p., illus. Republication of booklet originally published by the Anglo-American Caribbean Commission, Mar. 1945.
- ✓ FL 136. Dry-salting mullet, red drum (channel bass) and kingfish (king mackerel) by Norman D. Jarvis. Sept. 1945. 7 p., illus.
- *FL 137. Summary of trout stocking experiments, by Ancil D. Holloway. Aug. 1945. 16 p.
- ✓ FL 138. Some time and labor saving techniques in vitamin A and oil analyses, by F. B. Sanford, G. C. Bucher and W. Clegg. Reissued June 1948. 3 p., illus.
- *FL 139. WFA net weights and conversion factors for fishery products summarized. July 1945. 3 p. Supersedes Sep 75.
- *FL 140. 'Fish poisoning' and its prevention, by O. W. Lang. Aug. 1945. 3 p. Taken from Pacific Fisherman, v. 30, no. 7, June 1932.
- ✓ FL 141. Drill sampling device for fish livers. 1. Constructional details, by L. G. McKee, F. B. Sanford and G. C. Bucher. Aug. 1945. 6 p., illus. Supersedes Sep 84.
- *FL 142. Spiny lobster, by John C. Pearson and W. W. Anderson. Rev. Nov. 1946. 4 p.
- ✓ *FL 143. Preparation of fish for storage in refrigerated lockers, by Leo Young. Sept. 1945. 13 p., illus. Reprinted from Locker Operator, Aug. 1945.
- ✓ *FL 144. Precooked frozen fish preparations, by Kathryn L. Osterhaug and Dorris L. Bucher. Sept. 1945. 7 p., illus. Reprinted from Food Packer, Aug. 1945.
- FL 145. Pearl culture, prepared in the Branch of Fishery Biology. Reissued Jan. 1950. 3 l.
- ✓ FL 146. Preliminary report on the use of DDT as an insecticide in the fishery industries, by Leslie A. Sandholzer and A. W. Lindquist. Oct. 1945. 7 p.
- FL 147. List of federal fish-cultural stations, prepared in the Branch of Game-fish and Hatcheries. Rev. Nov. 1954. 5 p.
- FL 148. Improved fish trap for taking spawners, prepared in the Division of Game-fish and Hatcheries. Feb. 1946. 2 p., illus.
- FL 149. Unemployment insurance information for fishermen and allied workers, Chesapeake Bay states, Maryland and Virginia, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Nov. 1945. 6 p.

- FL 150. Unemployment insurance information for fishermen and allied workers, middle Atlantic states, New York, New Jersey, Pennsylvania, Delaware, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Nov. 1945. 13 p.
- FL 151. Unemployment insurance information for fishermen and allied workers, New England states, Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Dec. 1945. 15 p.
- FL 152. Unemployment insurance information for fishermen and allied workers, South Atlantic states, North Carolina, South Carolina, Georgia, Florida, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Dec. 1945. 13 p.
- FL 153. Unemployment insurance information for fishermen and allied workers, Pacific Coast states, Washington, Oregon, California, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Dec. 1945. 9 p.
- FL 154. Unemployment insurance information for fishermen and allied workers, Gulf states, Alabama, Mississippi, Louisiana, Texas, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Dec. 1945. 11 p.
- ✓ FL 155. Dry ice refrigeration of fresh fish fillets, by E. F. Kapalka and R. H. Flowers. Dec. 1945. 4 p., illus. Supersedes Sep 32.
- ✓ FL 156. The commercial importance of seaweed gums in the United States, by Victor B. Scheffer. Nov. 1945. 5 p. Supersedes Sep 23.
- FL 157. Japanese fishing industry, extracted by the Office of the Chief of Naval Operations from information in the Navy Department files. Dec. 1945. 21 p.
- *FL 158. Some methods of fishing sharks, extracted from "Preliminary report of the shark investigations at Big Pine, Fla." 1924, by Elmer Higgins. Dec. 1945. 2 p.
- *FL 159. Condensed fish press water and fish liver meal in chick rations, by E. P. Berry, C. W. Carrick, Roy E. Roberts, and S. M. Hauge. Dec. 1945. 7 p. Reprinted from Poultry Science, v. 24, no. 3, May 1945.
- FL 160. Partial list of fishery periodicals, by Ruth V. Keefe. Rev. Dec. 1952. 9 p.
- *FL 161. Ridding ponds of turtles, prepared in the Division of Fishery Biology. Dec. 1945. 2 p., illus.
- FL 162. Aquatic biology and oceanography; a selected list of books, compiled in the Library. Rev. Nov. 1952. 12 p.
- *FL 163. Culture and care of minnows, shiners, and bait fish, prepared in the Division of Fishery Biology. Mar. 1946. 4 p.
- FL 164. Alligators, prepared in the Division of Fishery Biology. Feb. 1946. 2 p.
- *FL 165. Some tropical aquarium fishes, prepared in the Division of Fishery Biology. Mar. 1946. 16 p. Superseded by FL 411.
- FL 166. The pikes, by John Van Oosten. Reissued Feb. 1953. 7 p.
- *FL 167. Fishing vessels of New England and New York City, 1945, by H. M. Bearse and W. F. Royce. Jan. 1946. 43 p.
- FL 168. Commercial fishery laws and regulations by Ruth V. Keefe. Rev. July 1954. 8 p.
- FL 169. Natural history and methods of controlling the starfish, *Asterias forbesi* (Desor), prepared in the Division of Fishery Biology. Mar. 1946. 7 p.
- FL 170. Sponge production and international sponge trade of the United States, by Richard A. Kahn and Lois B. Sandven. Jan. 1946. 8 p., illus.
- FL 171. Unemployment insurance information for fishermen and allied workers, Great Lakes states, Minnesota, Wisconsin, Illinois, Michigan, Ohio, compiled by the Economics and Cooperative Marketing Section, Division of Commercial Fisheries. Dec. 1945. 18 p.
- ✓ FL 172. Compliance with the Federal Food, Drug and Cosmetic Act in the marketing of fishery products, by Albert C. Hunter. Jan. 1946. 3 p. Supersedes Sep 26.
- ✓ FL 173. Agar and other seaweed gums: a summary of data on chemical and physical properties, by Leonard S. Stoloff and Charles F. Lee. Mar. 1946. 8 p., illus. Supersedes Sep 44.
- FL 174. Stream pollution hazards of wood pulp mill effluents, by B. A. Westfall. Reissued Jan. 1950. 9 p.

Series

- FL 175. Striped bass (Roccus saxatilis), prepared in the Division of Fishery Biology. Mar. 1946. 4 p.
- FL 176. Atlantic Salmon (Salmo salar). Rev. Mar. 1954. 6 p.
- FL 177. Progress report on tests in commercial fisheries of cordages made from various fibers. Reissued Mar. 1946. 7 p. Prepared on May 15, 1944, by Frank E. Firth.
- FL 178. Partial list of fishing boat builders, prepared in the Branch of Commercial Fisheries. Rev. Feb. 1953. 4 p.
- *FL 179. The shad, Alosa sapidissima. Mar. 1946. 5 p.
- ✓FL 180. Home canning of fish, by Norman D. Jarvis. Rev. July 1948. 13 p.
- ✓FL 181. Fish can be stored in refrigerated lockers with other foods, by Martin Heerdt, Jr. Mar. 1946. 3 p.
- FL 182. Reproduction in fishes, prepared in the Division of Fishery Biology. Apr. 1946. 5 p.
- *FL 183. Some publications on corals, prepared in the Division of Fishery Biology. Apr. 1946. 1 p.
- *FL 184. The Chesapeake Bay soft crab industry, by Prentiss W. Evans. Rev. Apr. 1946.
- ✓FL 185. Keeping quality of east coast crab meat in fiberboard containers and in tin cans, by S. R. Pottinger. May 1946. 4 p., illus. Supersedes Sep 33.
- *FL 186. "Non-gilling" fish sorter, prepared in the Division of Game Fish and Hatcheries. May 1946. 2 p., illus.
- FL 187. The oyster and the oyster industry in the United States, by Paul S. Galtsoff. Rerun Mar. 1949. 10 p.
- *FL 188. The tuna industry of southern Spain, by T. E. A. Classen. July 1946. 28 p.
- ✓FL 189. Icing of fish at sea, by Boris O. Knake. July 1946. 3 p., illus. Supersedes Sep 110.
- FL 190. Turtle trapping, prepared in the Branch of Game-fish and Hatcheries. Rev. Aug. 1951. 5 p., illus.
- *FL 191. Dealers in bait fishes, prepared in the Division of Game-fish and Hatcheries. July 1946. 3 p. Superseded by Bait fish wholesale dealers and producers, compiled by U.S. Dept. of the Interior, Fish and Wildlife Service, published by Sport Fishing Institute, Washington, D. C., Oct. 1952. 8 p.
- *FL 192. Gloucester - three centuries a fishing port, by Homer Haberland. Aug. 1946. 5 p., illus. Supersedes Sep 138.
- FL 193. Partial lists of dealers in goldfish, aquarium fishes, plants and accessories, compiled in the Branch of Game-fish and Hatcheries. Rev. May 1949. 5 p.
- ✓FL 194. Recipes for Pacific rockfish, by Kathryn L. Osterhaug. Sept. 1946. 2 p.
- FL 195. Partial list of manufacturers of fishing gear and accessories, compiled in the Branch of Commercial Fisheries. Rev. Sept. 1952. 8 p.
- ✓FL 196. Smoking of herring, by Norman D. Jarvis. Reissued July 1949. 10 p.
- FL 197. Fishery statistics, by C. E. Peterson. Rev. Feb. 1952. 12 p.
- FL 198. Haddock (Melanogrammus aeglefinus), by Howard A. Schuck. Rev. Sept. 1947. 10 p.
- FL 199. New rig for high opening otter trawl, by Division of Commercial Fisheries. Oct. 1946. 1 p., illus.
- *FL 200. List of fishery leaflets 1-200, compiled by Barbara B. Aller. Jan. 1947. 13 p.
- ✓FL 201. Studies of the fecal streptococci, by Charles E. Winter and Leslie A. Sandholzer. Oct.-Nov. 1946. 9 p.
- ✓FL 202. Pacific salmon -- succulent and savory, by Kathryn L. Osterhaug. Reissued Aug. 1950. 6 p. Reproduced through the courtesy of Better Food, Jan. 1947.
- FL 203. Quick-freezing technique. Mr. H. W. Dunsford, Associate Member, presented the following paper at a meeting of the Institute of Refrigeration (Empire House, St. Martin's-le-Grand, London, E. C. 1) held at the Institution of Mechanical Engineers, on December 12th, 1945. Reissued June 1948. 5 p. From Modern Refrigeration, Dec. 20, 1945.
- ✓FL 204. A cardboard smokehouse, by Walter A. Rust. Reissued Feb. 1954. 4 p., illus. Supersedes Sep 141.

- *FL 205. Field method for determination of the oil content of fish livers, by F. Bruce Sanford, Manuel Cantillo and Glenn C. Bucher. Nov. 1946. 3 p. Supersedes Sep 98.
- FL 206. Certain aspects of the German fishing industry. Report 1 - Fish processing machinery...abstracted from Bios Final Report no. 493, Item no. 22. Dec. 1946. 7 p.
- FL 207. Certain aspects of the German fishing industry. Report 2 - Quick freezing and cold storage of fish...abstracted from Bios Final Report no. 493, Item no. 22. Dec. 1946. 7 p., illus.
- FL 208. Certain aspects of the German fishing industry. Reprt 3 - Smoke curing of fish...abstracted from Bios Final Report no. 493, Item no. 22. Dec. 1946. 5 p.
- FL 209. Certain aspects of the German fishing industry. Report 4 - The preservation of fish by canning and related processes...abstracted from Bios Final Report no. 493, Item no. 22. Dec. 1946. 4 p.
- FL 210. Certain aspects of the German fishing industry. Report 5 - "Wiking Eiweiss"...abstracted from Bios Final Report no. 493, Item no. 22. Dec. 1946. 7 p.
- FL 211. Certain aspects of the German fishing industry. Report 6 - Institute for the utilization of fish of the federal fisheries agency...abstracted from Bios Final Report no. 493, Item no. 22. Dec. 1946. 3 p.
- ✓ FL 212. A rapid test for vitamin A stability, by F. B. Sanford, R. W. Harrison, and M. E. Stansby. Dec. 1946. 3 p., illus. Supersedes Sep 129.
- ✓ FL 213. Wrapping materials for frozen fish, by Martin Heerdt, Jr. Jan. 1947. 1 p., illus. Supersedes Sep 148.
- ✓ FL 214. Fish refrigeration, by J. M. Lemon. Reissued June 1948. 21 p., illus. Reprinted from Refrigerating Data Book, Applications volume, 1946.
- FL 215. Outlook for production, distribution, and marketing in the fisheries and related industries in 1947. A summary of factors bearing on the fisheries, prepared in the Division of Commercial Fisheries. Mar. 1947. 21 p., illus.
- FL 216. Diamond-back terrapin culture, by Samuel F. Hildebrand and Herbert F. Prytherch. Mar. 1947. 6 p.
- FL 217. Aquatic plant control with 2, 4-D, by Eugene W. Surber. Rerun Nov. 1948. 6 p.
- *FL 218. List of books on angling and fishery equipment, prepared in the Division of Game-fish and Hatcheries. Oct. 1947. 7 p.
- *FL 219. Recipes used in the fish cookery demonstrations, South Atlantic states, by Jean Burtis. Mar. 1947. 3 p.
- *FL 220. Glossary of Japanese fisheries terms, prepared by Richard S. Croker. Mar. 1947. 40 p. Reproduction of Report no. 63, General Headquarters, Supreme Commander for the Allied Powers, Natural Resources Section, Tokyo, 1946.
- FL 221. Temperature and fishes, by M. M. Ellis. Reissued Apr. 1952. 4 p.
- FL 222. Disease control in hatchery fish, by Frederic F. Fish. Mar. 1947. 10 p., illus.
- FL 223. Commercial clams of the Pacific Coast of the United States, by V. L. Loosanoff. Apr. 1947. 7 p.
- *FL 224. Important products in the canned and frozen fish trade, prepared in the Division of Commercial Fisheries. Apr. 1947. 17 p.
- FL 225. Gear used in the sea scallop fishery, by William F. Royce. Apr. 1947. 5 p., illus. Supersedes Sep. 157.
- ✓ FL 226. How oil and vitamin A are determined in fish livers, by F. B. Sanford and G. C. Bucher. Rev. June 1948. 3 p., illus.
- FL 227. Fishing industry of Ecuador, by Hugo W. Alberts, Apr. 1947. 5 p. American Consulate General Report no. 97, Guayaquil, Ecuador, Nov. 1, 1946.
- FL 228. Fisheries in St. Lucia, British West Indies, by Henry L. Taylor. Apr. 1947. 2 p. American Consulate Report no. 54, St. George's, Grenada, British West Indies, Mar. 27, 1947.
- FL 229. Operation fisheries in Japan, address by Reginald H. Fiedler at the Fishery Products Conference of the National Canners Association in Convention at Atlantic City, N. J., Jan. 20, 1947. Apr. 1947. 8 p., illus.
- FL 230. The Japanese salmon industry compiled by Capt. Verne W. Broadbent. Mar. 1947. 12 p., illus. Supersedes Sep 143. A reprint of Report no. 31, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, 1946.

- FL 231. The sea urchin fishery, by Leslie W. Scattergood. May 1947. 2 p.
- ✓ FL 232. Fishery technology abstract card system, by M. E. Stansby and K. L. Osterhaug. Rev. Oct. 1950. 20 p.
- ✓ FL 233. The fish liver oil industry, by Charles Butler. Mar. 1948. 104 p., illus.
- FL 234. Japanese fishing gear, compiled by John L. Kask, with the assistance of Yoshio Hiyama. May 1947. 107 p., illus. Reproduction of Report no. 71, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, Mar. 5, 1947.
- FL 235. The Kamloops rainbow trout, by Charles M. Mottley. May 1947. 3 p.
- FL 236. Fisheries education and research in Japan, compiled by John L. Kask, May 1947. 26 p., illus. Reprint of Report no. 37, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, 1946.
- ✓ FL 237. The calculation of the vitamin A potency of fish livers, by F. Bruce Sanford. Rev. July 1948. 2 p.
- FL 238. The sponge industry in Turkey, by Jean D. Brennan. May 1947. 3 p. Report no. 26, American Embassy, Ankara, Turkey, Mar. 5, 1947.
- FL 239. Fishery resources of Micronesia, by Robert O. Smith. May 1947. 46 p., illus. Superseded by FL 273.
- ✓ FL 240. The Venezuelan salt-fish industries, by Milton J. Lobell and Joseph F. Puncochar, with a Supplementary report: Studies on the control of "reddening" in salt-fish products by Joseph F. Puncochar and Francisca Arana. June 1947. 81 p., illus.
- FL 241. Methods of net mending - - New England, by Boris O. Knake. May 1947. 17 p., illus. From Commercial Fisheries Review, Mar. 1947.
- ✓ *FL 242. A rapid method for determining the vitamin A potency of fish livers, by F. Bruce Sanford. June 1948. 2 p. Supersedes Sep 100.
- FL 243. Aids for small business, prepared in the Branch of Commercial Fisheries, Educational and Market Development Section. Rev. Apr. 1954. 6 p.
- FL 244. Conversion of selected Japanese weights and measures. June 1947. 1 p. From Bulletin no. 5 Japanese Economic Statistics, Jan. 1947, p. 43, Economic and Scientific Section, Research and Statistics Division, Supreme Commander for the Allied Powers.
- FL 245. Balloon trawl construction (Long Island type), by R. T. Whiteleather. Reissued Apr. 1948. 3 p., illus.
- FL 246. Fresh-water mussel shells, by W. Paul Brann. June 1947. 12 p. Excerpts from Research series no. 9, Bureau of Research, University of Arkansas.
- ✓ FL 247. Fish for breakfast -- and why not? By Kathryn L. Osterhaug. June 1947. 4 p., illus. Supersedes Sep 131.
- FL 248. Japanese whaling in the Bonin Island area. (A preliminary report) Prepared by Bell M. Shimada. June 1947. 6 p., illus. Reprint of Report no. 73, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, Apr. 1947.
- FL 249. Natural resources of Japan (revised edition). June 1947. 60 p., illus. Reproduction of report prepared by the Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, April 1947.
- FL 250. Part 1 - The Cuban shark industry. Part 2 - Cuban government fosters fishing cooperatives, by Joseph L. Martinez. July 1947. 18 p., illus. Report no. 155 and no. 220, American Embassy, Habana, Cuba. Apr. 17, 1947 and June 9, 1947.
- FL 251. Gold coast sea fisheries, prepared by Robert B. Houston, Jr. Aug. 1947. 7 p. Report no. 12, American Consulate, Accra, Gold Coast, Apr. 17, 1947.
- *FL 252. The decline and rehabilitation of the southeastern Alaska herring fishery, by Lawrence N. Kolloen. July 1947. 13 p.
- FL 253. Manitoba's fresh water fishing industry, prepared by Stewart E. McMillin. July 1947. 26 p. American Consulate General Report no. 12, Winnipeg, Canada, Feb. 18, 1947.
- FL 254. List of fishery associations in the United States, Alaska, and Hawaii. Rev. May 1954. 13 p.
- FL 255. Fishery motion pictures. Rev. 1954. 4 p.

- FL 256. Outlook for Newfoundland fisheries, 1947, by L. O. Sanderhoff. Aug. 1947. 10 p. Report no. 49, American Consulate General, St. John's, Newfoundland, July 10, 1947.
- *FL 257. State trading in Iceland with respect to its fisheries, by Joseph H. Rogatnick. Aug. 1947. 5 p. Report no. 22 from American Legation, Reykjavik, Iceland, dated June 4, 1947.
- ✓ FL 258. Retailing fish, by A. M. Sandberg. Aug. 1947. 8 p., illus.
- *FL 259. The fisheries and fishery resources of the Caribbean area. (A report of the Caribbean Fishery Mission of 1942). By Reginald H. Fiedler, Milton J. Lobell and Clarence R. Lucas. Sept. 1947. 210 p., illus. Republication of report issued Aug. 1943 by Office of the Coordinator of Inter-American Affairs.
- FL 260. Mexican fishery legislation, compiled by Milton J. Lindner. Oct. 1947. 131 p.
- ✓ FL 261. A partial bibliography relating to agar, by Leonard S. Stoloff. Aug. 1947. 14 p.
- FL 262. Crab pot construction (Chesapeake Bay type), by Emmett Andrews. Sept. 1947. 4 p., illus.
- *FL 263. The Japanese agar-agar industry, compiled by Claude M. Adams. Sept. 1947. 24 p., illus. Reprint of Report no. 42, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, June 28, 1946.
- ✓ FL 264. Palatability of Pacific rockfish fillets, by R. Paul Elliott and Kathryn L. Osterhaug. Sept. 1947. 5 p., illus. Supersedes Sep. 151.
- ✓ FL 265. Bibliography of the preservation of fishery products by freezing. Part 1 - Period to January 1945, by Dorris Bucher, Martin Heerdt, Kathryn Osterhaug. Part 2 - Period of January 1945 to December 1947, inclusive, by John Dassow. Reissued Sept. 1949. 88 p.
- FL 266. Fisheries of Uruguay, by Alfredo Comelli and DeWitt L. Stora. Sept. 1947. 15 p. Report no. 92, Apr. 30, 1947, American Embassy, Montevideo, Uruguay.
- FL 267. Sao Paulo fishing industry, by John F. Root. Sept. 1947. 14 p. American Consulate General. Report no. 131, Sao Paulo, Brazil, Aug. 26, 1947.
- FL 268. Japan's big fishing companies, prepared by John L. Kask. Sept. 1947. 23 p., illus. Reproduction of Preliminary Study no. 5, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, Mar. 13, 1947.
- ✓ FL 269. Cod -- the beef of the sea, by Rose G. Kerr. Reissued May 1951. 7 p.
- ✓ FL 270. The electrostatic smoking of sardines by William S. Hamm and Walter A. Rust. June 1948. 4 p., illus.
- FL 271. Spanish fishing industry, 1946, by Mario A. Rey. Sept. 1947. 8p. American Consulate Report no. 3, Vigo, Spain, July 31, 1947.
- FL 272. Volume and value of the catch of fish and shellfish landed at Malaga, 1946, by James G. Orn. Oct. 1947. 3 p. American Consulate Report no. 11, Malaga, Spain, Aug. 20, 1947.
- FL 273. Survey of the fisheries of the former Japanese mandated islands, by Robert O. Smith. Oct. 1947. 105., illus. Supersedes FL 239.
- ✓ FL 274. Evaluation of surface pH as a freshness index for fish fillets, by R. Paul Elliott. Oct. 1947. 12 p., illus. Article appeared in Food Research, v.12, no. 2, Mar.-Apr. 1947.
- ✓ FL 275. Fish and shellfish canapes and hors d'oeuvres, by Norman D. Jarvis. Reissued Mar. 1949. 8 p.
- ✓ FL 276. The "Bob" method of picking blue crabs, by Emmett Andrews. Mar. 1948. 6 p., illus.
- FL 277. Organizing and incorporating fishery cooperative marketing associations, by L. C. Salter revised by R. A. Kahn. Feb. 1948. 106 p. Supersedes FC 22.
- ✓ FL 278. Freezing fish at sea, by J. M. Lemon and C. B. Carlson. Jan. 1948. 11 p., illus. Reproduced from Dec. 1947 issue of Refrigerating Engineers, v.54, no. 6.
- FL 279. Japanese fisheries production 1908-46, (a statistical report), prepared by Ada V. Espenshade. Jan. 1948. 40 p., illus. Reproduction of Report no. 95, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo.
- FL 280. Ambergris, Jan. 1948. 4 p. Reprinted from Chemical Trade Journal and Chemical Engineer, v.74, no. 1929, May 9, 1924.
- FL 281. Ambergris in perfume extracts, by Victor Hasslauer. Jan. 1948. 6 p. Reproduced from Oct. 1947 issue of Drug & Cosmetic Industry, v.61, no. 4.
- FL 282. The blue crab, Callinectes sapidus, prepared in the Division of Fishery Biology. Jan. 1948. 3 p., illus.

- FL 283. Mexican fishery law of December 31, 1949, translated by Milton J. Lindner and Rae Kaplan. Jan. 1950. 17 p. (Revised)
- FL 284. Cuban frog leg industry, by Joseph L. Martinez. Jan. 1948. 4 p. Report no. 66, American Embassy, Habana, Cuba. Feb. 14, 1946.
- ✓ *FL 285. Rosefish recipes, by Rose G. Kerr, Dorothy M. Robey, Sarah P. Weems, Jean M. Burtis. Feb. 1948. 4 p.
- ✓ FL 286. Steps in the handling of frozen fish in the freezer warehouse, by J. M. Lemon. Feb. 1948. 8 p., illus. Reproduced from Aug. 1947 issue of Food Freezing, v.2, no. 9.
- FL 287. Per capita consumption of fish only 13.3 pounds (1935), by Fred F. Johnson. May 1948. 5 p.
- FL 288. The (Japanese) fishing industry, prepared by the Civil Information and Education Section, Analysis and Research Division, General Headquarters, Supreme Commander for the Allied Powers. Mar. 1948. 5 p. Reproduction of Publications Analysis, 18 Feb. 1947, no. 93.
- ✓ FL 289. Preliminary report on sampling of fish livers, by G. C. Bucher, W. S. Hamm, F. B. Sanford, and W. Clegg. Feb. 1948. 4 p. Supersedes Sep. 87.
- ✓ FL 290. Distribution of oil and vitamin A in fish livers, by Glenn C. Bucher, William Clegg and F. Bruce Sanford. Feb. 1948. 3 p., illus. Supersedes Sep. 88.
- *FL 291. Trotline construction, operation, and maintenance (Chesapeake Bay type), by Emmett Andrews. July 1948. 5 p., illus.
- FL 292. List of fishery cooperatives in the United States and Alaska. Rev. Mar. 1954. 5 p.
- FL 293. List of fishermen's and fish shore workers' unions in the United States, Alaska, and Hawaii. Rev. May 1954. 8 p.
- FL 294. Cuba's spiny lobster industry, by Joseph L. Martinez. Jan. 1948. 19 p., illus. Report no. 188, American Embassy, Habana, Cuba. May 17, 1946.
- ✓ FL 295. Chemical composition of some canned fishery products, by Ray Treichler, Charles F. Lee, and Norman D. Jarvis. Mar. 1948. 7 p.
- ✓ FL 296. A method for evaluation of the nutritive value of a protein. A comparison of broiled and pan-fried striped bass fillets, by Hugo W. Nilson, William A. Martinek and Dorothy B. Darling. July 1948. 15 p.
- FL 297. The Japanese tuna fisheries, by Sidney Shapiro. Apr. 1948. 60 p., illus. Reproduction of Report no. 104, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, issued in Mar. 1948.
- FL 298. Employment possibilities in the Alaskan fishing industry, by R. Paul Elliott. Rev. Apr. 1950. 4 p.
- *FL 299. Legislation for the protection of the Alaska fur seal herd, by Ralph C. Baker. Apr. 1948. 9 p.
- FL 300. List of Fishery Leaflets 201-300, compiled by Barbara B. Aller. Oct. 1948. 9 p.
- ✓ *FL 301. Suggestions for operators of tuna receiving ships, by Carl B. Carlson. Apr. 1948. 14 p., illus. See also FL 414.
- FL 302. Kite rigs for otter trawl gear, prepared by R. T. Whiteleather. May 1948. 7 p., illus.
- FL 303. The Economic Cooperation Administration and the fishery industries, by Richard A. Kahn. May 1948. 11 p.
- FL 304. Part 1 - Fish of the Persian and Oman Gulfs, prepared by H. G. Bolster. Part 2 - Edible fish in the Persian Gulf prepared by Robert R. Schott. Part 1 from Report no. Ag. 52, American Embassy, Tehran, Iran, Dec. 31, 1947. Part 2 from Report no. 8, American Consulate, Basra, Iraq, Mar. 27, 1948. May 1948. 8 p.
- FL 305. Guano islands, Union of South Africa, prepared by John C. Fuess. May 1948. 6 p. Report no. 12, American Consulate General, Capetown, South Africa, Feb. 11, 1948.
- ✓ FL 306. Strength measurement of agar gels, by Leonard S. Stolloff. Apr. 1948. 32 p., illus.
- FL 307. Syneresis of agar gels, by Leonard S. Stolloff. May 1948. 12 p., illus.
- FL 308. The Cuban fishing industry, by Joseph L. Martinez. Mar. 1948. 67 p., illus. Report no. 372, American Embassy, Habana, Cuba, Sept. 20, 1946.
- FL 309. Japanese sponge culture experiments in the South Pacific islands, by A. R. Cahn. July 1948. 9 p., illus. Reprint of Preliminary Study no. 24, Natural Resources Sections General Headquarters, Supreme Commander for the Allied Powers, Tokyo.
- FL 310. Production of edible fish in the Red Sea, by Enoch S. Duncan. June 1948. 6 p. Report no. 42, Feb. 12, 1948, American Embassy, Cairo, Egypt.

- FL 311. Textbook of pond culture, rearing and keeping of carp, trout and allied fishes, by Wilhelm Schaeperclaus. Berlin, Parey, 1933. Translated from the German by Frederick Hund. n.d. 260 p.
- ✓ FL 312. Smoking shrimp, by Leo Young. July 1948. 3 p., illus. Supersedes Sep 109.
- *FL 313. The Economic Cooperation Program as it affects the fishery industries, Sixty questions and answers, by Richard A. Kahn and Harry E. Timmis. Sept. 1948. 9 p.
- FL 314. Canned crab industry of Japan, prepared by A. R. Cahn. Aug. 1948. 50 p., illus. Reproduction of Report no. 109, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, issued July 26, 1948.
- FL 315. Aquarium construction in the home workshop, prepared in the Branch of Gamefish and Hatcheries. Rev. Apr. 1953. 5 p.
- ✓ *FL 316. S. S. Pacific Explorer. Part 3 - Below deck arrangements and refrigeration equipment, by Carl B. Carlson. 39 p., illus. See also FL 414.
- FL 317. The Japanese long-line fishery for tunas, by Sidney Shapiro. Nov. 1950. 26 p., illus. Supersedes Sep 249.
- FL 318. Notes on shrimp fishing along the New England coast, by Lionel A. Walford. Sept. 1948. 8 p., illus.
- FL 319. The shrimp and the shrimp industry of the South Atlantic and Gulf of Mexico, prepared in the Branch of Fishery Biology. Sept. 1948. 5 p., illus.
- ✓ FL 320. Rosefish cookery - a demonstration manual, by Sarah P. Weems. Oct. 1948. 18 p.
- ✓ *FL 321. An improved method of glazing fish for locker storage, by S. R. Pottinger. Jan. 1951. 3 p. Published in Quick Frozen Foods and the Locker Plant, v.13, no. 4, Nov. 1950.
- FL 322. Fishery industries of Alaska and their administration, by C. Howard Baltzo and Donald W. Erickson. Oct. 1948. 8 p.
- FL 323. Snails, prepared in the Branch of Gamefish and Hatcheries. Oct. 1948. 7 p.
- ✓ *FL 324. Packaging frozen fishery products, by S. R. Pottinger. Nov. 1948. 10 p., illus.
- ✓ *FL 325. The nutrition of fish in hatcheries - a literature review, by Neva Karrick. Nov. 1948. 23 p.
- ✓ *FL 326. S. S. Pacific Explorer. Part 4 - Personnel and the movement of materials, by Carl B. Carlson. Nov. 1948. 26 p., illus. See also FL 414.
- FL 327. The fishing industry and the market for fish in Sweden, by Georg Frostenson. Dec. 1948. 6 p. Report no. 475, American Consulate, Stockholm, Sweden, Oct. 6, 1948.
- FL 328. Fishing industry of the Gulf of Aden (Arabia), by Robert E. Ferris. Jan. 1949. 5 p. Report no. 4, American Consulate, Aden, Arabia, June 7, 1948. Accompanied by Appendix, Names of fish from Arabia, by Donald S. Erdman, 5 p.
- FL 329. Fishing industry of Brazil, by Jack E. Conner. Sept. 1948. 42 p., illus. Report no. 202, American Embassy, Rio de Janeiro, Brazil, June 3, 1948.
- FL 330. Experimental fishing trip to Bering Sea, by Joseph E. King. Mar. 1949. 13, 13 p., illus.
- FL 331. Culture of daphnia, by Eugen W. Surber. Jan. 1949. 7 p. Revision of PFC 17, 1-6 p., Apr. 1936.
- ✓ FL 332. Recording color changes in frozen pink salmon, by John A. Dassow and Maurice E. Stansby. Jan. 1949. 8 p., illus.
- FL 333. Aquatic resources of the Ryukyu area, prepared by Sidney Shapiro. Feb. 1949. 54p., illus. Reproduction of Report no. 117, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, issued in December 1948.
- ✓ FL 334. The effect of a seafood diet on the red cell count, hemoglobin value, and hematocrit of human blood, by Shirley J. Wilson. Jan. 1949. 24 p.
- ✓ FL 335. Studies of bacteriological agar. 1. Physical and chemical properties, by Leonard S. Stoloff and Charles F. Lee. 2. Bacteriological studies, by Leslie A. Sandholzer, Margaret E. Dean, William Arcisz and Martha C. Bradley. Mar. 1949. 41 p., illus.
- FL 336. Quarterly outlook for marketing fishery products. Apr. - June 1949 (to date) Prepared in the Branch of Commercial Fisheries. Apr. 1949 (to date)
- FL 337. Keeping live shrimp for bait, prepared in the Branch of Fishery Biology. Apr. 1949. 2 p.
- FL 338. Fishery regulations of Venezuela including a section on import duties for products connected with the fishing industry, translated by R. O. Smith. Apr. 1949. 26 p.

- FL 339. The Mexican fisheries industry, by Alan E. Hool. Mar. 1949. 21 p. American Embassy Report no. 780, Mexico, D. F., Dec. 31, 1948.
- FL 340. Contribution to the biology of the king crab (*Paralithodes camtschatica* Tilesius), by M. Marvin Wallace, Camile J. Pertuit and Arthur R. Hvatum. Apr. 1949. 50 p., illus.
- *FL 341. The sponge fishing industry in Libya. (Africa), by Henry T. Van Buren. Apr. 1949. 7 p. American Consulate Report no. 3, Tripoli, Libya, Feb. 1, 1949.
- FL 342. Report of Alaska exploratory fishing expedition, fall of 1948, to northern Bering Sea, by J. G. Ellson, Boris Knake and John Dassow. June 1949. 25 p., illus.
- FL 343. Floating trawls, by William S. Krason. June 1949. 5 p., illus. American Consulate Report no. 20, Reykjavik, Iceland, May 17, 1949.
- *FL 344. Control of aquatic plants in ponds and lakes, by Eugene W. Surber. July 1949. 20 p., illus.
- FL 345. Whale and fish oils (Iceland), by William S. Krason. May 1949. 13 p. American Consulate Report no. 4, Reykjavik, Iceland, Jan. 31, 1949.
- *FL 346. United States special mission reviews Japanese fisheries situation. This report appeared in Weekly Summary, May 22-28, 1949, (Report no. 189), Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, Japan. June 1949. 12 p.
- FL 347. Growth of South African fisheries, by John C. Fuess. June 1949. 10 p. American Consulate Report no. 69, Capetown, South Africa, Oct 8, 1948.
- FL 348. German commercial electrical fishing device, by Robert B. Houston, Jr. Reissued with supplement Dec. 1949. 16 p., illus. American Consulate Report no. 11, Bremerhaven, Germany, June 24, 1949.
- FL 349. Fishing and fisheries (Brazil). July 1949. 12 p. Excerpts from the Report of the Joint Brazil-United States Technical Commission, Publication 3487, International Organization and Conference Series 2, American Republics 5, Division of Publications, Department of State.
- FL 350. The use of rotenone as fish poison, prepared in the Branches of Fishery Biology and Game-fish and Hatcheries. Aug. 1949. 8 p., illus.
- FL 351. Tuna trolling in the Line Islands in the late spring of 1950, by Donald H. Bates, Jr. Oct. 1950. 32 p., illus.
- FL 352. United States per capita consumption of fishery products. Sept. 1949. 10 p., illus. Excerpted from article "Supply and distribution of fishery products in the continental United States, 1930-47," which appeared in National food situation, July-Sept. 1948, prepared by Harry Sherr in cooperation with Edward A. Power, Richard A. Kahn, and others. Supersedes Sep. 220.
- FL 353. "Little tuna" of the Atlantic and Gulf Coasts, by Cyrus H. Chilton. Dec. 1949. 5 p., illus. Reprint from Southern fisherman, Aug. 1949, v. 9, no. 10.
- FL 354. Reef fishing in the Philippines, by Agustin F. Umali, and Herbert E. Warfel. Dec. 1949. 28 p., illus.
- FL 355. The trouts of North America; general remarks on classification, by Samuel F. Hildebrand. Nov. 1949. 13 p.
- FL 356. Fisheries of New Brunswick (Canada), by Lewis Dean Brown. Dec. 1949. 26 p. American Consulate Report no. 12, Saint John, N. B., Canada, Mar. 15, 1949.
- *FL 357. Pearl culture in Japan, by A. R. Cahn. Nov. 1949. 91 p., illus. Reproduction of Report no. 122, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers. Tokyo, issued Oct. 31, 1949.
- FL 358. The Chesapeake Bay crab industry, by James Wharton. Rev. Sept. 1954. 17 p., illus. Supersedes FL 184.

- ✓ FL 359. Manufacturers of equipment for the fish processing industries (A partial list prepared by the Branch of Commercial Fisheries) Rev. Dec. 1953. 6 p.
- FL 360. Sea lampreys of the Atlantic Coast and Great Lakes, by Lola Tidwell Dees. Feb. 1950. 4 p., illus.
- ✓ FL 361. S. S. Pacific Explorer. Part 5. - 1948 Operations in the North Pacific and Bering Sea, by Norman B. Wigutoff and Carl B. Carlson. Jan. 1950. 161 p., illus. See also FL414.
- ✓ FL 362. Sources of information concerning the commercial fisheries, revised by Ruth V. Keefe. Rev. Jan. 1952. 23 p.
- FL 363. Egyptian fisheries, by John Panos and Quincy F. Roberts. Jan. 1950. 12 p. Report no. 95, American Consulate, Alexandria, Egypt, Dec. 6, 1949.
- FL 364. The mussel resources of the North Atlantic region, by Leslie W. Scattergood and Clyde C. Taylor. Jan. 1950. 34 p., illus. Supersedes Sep 239.
- FL 365. Sales patterns for fresh and frozen fish and shellfish, 1936 and 1946, by R. A. Kahn, and W. H. Stolting. Dec. 1949. 101 p., illus.
- FL 366. Identification of the commercial common shrimp species, by Carter Broad. Feb. 1950. 4 p., illus. Supersedes Sep 242.
- FL 367. The codfish industry in northern Portugal, by Randall T. Klein, Jr. Feb. 1950. 23 p. American consulate Report no. 26, Oporto, Portugal, Oct. 10, 1949.
- FL 368. The shrimp fishery of the southern United States, by W. W. Anderson, M. J. Lindner, and J. E. King. Mar. 1950. 17 p., illus. Supersedes Sep 121.
- FL 369. Exploratory fishing expedition to the northern Bering Sea in June and July, 1949, by J. G. Ellson, Donald E. Powell, and Henry H. Hildebrand. Mar. 1950. 56 p., illus.
- ✓ FL 370. Utilization of fishery by-products in Washington and Oregon, by F. Bruce Sanford. Mar. 1950. 24 p., illus.
- FL 371. Japanese whaling industry prior to 1946, by William M. Terry. Jan. 1951. 47 p., illus. Republication of Report no. 126, issued Mar. 1, 1950, by the Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo.
- FL 372. Report on the fisheries industry in the Republic of Korea, prepared under the supervision of Director, Food and Agriculture Division, Economic Cooperation Administration, Mission to Korea, Dec. 1949. Apr. 1950. 37 p., illus.
- FL 373. Atlantic coast mackerel purse seine, by Boris O. Knake. July 1950. 9 p., illus.
- ✓ FL 374. Freezing and canning king crab, by John A. Dassow. May 1950. 9 p.
- ✓ FL 375. A survey of the commercial fishery possibilities of Seward Peninsula area, Kotzebue Sound, and certain inland rivers and lakes in Alaska, by Norman B. Wigutoff and Clarence J. Carlson. May 1950. 24 p., illus.
- FL 376. Albacore tuna exploration in Alaskan and adjacent waters -- 1949, by Donald E. Powell and Henry H. Hildebrand. May 1950. 33 p., illus.
- FL 377. Cosmopolitan fish cookery for the Philippines, by Arthur C. Avery. n. d. 77 p., illus.
- FL 378. Forrajes y alimentacion de la trucha, por A. V. Tunison. June 1950. 27 p., illus. Translated from the English by Luz de Maúrtua.
- FL 379. New England sink gill net, by Boris O. Knake. Aug. 1950. 10 p., illus.
- FL 380. Byproducts of the government-operated Alaska fur-seal industry, by Ralph C. Baker. July 1950. 5 p.
- *FL 381. Fisheries of France, by Richard C. Desmond. July 1950. 18 p. American Consulate Report no. 225, Paris, France, Feb. 10, 1950.
- FL 382. Mesh size and construction as a factor in releasing small fish and shrimp from trawl nets, by Eugene W. Roelofs. Sept. 1950. 11 p., illus. Supersedes Sep 257.

- FL 383. Oyster culture in Japan, by A. R. Cahn. Oct. 1950. 80 p., illus. Republication of Report no. 134 of the Natural Resources Section, Supreme Commander for the Allied Powers, Tokyo, issued in Sept. 1950.
- FL 384. The sea lamprey in the Great Lakes, by Vernon C. Applegate. Oct. 1950. 11 p., illus.
- FL 385. The exploratory fishing vessel John N. Cobb. Part 1 -- Description of vessel, by J. G. Ellson. Part 2 -- John N. Cobb uses new rig for slow-speed trolling, by Sheldon W. Johnson. 11 p., illus. Part 2 supersedes Sep 253.
- FL 386. Pacific salmon drift gill netting, by Norman B. Wigutoff. Apr. 1951. 6 p., illus.
- FL 387. Commercial salmon trolling, by Norman B. Wigutoff. Dec. 1950. 8 p., illus.
- FL 388. The Japanese albacore fishery of the north central Pacific, by W. G. Campen, and B. M. Shimada. Feb. 1951. 6 p., illus. Originally appeared in Pacific fisherman.
- FL 389. Japanese offshore trawling, by Francois Bourgois. Feb. 1951. 60 p., illus. Reproduction of Report no. 138, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers, Tokyo, issued in Dec. 1950.
- FL 390. Fishery resources of Turkey, by Bertha Carp. May 1951. 24 p., illus. American Consulate General, Istanbul, Turkey. Reports 32 and 63, dated Apr. 7 and May 31, 1949.
- FL 391. Technological studies of the starfish, by Charles F. Lee. Mar. 1941. 47 p., illus. Supersedes Sep 193, 196, 199, 204, 206, 208.
- FL 392. ✓
- FL 393. Fisheries of the United States and Alaska, 1953. A preliminary review, by E. A. Power and C. E. Peterson. Rev. Mar. 1954. 22 p.
- FL 394. Gulf of Mexico shrimp trawl designs, by Harvey R. Bullis. Sept. 1951. 16 p., illus.
- FL 395. A program for Japanese coastal fisheries, by William C. Herrington. June 1951. 71 p. Republication of Report no. 48 of the Natural Resources Section, Supreme Commander for the Allied Powers, Tokyo, issued in May 1951.
- *FL 396. The fisheries of Indonesia, by R. H. Fiedler. July 1951. 60 p., illus.
- FL 397. \$
- FL 398. Some publications on game-fish and sport fishing, prepared in the Branch of Game-fish and Hatcheries. Rev. Nov. 1951. 6 p.
- FL 399. Clam culture in Japan, by A. R. Cahn. Nov. 1951. 103 p., illus. Republication of Report no. 146 of the Natural Resources Section, Supreme Commander for the Allied Powers, Tokyo, issued in Sept. 1951.
- FL 400. List of Fishery Leaflets 301 - 400. July 1954. 5 p.
- FL 401. Crawfish control methods, prepared in the Branch of Game-fish and Hatcheries. Rev. June 1952. 2 p.
- FL 402. North Pacific albacore tuna exploration, 1950, by Donald E. Powell, Dayton L. Alverson, and Robert Livingstone, Jr. Apr. 1952. 56 p., illus.
- FL 403. Fishing laws and regulations of the District of Columbia, prepared in the Branch of Game-fish and Hatcheries. Apr. 1952. 2 p.
- ✓ FL 404. Tilefish recipes, by Jean Burtis and Rose G. Kerr. Apr. 1952. 3 p.
- ✓ FL 405. Salmon cannery waste for mink feed, by James R. Leekley, Raymond G. Landgraf, Jr., Jeanne E. Bjork and William A. Hagevig. Nov. 1952. 31 p., illus.
- FL 406. Exploratory shrimp fishing in the Gulf of Mexico, 1950-51, by Stewart Springer and Harvey R. Bullis. Sept. 1952. 34 p., illus.
- FL 407. Fish and shellfish preferences of household consumers - 1951. Part 1 - National summary, by Walter H. Stolting and Morton J. Garfield. May 1952. 46 p.

- FL 408. Fish and shellfish preferences of household consumers - 1951. Part 2 - Regional summary, by Walter H. Stolting and Morton J. Garfield. Sept. 1952. 66 p.
- FL 409. Fish and shellfish preferences of household consumers - 1951. Part 3 - Summary by income groups, by Walter H. Stolting and Morton J. Garfield. Apr. 1954. 46 p.
- FL 410. Fish and shellfish preferences of household consumers - 1951. Part 4 - Summary by farm, nonfarm, and city-size groups, by Walter H. Stolting and Devora R. Alexander. Sept. 1954. 52 p.
- FL 411. Care of tropical aquarium fishes, prepared in the Branch of Game-fish and Hatcheries. Nov. 1952. 16 p. Supersedes FL 165.
- ✓ FL 412. Menhaden industry - past and present, by Charles F. Lee. June 1953. 17 p., illus. Reprinted from Fish Meal and Oil Industry, International yearbook, v. 4, no. 4, Mar. 1952.
- ✓ FL 413. Common or local names of commercial fish and shellfish of Alaska, by Norman B. Wigutoff. Reissued Oct. 1953.
- ✓ FL 414. S.S. Pacific Explorer, factory ship, by Carl B. Carlson. July 1953. 1 v. (various pagings), illus. Part 5 is by Norman B. Wigutoff and Carl B. Carlson. This leaflet is a combination of Sep 161; FL 301, 316, 326, 361.
- ✓ FL 415. Pasteurization of crab meat, by J. V. Anzulovic and R. J. Reedy. Feb. 1954. 7 p.
- ✓ FL 416. Little tuna recipes, by Dorothy M. Robey and Rose G. Kerr. May 1954. 6 p.
- FL 417. U.S. import classification and duties of fishery and wildlife commodities, Jan. 1, 1954, by A. M. Sandberg. July 1954. 35 p.
- FL 418. Food fishes with fins and scales, the anatomy of fishes in its bearing on the requirements of certain religious dietary regulations, with a note on the source of cod and other liver oils, by Isaac Ginsburg. Aug. 1954. 9 p. Revision of FL 8.
- FL 419. §
- FL 420. Florida's red tide problem, prepared by Edna N. Sater. Nov. 1954. 11 p., illus.
- FL 421. United States foreign trade in edible fishery products, 1949-53, by Arthur M. Sandberg and Ruth L. Dunavant. Oct. 1954. 44 p., illus.

INVESTIGATIONAL REPORTS

- *IR 1. The menhaden industry, by Roger W. Harrison. 1931. 113 p., illus.
- *IR 2. Studies on the nutritive value of fish meals, by Esther Peterson Daniel and E. V. McCollum. 1931. 19 p., illus.
- *IR 3. Vitamin D in menhaden fish oils, by John Ruel Manning, E. M. Nelson and Chester D. Tolle, 1931. 5 p., illus.
- *IR 4. Commercial production of menhaden fish oil for animal feeding, by Roger W. Harrison and S. R. Pottinger. 1931. 11 p.
- *IR 5. Spectrographic analysis of marine products, by John M. Newell and E. V. McCollum. 1931. 9 p.
- *IR 6. Survey of oyster bottoms in Texas, by Paul S. Galtsoff. 1931. 30 p., illus.
- *IR 7. Market for marine animal oils in the United States, by Roger W. Harrison. 1931. 78 p., illus.
- *IR 8. Studies in crab canning, by Kokichi Oshima. 1931. 8 p.
- *IR 9. Reducing the shrinkage of frozen fish in cold storage, by James M. Lemon. 1932. 12 p.
- *IR 10. Winter trawl fishery off the Virginia and North Carolina coasts, by John C. Pearson. 1932. 31 p., illus.
- *IR 11. Controlling vegetation in fish ponds with sodium arsenite, by Eugene W. Surber. 1932. 39 p., illus.
- *IR 12. Chemical and physical properties of burbotliver oil and its vitamin content, by E. M. Nelson, Chester D. Tolle, and George S. Jamieson. 1932. 6 p., illus.
- *IR 13. The fisheries of Puerto Rico, by Norman D. Jarvis. 1932. 41 p., illus.
- *IR 14. Fisheries of the Virgin Islands of the United States, by R. H. Fiedler and N. D. Jarvis. 1932. 32 p., illus.
- *IR 15. New methods of opening oysters and improving their condition for market, by V. Koehring and H. F. Prytherch. 1932. 25 p., illus.
- *IR 16. Developments in refrigeration of fish in the United States (with bibliography), by James M. Lemon. 1932. 32 p., illus.
- *IR 17. Studies on the nutritive value of oysters, by E. J. Coulson. 1933. 30 p., illus.
- *IR 18. The iodine content of oysters, by E. J. Coulson. 1934. 10 p.
- *IR 19. Statistics of the mackerel fishery off the east coast of North America, 1804 to 1930, by Oscar E. Sette and A. W. H. Needler. 1934. 48 p., illus.
- *IR 20. Studies on the smoking of haddock, by Francis P. Griffiths and J. M. Lemon. 1934. 12 p.
- *IR 21. Shrimp industry of the South Atlantic and Gulf states with notes on other domestic and foreign areas, by Fred F. Johnson and Milton J. Lindner. 1934. 83 p., illus.
- *IR 22. Care and diseases of trout, by H. S. Davis. 1934. 69 p., illus. Revised by IR 35.
- *IR 23. Studies on the metabolism of copper, by E. J. Coulson, Roe E. Remington and Kenneth M. Lynch. 1934. 12 p.
- *IR 24. Modifications in gear to curtail the destruction of undersized fish in otter trawling, by William C. Herrington. 1935. 48 p., illus.
- *IR 25. The iodine content of some American fishery products, by E. J. Coulson. 1935. 7 p.
- *IR 26. Fishery for red snappers and groupers in the Gulf of Mexico, by Norman D. Jarvis. 1935. 29 p., illus.
- *IR 27. Chemical and physical properties of haddock-liver oil and its vitamin content, by S. R. Pottinger, Charles F. Lee, Chester D. Tolle and Roger W. Harrison. 1935. 16 p., illus.
- *IR 28. Studies on the utilization of swordfish livers, by Roger W. Harrison, S. R. Pottinger, Charles F. Lee and Andrew W. Anderson. 1935. 10 p., illus.

- *IR 29. Condition of razor clam fishery in vicinity of Cordova, Alaska, by Seton H. Thompson and F. W. Weymouth. 1935. 14 p., illus.
- *IR 30. Effect of manufacture on the quality of nonoily fish meals, by Roger W. Harrison, Andrew W. Anderson and S. R. Pottinger. 1935. 30 p.
- *IR 31. Effect of method of manufacture on the composition of haddock fish-meal proteins, by S. R. Pottinger, Roger W. Harrison and Andrew W. Anderson. 1935. 14 p.
- *IR 32. Studies on drying cod and haddock waste, by Andrew W. Anderson, Roger W. Harrison and S. R. Pottinger. 1935. 41 p.
- *IR 33. Physical and chemical changes in the pink salmon during the spawning migration, by Frederick A. Davidson and O. Eugene Shostrom. 1936. 37 p., illus.
- *IR 34. The home canning of fishery products, by Norman D. Jarvis and Francis P. Griffiths. 1936. 16 p., illus.
- *IR 35. Care and diseases of trout, by H. S. Davis. Rev. 1937. 76 p., illus. Revision of Document no. 1061 and IR 22.
- *IR 36. Vitamin content of oils from cannery trimmings of salmon from the Columbia River and Puget Sound regions, by Roger W. Harrison, Andrew W. Anderson, Arthur D. Holmes and Madeleine G. Pigott. 1937. 8 p.
- *IR 37. Preliminary report on the cause of the decline of the oyster industry of the York River, Va., and the effects of pulp-mill pollution on oysters, by Paul S. Galtsoff, Walter A. Chipman, Jr., Arthur D. Hasler, and James B. Engle. 1938. 42 p., illus.
- *IR 38. Marketing of shad on the Atlantic coast, by Fred F. Johnson. 1938. 44 p., illus.
- *IR 39. Trade in fresh and frozen fishery products and related marketing considerations in the San Francisco Bay area, by Barton DeLoach. 1938. 51 p., illus.
- *IR 40. Pacific salmon oils, by Roger W. Harrison, Andrew W. Anderson, S. R. Pottinger and Charles F. Lee. 1939. 21 p.
- *IR 41. The mineral content of the edible portions of some American fishery products, by Hugo W. Nilson and E. J. Coulson. 1939. 7 p.
- *IR 42. A plan for the development of the Hawaiian fisheries, by Frank T. Bell and Elmer Higgins. 1931. 25 p., illus.
- *IR 43. Some effects of ultraviolet irradiation of haddock fillets, by Joseph F. Puncochar, William B. Lanham, Jr., and Hugo W. Nilson. 1939. 8 p., illus.
- *IR 44. Study of the metabolism of naturally occurring fluorine in canned salmon and mackerel, by Charles F. Lee and Hugo W. Nilson. 1939. 15 p., illus.

MARKET DEVELOPMENT LEAFLETS

- MDL 1. Producers of packaged fish. Rev. Oct. 1949. 9 p.
- MDL 2. Michigan refrigerated locker plants. Rev. Feb. 1951. 9 p.
- MDL 3. Tennessee refrigerated locker plants. Rev. Nov. 1950. 4 p.
- MDL 4. Nebraska refrigerated locker plants. Rev. Feb. 1951. 12 p.
- MDL 5. Georgia refrigerated locker plants. Rev. Oct. 1950. 5 p.
- MDL 6. Kentucky refrigerated locker plants. Rev. Oct. 1950. 4 p.
- MDL 7. Indiana refrigerated locker plants. Rev. Nov. 1950. 9 p.
- MDL 8. Montana refrigerated locker plants. Rev. Nov. 1950. 6 p.
- MDL 9. Oklahoma refrigerated locker plants. Rev. Nov. 1950. 7 p.
- MDL 10. Pennsylvania refrigerated locker plants. Rev. Nov. 1950. 7 p.
- MDL 11. New Hampshire refrigerated locker plants. Rev. Nov. 1950. 2 p.
- MDL 12. Texas refrigerated locker plants. Rev. Feb. 1951. 12 p.
- MDL 13. New York refrigerated locker plants. Rev. Nov. 1950. 6 p.
- MDL 14. California refrigerated locker plants. Rev. Oct. 1950. 13 p.
- MDL 15. Mississippi refrigerated locker plants. Rev. Nov. 1950. 3 p.
- MDL 16. North Dakota refrigerated locker plants. Rev. Nov. 1950. 7 p.
- MDL 17. Kansas refrigerated locker plants. Rev. Dec. 1950. 12 p.
- MDL 18. Iowa refrigerated locker plants. Rev. Oct. 1950. 19 p.
- MDL 19. Washington refrigerated locker plants. Rev. Feb. 1951. 15 p.
- MDL 20. Illinois refrigerated locker plants. Rev. Jan. 1951. 13 p.
- MDL 21. New Jersey refrigerated locker plants. Rev. Nov. 1950. 2 p.
- MDL 22. Massachusetts refrigerated locker plants. Rev. Oct. 1950. 2 p.
- MDL 23. Rhode Island refrigerated locker plants. Rev. Nov. 1950. 1 p.
- MDL 24. Ohio refrigerated locker plants. Rev. Nov. 1950. 10 p.
- MDL 25. Wisconsin refrigerated locker plants. Rev. Mar. 1951. 16 p.
- MDL 26. Colorado refrigerated locker plants. Rev. Nov. 1950. 6 p.
- MDL 27. Louisiana refrigerated locker plants. Rev. Oct. 1950. 2 p.
- MDL 28. Vermont refrigerated locker plants. Rev. Nov. 1950. 2 p.
- MDL 29. Virginia refrigerated locker plants. Rev. Nov. 1950. 3 p.
- MDL 30. North Carolina refrigerated locker plants. Rev. Oct. 1950. 3 p.
- MDL 31. Oregon refrigerated locker plants. Rev. Jan. 1951. 11 p.
- MDL 32. New Mexico refrigerated locker plants. Rev. Nov. 1950. 2 p.
- MDL 33. Arizona refrigerated locker plants. Rev. Oct. 1950. 2 p.
- MDL 34. Missouri refrigerated locker plants. Rev. Jan. 1951. 11 p.
- MDL 35. Minnesota refrigerated locker plants. Rev. Jan. 1951. 15 p.
- MDL 36. Arkansas refrigerated locker plants. Rev. Nov. 1950. 3 p.
- MDL 37. Connecticut refrigerated locker plants. Rev. Oct. 1950. 2 p.
- MDL 38. Delaware refrigerated locker plants. Rev. Oct. 1950. 1 p.
- MDL 39. Florida refrigerated locker plants. Rev. Nov. 1950. 2 p.
- MDL 40. Idaho refrigerated locker plants. Rev. Oct. 1950. 5 p.
- MDL 41. Maine refrigerated locker plants. Rev. Oct. 1950. 1 p.

- MDL 42. Maryland refrigerated locker plants. Rev. Oct. 1950. 2 p.
- MDL 43. South Carolina refrigerated locker plants. Rev. Nov. 1950. 2 p.
- MDL 44. South Dakota refrigerated locker plants. Rev. Nov. 1950. 7 p.
- MDL 45. Utah refrigerated locker plants. Rev. Nov. 1950. 4 p.
- MDL 46. West Virginia refrigerated locker plants. Rev. Nov. 1950. 1 p.
- MDL 47. Wyoming refrigerated locker plants. Rev. Nov. 1950. 3 p.
- MDL 48. Alabama refrigerated locker plants. Rev. Oct. 1950. 3 p.
- *MDL 49. Partial list of buyers of fresh and processed fish for chain store companies operating in Virginia, North Carolina, South Carolina and Georgia. Apr. 1949. 3 p.
- *MDL 50. State directors, Production and Marketing Administration, U. S. Department of Agriculture. Oct. 1946. 4 p.
- *MDL 51. Officials of refrigerated locker plant associations, state and national. Rev. Oct. 1950. 4 p.
- *MDL 52. State school lunch supervisors. Mar. 1947. 4 p.
- MDL 53. Nevada refrigerated locker plants. Rev. Nov. 1950. 1 p.
- MDL 54-59. \$
- MDL 60. Partial list of inland wholesale dealers in fishery products, compiled by Harry E. Timmis and Cyrus H. Chilton. Rev. Mar. 1951. 53 p.
- MDL 61. Suggestions for institutional purchasers of fishery products, by Clarence R. Lucas. Mar. 1950. 4 p.

PROGRESSIVE FISH CULTURIST

- *PFC 1, Dec. 1934.
A. Growth, by C. M. McCay. 2-7 p.
- *PFC 2, Jan. 1935.
A. Hatchery records and accounting, by M. C. James. 1-4 p.
B. Methods for counting small fish in hatcheries, by A. C. Taft. 5-7 p.
- *PFC 3, Feb. 1935.
A. The microscope in the hatchery, by Frederic F. Fish. 1-7 p.
- *PFC 4, Mar. 1935.
A. Practical methods of feeding various classes of hatchery foods with a minimum loss, by R. F. Lord. 1-5 p.
- *PFC 5, Apr. 1935.
A. The bacterial diseases of fish, by Frederic F. Fish. 1-9 p.
- *PFC 6, May 1935.
A. The protozoan diseases of hatchery fish, by Frederic F. Fish. 1-4 p.
- *PFC 7, June 1935.
A. The production of small-mouth bass under controlled conditions, by T. H. Langlois. 1-7 p.
- *PFC 8, July 1935.
A. Production of bass fry, by Eugene W. Surber. 1-7 p.
B. The Bureau of Fisheries' Disease Service, by Frederic F. Fish. 9-12 p.
- *PFC 9, Aug. 1935.
A. Better stocking methods by W. M. Keil. 1-6 p.
B. Cheaper trout foods, by H. S. Davis. 7-10 p.
- *PFC 10, Sept. 1935.
A. Natural food of trout, by P. R. Needham. 1-12 p.
B. Fish culture in Indiana, by A. E. Andrews. 12-15 p.
- *PFC 11, Oct. 1935.
A. The celebrated case of hatchery trout vs. average angler: Are hatchery trout inferior to wild trout?, by Russell F. Lord. 1-9 p.
B. Digestion in the stomachs of trout, by C. M. McCay. 9-11 p.
C. Comparative costs of planting fish of different sizes, by A. C. Taft. 11-14 p.
- *PFC 12, Nov. 1935.
A. Notes on certain features of a program of fish culture, by J. O. Snyder. 1-8 p.
- *PFC 13, Dec. 1935.
A. Improvement of trout brood stock through selective breeding, by H. S. Davis. 1-6 p.
B. Conflicting classification of game fishes and the status of the steelhead trout. 7-10 p.
- *PFC 14, Jan. 1936.
A. The role of fish-eating birds, by Clarence Cottam and F. M. Uhler. 1-14 p.
B. Fish and fish culture in modern Europe, by C. M. McCay. 15-18 p.
- *PFC 15, Feb. 1936.
A. Proposals for a solution of the fishery conservation problem, by Frank T. Bell. 1-8 p.
- *PFC 16, Mar. 1936.
A. Some factors controlling largemouth bass production, by Otis Lloyd Meehan. 1-6 p., illus.
B. Rat control in the hatchery, by W. J. Hamilton, Jr. 6-7 p. Reprinted from Fish Culture, New York State Conservation Dept., v.1, no.5, Dec. 1935.
C. European origins, by Frederic F. Fish. (Founders of fish culture) 8-10 p.
- *PFC 17, Apr. 1936.
A. The culture of daphnia, by Eugene W. Surber. 1-6 p. Revised by FL 331.
B. The use of dry foods in the diet of rainbow trout and results of over-feeding, by Charles O. Hayford and H. S. Davis. 7-10 p.
C. Phosphorous and calcium in the eggs and bodies of trout, by C. M. McCay. 10-15 p.
- *PFC 18, May 1936.
A. A national freshwater fish cultural policy, by J. A. Rodd. 1-4 p.
B. Care of fingerling trout and salmon, by W. M. Keil. 4-7 p.
C. The use of malachite green as a fish fungicide and antiseptic, by Fred J. Foster and Lowell Woodbury. 7-9 p.
D. Seth Green - A historical note on a pioneer in fish culture, by Emeline Moore. (Founders of fish culture) 10-12 p.

*PFC 19, June 1936.

- A. Processing of fishery products into fish food, by Lauren R. Donaldson and Fred J. Foster. 1-6 p.
- B. "The role of fish-eating birds" - A reply, by Clarence R. Lucas. 7-10 p.
- C. The Michigan creel census as an aid to the hatchery man, by R. W. Eschmeyer. 11-14 p.

*PFC 20, July 1936.

- A. Effects of pollution on fish, by M. M. Ellis. 1-4 p.
- B. Legislation proposed in the 74th Congress for the abatement of water pollution, by Elmer Higgins. 5-10 p.
- C. Notes on feeding the freshwater shrimp, *Gammarus*, to rainbow trout, by Leo Erkkila. 10-12 p.
- D. Experiments with marked rainbow trout, by Russell F. Lord. 12-15 p.

*PFC 21, Aug. 1936.

- A. Circular rearing pools for trout and bass, by Eugene W. Surber. 1-14 p. illus.
- B. History and present activities of the Michigan Institute for Fisheries Research, by A. S. Hazzard. 14-16 p.
- C. Samuel Wilmot, pioneer Canadian fish culturist, by J. A. Rodd. (Founders of fish culture) 16-18 p.

*PFC 22, Sept. 1936.

- A. Spawntaking operations, by W. M. Keil. 1-6 p.
- B. Concrete ponds versus dirt ponds; a symposium of opinion. 10-15 p.
- C. An egg handling experiment, by Ralph P. Silliman. 15-17 p.

*PFC 23, Oct. 1936.

- A. Age determination of fish from scales; method and application to fish cultural problems, by Ralph Hile. 1-5 p., illus.

*PFC 24, Nov. 1936.

- A. A report of four years experience with fin rot and some remarks on octomitiiasis, by Alice Wright. 1-26 p.

*PFC 25, Dec. 1936.

- A. Selecting and developing a brood stock of trout, by W. M. Keil. 1-4 p.
- B. A study of sockeye salmon propagation methods in British Columbia, by R. E. Foerster. 4-6 p.
- C. Charles Grandison Atkins, a pioneer who blazed the trails, by William C. Kendall. (Founders of fish culture) 12-17 p.

*PFC 26, Jan. 1937.

- A. Discussing the problem of the propagation of Pacific salmon, by R. E. Foerster. 1-6 p.
- B. Simple methods of measuring flow of water, by A. L. Anderson. 6-13 p., illus.

*PFC 27, Feb. 1937.

- A. Cold storage plants at Oregon trout hatcheries, by Matt L. Ryckman. 1-3 p.
- B. Notes on the use of kelp meal in the diets of young salmon, by L. R. Donaldson and Fred J. Foster. 3-7 p.
- C. A gill disease of the smallmouth blackbass, by H. S. Davis. 7-11 p.

*PFC 28, Mar. and Apr. 1937.

- A. Conservation progress by the Bureau of Fisheries, by Frank T. Bell. 1-7 p.
- B. The artificial propagation of the commercial species of fish of the Great Lakes, by John Van Oosten. 8-15 p.
- C. Results of experimental bass studies, by E. W. Surber and J. S. Gutsell. 16-17 p.
- D. Dwight Lydell, 1861-1927, by Jacob Reighard. (Founders of fish culture) 26-31 p.

*PFC 29, May 1937.

- A. New York's feeding records and hatchery production in 1936, by Charles R. Deuel. 1-10 p.
- B. A new and successful method of sealing fish ponds, by Alvin R. Cahn. 12-13 p.
- C. Mortality of hatchery trout, Great Smoky Mountains National Park, by Willis King. 14-17 p.
- D. Experiments in pond rearing of trout on natural foods, by P. R. Needham and R. C. Lewis. 18-24 p.
- E. Richard Nettle, first Canadian fish culturist, by J. A. Rodd. (Founders of fish culture) 25 p.

*PFC 30, June 1937.

- A. Observations on the nutrition of trout, by C. M. McCay. 1-24 p.
- B. The influence of natural conditions on the geographic distribution of the Pacific salmon, by F. A. Davidson and S. J. Hutchinson. 24-34 p., illus.
- C. Feeding methods for bass at Fairport, Ia., station, by Leslie H. Bennett. 34-35 p.
- D. Feeding Montana grayling fry, by Harlan E. Johnson. 35-36 p.

*PFC 31, July 1937.

- A. Fish culture is big business in the United States, by Swepson Earle. 1-29 p., illus.
- B. Glimpses of fishery biology and fish culture in Europe. 1 - The Scandinavian countries, by William E. Ricker. 29-33 p.
- C. Relation of size at release to proportionate return of hatchery-reared coho (silver) salmon, by George B. Kelez. 33-36 p.
- D. Shocking the fish, by John Carl and J. R. Hodgson. 36-38 p.

*PFC 32, Aug.-Oct. 1937.

- A. The use of oat flour combined with salmon meal in the diet of fingerling silver salmon (*Oncorhynchus kisutch*), by Lauren R. Donaldson and Fred J. Foster. 1-6 p., illus.
- B. Concrete, by David C. Haskell. 6-10 p.
- C. *Dactylogyrus* control in ponds, by O. Lloyd Meehan. 10-12 p.
- D. Glimpses at fisheries biology and fish culture in Europe (continued). 2 - Germany and France, by William E. Ricker. 12-15 p.
- E. A large fish sorter, by Louis E. Wolf. 16-17 p.
- F. Teaching baby small mouth and baby large mouth bass to take artificial food, by John L. Brass. 17-20 p.

*PFC 33, Nov. 1937.

- A. Goofy business: Is fishery conservation businesslike? By Russell F. Lord. 1-8 p.
- B. Fertilization of fish ponds in Czechoslovakia, by Edward B. Lawson. 8-13 p.
- C. Slots for screens at outlets of ponds, by E. D. Brown. 14-15 p., illus.
- D. Control of predacious insects and larvae in ponds, by O. Lloyd Meehan. 15-16 p.
- E. WPA fish propagation projects win popular acclaim, by R. L. MacDougal. 17-19 p.
- F. Observations of interest to hatchery men, by Edward R. Hewitt. 19-21 p.

*PFC 34, Dec. 1937.

- A. The fish-culturist's library, by Albert S. Hazzard. 1-6 p.
- B. Chlorine treatment of bacterial fin rot of trout, by Frank H. Connell. 6-9 p.
- C. Control of "shellbugs" in pond culture, by O. Lloyd Meehan. 10-11 p.
- D. Glimpses at fisheries biology and fish culture in Europe. 3 - Austria, Czechoslovakia, Poland, Russia, by William E. Ricker. 12-14 p.
- E. A method for inducing fish to spawn, by R. von Ihering. 15-16 p.

*PFC 35, Jan. 1938.

- A. Fish management in the Pisgah National Game Preserve, by William M. Keil. 1-9 p., illus.
- B. The California trout investigations, by Tracy I. Storer. 9-19 p.
- C. Glimpses at fisheries biology and fish culture in Europe. 4 - England and Scotland, by William E. Ricker. 20-23 p.
- D. Aeration of waters for trout, by Edward R. Hewitt. 23-26 p.

*PFC 36, Feb.-Mar. 1938.

- A. Pond rearing of wall-eyed pike, by E. B. Speaker. 1-6 p., illus.
- B. Suggestions on stream improvement, by Osgood R. Smith. 6-19 p., illus.
- C. Notes on warm-water fish culture, by C. F. Culler. 19-24 p.

*PFC 37, Apr. 1938.

- A. Notes on the introduction of Mexican trout, by Paul R. Needham. 1-10 p., illus.
- B. Meat diet supplements, and their effect on growth and health of fingerling trout, by Earl W. Stiles and Howard C. Russ. 10-16 p.
- C. A creel census as an aid to a better fish stocking program, by Harry A. Hanson. 17-19 p.

*PFC 38, May 1938.

- A. Practical pH determinations, by M. M. Ellis. 1-4 p.
- B. Cobquid hatchery - fish production in Second River, and a new method of disease control, by R. H. M'Gonigle and M. W. Smith. 5-11 p., illus.
- C. Crappie and calico bass culture in Texas, by D. C. Harper. 12-14 p.
- D. Where do we go from here?, by Ralph W. Young. 14-18 p.

*PFC 39, June - July 1938.

- A. Treat - think - and be wary, for tomorrow they may die; some advice on the prevention and treatment of fish diseases, by Frederic F. Fish. 1-9 p.
- B. Soldering and sheet-metal work for hatcheries, by Nathan B. Fruchter. 9-16 p., illus.
- C. Effect of amount of food on fin condition of fingerling trout, by Louis E. Wolf. 16-18 p.
- D. Wisconsin lakes and fish investigations, by Chancey Juday. 18-21 p.

*PFC 40, Aug.-Sept. 1938.

- A. The development of a bony fish, by Archie Norman Solberg. 1-19 p., illus.
- B. Comparative feeding values of some of the meals fed to fish, by L. R. Donaldson and Fred J. Foster. 20-23 p., illus.
- C. Effect of fertilizers on plankton production and on fish growth in a Wisconsin lake, by C. Juday, C. L. Schloemer and Clarence Livingston. 24-27 p., illus.
- D. Trout production in Fish Lake, Umpqua National Forest - 1937, by P. R. Needham and E. P. Cliff. 28-40 p., illus.

*PFC 41, Oct. 1938.

- A. Developing trout and salmon fishing in lakes, by W. M. Keil. 1-8 p.
- B. A classification of Minnesota lakes for fish propagation, by Samuel Eddy. 9-13 p.
- C. Why a well planned fish cultural program is necessary, with comments on transporting and stocking fish, by Charles S. MacIntire. 14-19 p.

*PFC 42, Nov-Dec. 1938.

- A. Ichthyophthiriasis in a trout hatchery, by Louis E. Wolf. 1-17 p., illus.
- B. Maryland small mouth bass spawn when sixteen months old in South Africa, by A. Cecil Harrison. 17-21 p.
- C. Artificial spawning and propagation of black bass in Wisconsin, by G. E. Sprecher. 21-24 p.
- D. The use of chlorine for disinfecting fish ponds, by H. S. Davis. 24-29 p.
- E. A comparison of the growth of fingerling rainbow trout in concrete and dirt-bottomed circular pools of the same size, by Eugene W. Surber. 29-31 p.

*PFC 43, Jan.-Feb. 1939.

- A. Disease prevention in the trout hatchery, by Frederic F. Fish. 1-7 p.
- B. Feeding of Montana grayling at the Bozeman, Montana station, by Charles L. Fuqua. 12-17 p.
- C. Marshall McDonald, 1835-1895, by William C. Kendall. (Founders of fish culture) 19-30 p.

*PFC 44, Mar.-Apr. 1939.

- A. Report on Pisgah fish management, 1939, by William M. Keil. 1-10 p.
- B. Some experiments on the use of salmon viscera, seal meal, beef pancreas, and apple flour in the diet of young chinook salmon, (*Oncorhynchus tshawytscha*), by L. R. Donaldson and Richard F. Foster. 10-17 p., illus.
- C. Starch digestion in trout, by Frank H. Connell and Eddy Davis Palmer. 18-19 p.

- D. Further notes on heating water for the culture of trout, by T. S. Kibbe. 19-23 p., illus.
- E. Propagation of channel catfish, by A. G. Morris. 23-27 p., illus.

*PFC 45, May-June 1939.

- A. The success of the Bonneville fishways during their first year of operation, by Harlan B. Holmes and Frederick G. Morton. 1-11 p., illus.
- B. Plans for constructing a small fish ladder, based on reports of O. W. Lindgren. 11-17 p., illus.
- C. Fish screen in irrigation diversions, based on reports from O. W. Lindgren and John Spencer. 18-23 p., illus.
- D. Bluegills from Maryland make good in South Africa, by A. Cecil Harrison. 23-28 p., illus.
- E. Notes on the effect of low temperature upon eyed eggs, by Frederic F. Fish and Roger E. Burrows. 28-31 p.
- F. Fingerling trout-feeding experiments, Leetown, 1938, by James S. Gutsell. 32-41 p., illus.
- G. Diplostomiasis, a hatchery disease of fresh-water fishes new to North America, by Eddy D. Palmer. 41-47 p., illus.
- H. Furunculosis and another case of ichthyophthiriasis, by G. Clifford Carl. 47-50 p.
- I. Another hatchery meat-room, by Robert Fortney. 50-53 p., illus.

*PFC 46, July-Oct. 1939.

- A. Fish and fishing waters in Glacier Park, by A. S. Hazzard. 1-7 p., illus.
- B. Hatcheries, by Richard Paget. 7-11 p. Reprinted from The Irish angler, v.1, no.1, Spring, 1939.
- C. Some experiments on the use of beef liver, seal meal, salmon meal, and apple flour in the diet of young chinook salmon, by L. R. Donaldson and Fred J. Foster. 12-15 p.
- D. Perfection in hatchery intakes, by A. H. Dinsmore. 16-19 p., illus.
- E. Transportation of channel catfish eggs and fry, by Charles L. Fuqua and Hubert C. Topel. 19-21 p.
- F. The bulb siphon egg picker, by Roger E. Burrows. 22-24 p., illus.

*PFC 47, Nov.-Dec. 1939.

- A. A method for the production of large-mouth bass on natural food in fertilized ponds, by O. Lloyd Meehan. 1-19 p., illus.
- B. A closed water system for a hatchery by G. Clifford Carl. 20-24 p., illus.
- C. Transplanting the Columbia's salmon; salvaging the salmon runs obstructed by the Grand Coulee Dam. 25-30 p., illus.

--Continued on next page--

*PFC 47, Nov.-Dec. 1939. (Continued)

- D. Experiments with forage minnows in bass ponds, by Eugene W. Surber and George E. Klak. 31-37 p.
- E. General management suggestions for lakes surveyed in 1937 in the several national forests of Michigan, by R. W. Eschmeyer. 38-45 p., illus.
- F. Some experiments on the use of fresh beef blood as a substitute for beef liver in the diet of young chinook salmon, (*Oncorhynchus tshawytscha*), by L. R. Donaldson and Fred J. Foster. 46-49 p.
- G. Preliminary results of an experiment on the inclusion of apple flour in foods fed to young salmonoids, by Fred J. Foster, John Pelnar, and William Hagen, Jr. 49-51 p.
- H. The reactions of silver salmon *Oncorhynchus kistuch*, to a 190 foot fall, by Richard T. Smith. 51-52 p.
- I. Effect of temperature changes on young trout, by William Hagen, Jr. 52-53 p.
- J. Naturalistic raceways, by Robert Fortney. 53-54 p.

*PFC 48, Jan.-Feb. 1940.

- A. Formalin for external protozoan parasites; a report on the prevention and control of *Costia necatrix*, by Frederic F. Fish. 1-10 p., illus.
- B. Meatless diets and anemia; the development of anemia in trout fed a synthetic diet and its cure by the feeding of fresh beef liver, by Arthur M. Phillips, Jr. 11-13 p.
- C. Salmon culture in Japan; the Chitose Salmon Hatchery, by M. Watanabe. 14-18 p., illus.
- D. Sterilizing hatchery water supplies; the use of liquid chlorine and powdered derris root, by William Hagen, Jr. 19-24 p., illus.
- E. Do muskellunge and pickerel interbreed? Successful hybridizing in hatchery suggests they do, by Samuel Eddy. 25-27 p.
- F. Frozen fish in hatchery diets may be dangerous, by James S. Gutsell. 28-32 p.

*PFC 49, Mar.-Apr. 1940.

- A. Lost: 10,839 fingerling trout! An appraisal of the results of planting fingerling trout in St. Mary River, Virginia, by Eugene W. Surber. 1-13 p., illus.
- B. After the hatchery - what? A sports writer poses a question for fish culturists, by Roy Wall. p.26. Reprinted from Our Woods and Streams, Wichita, Kans., Beacon, Oct. 1, 1939.

- C. Hatchery diets and growth; experimental studies of the growth of brook trout, by C. McCay and the staff of the Cortland Hatchery, Cortland, New York. 27-30 p.
- D. Formalin treatments pass new tests; additional notes on the control of ectoparasitic protozoa, by Frederic F. Fish. 31-32 p.
- E. Stunning fish by electricity; electric shock provides method of anesthetizing fish in laboratory, by David C. Haskell. 33-34 p.
- F. The value of disinfection in ulcer disease; sterilizing ponds with chlorine prevents recurrence, by Louis E. Wolf. 35-36 p.
- G. Planting fish by boat, by Robert Fortney. 37-38 p., illus.

*PFC 50, May-June 1940.

- A. Laying the foundations of fishery management; a review of the aquicultural investigations of the Bureau of Fisheries, by H. S. Davis. 1-13 p., illus.
- B. Turtles; friends or foes of fish culture? By Karl F. Lagler. 14-18 p., illus.
- C. The feeding of trout brood stock; the diet of rainbow trout in relation to quantity, quality, and cost of eggs, by James S. Gutsell. 19-28 p., illus.
- D. The protein requirement of trout, by A. V. Tunison. 29-32 p.
- E. A treatment for tapeworms in trout, by Donald L. McKernan. 33-35 p.

*PFC 51, July-Oct. 1940.

- A. The Lake of the Ozarks; a problem in fishery management, by Albert E. Weyer. 1-10 p., illus.
- B. Suiting the diet to the hatchery; the tolerance of one strain of rainbow trout to some foods, by William Hagen, Jr. 11-15 p., illus.
- C. Feeding carbohydrates; a study of the digestion and absorption of carbohydrates by brook trout, by Arthur M. Phillips, Jr. 16-23 p.
- D. The control of Octomitus. Calomel in the diet of hatchery salmon, by Richard T. Smith and Elmer Quistorff. Calomel versus carbarsone, by Frederic F. Fish and Donald L. McKernan. 24-29 p.
- E. Planting fish in lakes, by H. John Rayner. 33-34 p., illus.

*PFC 52, Nov.-Dec. 1940.

- A. Building new salmon runs; Puget Sound sockeye salmon plantings show varying degrees of success, by Loyd A. Royal and Allyn Seymour. 1-7 p., illus.

--Continued on next page--

*PFC 52, Nov.-Dec. 1940. (Continued)

- B. The new federal fish distribution policy; requirements of federal waters to receive first consideration, by M. C. James. 8-11 p., illus.
- C. A bacterial disease of carp in central Europe; Haemorrhagic septicaemia causes heavy losses on Polish fish farms, by Stanislas F. Snieszko. 12-15 p.
- D. Air conditioning fish distribution tanks, by Ralph H. Olson. 16-17 p., illus.
- E. Feeds for the fish hatcheries; a summary of research at the Cortland Experimental Hatchery, by C. M. McCay and A. M. Phillips. 18-21 p.
- F. The new salmon hatchery at Leavenworth by S. E. Hutton. 24-30 p., illus. Reprinted from Reclamation Era, Dec. 1940.

*PFC 53, Jan.-Feb. 1941.

- A. The individual and the public service; Director Gabrielson discusses Service policy with the younger staff members. 1-7 p., illus.
- B. Managing ponds for fish production, by H. S. Swingle and E. V. Smith. 8-13 p., illus.
- C. Formalin for bacterial fin rot, by Roger E. Burrows. 14-16 p.
- D. A new fish-transportation unit; Jefferson National Forest trout ride in refrigerated van, by Theodore C. Fearnow. 19-22 p., illus.
- E. Bulk foods in the diet of young salmon, by Lauren R. Donaldson and Fred J. Foster. 23-25 p.
- F. Conservation at the headgate; screening irrigation diversions, an important phase of western fishery management, by R. R. Gardner. 26-29 p., illus.
- G. Beware of the broken egg! A possible cause of heavy losses of salmon eggs, by G. Clifford Carl. 30-31 p.

*PFC 54, Aug. 1941.

- A. The life history and control of an eye fluke; an account of a serious hatchery disease caused by a parasitic worm, by M. S. Ferguson and Robert A. Hayford. 1-13 p., illus.
- B. Organization of the Fish and Wildlife Service, by W. R. Dillon. 14-23 p. illus.
- C. Is wild trout fishing doomed? By Lithgow Osborne. 24-29 p., illus. Reprinted from Outdoor America, Nov. 1940.
- D. Marking trout under anesthesia, by Richard F. Foster. 30-31 p.
- E. Egg production of walleyed pike and sauger; Norris Reservoir fish differ from same species in other localities, by Charles G. Smith. 32-34 p.

*PFC 55, Nov. 1941.

- A. Carbarsone treatments for octomitus; experimental and practical tests show value of new drug, by E. Clifford Nelson. 1-5 p.
- B. Increasing the capacity of a hatchery; circular tanks give four-fold increase in potential capacity, by Gustave Prevost. 6-10 p., illus. Reprinted from Transactions of the American Fisheries Society, 70, 1941.
- C. Lingingston Stone, by Joel W. Hedgpeth. (Founders of fish culture) 11-14 p., illus.
- D. A sportsman-operated rearing station, by Jerry Martin. 15-18 p., illus.
- E. Keeping books on a Vermont trout stream, by Russell F. Lord. 19-22 p.
- F. Fish culture on Lake Titicaca, by M. C. James. 25-27 p., illus.
- G. The potato ricer in the fish hatchery; how to transform a kitchen gadget into a fish feeder by C. R. Mitchell. 28-30 p.
- H. A spawning knife for taking salmon eggs, by Edgar Ledgerwood. 31-32 p., illus.

*PFC 56, Dec. 1941.

- A. Trout management in New Hampshire; biologist's findings form basis of state's new program, by Herbert E. Warfel. 2-9 p., illus.
- B. A drip incubator and heater combination; device solves problem of limited water supply plus low temperatures, by James R. Simon and Floyd Roberts. 10-13 p., illus.
- C. Fishery research in Wisconsin, by Edward Schneberger. 14-17 p., illus.
- D. A new method of combating fungus infections, by D. John O'Donnell. 18-20 p.
- E. Belly tags for bass; preliminary returns from the tagging of fingerling smallmouth black bass, by Eugene W. Surber. 21-22 p., illus.
- F. Two-way counting weir for salmon; complete census of salmon migrants taken in Alaska stream. 23-27 p., illus.
- G. Fertilizing bass ponds; large quantities in center of pond recommended, by T. F. Nelson. 28-29 p.

*PFC v.9, no.1, Jan. 1947.

- A. Available knowledge as a spur to practical fish culture, by C. M. McCay. 5-8 p.
- B. River developments and their effects upon fish and wildlife resources, by Rudolph Dieffenbach. 9-12 p.
- C. Furunculosis and its treatment, by James S. Gutsell. 13-20 p.
- D. Ichthyophthiriasis in Australian trout hatchery, by A. Dunbavin Butcher. 21-26 p.

--Continued on next page--

*PFC v.9, no.1, Jan. 1947. (Continued)

- E. Artificial propagation of those channel cats, by H. L. Canfield. 27-30 p.
- F. Hatchery problems in wartime. 31-36 p.
- G. Use of bentonite for stopping seepage in ponds, by Lee M. Duncan. 37-39 p.
- H. It pays to grade largemouth bass fingerlings, by Hubert C. Topel. 40-41 p.
- I. Enlarged ricers for pond feeding, by Roger E. Burrows and John E. Manning. 42-45 p., illus.
- J. A new type of drain plug, by C. R. Mitchell. 46-47 p.

*PFC v.9, no.2, Apr. 1947.

- A. Hunt Creek fisheries experiment station; Michigan's field laboratory and experimental area engaged primarily in study of trout-stream problems, by Albert S. Hazzard, Justin W. Leonard, and David S. Shetter. 65-70 p., illus.
- B. 2,4-D and some emergent aquatics; effects of butyl ester of 2,4-dichlorophenoxy acetic acid on some emergent aquatic plants, by Aden C. Bauman. 71-77 p., illus.
- C. There is no universal pondfish, by Thomas K. Chamberlain. 78-81 p.
- D. Fishery management in Oklahoma; impoundments utilized to the advantage of fishery-management studies, by A. D. Aldrich. 82-85 p., illus.
- E. Growth rate and fin regeneration in trout, by J. H. Wales. 86-89 p., illus.
- F. One fish-culturist's estimate of the kingfisher, by Charles L. Fuqua. 90-93 p., illus.
- G. Dual treatment for bacterial fin rot, by George J. Eicher, Jr. 94-95 p.
- H. Compressed-air fish-feeding apparatus, by John Pelnar. 96-98 p., illus.
- I. Well casings for pond screens, by Fred A. Thompson. 99-101 p., illus.
- J. Screen frames that seal, by Walter M. Allen. 102-103 p., illus.

*PFC v.9, no.3, July 1947.

- A. Sulfamerazine in the treatment of trout for furunculosis and ulcer disease, by Louis E. Wolf. 115-124 p.
- B. An unusual type of farm pond, by Charles L. Fuqua. 125-129 p., illus.
- C. Trout fishery in Oregon, by H. J. Rayner. 130-132 p.
- D. Farm ponds - real and potential values by William H. Thompson. 133-135 p.
- E. The Montana grayling, by Clarence A. Tryon, Jr. 136-142 p., illus.

- F. The control of aquatic plants with phenoxyacetic compounds; experimental work with certain plant-growth regulators as herbicides, by Eugene W. Surber, C. E. Minarik and W. B. Ennis, Jr. 143-150 p., illus.
- G. This question of anemia; what it is, and what to do about it, by Arthur M. Phillips, Jr. and Donald R. Brockway. 151-154 p.
- H. Farm ponds, by Ancil D. Holloway. 155-158 p., illus.
- I. Rat control on fish-cultural stations, by Thomas B. Murray. 159-163 p., illus.
- J. Implements in flounder operations, by Thomas H. Dorr. 164-167 p., illus.
- K. Aluminum hatching troughs, by A. C. Balch. 167-168 p., illus.
- L. Catch basins for unfinished ponds, by Wilburn J. Whipple and Bernard L. Pelz. 168-169 p., illus.
- M. Separation of northern pike eggs, by Leslie H. Bennett. 169-170 p.

*PFC v.9, no.4, Oct. 1947.

- A. Foreign introductions of North American fishes; inadvisability of recommending North American fishes without careful appraisal of foreign fishes and ecology, by George S. Myers. 177-180 p.
- B. River shrimps; interesting crustaceans about which little has been written, by Joel W. Hedgpeth. 181-184 p., illus.
- C. Ten years of trout stream management on the Pisgah, by T. K. Chamberlain and W. W. Huber. 185-191 p., illus.
- D. Fish distribution units; construction of six-compartment and two-compartment units, by T. H. Copeland. 193-202 p., illus.
- E. New type of fish fence for use in streams, by William C. Herrington and Louis D. Stringer. 203-209., illus.
- F. Sorting table, by Hubert C. Topel. 209-210 p., illus.
- G. Control of algal growths in hatching ponds and raceways, by Elmer F. Herman and Wendel Anderson. 211-212 p., illus.
- H. Selected bibliography of North American fresh-water fishery biology, 1941-1946, by Karl F. Lagler and Charles K. Fisher, Jr. 213-230 p.

PFC v.10, no. 1, Jan. 1948.

- A. Survival of hatchery trout in streams and possible methods of improving the quality of hatchery trout, by Howard A. Schuck. 3-14 p.

--Continued on next page--

PFC v.10, no.1, Jan. 1948. (Continued)

- B. Effect of population pressure upon rate of growth and food conversion of fingerling cutthroat trout, by K. Bonham and R. Walter Williams. 15-18 p., illus.
- C. New compounds for the control of bacterial gill disease, by Robert R. Rucker. 19-22 p.
- D. Improved method for enumerating hatchery fish populations, by George S. Hewitt and Roger E. Burrows. 23-27 p., illus.
- E. Glacial acetic acid and green egg mortality, by Kenneth E. Morton. p. 28.
- F. Colorado's glass fish tank, by C. N. Feast and C. E. Hagie. 29-30 p., illus.
- G. Power egg picker, by Richard J. McMullen. 30-31 p., illus.
- H. The hatchery log-book, by F. Pells. p. 32.
- I. Trout in a floating raceway, by C. F. Culler. p. 33, illus.
- J. House trailer as a mobile fishery laboratory, by E. A. Seaman. 34-35 p., illus.
- K. Fish-food beater, by J. E. Manning and C. R. Jackson. p. 36, illus.

PFC v.10, no. 2, Apr. 1948.

- A. Fertilization of a recreational lake to control submerged plants; effects of fertilization program upon bathing, boating, fishing, by Eugene W. Surber. 53-58 p., illus.
- B. Graphical method for presenting data on the growth of trout, by David C. Haskell. 59-61 p., illus.
- C. Our national aquarium, by John C. Pearson. 62-66 p., illus.
- D. Fact and fiction in spawntaking, by E. M. Wood and W. A. Dunn. 67-72 p., illus.
- E. Use of the block system in fish-cultural operations, by Bruce B. Cannady. 73-75 p.
- F. Spawn from Lake San Cristobal, by Tom A. French. 76-77 p., illus.
- G. Establishment of "stream-feeders" as a means of conserving fish, by Charles Otto Masters. 78-80 p.
- H. Cod-liver oil in the diet of trout, by James S. Gutsell. 81-83 p.
- I. Fish production program, 1947, in the southeast, by John Blosz. 84-87 p.
- J. Removal of excess nitrogen in a hatchery water supply, by Robert R. Rucker and Edward M. Tuttle. 88-90 p., illus.
- K. Refrigerated live-trout distribution tank, by James V. Stoddard. 91-94 p., illus.

- L. Pike culture at the New London, Minnesota, station, by Leslie H. Bennett. 95-97 p., illus.
- M. Largemouth bass trap, by Robert A. Hayford. 98-99 p., illus.
- N. Fish tub carrier, by S. A. Scott. p. 100, illus.

PFC v.10, no.3, July 1948.

- A. Results of an analysis of farm ponds in the midwest; evaluating pond production, by Wallace L. Anderson. 111-116 p., illus.
- B. Vitaminology, by Arthur M. Phillips, Jr., and Donald R. Brockway. 117-124 p., illus.
- C. Chemical control agents and their effects on fish, by Eugene W. Surber. 125-131 p.
- D. Some precautions in estimating fish populations, by Kenneth D. Carlander and William M. Lewis. 134-137 p., illus.
- E. Brook and rainbow trout treated with sulfamerazine and calomel or sulfamerazine and carbarsone, by James S. Gutsell and S. F. Snieszko. 139-140 p.
- F. Experiment on the control of columnaris with sulfa drugs, by Daniel W. Slater. 141-142 p.
- G. Disinfection of rainbow trout eggs with sulfo-merthiolate; experiment with sodium p-ethyl mercuri thiophenyl-sulfonate, Lilly, by S. F. Snieszko and S. B. Friddle. 143-149 p.
- H. Channel catfish tagging in West Virginia, by E. A. Seaman. 150-152 p., illus.
- I. Cattail control with scythe and 2, 4-D, by C. H. Walker. 153-154 p., illus.

PFC v.10, no.4, Oct. 1948.

- A. Cement: Its preparation and use in fish-management projects; ponds, fish ladders, and hatchery buildings, by Portland Cement Association. 163-175 p., illus.
- B. Management of game fish of Conchas Reservoir, by C. M. Mottley and T. K. Chamberlain. 177-186 p., illus.
- C. Bangos culture in the Philippines, by W. F. Carbine. 187-197 p., illus.
- D. Washington Monument lot; fish ponds. p. 198, illus.
- E. Increasing production of bluegill sunfish for farm pond stocking, by Eugene W. Surber. 199-203 p., illus.
- F. New substances of possible value in fish disease control, by Max Katz. 204-205 p.
- G. New system of trout distribution in West Virginia, by E. A. Seaman. 206-208 p., illus.
- H. Improved rearing pond, by Marshall Thayer. 209-212 p., illus.

PFC v.11, no.1, Jan. 1949.

- A. Muskellunge fingerling culture; production of the "muskie" in Wisconsin, by A. A. Oehmcke. 3-18 p., illus.
- B. Fish culture in Morocco, by J. G. Prud'homme. 19-23 p., illus.
- C. Progress report; improvement of fish-cultural practices in Oklahoma, by A. D. Aldrich. 25-29 p.
- D. Survey of fish culture in the United States, by A. V. Tunison, S. M. Mullin and O. Lloyd Meehan. 31-69 p.
- E. Control of crawfish, by Clay Lyle. p. 72.
- F. Urethane (Ethyl carbamate) in some fishery procedures, by Shelby D. Gerking. 73-74 p. Contribution no. 392, Dept. of Zoology, Indiana University.
- G. Fact and fiction in spawntaking; addenda, by Robert R. Rucker. 75-77 p.
- H. Use of lime in acid ponds, by Meddie C. Walker. p. 78.
- I. Experimental fish troughs, by S. F. Snieszko. 79-81 p., illus.
- J. Neutralizing chlorine in trout display tanks, by E. O. Rodgers. 82-83 p.

PFC v.11, no.2, Apr. 1949.

- A. Prophylactic treatment for control of fungus (*Saprolegnia parasitica*) on salmon eggs, by Roger E. Burrows. 97-103 p., illus.
- B. Control of pondweeds with 2, 4-D, by J. R. Snow. 105-108 p.
- C. Use of cod-liver oil in the diet of hatchery-reared trout, by Arthur M. Phillips, Jr., Donald R. Brockway, and E. O. Rodgers. 109-112 p., illus.
- D. Eradication of emergent aquatic vegetation with 2, 4-D; particular emphasis upon alligatorweed, by J. H. Cornell. 113-118 p.
- E. Electric seine used in Kentucky, by Leonard Joeris. 119-121 p., illus.
- F. *Epistylis*; a peritrichous protozoan, on hatchery brook trout, by Jacob H. Fischthal. 122-124 p., illus.
- G. Progress in reclamation techniques, by Hilbert R. Siegler and Harold Pillsbury. 125-129 p., illus.
- H. Dietary observations on brown trout fingerlings, by Ernest O. Rodgers. 130-132 p.
- I. Inexpensive microprojector for scale and plankton study, by Leonard Joeris. 133-135 p., illus.
- J. That potato ricer again, by Maurice Bryant, Jr. 136-137 p., illus.

PFC v.11, no.3, July 1949.

- A. The folic acid requirements of trout; brook, brown, and rainbow, receive various levels for study, by Arthur M. Phillips, Jr., Donald R. Brockway and Ernest O. Rodgers. 141-145 p., illus.
- B. Pyridylmercuric acetate; its toxicity to fish, efficacy in disease control and applicability to a simplified treatment technique, by Roger E. Burrows and David D. Palmer. 147-151 p.
- C. Pyridylmercuric acetate technical; its use in control of gill disease and some external parasitic infestations, by S. F. Snieszko. 153-155 p., illus.
- D. Manganese for increased production of water-bloom algae in ponds, by Croswell Henderson. 157-159 p., illus.
- E. Prophylaxis of furunculosis in brook trout (*Salvelinus fontinalis*) by oral immunization and sulfamerazine, by S. F. Snieszko and S. B. Friddle. 161-168 p., illus.
- F. Direct current as aid to the fishery worker, by H. J. Rayner. 169-170 p.
- G. Isolation of *Saprolegnia* and *Achlya* with penicillin-streptomycin, and attempts to infect fish, by Glenn L. Hoffman. 171-174 p.
- H. Recommended methods for fertilization, transportation, and care of salmon eggs, by Roger E. Burrows. 175-177 p.
- I. Analyses of farm ponds in Oklahoma, Texas, and New Mexico, by Charles L. Fuqua. 178-184 p., illus.
- J. Improvements in bluegill sunfish distribution methods, by Fred L. Cox. 185-188 p., illus.
- K. A drop center raceway, by Ernest O. Rodgers. 189-190 p., illus.

PFC v.11, no.4, Oct. 1949.

- A. An echo sounder for small boats, by Charles R. Burrows. 199-201 p., illus.
- B. Effects of an aerial application of DDT on fish and fish-food organisms in two Pennsylvania watersheds, by C. H. Hoffman, and E. W. Surber. 203-211., illus.
- C. Survey of problems in fishery administration, by Karl F. Lagler. 213-216 p.
- D. Value of the bottom sampler in demonstrating the effects of pollution on fishfood organisms and fish in the Shenandoah River, by Croswell Henderson. 217-230 p., illus.
- E. Pond record of bass and bluegill production, by Hubert C. Topel. 231-243 p., illus.

--Continued on next page--

PFC v.11, no.4, Oct. 1949. (Continued)

- F. Montana fish-distribution tank, by A. G. Stubblefield, Lorin Lefevre and Rex Smart. 245-252 p., illus.
- G. Extended survey of fish culture in the United States, by A. V. Tunison, S. M. Mullin and O. Lloyd Meehan. 253-262 p.
- H. A simple method of mounting scales, by William M. Lewis and Kenneth D. Carlander. p. 263.
- I. Effect of acid treatment on pH and fish, by A. E. Borell. p. 264.
- J. A "quick-change" screen for fish hatchery ponds, by Fred V. Carr and Leonard N. Allison. 265-266 p., illus.

PFC v.12, no.1, Jan. 1950.

- A. Fish populations in some Iowa farm ponds; a survey based upon two methods of population analysis, by Floyd R. Fessler. 3-11 p.
- B. Propagation of fresh-water mussels, by Richard O. Jones. 13-25 p., illus.
- C. Comparison of the number of erythrocytes in the blood of hatchery-reared and wild silver salmon fingerlings, by Max Katz and L. R. Donaldson. 27-28 p.
- D. Percentage returns of marked trout in two West Virginia streams, by E. A. Seaman and R. F. Stephens. 29-31 p.
- E. Bass production in a Kentucky fish hatchery pond, by Minor Clark. 33-34 p., illus.
- F. Black bass in Maryland, by Talbott Denmead. 35-37 p., illus.
- G. An application of electricity to collection of fish, by Robert W. Morris. 39-42 p., illus. Technical paper no. 583, Oregon Agricultural Experiment Station.
- H. Natural siphon egg picker, by A. B. Smith. p. 44.
- I. Carbon black on East Lake; Deschutes Nat'l Forest, Oregon, by Robert L. Borovicka. p. 45, illus.

PFC v.12, no.2, Apr. 1950.

- A. Ten years of fishery activities under the Fish and Wildlife Service, by Albert M. Day. 57-62 p.
- B. Bacteriological findings in the study of an outbreak of ulcer disease among brook trout yearlings of the Westfield, Wisconsin, hatchery, by Kenneth G. Flakas. 63-66 p., illus.
- C. Biotin and brown trout; the tale of a vitamin, by Arthur M. Phillips, Jr.,

Donald R. Brockway, and Ernest O. Rodgers. 67-71 p.

- D. The helicopter in fish-planting operations in Olympic National Park, by Lewis R. Garlick. 72-76 p., illus.
- E. Fishery research program at Cornell University, by Dwight A. Webster. 77-80 p.
- F. Sterilization of a trout hatchery pond with chlorine, by Robert E. Cleary and Lloyd P. Bailey. 81-84 p., illus.
- G. Cutthroat trout without dorsal fins, by Mark R. Code. 85-86 p., illus.
- H. A bacterial disease found in the black crappie; *Poxomis nigro-maculatus*, by Kenneth G. Flakas. 87-88 p.
- I. An expansion raceway gate, by Tom E. Carlon. 89-90 p., illus.
- J. A graphic record for hatcheries rearing artificially fed fish, by Maurice Bryant, Jr. 91-93 p., illus.
- K. A selected bibliography on farm ponds and closely related subjects, by Vincent Schultz. 97-104 p.

PFC v.12, no.3, July 1950.

- A. Fish management in the multiple-use management of the national forests, by Lloyd W. Swift and Merle A. Gee. 113-126 p., illus.
- B. Metabolic products and their effects, by Donald R. Brockway. 127-129 p.
- C. Recent developments in the electric method of collecting fish, by David C. Haskell. 131-134 p.
- D. Biological effects of nigrosine used for control of weeds in hatchery ponds, by Eugene W. Surber and Max H. Everhart. 135-140 p., illus.
- E. Toxicity of some new insecticides to several species of pondfish, by J. M. Lawrence. 141-146 p.
- F. Summary of farm-pond inspections, 1949, by Robert W. Sharp. 147-150 p., illus.
- G. Rainbow brood-stock selection and observations on its application to fishery management, by Cliff Millenbach. 151-152 p.
- H. A method of transporting fingerline shad, by James E. Sykes. 153-159 p.
- I. Perforated aluminum screens for circular pools, by Robert F. Stephens and William Evans. 161-162 p., illus.
- J. Condition factor alignment charts, by Charles K. Phenicie and Clinton G. Bishop. 163-168 p.
- K. Diet experiments on Atlantic salmon in Maine, by George A. Rounsefell, Lyndon H. Bond and George K. White. 169-172 p.

PFC v.12, no.4, Oct. 1950.

- A. Construction and use of small trap nets, by Walter R. Crowe. 185-192 p., illus.
- B. Present status of fishery management in Oklahoma, by Bill Thompson. 193-195 p.
- C. Fish-planting tank for 3/4-ton pickup truck, by Earl Leitritz. 197-206 p., illus.
- D. Survey of systems used in measuring lengths and weights of fishes, and of systems proposed as standard, in the Southwest, by Frank T. Knapp. 207-208 p., illus.
- E. Fish growth rates read directly from the projected scale, by Leonard Joeris. 209-210 p., illus.
- F. Distribution units for warm-water fish, by Albert J. Wilson. 211-213 p.
- G. The Chipman meat cutter, by Jack R. Chipman. 214-215 p., illus.
- H. Quickly changed dip net, by Fred J. Richan. 217-220 p., illus.

PFC v.13, no.1, Jan. 1951.

- A. Channel catfish culture in Texas; helpful hints regarding propagation procedures, by Marion Toole. 3-10 p., illus.
- B. An impression method for preparing fish scales for age and growth analysis, by Edgar L. Arnold, Jr. 11-16 p., illus.
- C. Diet experiments with trout, by Louis E. Wolf. 17-24 p.
- D. Method for enumeration of salmon and trout eggs by displacement, by Roger E. Burrows. 25-30 p., illus.
- E. Raising fish; planting by plane, by Earl Leitritz. 31-35 p., illus.
- F. The handling of applications for fish in the Fish and Wildlife Service, by Lee M. Duncan. 37-41 p.
- G. Effect of bactericides on steelhead trout fry, by R. R. Rucker and W. J. Whipple. 43-44 p.
- H. The transfer of adult shad, by James E. Sykes. 45-46 p.
- I. Metal fish graders, by Frank A. Bengard. 47-48 p., illus.

PFC v.13, no.2, Apr. 1951.

- A. The effect of retardation of the initial feeding on the growth and survival of salmon fingerlings, by David D. Palmer, Harlan E. Johnson, Leslie A. Robinson, and Roger E. Burrows. 55-62 p., illus.
- B. Muskellunge yearling culture and its application to lake management, by Arthur A. Oehmcke. 63-70 p., illus.

- C. The toxicity of pyridylmercuric acetate technical (PMA) to rainbow trout (*Salmo gairdnerii*), by E. O. Rodgers, B. H. Hazen, S. B. Friddle, and S. F. Snieszko. 71-73 p.
- D. Some experiments on the use of thiouracil as an aid in holding and transporting fish, by Paul E. Osborn. 75-78 p., illus.
- E. An evaluation of methods of egg enumeration, by Roger E. Burrows. 79-85 p.
- F. Snaring through the ice for nongame fish in West Virginia, by E. A. Seaman. 86-90 p., illus.
- G. Sulfamerazine in the control of columnaris in steelhead trout (*Salmo gairdnerii*), by Harlan E. Johnson. 91-93 p., illus.
- H. Experiments with canned fish as food for trout, by Louis E. Wolf. 95-97 p.
- I. A lightweight pulling engine for seines, by E. T. Rose. 99-100 p., illus.
- J. Dual-purpose trout rearing tanks, by Maurice Bryant, Jr. 101-102 p., illus.

PFC v.13, no.3, July 1951.

- A. Delay of spawning in eastern brook trout by means of artificially prolonged light intervals; an attempt to decrease losses among hold-over stock during normal fall spawning season, by Leonard N. Allison. 111-116 p., illus.
- B. Comparison of yeast and penicillin mat as supplements to dry-meal diets for brown trout, by Louis E. Wolf. 117-120 p.,
- C. Comparison of fish food costs in federal hatcheries in 1945 and 1949, by A. V. Tunison. 121-128 p.
- D. An incident of high mortality among large rainbow trout after treatment with pyridylmercuric acetate, by R. F. Foster and P. A. Olson. 129-130 p.
- E. A method of measuring the natural food content of rearing ponds, by John Dobie. 131-134 p., illus.
- F. Sulfadiazine for kidney disease, by R. R. Rucker, A. F. Bernier, W. J. Whipple and R. E. Burrows. 135-137 p.
- G. Notes on a bacterial disease of rainbow trout in a Colorado hatchery, by Wayne R. Seaman. 139-141 p.
- H. Use of a wetting agent to facilitate pond reclamation, by Richard H. Stroud. 143-145 p.
- I. Chlorine-removal unit at full-scale operating hatchery, by R. W. Sharp. 146-148 p., illus.

--Continued on next page--

PFC v.13, no.3, July 1951. (Continued)

- J. Suggestions for improving the collection of fish with rotenone, by Robert B. Moorman and C. E. Ruhr. 149-151 p., illus.
- K. Practical gill net sizes for sampling average Connecticut lakes, by Cole W. Wilde and Vincent B. Romeo. 153-156 p., illus.
- L. Can we establish a standard system of measuring lengths and weights of fishes? By Hurst H. Shoemaker. 157-158 p.
- M. Pond-scrubbing machine with single brush, by Rudolph W. Branum. 159-160 p., illus.
- N. Pond-scrubbing machine with double brush, by Harold G. Kronholm. 161-164 p., illus.

PFC v.13, no.4, Oct. 1951.

- A. An evaluation of fish pond stocking policy and success in the southeastern states, by Ancil D. Holloway. 171-180 p., illus.
- B. The coefficient of condition of brook, brown, and rainbow trout in the Pigeon River, Otsego County, Michigan, by Edwin L. Cooper and Norman G. Benson. 181-192 p., illus.
- C. Stream pollution resulting from the use of organic insecticides, by L. A. Young and H. P. Nicholson. 193-198 p.
- D. A nomograph for rapid back-calculation of fish lengths, by Edward M. Lowry. 199-204 p., illus.
- E. Feeding frequency; its role in the rearing of blueback salmon fingerlings in troughs, by David D. Palmer, Leslie A. Robinson and Roger E. Burrows. 205-212 p.
- F. Variation in fishing pressure and catch during various portions of the trout season on some Michigan trout waters, by David S. Shetter. 213-218 p., illus.
- G. A new chemical treatment apparatus, by Elden H. Vestal. 219-224 p., illus.
- H. The treatment frequency and concentration necessary for adequate prophylaxis with pyridylmercuric acetate for the control of bacterial gill disease, by Roger E. Burrows. 225-226 p.
- I. The feeding of cooked carp to hatchery trout in Colorado, by W. R. Seaman. 227-228 p.
- J. The design of an electric shocker boat, by Gerald F. Myers. 229-231 p.

PFC v.14, no.1, Jan. 1952.

- A. The use of torula yeast in the feeding of trout; study of growth rate and vitamin values in Wisconsin hatcheries, by Warren S. Churchill. 3-9 p., illus.
- B. An interim report on gill disease, by Robert R. Rucker, Harlan E. Johnson and George M. Kaydas. 10-14 p., illus.
- C. Comparison of the growth of lake trout fingerlings from eggs taken in Seneca, Saranac, and Raquette Lakes, by David C. Haskell. 15-18 p., illus.
- D. The effects of supplemental fats in the diet of brook trout, by Arthur M. Phillips, Jr., Donald R. Brockway and John M. Maxwell. 19-22 p.
- E. A method of calculating fish production in rearing ponds, by John Dobie. 23-26 p., illus.
- F. Suggestions for the renovation of fish ponds, by Ancil D. Holloway. 27-29 p.
- G. A preliminary report on the control of fungus in the eggs of the pike (Esox lucius) with malachite green, by Robert W. Sharp, Leslie H. Bennett, and Eldon C. Saeugling. p. 30.
- H. An aid in the application of rotenone in pond reclamation, by Howard P. Clemens. 31-32 p., illus.
- I. Rearing young shad in ponds, by John C. Pearson. 33-36 p.
- J. Trout on a trolley in Oregon, by Chris C. Jensen. p. 37., illus.

PFC v.14, no.2, Apr. 1952.

- A. Ulcer disease in brook trout (Salvelinus fontinalis); its economic importance, diagnosis, treatment, and prevention, by Stanislas F. Snieszke. 43-49 p.
- B. Relationships of weight and body measurements of adult smelt, Osmerus mordax (Mitchill), by William Dowell Baten and Peter I. Tack. 50-55 p.
- C. Echo sounding, Massachusetts' lakes, ponds, and reservoirs, by Richard H. Stroud and Frank Grice. 56-60 p., illus.
- D. Propagation of largemouth black bass and bluegill sunfish in federal hatcheries of the Southeast, by John Blosz. 61-66 p., illus.
- E. Biotin, pantothenic acid, and brown trout, by Arthur M. Phillips, Jr., Donald R. Brockway, Floyd E. Lovelace and George C. Balzer, Jr. 67-70 p.
- F. Survival and growth of stocked lake trout yearlings from Seneca and Raquette lake breeders, by David C. Haskell, Robert G. Zilliox, and W. Mason Lawrence. 71-73 p.

--Continued on next page--

PFC v.14, no.2, Apr. 1952. (Continued)

- G. A rapid presumptive test for furunculosis in fish, by Philip J. Griffin. 74-75 p.
- H. A comparison of the growth of fingerling chinook salmon reared in ponds, troughs, and circular tanks, by Harlan E. Johnson and Alfred C. Gastineau. 76-78 p., illus.
- I. Rate of survival of largemouth black bass fingerlings stocked in experimental farm ponds, by William H. Brown. 79-80 p.
- J. Egg inventory; enumeration with the egg counter, by David C. Haskell. 81-82 p., illus.

PFC v.14, no.3, July 1952.

- A. Labor to produce fifty tons of trout; a time study, by David C. Haskell. 87-97 p., illus.
- B. Public sentiment; an important factor in fishery management; with special reference to the St. Johns River and Lake Okeechobee, Florida, by John F. Dequine. 98-103 p., illus.
- C. Observations on columnaris in salmon and trout, by Harlan E. Johnson and Richard F. Brice. 104-109 p., illus.
- D. Some pathological symptoms in brown trout on an all-meal diet, by Louis E. Wolf. 110-112 p.
- E. Effects of injected pituitary material upon the spawning of blueback salmon, by Roger E. Burrows, David D. Palmer and H. William Newman. 113-116 p.
- F. The effect of trout stocking on the rate of catch, by H. M. Ratledge and J. H. Cornell. 117-121 p., illus.
- G. Comparison of the growth rates of chinook salmon fingerlings reared in circular tanks and Foster-Lucas ponds, by David D. Palmer, H. William Newman, Robert L. Azevedo, and Roger E. Burrows. 122-124 p.
- H. Inks for marking plastic fish tags, by Oliver B. Cope. 125-126 p.
- I. Pseudomonas hydrophila; the cause of "redmouth" disease in rainbow trout, by Edward D. Wagner and Curtis L. Perkins. 127-128 p.
- J. The propagation of buffalo, by Meddie C. Walker and Philip T. Frank. 129-130 p.
- K. Operation mackinaw, by R. S. Robinson. p. 131.

PFC v.14, no.4, Oct. 1952.

- A. The first year of federal aid in fish restoration. The Dingell-Johnson Act in operation, by Willis King. 135-147 p.

- B. Experiments with antibiotics and vitamin B₁₂ in the diets of brown trout fingerlings, by Louis E. Wolf. 148-153 p.
- C. Absorption of radioactive calcium by brook trout, by Floyd E. Lovelace and Henry A. Podoliak. 154-158 p., illus.
- D. The School of Fisheries, by Richard Van Cleve. 159-164 p., illus.
- E. A note on experiments designed to test the viability of gametes and the fertilization of eggs by minute quantities of sperm, by J. R. Nursall and A. D. Hasler. 165-168 p., illus.
- F. A comparative morphologic and physiologic study of fish blood, by Charles G. Smith, William M. Lewis, and

Harold M. Kaplan. 169-172 p., illus.

- G. Walleyed pike fingerling production in drainable constructed ponds in Minnesota, by Fred Miller. 173-176 p.
- H. Rate of survival of largemouth black bass fry stocked in experimental farm ponds, by William H. Brown. 177-179 p.

PFC v.15, no.1, Jan. 1953.

- A. Spot-poisoning applied to the Massachusetts lake and pond fisheries survey, by Richard H. Stroud. 3-10 p., illus.
- B. Commercial and sport fishing; a reiteration of policy, by Paul E. Thompson. 11-13 p.
- C. A simplified technique for classifying streams useful in fishery and related resource management, by R. D. Van Deusen. 14-19 p., illus.
- D. The status of commercial and sport fishing on Reelfoot Lake, by Eugene S. Cobb. 20-23 p.
- E. Observations on gas-bubble disease of fish, by R. R. Rucker and K. Hodgeboom. 24-26 p., illus.
- F. Water sampler and water-analysis kit, by H. S. Swingle and M. C. Johnson. 27-30 p., illus.
- G. Mortality of silver salmon from treatments with sulfamerazine, by Harlan E. Johnson and Richard F. Brice. 31-32 p.
- H. A machine for sounding and for operating limnological apparatus, by Norman Reimers and Edwin P. Pister. 33-34 p., illus.
- I. Chloretone as an anaesthetic for adult cutthroat trout, by Oliver B. Cope. p. 35.
- J. A new type of fish trap, by Reed S. Nielson. 36-38 p., illus.

PFC v.15, no.2, Apr. 1953.

- A. The distribution of four anadromous members of the genus *Salmo* in the northern hemisphere, by James E. Mason. 51-56 p., illus.
- B. Migratory tendencies of the Manchester (Iowa) strain of rainbow trout, by H. M. Ratledge and J. H. Cornell. 57-63 p., illus.
- C. The application of land use to fisheries management in Michigan, by O. H. Clark. 64-71 p., illus.
- D. Virus diseases in fishes; outlook for their treatment and prevention, by S. F. Snieszko. 72-74 p.
- E. Changes in the commercial fishery on the Alabama portion of the Tennessee River, by Paul Bryan and Lawrence F. Miller. 75-77 p.
- F. A salmon research laboratory, by John A. Coates and A. Neal Woodall. 78-79 p., illus.
- G. The effect of ether anesthesia on fin-clipping rate, by Paul H. Eschmeyer. 80-82 p.
- H. Further data on the development of a nonmigratory strain of rainbow trout, by W. F. Carbine. 83-84 p.
- I. A modification in the technique of computing average lengths from the scales of fishes, by John Van Oosten. 85-86 p.
- J. Apparatus and methods for the collection of attachment materials in lakes, by Reed S. Nielson. 87-89 p., illus.
- K. Innovation in a machine for reading fish scales, by Leon D. Johnson. 90-91 p., illus.
- L. Fish food pellets show promise, by Donald R. Brockway. 92-93 p.

PFC v.15, no.3, July 1953.

- A. A new, mechanically adjustable three-way grader, by K. E. Morton. 99-103 p., illus.
- B. Effects of transportation of green eggs, and of water temperature during incubation, on the mortality of chinook salmon, by Harlan E. Johnson and Richard F. Brice. 104-108 p., illus.
- C. Experiments with nigrosine dye in aquatic plant control, by Norman O. Levardsen. 109-113 p.
- D. Use of pectoral fin rays to determine age of the white sucker, by W. J. Scidmore and A. W. Glass. 114-115 p., illus.
- E. A report on the fisheries of East Bengal, Pakistan, by A. R. K. Zobairi. 116-120 p.
- F. Methods and techniques used in trap-cropping largemouth black bass from Lake Mills, Wisconsin, hatchery

ponds, by Nicholas J. Sears. 121-122 p., illus.

- G. Lake mapping in Wisconsin, by Charles N. Lloyd. 123-124 p., illus.
- H. Should we stock brown trout? By Reed S. Nielson. 125-126 p.
- I. Use of pellets as trout food, by Harvey Willoughby. 127-128 p.
- J. Occurrence of high mortality among chinook salmon fry after the recharge of a charcoal filter, by Allyn H. Seymour and John R. Donaldson. 129-130 p.
- K. The Rogue River boat in fishery work, by Oliver B. Cope. 131-132 p., illus.
- L. A partial bibliography on reservoirs, by William C. Beckman and Joseph H. Kutkuhn. 135-144 p.

PFC v.15, no.4, Oct. 1953.

- A. A century of American fish culture, 1853-1953, by Edward M. Wood. 147-162 p.
- B. Mortality rates of brook trout and brown trout in the Pigeon River, Otsego County, Michigan, by Edwin L. Cooper. 163-169 p., illus.
- C. The use of a graphic-recording echo sounder on Maine lakes, by Kendall Warner. 170-174 p., illus.
- D. A method for cellulose acetate impressions of fish scales with a measurement of its reliability, by Robert L. Butler and Lloyd L. Smith, Jr. 175-178 p., illus. Paper no. 3003, Scientific Journal Series, Minnesota Agricultural Experiment Station, St. Paul, Minn.
- E. An epizootic among rainbow trout, by R. R. Rucker and Paul V. Gustafson. 179-181 p., illus.
- F. Colored fish-food pellets, by Harold Wolf. p. 182.
- G. Further observations on columnaris in salmon and trout, by Harlan E. Johnson and Richard F. Brice. 183-185 p.

PFC v.16, no.1, Jan. 1954.

- A. Fishing in the tailwaters of T.V.A. dams, by L. F. Miller and C. J. Chance. 3-9 p.
- B. West Virginia's electrical fish-collecting methods, by George D. Holton and Carl R. Sullivan, Jr. 10-18 p., illus.
- C. Synthetic binding of trout diets, by E. M. Wood, P. J. Griffin, and S. F. Snieszko. 19-24 p., illus.
- D. The use of dyes for marking fish, by Mahmoud Ibrahim Al-Hamid. 25-29 p.

--Continued on next page--

PFC v.16, no.1, Jan. 1954. (Continued)

- E. Stream sediment removal by controlled reservoir releases, by A. B. Eustis and R. H. Hillen. 30-35 p., illus.
- F. The effects of antibiotics and arsenic acid on the growth of rainbow trout fingerlings, by Edward D. Wagner. 36-38 p., illus.
- G. A Method for recording measurements of certain molluscs, arthropods, and fishes, by Carl N. Shuster, Jr. 39-40 p., illus.
- H. Toxaphene as a fish toxin, by Jack E. Hemphill. 41-42 p.

PFC v.16, no.2, Apr. 1954.

- A. Progress report on blue-sac disease, by Ken Wolf. 51-59 p., illus.
- B. Pollution: its nature and evaluation, by Bertil G. Anderson. 60-64 p.
- C. Effect of starvation, water temperature, and sodium amytal on the metabolic rate of brook trout, by Arthur M. Phillips, Jr., and Donald R. Brockway. 65-68 p.
- D. A spaced-disc, self-cleaning fish screen, by Kenneth R. John. 70-74 p., illus.
- E. Method of producing plastic impressions of fish scales without using heat, by Stanford H. Smith. 75-78 p., illus.
- F. Malachite green oxalate used to control fungus on yellow pikeperch eggs in jar hatchery operations, by Robert Cummins, Jr. 79-82 p.
- G. Control of a branched alga, *Pithophora*, in farm fishponds, by J. M. Lawrence. 83-86 p., illus.
- H. Suspected ulcer disease in the golden shiner, *Notemigonus crysoleucas* (Mitchill), by George A. Schuster and William M. Lewis. 87-88 p.
- I. The northern pike hatch at the Clear Lake (Iowa) Hatchery, by Tom Moen and Muhrl Lindquist. 89-90 p.

PFC v.16, no.3, July 1954.

- A. Further studies on the reactions of adult blueback salmon to injected salmon and mammalian gonadotrophins, by David D. Palmer, Roger E. Burrows, O. H. Robertson, and H. William Newman. 99-107 p.
- B. Use of pituitary material in the propagation of minnows, by Robert C. Ball and Edward H. Bacon. 108-113 p., illus. Journal Article 1610, Michigan Agricultural Experiment Station.

- C. Spring fishing on two TVA mainstream reservoirs, 1945-1953, by Lawrence F. Miller. 114-121 p.
- D. An infestation of leeches on salmon fry and eggs, by B. J. Earp and R. L. Schwab. 122-124 p.
- E. Relative survival of hatchery and wild trout, by J. H. Wales. 125-127 p.
- F. The alewife in fresh water, by Joseph J. Graham. 128-130 p.

- G. Preliminary experiment on fish culture in brackish-water ponds, by Malcolm C. Johnson. 131-133 p.
- H. Feeding habits of the largemouth bass as revealed by a gastroscope, by Harry Dubets. 134-136 p., illus.
- I. New method of artificially planting salmon eggs, by Clinton Stockley. 137-138 p., illus.
- J. Converting carboys into jars and aquaria, by Oliver B. Cope. 139-140 p., illus.

PFC v.16, no.4, Oct. 1954.

- A. A survey of private trout enterprises in the West, by John W. DeWitt, Jr. 147-152 p.
- B. A comparison of hatchery diets and natural food, by Arthur M. Phillips, Jr., Reed S. Nielsen, and Donald R. Brockway. 153-157 p.
- C. A field method of estimating soluble inorganic phosphate in natural waters, by E. P. Parry and A. L. McClelland. 158-162 p., illus.
- D. A check on two methods of estimating farm fishpond populations, by Louis R. Hundley. 163-168 p., illus.
- E. Check dams to maintain trout streams, by Kenneth A. Reid. 169-171 p., illus.
- F. Chilling the eggs of the largemouth bass, by Kenneth C. Jurgens and William H. Brown. 172-175 p.
- G. A new method of applying inorganic fertilizer to farm fishponds, by J. M. Lawrence. 176-178 p., illus.
- H. A report on the Mississippi threadfin shad, by John W. Parsons and J. Bruce Kimsey. 179-181 p., illus.
- I. Use of urethane anesthesia in spawning eastern brook trout, by Leon D. Johnson. 182-183 p., illus.

REGULATORY ANNOUNCEMENTS

- RA 1. Laws and regulations for protection of the commercial fisheries of Alaska, 1941. 1941. 67 p. Supersedes Department of the Interior circular of the same title under date of Jan. 4, 1940, as amended.
- RA 2-3. §
- RA 4. Laws and regulations for the protection of walruses and sea lions in Alaska. 1941 [i.e. 1942] 2 p. Supersedes Department of Commerce, Department Circular no. 288, 9th ed., June 29, 1939, entitled Protection of walruses and sea lions in Alaska.
- RA 5. Laws and regulations for protection of the commercial fisheries of Alaska, 1942. 1942. 64 p.
- RA 6. §
- RA 7. Laws and regulations for protection of the commercial fisheries of Alaska, 1943. 1943. 65 p.
- RA 8. §
- RA 9. Laws and regulations for protection of the commercial fisheries of Alaska, 1944. 1944. 65 p.
- RA 10. Regulations relating to game and fur animals, birds, and game fishes in Alaska 1944-1945. 1944. 22 p., illus. Supersedes Alaska Game Commission Circular 21 of the same title, issued Aug. 1943.
- RA 11. §
- RA 12. Laws and regulations for protection of the commercial fisheries of Alaska, 1945. 1945. 63 p.
- RA 13. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1945-1946. 1945. 23 p., illus.
- RA 14. §
- RA 15. Laws and regulations for protection of the commercial fisheries of Alaska, 1946. 1946. 66 p.
- RA 16. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1946-47. 1946. 24 p., illus.
- RA 17-18. §
- RA 19. Laws and regulations for protection of the commercial fisheries of Alaska, 1947. 1947. 66 p.
- RA 20. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1947-1948. 1947. 25 p., illus.
- RA 21. §
- RA 22. Laws and regulations for protection of the commercial fisheries of Alaska, 1948. 1948. 67 p.
- RA 23. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1948-49. 1948. 26 p., illus.
- RA 24. §
- RA 25. Laws and regulations for protection of the commercial fisheries of Alaska, 1949. 1949. 62 p.
- RA 26. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1949-50. 1949. 27 p., illus.
- RA 27. §
- RA 28. Laws and regulations for protection of the commercial fisheries of Alaska, 1950. 1950. 62 p.
- RA 29. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1950-51. 1950. 27 p., illus.
- RA 30. §
- RA 31. Laws and regulations for protection of the commercial fisheries of Alaska, 1951. 1951. 61 p.
- RA 32. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1951-52. 1951. 28 p., illus.
- RA 33. §
- RA 34. Federal aid in fish restoration, general information, by R. M. Rutherford. 1952. 13 p.
- RA 35. Laws and regulations for protection of the commercial fisheries of Alaska, 1952. 1952. 61 p.
- RA 36. §
- RA 37. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1952-53. 1952. 30 p., illus.
- RA 38. §

Series

RA 39. Laws and regulations for protection of the commercial fisheries of Alaska, 1953. 1953. 62 p.

RA 40. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1953-54. 1953. 28 p., illus.

RA 41. §

RA 42. Laws and regulations for protection of the commercial fisheries of Alaska, 1954. 1954. 59 p.

RA 43. Regulations relating to game and fur animals, birds, and game fishes in Alaska, 1954-55. 1954. 29 p., illus.

RESEARCH REPORTS

- RR 1. Studies on the handling of fresh mackerel, (*Scomber scombrus*), by M. E. Stansby and J. M. Lemon. 1941. 46 p., illus.
- RR 2. Use of lime in controlling starfish, by Victor L. Loosanoff and James B. Engle. 1942. 29 p., illus.
- *RR 3. The effect of heat and moisture on the feeding value of pilchard meal, by William B. Lanham, Jr., and Hugo W. Nilson. 1942. 10 p.
- *RR 4. Metabolism studies with algin and gelatin, by Hugo W. Nilson and J. M. Lemon. 1942. 9 p.
- RR 5. §
- RR 6. Preparation and keeping quality of lightly smoked mackerel, by Maurice E. Stansby and Francis P. Griffiths. 1943. 10 p.
- RR 7. Principles and methods in the canning of fishery products, by Norman D. Jarvis. 1944. 366 p., illus.
- RR 8. §
- RR 9. Determination of water quality, by M. M. Ellis, B. A. Westfall and Marion D. Ellis. 1946. 122 p., illus.
- RR 10. §
- RR 11. Reaction of oysters to chlorination, by Paul S. Galtsoff. 1946. 28 p., illus.
- RR 12. Care and diseases of trout, by H. S. Davis. Rev. 1946. 1947. 98 p., illus.
- RR 13. §
- RR 14. Fluctuations in the abundance of the blue crab in Chesapeake Bay, by John C. Pearson. 1948. 26 p., illus.
- RR 15. Shark fishing potentialities of the Philippine seas, by Herbert E. Warfel and John A. Clague. 1950. 19 p., illus.
- RR 16. Notes on the biology of the tiger shark (*Galeocerdo arcticus*) from Philippine waters, by Donald E. Kauffman. 1950. 10 p., illus.
- RR 17. Guide to the classification of fishing gear in the Philippines, by Agustin F. Umali. 1950. 165 p., illus.
- ✓RR 18. Curing of fishery products, by Norman D. Jarvis. 1950. 271 p., illus.
- RR 19. §
- RR 20. Check list of Philippine fishes, by Albert W. Herre. 1953. 977 p.
- RR 21. Key to the families of common commercial fishes in the Philippines, by Agustin F. Umali. 1950. 47 p., illus.
- RR 22. Fishing gear preservatives for Philippine waters, by John A. Clague and Bienvenido Datingaling. 1950. 23 p., illus.
- ✓RR 23. Liver oil properties of Philippine sharks and rays, by William S. Hamm. 1950. 5 p.
- ✓RR 24. Temperature and salt purity effects on the manufacture of fish paste and sauce, by William S. Hamm and John A. Clague. 1950. 11 p., illus.
- RR 25. Otter trawl explorations in Philippine waters, by Herbert E. Warfel and Porfirio R. Manacop. 1950. 49 p., illus.
- ✓RR 26. Fish processing handbook for the Philippines, by Arthur C. Avery. 1950. 149 p., illus. Drawings by Pio Medel.
- ✓RR 27. Bacteriological studies of Philippine fishery products, by John A. Clague and Crisanto Almario. 1950. 12 p.
- RR 28. Outlook for development of a tuna industry in the Philippines, by Herbert E. Warfel. 1950. 37 p., illus. Drawings by Pablo Bravo.
- RR 29. Growth of Pacific coast pilchard fishery to 1942, by Milner B. Schaefer, Oscar E. Sette, and John C. Marr. 1951. 31 p., illus.
- RR 30. §
- RR 31. Effect of floodwaters on oysters in Mississippi sound in 1950, by Philip A. Butler. 1952. 20 p., illus.
- RR 32. Offshore grounds important to the United States haddock fishery, by Howard A. Schuck. 1952. 20 p., illus.
- RR 33. Fecundity of Hudson River shad, by Burton A. Lehman. 1953. 8 p., illus.
- RR 34. Common tuna-bait fishes of the central Pacific, by Fred C. June and John W. Reintjes. 1953. 54 p., illus.
- RR 35. Use of impounded water for fish culture, by Harlan E. Johnson and Richard F. Brice. 1953. 35 p., illus.
- RR 36. Naxious marine animals of the central and western Pacific Ocean, by Charles J. Fish and Mary Curtis Cobb. 1954. 45 p., illus. Contribution no.708, Woods Hole Oceanographic Institution, Contribution no.8, Narragansett Marine Laboratory.

SEPARATES

- *Sep 1. Draft deferment in fishery industries 3-6 p. From Fishery Market News, July 1942, v.4, no.7.
- *Sep 2. Fish retailing in Boston, Massachusetts, by Ralph Russell and Keith O. Burr. 1-6 p. From Fishery Market News, Aug. 1942, v.4, no.8.
- *Sep 3. Some notes on the rosefish fishery, by Frank E. Firth. p.17. From Fishery Market News, Aug. 1942, v.4, no.8.
- *Sep 4. Critical Selective Service food processing classifications. p.7. From Fishery Market News, Sept. 1942, v.4, no.9.
- *Sep 5. Food production in farm fish ponds, by M. C. James. 1-3 p. From Fishery Market News, Nov. 1942, v.4, no.11.
- Sep 6. New weapon against oyster-killing starfish, by V. L. Loosanoff. 3-5p., illus. From Fishery Market News, Nov. 1942, v.4, no.11.
- *Sep 7. The canning of Maine sea herring, by Buell W. Blair, E. J. Cameron and Norman D. Jarvis. 6-7 p. From Fishery Market News, Nov. 1942, v.4, no.11. Replaced by FL 104.
- Sep 8. Utilization of rough fish in midwestern states as a food, by C. F. Culler. 1-3 p. From Fishery Market News, Jan. 1943, v.5, no.1.
- Sep 9. Atlantic sea mussels as food, by V. L. Loosanoff. 4-5 p. From Fishery Market News, Jan. 1943, v.5, no.1.
- Sep 10. Seasons, sources, and sizes of Gulf shrimp, by C. E. Peterson. 1-4. From Fishery Market News, Feb. 1943, v.5, no.2.
- *Sep 11. Essential commercial fishing activities listed by Selective Service. p.11. From Fishery Market News. Feb. 1943, v.5, no.2.
- *Sep 12. Some information on fishery manpower, prepared by Ralph Russell and Harry B. Hinkle. 1-6 p. From Fishery Market News, Mar. 1943, v.5, no.3.
- *Sep 13. Optimum program for production of war foods prepared by Interior Department. 7-11 p. From Fishery Market News, Mar. 1943, v.5, no.3.
- *Sep 14. The oyster canning industry in South Carolina, by Robert O. Smith. 11-13 p. From Fishery Market News, Mar. 1943, v.5, no.3.
- *Sep 15. The Controlled Materials Plan with relation to the fishery industry, by L. S. Christey and E. A. Power. 1-4. From Fishery Market News, Apr. Supplement, 1943, v.5, no.4a.
- *Sep 16. Preliminary report on definitions and recommended substitutes for vessel and gear cordage items, by C. B. Carlson, F. E. Firth, and L. S. Christey. 4-12 p. From Fishery Market News, Apr. Supplement, 1943, v.5, no.4a.
- *Sep 17. Wartime transportation and the fishing industry, by A. W. Anderson. 37-57 p., illus. From Fishery Market News, Apr. Supplement, 1943, v.5, no.4a.
- *Sep 18. Seed oyster production in South Carolina, by Robert O. Smith. 1-2 p. From Fishery Market News, Apr. 1953, v.5, no.4.
- Sep 19. Loss in weight and mortality of sea mussels kept in storage at different temperatures, by V. L. Loosanoff and James B. Engle. 2-5 p. From Fishery Market News, Apr. 1943, v.5, no.4.
- *Sep 20. Production of fishery products in Alabama, Louisiana, Mississippi, and Texas during 1942, by C. E. and Lorraine D. Peterson. 7-10 p. From Fishery Market News, Apr. 1943, v.5, no.4.
- *Sep 21. Landings of fishery products at Boston, Massachusetts, 1942, by B. E. Lindgren. 1-9 p., illus. From Fishery Market News, May 1943, v.5, no.5.
- *Sep 22. Partial index of federal controls pertinent to the fishing industry. (As issued up to May 1, 1943) 34-37 p. From Fishery Market News, May 1943, v.5, no.5.
- Sep 23. The commercial importance of seaweed gums in the United States, by Victor B. Scheffer. 1-5 p. From Fishery Market News, June 1943, v.5, no.6. Superseded by FL 156.

- *Sep 24. Brine salted mullet, by C. F. Lee and Leo Young. p.5. From Fishery Market News, June 1943, v. 5, no. 6. Replaced by FL 51.
- *Sep 25. Index of federal controls pertinent to the fishing industry. (Effective during May 1943) 64-65 p. From Fishery Market News, June 1943, v. 5, no. 6.
- Sep 26. Compliance with the federal Food, Drug, and Cosmetic Act in the marketing of fishery products, by Albert C. Hunter. 1-3 p. From Fishery Market News, July 1943, v. 5, no. 7. Superseded by FL 172.
- *Sep 27. Preservation and care of fish nets, by Frank E. Firth and Carl B. Carlson. 3-6 p. From Fishery Market News, July 1943, v. 5, no. 7.
- *Sep 28. Control and distribution of fish supplies in Great Britain and Northern Ireland, by John Adamson. 6-8 p. From Fishery Market News, July 1943, v. 5, no. 7.
- *Sep 29. Index of federal controls pertinent to the fishing industry. (Effective during June 1943) 48-50 p. From Fishery Market News, July 1943, v. 5, no. 7.
- *Sep 30. Technological investigations - program of research 1943-44, by R. W. Harrison. 1-2 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- *Sep 31. Judging the quality and freshness of fish by organoleptic methods, by Maurice E. Stansby. 3-7 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- *Sep 32. Dry ice refrigeration of fresh fish fillets, by E. F. Kapalka and R. H. Flowers. 7-10 p., illus. From Fishery Market News, Aug. 1943, v. 5, no. 8. Superseded by FL 155.
- *Sep 33. Keeping quality of east coast crab meat in fibre containers and in tin cans, by S. R. Pottinger. 10-12 p. From Fishery Market News, Aug. 1943, v. 5, no. 8. Superseded by FL 185.
- Sep 34. The nutritive value of the protein of some dehydrated fishery products, by William A. Martinek and Barbara Jacobs. 12-14 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- Sep 35. Studies on substitute containers for canned fishery products, by Norman D. Jarvis and Lynn G. McKee. 14-16 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- *Sep 36. The suitability of non-tin containers for shipping fresh seafoods, by J. M. Lemon and S. R. Pottinger. 16-18 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- Sep 37. Effect of packaging methods on spoilage of crab meat, by Charles F. Shockey, Maurice E. Stansby, and R. Paul Elliott. 18-23 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- Sep 38. Studies on the icing of fresh-cooked east coast crab meat, by S. R. Pottinger. 23-25 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- Sep 39. Notes on canning ground fish, by Norman D. Jarvis. 25-27 p. From Fishery Market News, Aug. 1943, v. 5, no. 8.
- *Sep 40. Receipts of fishery products at Seattle, 1942, by F. M. Wood. 1-7 p. From Fishery Market News, Sept. 1943, v. 5, no. 9.
- *Sep 41. Index of federal controls pertinent to the fishing industry. (Effective during July 1943) 42-44 p. From Fishery Market News, Sept. 1943, v. 5, no. 9.
- *Sep 42. Index of federal controls pertinent to the fishing industry. (Effective during Aug. 1943). 79-80 p. From Fishery Market News, Oct. 1943, v. 5, no. 10.
- Sep 43. Preliminary notes on dogfish as a food, by D. L. Bucher and K. L. Osterhaug. 24-25 p. From Fishery Market News, Oct. 1943, v. 5, no. 10.
- *Sep 44. The agar situation, by Leonard S. Stoll-off. 1-5 p., illus. From Fishery Market News, Nov. 1943, v. 5, no. 11. Superseded by FL 173.
- Sep 45. The value of plankton as a food, by Louella E. Cable. 6-12 p., illus. From Fishery Market News, Nov. 1943, v. 5, no. 11.
- *Sep 46. Some technical notes on the handling of Alaskan sleeper shark, by Lyle Anderson. 12-13 p. From Fishery Market News, Nov. 1943, v. 5, no. 11.
- Sep 47. Notes on the commercial fisheries of Lake Okeechobee, by C. West Jacobs. 13-15 p., illus. From Fishery Market News, Nov. 1943, v. 5, no. 11.

- *Sep 48. Index of federal controls pertinent to the fishing industry. (Effective during September and October 1943) 45-49 p. From Fishery Market News, Nov. 1943, v.5, no.11.
- *Sep 49. Report of the Alaska crab investigation. Appendix 2- Fishing gear. 82-95 p., illus. From Fishery Market News, May 1942 - Supplement, v.4, no.5a.
- Sep 50. Report of the Alaska crab investigation. Appendix 3 - Canning king crabs. 96-103 p. From Fishery Market News, May 1942 - Supplement, v.4, no.5a.
- Sep 51. The relative productivity and value of the fisheries of the United States and Alaska, by Arthur M. Sandberg. 1-7 p. From Fishery Market News, Dec. 1943, v.5, no.12.
- *Sep 52. Index of federal controls pertinent to the fishing industry. (Effective during November and December 1943) 35-38 p. From Fishery Market News, Dec. 1943, v.5, no.12.
- *Sep 53. Index to volume 5, nos. 1 to 12, inclusive, 1943. 39-53 p. From Fishery Market News, Dec. 1943, v.5, no.12.
- Sep 54. Fighting fibers, by Frank E. Firth. 2-5 p. From Fishery Market News, Jan. 1944, v.6, no.1. Superseded by FL 111.
- *Sep 55. Smoking anglerfish, sea trout and spanish mackerel, by Leo Young and N. D. Jarvis. 6-7 p. From Fishery Market News, Jan. 1944, v.6, no.1.
- Sep 56. The effect of technological advances on the western North Atlantic fisheries, by A. W. Anderson. 1-3 p., illus. From Fishery Market News, Feb. 1944, v.6, no. 2.
- Sep 57. The marketing of rajafish in New England, by Henry M. Bearse. 4-5 p., illus. From Fishery Market News, Feb. 1944, v.6, no.2.
- *Sep 58. Receipts of fishery products at Chicago, 1943, by E. C. Hinsdale. 2-7 p. From Fishery Market News, Mar. 1944, v.6, no.3.
- *Sep 59. Index of federal controls, pertinent to the fishing industry. (Effective during January and February 1944) 39-41 p. From Fishery Market News, Mar. 1944, v.6, no.3.
- *Sep 60. Coordinator's office discusses 1944 fish production. 9-10 p. From Fishery Market News, Mar. 1944, v.6, no.3.
- Sep 61. The effect of OPA'S MPR-507 on fresh fish prices, by Richard A. Kahn. 2-4 p. From Fishery Market News, Apr. 1944, v.6, no.4.
- Sep 62. The anglerfish, by Henry M. Bearse. 4-7 p., illus. From Fishery Market News, Apr. 1944, v.6, no.4.
- Sep 63. A study of the nutritive value of the protein of cooked angler fish, rajafish, and bay mussels, by William A. Martinek. 7-9 p. From Fishery Market News, Apr. 1944, v.6, no.4.
- Sep 64. Fish ceiling prices in 301 A. D., by Richard A. Kahn. 2-4 p. From Fishery Market News, May 1944, v.6, no. 5.
- *Sep 65. Production of fishery products in Alabama, Louisiana, Mississippi, and Texas during 1943, by Lorraine D. Peterson. 4-8 p. From Fishery Market News, May 1944, v.6, no.5.
- Sep 66. Preliminary report on a drill sampling device for fish livers, by Charles F. Shockey and F. Bruce Sanford. 9-10 p., illus. From Fishery Market News, May 1944, v.6, no.5.
- Sep 67. Food supplies of U. S., Canada and Great Britain compared. 10-12 p. From Fishery Market News, May 1944, v.6, no.5.
- Sep 68. Observations on the shark fishery in the central part of the Gulf of California with records of vitamin potency of liver oils and with keys to the identification of commercially important sharks, by Lionel A. Walford. 2-7 p., illus. From Fishery Market News, June 1944, v.6, no.6. Superseded by FL 121.
- Sep 69. Social security protection for fishermen, by Arthur J. Altmeyer. 2-3 p. From Fishery Market News, July 1944, v.6, no.7.
- *Sep 70. The fisheries of the world, by Arthur M. Sandberg. 4-12 p., illus. From Fishery Market News, July 1944, v.6, no.7. Superseded by FL 109.
- *Sep 71. Opportunities for small business in the fisheries of the Pacific Northwest and Alaska, by M. E. Stansby. 2-6 p. From Fishery Market News, Aug. 1944, v.6, no.8.
- *Sep 72. Some time and labor saving techniques in vitamin A and oil analysis, by F. B. Sanford, G. C. Bucher and W. Clegg. 6-8 p., illus. From Fishery Market News, Aug. 1944, v.6, no.8.

- Sep 73. Comparable values of fibers for use in commercial fisheries, by Frank E. Firth. 9-10 p. From Fishery Market News, Aug. 1944, v.6, no.8. Superseded by FL 111.
- *Sep 74. Manila rope restrictions again tightened by M-84. 12-20 p. From Fishery Market News, Aug. 1944, v.6, no.8.
- *Sep 75. WFA net weights and conversion factors for fishery products summarized. 21-23 p. From Fishery Market News, Aug. 1944, v.6, no.8. Superseded by FL 139.
- *Sep 76. Landings of fishery products at Boston, Mass., 1943, by B. E. Lindgren. 2-9 p. From Fishery Market News, Sept. 1944, v.6, no.9.
- Sep 77. Frozen fish belongs in your locker plant, by L. S. Christey. 10-12 p. From Fishery Market News, Sept. 1944, v.6, no.9.
- Sep 78. The distribution of fish by frozen food locker plants, by Leo Young. 12-15 p., illus. From Fishery Market News, Sept. 1944, v.6, no.9.
- Sep 79. Department of Labor aids fishing industry in many fields. 15-17 p. From Fishery Market News, Sept. 1944, v.6, no.9.
- *Sep 80. A comparison of controlled and uncontrolled fish prices in New York City, by Eunice M. Werner. 2-8 p. From Fishery Market News, Oct. 1944, v.6, no.10.
- *Sep 81. The ragfish, by Glenn C. Bucher and Kathryn L. Osterhaug. p. 9. From Fishery Market News, Oct. 1944, v.6, no. 10.
- *Sep 82. Storage tests on frozen pink salmon, by Dorris L. Bucher. 2-4 p. From Fishery Market News, Nov. 1944, v.6, no.11.
- *Sep 83. Studies on the icing of fresh-cooked and peeled shrimp, by E. F. Kapalka and S. R. Pottinger. 4-6 p., illus. From Fishery Market News, Nov. 1944, v.6, no. 11.
- *Sep 84. Drill sampling device for fish livers. 1. Constructional details, by L. G. McKee, F. B. Sanford and G. C. Bucher. 6-11 p., illus. From Fishery Market News, Nov. 1944, v.6, no.11. Superseded by FL 141.
- *Sep 85. Receipts of fishery products at Seattle, 1943, by E. C. Hinsdale. 2-10 p. From Fishery Market News, Dec. 1944, v.6, no. 12.
- Sep 86. Index to volume 6, nos.1 to 12, inclusive, 1944. 28-40 p. From Fishery Market News, Dec. 1944, v.6, no.12.
- *Sep 87. Preliminary report on sampling of fish livers, by G. C. Bucher, W. S. Hamm, F. B. Sanford and W. Clegg. 2-5 p. From Fishery Market News, Jan. 1945, v.7, no.1. Superseded by FL 289.
- *Sep 88. Distribution of oil and vitamin A in fish livers, by Glenn C. Bucher, William Clegg and F. Bruce Sanford. 6-8 p., illus. From Fishery Market News, Jan. 1945, v.7, no.1. Superseded by FL 290.
- *Sep 89. The calculation of the vitamin A potency of fish livers, by F. Bruce Sanford. 8-9 p. From Fishery Market News, Jan. 1945, v.7, no.1.
- Sep 90. Food consumption of deep-sea fishermen, by Ruth M. Lusby and Lucille S. Binson. 2-7 p. From Fishery Market News, Feb. 1945, v.7, no.2.
- Sep 91. Survey of available and potential fish waste for reduction in Washington and Oregon, by Charles Butler. 8-15 p. From Fishery Market News, Feb. 1945, v.7, no.2.
- *Sep 92. Grayfish liver trading on a potency basis fosters conservation, by F. B. Sanford. p. 16. From Fishery Market News, Feb. 1945, v.7, no. 2.
- Sep 93. Nomograph for the determination of liver potency, by F. Bruce Sanford, Manuel Cantillo, and Glenn C. Bucher. 16-19 p. From Fishery Market News, Feb. 1945, v.7, no.2.
- Sep 94. Fetal livers of the grayfish, by F. B. Sanford, K. Bonham, W. Clegg, and G. C. Bucher. p. 19. From Fishery Market News, Feb. 1945, v.7, no. 2.
- *Sep 95. Production of fishery products in Alabama, Louisiana, Mississippi, and Texas during 1944, by Lorraine D. Peterson. 2-8 p. From Fishery Market News, Mar. 1945, v.7, no.3.
- Sep 96. Institutional advertising of fishery products, by Keith O. Burr. 8-11 p. illus. From Fishery Market News, Mar. 1945, v.7, no.3.
- Sep 97. How oil and vitamin A are determined in fish livers, by F. B. Sanford and G. C. Bucher. 11-3 p., illus. From Fishery Market News, Mar. 1945, v.7, no.3.

Series

- *Sep 98. Field method for determination of the oil content of fish livers, by F. Bruce Sanford, Manuel Cantillo, and Glenn C. Bucher. 2-3 p. From Fishery Market News, Apr. 1945, v.7, no.4. Superseded by FL 205.
- Sep 99. A preliminary report on an alkali process for the manufacture of commercial oil from salmon cannery trimmings, by Lyle Anderson. 4-7 p., illus. From Fishery Market News, Apr. 1945, v.7, no.4.
- *Sep 100. A rapid method for determining the vitamin A potency of fish livers, by F. Bruce Sanford. 7-8 p. From Fishery Market News, Apr. 1945, v.7, no.4. Superseded by FL 242.
- Sep 101. Rope cod ends, by Carl B. Carlson. 2-4 p., illus. From Fishery Market News, May 1945, v.7, no.5.
- Sep 102. North Atlantic fish production; national importance, possibilities, and bottlenecks to increased production, by William C. Herrington. 4-7 p. From Fishery Market News, May 1945, v.7, no.5.
- *Sep 103. Effect of fish liver freshness on E value ratios of resulting oil, by W. Clegg, F. Bruce Sanford, and M. E. Stansby. 7-8 p. From Fishery Market News, May 1945, v.7, no.5.
- *Sep 104. War-time studies of containers and substitute containers for fresh fishery products, by S. R. Pottinger, E. F. Kapalka, and C. F. Shockey. 2-18 p. From Fishery Market News, June 1945, v.7, no.6.
- *Sep 105. Receipts of fishery products at Seattle, 1944, by E. C. Hinsdale. 2-13 p. From Fishery Market News, July 1945, v.7, no.7.
- *Sep 106. An interview with personnel of a Russian floating crab cannery, by Carl B. Carlson. 13-17 p., illus. From Fishery Market News, July 1945, v.7, no.7.
- *Sep 107. Antioxidants for fish oils, by Dorris L. Bucher. 17-19 p., illus. From Fishery Market News, July 1945, v.7, no.7.
- Sep 108. Have you a program for increasing your sales of fishery products? By Leo Young. 2-4 p. From Fishery Market News, Aug. 1945, v.7, no.8.
- *Sep 109. Smoking shrimp, by Leo Young. 2-4 p., illus. From Fishery Market News, Sept. 1945, v.7, no.9. Superseded by FL 312.
- *Sep 110. Notes on the icing of fish at sea, by Boris O. Knake. 4-6 p., illus. From Fishery Market News, Sept. 1945, v.7, no.9. Superseded by FL 189.
- Sep 111. Problems of taxation of fishery cooperatives, by Richard A. Kahn. 2-4 p. From Fishery Market News, Oct. 1945, v.7, no.10.
- Sep 112. Great Lakes production of salt (flat) lake herring, 1941-1944, by John Van Oosten. 4-5 p. v.7, no.10.
- *Sep 113. Fishing hoop nets in Florida, by Kenneth P. Foster. 5-7 p., illus. From Fishery Market News, Oct. 1945, v.7, no.10.
- Sep 114. The effect of DDT upon the Chesapeake Bay blue crab (*Callinectes sapidus*), by Leslie A. Sandholzer. 2-4 p. From Fishery Market News, Nov. 1945, v.7, no.11.
- *Sep 115. Vitamin A analyses of two shark livers, by David Miyauchi and F. Bruce Sanford. 5-6 p. From Fishery Market News, Nov. 1945, v.7, no.11.
- Sep 116. The ratfish, by F. B. Sanford, W. Clegg, and K. Bonham. 6-7 p. From Fishery Market News, Nov. 1945, v.7, no.11.
- Sep 117. Vitamin A potencies of livers of mature female grayfish caught in Hecate Strait, by F. Bruce Sanford. 7-8 p. From Fishery Market News, Nov. 1945, v.7, no.11.
- *Sep 118. Receipts of fishery products at Chicago, 1944, by Walter W. Donovan. 2-4 p. From Fishery Market News, Dec. 1945, v.7, no.12.
- *Sep 119. Future of marketing, by F. L. Thomsen. 4-8 p., illus. From Fishery Market News, Dec. 1945, v.7, no.12.
- Sep 120. Index to volume 7, nos. 1 to 12, inclusive, 1945. 27-43 p. From Fishery Market News, Dec. 1945, v.7, no.12.

- Sep 121. The shrimp fishery of the southern United States, by W. W. Anderson, M. J. Lindner and J. E. King. 1-17 p., illus. From Commercial Fisheries Review, Feb. 1949, v. 11, no. 2. Superseded by FL 368.
- Sep 122. Service activities in the Atlantic States, by Milton C. James. 1-5 p., illus. From Commercial Fisheries Review, Jan. 1946, v. 8, no. 1.
- *Sep 123. Fish production at New Bedford, by William F. Royce. 5-8 p., illus. From Commercial Fisheries Review, Jan. 1946, v. 8, no. 1.
- Sep 124. Paper bags for fish meal, by Charles Butler. 9-12 p., illus. From Commercial Fisheries Review, Jan. 1946, v. 8, no. 1.
- Sep 125. Imported fish; a major New England problem, by William C. Herrington. 1-16 p., illus. From Commercial Fisheries Review, Feb. 1946, v. 8, no. 2.
- Sep 126. Thiamine assays of fishery products, by Philip M. Sautier. 17-19 p. From Commercial Fisheries Review, Feb. 1946, v. 8, no. 2.
- *Sep 127. Fishery statistics, by E. A. Power. 1-11 p., illus. From Commercial Fisheries Review, Mar. 1946, v. 8, no. 3.
- Sep 128. A bacteriological study of fresh muskels, by Leslie A. Sandholzer and William Arcisz. 12-15 p., illus. From Commercial Fisheries Review, Mar. 1946, v. 8, no. 3.
- *Sep 129. A rapid test for vitamin A stability, by F. B. Sanford, R. W. Harrison and M. E. Stansby. 16-18 p., illus. From Commercial Fisheries Review, Mar. 1946, v. 8, no. 3. Superseded by FL 212.
- Sep 130. Riboflavin assays of fishery products, by Philip M. Sautier. 19-21 p., illus. From Commercial Fisheries Review, Mar. 1946, v. 8, no. 3.
- *Sep 131. Fish for breakfast — and why not? By Kathryn L. Osterhaug. 1-4 p., illus. From Commercial Fisheries Review, Apr. 1946, v. 8, no. 4. Superseded by FL 247.
- *Sep 132. Preservation of shucked Alaska clams, by Frank Piskur and Maurice E. Stansby. 5-12 p., illus. From Commercial Fisheries Review, Apr. 1946, v. 8, no. 4.
- Sep 133. Vitamin A and D in fish livers and viscera, by Charles Butler. 13-19 p. From Commercial Fisheries Review, Apr. 1946, v. 8, no. 4.
- *Sep 134. The Army's wartime fishery research, by Frank Piskur. 1-9 p., illus. From Commercial Fisheries Review, May 1946, v. 8, no. 5.
- Sep 135. A tripod derrick for small fishing vessels, by Boris O. Knake. 10-13 p., illus. From Commercial Fisheries Review, May 1946, v. 8, no. 5.
- *Sep 136. Fishery receipts at Seattle, 1945, by E. C. Hinsdale. 14-17 p., illus. From Commercial Fisheries Review, May 1946, v. 8, no. 5.
- Sep 137. Fish jaw oil, by Joseph F. Puncochar. 18-19 p., illus. From Commercial Fisheries Review, May 1946, v. 8, no. 5.
- Sep 138. Gloucester - three centuries a fishing port, by Homer Haberland. 1-5 p., illus. From Commercial Fisheries Review, June 1946, v. 8, no. 6. Superseded by FL 192.
- Sep 139. Grayfish liver color related to fin-spine length, by F. B. Sanford and K. Bonham. 6-8 p., illus. From Commercial Fisheries Review, June 1946, v. 8, no. 6.
- Sep 140. Conversion of salmon cannery to clam packing, by L. G. McKee. 9-11 p., illus. From Commercial Fisheries Review, June 1946, v. 8, no. 6.
- *Sep 141. A cardboard smokehouse, by Walter A. Rust. 1-4 p., illus. From Commercial Fisheries Review, July 1946, v. 8, no. 7. Superseded by FL 204.
- Sep 142. Feeding fish meal to ducklings, by Hugo W. Nilson. 5-7 p., illus. From Commercial Fisheries Review, July 1946, v. 8, no. 7.

- Sep 143. The Japanese salmon industry. 8-19 p., illus. From Commercial Fisheries Review, July 1946, v.8, no. 7. From Report no. 31, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers. Superseded by FL 230.
- ✓ SEP 144. Agar-weed, a fishery resource, by Vincent J. Senn. 1-4 p., illus. From Commercial Fisheries Review, Aug. 1946, v.8, no. 8.
- ✓ Sep 145. The content of certain amino acids in seafoods, by S. R. Pottinger and W. H. Baldwin. 5-9 p., illus. From Commercial Fisheries Review, Aug. 1946, v.8, no. 8.
- ✓ Sep 146. Nutritive value of the protein of swell-fish, by Dorothy B. Darling and Hugo W. Nilson. 10-11 p., illus. From Commercial Fisheries Review, Aug. 1946, v.8, no. 8.
- ✓ Sep 147. Feeding fish meals to pullets, by Hugo W. Nilson and Richard W. Schayer. 1-5 p., illus. From Commercial Fisheries Review, Sept. 1946, v.8, no. 9.
- ✓ *Sep 148. Wrapping materials for frozen fish, by Martin Heerdt, Jr. p. 6, illus. From Commercial Fisheries Review, Sept. 1946, v.8, no. 9. Superseded by FL 213.
- Sep 149. Workmen's compensation for seamen, by M. D. Kossoris and Joseph Zisman. 7-14 p., illus. From Commercial Fisheries Review, Sept. 1946, v.8, no. 9.
- *Sep 150. Haiti and its fisheries, by C. R. Lucas. 1-3 p., illus. From Commercial Fisheries Review, Oct. 1946, v.8, no. 10.
- ✓ *Sep 151. Palatability of Pacific rockfish fillets, by R. Paul Elliott and Kathryn L. Osterhaug. 4-8 p., illus. From Commercial Fisheries Review, Oct. 1946, v.8, no. 10. Superseded by FL 264.
- *Sep 152. Panama and its fisheries, by C. R. Lucas. 1-2 p., illus. From Commercial Fisheries Review, Nov. 1946, v.8, no. 11.
- ✓ Sep 153. A sampler for livers frozen in drums, by Lynn G. McKee and F. Bruce Sanford. 3-5 p., illus. From Commercial Fisheries Review, Nov. 1946, v.8, no. 11.
- Sep 154. Oyster transplanting in winter and early spring, by Victor Loosanoff. 6-8 p., illus. From Commercial Fisheries Review, Nov. 1946, v.8, no. 11.
- Sep 155. Extension of unemployment insurance to certain fishing services, by Richard A. Kahn. 9-12 p., illus. From Commercial Fisheries Review, Nov. 1946, v.8, no. 11.
- ✓ Sep 156. Effect of cooking on the nutritive value of the protein of cod, by A. Louise Marks and Hugo W. Nilson. 1-6 p., illus. From Commercial Fisheries Review, Dec. 1946, v.8, no. 12.
- Sep 157. Gear used in the sea scallop fishery, by William F. Royce. 7-11 p., illus. From Commercial Fisheries Review, Dec. 1946, v.8, no. 12. Superseded by FL 225.
- ✓ Sep 158. Thiamine and riboflavin in baked and simmered oysters, by A. Louise Marks and Hugo W. Nilson. 12-13 p., illus. From Commercial Fisheries Review, Dec. 1946, v.8, no. 12.
- Sep 159. The location of sardine schools by super-sonic echo-ranging, by Osgood R. Smith. 1-6 p., illus. From Commercial Fisheries Review, Jan. 1947, v.9, no. 1.
- ✓ Sep 160. Bacteriological studies of oyster conditioning, by Leslie A. Sandholzer and Cecelia R. Buckner. 7-11 p., illus. From Commercial Fisheries Review, Jan. 1947, v.9, no. 1.
- ✓ *Sep 161. "S.S. Pacific Explorer"-- A preliminary description, by Carl B. Carlson. 12-17 p., illus. From Commercial Fisheries Review, Jan. 1947, v.9, no. 1. See also FL 414.
- *Sep 162. Receipts of fishery products at Chicago, 1945, by C. M. Reardon. 18-21 p., illus. From Commercial Fisheries Review, Jan. 1947, v.9, no. 1.
- ✓ *Sep 163. Preliminary procedures for the analysis of vitamin A in fishery byproducts. 40-42 p. From Commercial Fisheries Review, Jan. 1947, v.9, no. 1.
- ✓ Sep 164. The electrostatic smoking of sardines, by William S. Hamm and Walter A. Rust. 104 p., illus. From Commercial Fisheries Review, Feb. 1947, v.9, no. 2.
- *Sep 165. Shallower storage pens improve fish quality, by Joseph F. Puncochar and Samuel R. Pottinger. 5-6 p., illus. From Commercial Fisheries Review, Feb. 1947, v.9, no. 2.
- ✓ Sep 166. Toughening of frozen crab meat can be retarded, by Martin Heerdt, Jr. 7-10 p., illus. From Commercial Fisheries Review, Feb. 1947, v.9, no. 2.
- ✓ Sep 167. Studies on deterioration of vitamin A in fish livers and liver oils. Part 1- Loss of vitamin A and stability in grayfish livers in storage, by F. B. Sanford, D. Miyauchi and G. I. Jones. 11-15 p., illus. From Commercial Fisheries Review, Feb. 1947, v.9, no. 2.

- Sep 168. Fishery programs in the U. S. S. R., by Alexander S. Bogdanov. 55-62 p., illus. From Commercial Fisheries Review, Feb. 1947, v.9, no. 2.
- *Sep 169. Arrivals of fishery products at Seattle, 1946, by E. C. Hinsdale 1-4 p., illus. From Commercial Fisheries Review, Apr. 1947, v.9, no. 4.
- ✓Sep 170. Studies on deterioration of vitamin A in fish livers and liver oils. Part 3 - Loss at 37° C. of vitamin A from liver oil in presence and absence of grayfish liver tissue, by G. I. Jones, F. B. Sanford and D. Miyauchi. 5-8 p., illus. From Commercial Fisheries Review, Apr. 1947, v.9, no. 4.
- ✓Sep 171. Nutritive value of baked croaker, by W. A. Martinek and C. G. Goldbeck. 9-13 p., illus. From Commercial Fisheries Review, Apr. 1947, v.9, no. 4.
- ✓Sep 172. Mobile laboratories for fishery technological research, by C.E. Winter and L. A. Sandholzer. 1-6 p., illus. From Commercial Fisheries Review, May 1947, v.9, no.5.
- ✓Sep 173. Studies on deterioration of vitamin A in fish livers and liver oils. Part 2. Loss of vitamin A potency and stability in frozen ground grayfish livers, by D. Miyauchi and F. B. Sanford. 7-9 p., illus. From Commercial Fisheries Review, May 1947, v.9, no.5.
- ✓Sep 174. New type thermocouple seal for tin containers, by M. Heerdt, Jr., F. Hoyos, and M. Cantillo. 10-11 p., illus. From Commercial Fisheries Review, May 1947, v.9, no.5.
- ✓Sep 175. Some observations on fish processing in Norway, by William S. Hamm. 12-17 p., illus. From Commercial Fisheries Review, May 1947, v.9, no.5.
- ✓Sep 176. A technological study of the ocean quahog fishery, by W. Arcisz and L. A. Sandholzer. 1-12 p., illus. From Commercial Fisheries Review, June 1947, v.9, no.6.
- ✓Sep 177. Preliminary study of correlation of pH and quality of shucked Pacific oysters, by Frank T. Piskur. 22-24 p., illus. From Commercial Fisheries Review, June 1947, v.9, no. 6.
- ✓Sep 178. Nutritive value for growth of some fish proteins, by H. W. Nilson, W. A. Martinek, and B. Jacobs. 1-7 p., illus. From Commercial Fisheries Review, July 1947, v.9, no. 7.
- Sep 179. Fluctuations in fish production in the U. S. and Alaska, by Walter H. Stoltz. 8-14 p., illus. From Commercial Fisheries Review, July 1947, v.9, no. 7.
- ✓Sep 180. Estimations of extinction ratios and vitamin A potency of 12 reduction plant oils, by G. C. Bucher, F. B. Sanford and D. T. Miyauchi. 15-17 p., illus. From Commercial Fisheries Review, July 1947, v.9, no. 7.
- ✓Sep 181. Some studies on the feeding value of fish meals, by William B. Lanham, Jr. and Hugo W. Nilson. 1-12 p., illus. From Commercial Fisheries Review, Aug. 1947, v.9, no. 8.
- ✓Sep 182. Some studies on the content of thiamine and anti-thiamine factor in fishery products, by Clara Gale Goldbeck. 13-21 p., illus. From Commercial Fisheries Review, Aug. 1947, v.9, no. 8.
- ✓Sep 183. Ultraviolet absorption curves for vitamin A using tungsten and hydrogen discharge light sources, by G. Ivor Jones. 22-26 p., illus. From Commercial Fisheries Review, Aug. 1947, v.9, no. 8.
- ✓Sep 184. Relationship between body length of grayfish and vitamin A in liver, by F. Bruce Sanford and Kelshaw Bonham. 1-7 p., illus. From Commercial Fisheries Review, Sept. 1947, v.9, no. 9.
- ✓Sep 185. Chemical studies of lipid extracts from menhaden fish meal, by Herman F. Kraybill and Hugo W. Nilson. 8-18 p., illus. From Commercial Fisheries Review, Sept. 1947, v.9, no. 9.
- ✓Sep 186. Studies on methods of extracting vitamin A and oil from fishery products. Part 1 - Vitamin A potencies of oils from grayfish livers obtained by extraction with petroleum ether and by cooking with water, by D. Miyauchi and F. B. Sanford. 19-20 p., illus. From Commercial Fisheries Review, Sept. 1947, v.9, no. 9.
- ✓Sep 187. Bacterial population of brining tanks in fish filleting plants, by Jean C. Hartshorne. 1-6 p., illus. From Commercial Fisheries Review, Oct. 1947, v.9, no. 10.
- *Sep 188. Feeding studies with lipid extracts from menhaden fish meal, by Herman F. Kraybill and Hugo W. Nilson. 7-15 p., illus. From Commercial Fisheries Review, Oct. 1947, v.9, no. 10.
- ✓Sep 189. Notes on freezing shrimp, by J. M. Lemon. 1-4 p., illus. From Commercial Fisheries Review, Nov. 1947, v.9, no. 11.

Series

- ✓ Sep 190. Vitamin A content of fur seal oils, by David T. Miyauchi and F. Bruce Sanford. 5-8 p., illus. From Commercial Fisheries Review, Nov. 1947, v.9, no. 11.
- ✓ *Sep 191. The Chesapeake Bay crab industry, by James Wharton. 1-9 p., illus. From Commercial Fisheries Review, Dec. 1947, v.9, no. 12.
- ✓ Sep 192. Suggestions for handling trawler-caught fish, by J. F. Puncochar and S. R. Pottinger. 10-18 p., illus. From Commercial Fisheries Review, Dec. 1947, v.9, no. 12.
- + ✓ *Sep 193. Technological studies of the starfish. Part 1 - Starfish control; its economic necessity and methods used, by Charles F. Lee. 1-6 p., illus. From Commercial Fisheries Review, Jan. 1948, v.10, no. 1. Superseded by FL 391.
- *Sep 194. Economic review of the fisheries in 1947 and prospects for 1948, by Richard A. Kahn. 7-10 p., illus. From Commercial Fisheries Review, Jan. 1948, v.10, no. 1.
- Sep 195. Experimental fishing for red snapper. Part 1 - The use of hoop nets, by Robert O. Smith. 1-10 p., illus. From Commercial Fisheries Review, Feb. 1948, v.10, no. 2.
- ✓ Sep 196. Technological studies of the starfish. Part 2 - Chemical composition, by Charles F. Lee. 11-18 p., illus. From Commercial Fisheries Review, Feb. 1948, v.10, no. 2. Superseded by FL 391.
- *Sep 197. Arrivals of fishery products at Seattle, 1947, by E. C. Hinsdale. 1-5 p., illus. From Commercial Fisheries Review, Mar. 1948, v.10, no. 3.
- Sep 198. Experimental fishing for red snapper. Part 2 - The use of mechanical reels, by Robert O. Smith. 6-7 p., illus. From Commercial Fisheries Review, Mar. 1948, v.10, no. 3.
- + ✓ Sep 199. Technological studies of the starfish. Part 3 - Value of starfish meal -- protein supplement for growth of rats and chicks and for egg production, by Charles F. Lee. 8-19 p., illus. From Commercial Fisheries Review, Mar. 1948, v.10, no. 3. Superseded by FL 391.
- Sep 200. The Albatross III, by William F. Royce. 20-26 p., illus. From Commercial Fisheries Review, Mar. 1948, v.10, no. 3.
- Sep 201. Fish marketing in Colorado and the development of greater markets, by Clarence R. Lucas. 1-6 p., illus. From Commercial Fisheries Review, Apr. 1948, v.10, no. 4.

- ✓ Sep 202. Thiaminase in fishery products; a review, by Charles F. Lee. 7-17 p., illus. From Commercial Fisheries Review, Apr. 1948, v.10, no. 4.
- Sep 203. Coordinated plans for management of the fisheries of the Pacific Coast, prepared by the research departments of the California Division of Fish and Game, the Washington Department of Fisheries, and the Oregon Fish Commission. 1-11 p., illus. From Commercial Fisheries Review, May 1948, v.10, no. 5. Excerpted from a report submitted to Pacific Marine Fisheries Commission, Apr. 5-6, 1948.
- + ✓ Sep 204. Technological studies of the starfish. Part 4 - Thiaminase in starfish, by Charles F. Lee. 12-19 p., illus. From Commercial Fisheries Review, May 1948, v.10, no. 5. Superseded by FL 391.
- Sep 205. A serious situation confronting the oyster industry, by Walter A. Chipman, Jr. 7-10 p., illus. From Commercial Fisheries Review, June 1948, v.10, no. 6.
- + ✓ *Sep 206. Technological studies of the starfish. Part 5 - Starfish as fertilizer, by Charles F. Lee. 11-16 p., illus. From Commercial Fisheries Review, June 1948, v.10, no. 6. Superseded by FL 391.
- *Sep 207. Fisheries review -- Gulf states, 1947, by S. C. Denham. 1-8 p., illus. From Commercial Fisheries Review, July 1948, v.10, no. 7.
- + ✓ *Sep 208. Technological studies of the starfish. Part 6 - Economic considerations in the utilization of starfish, by Charles F. Lee. 9-15 p., illus. From Commercial Fisheries Review, July 1948, v.10, no. 7. Superseded by FL 391.
- *Sep 209. Effect of refreezing on quality of sea trout fillets, by S. R. Pottinger, Rose G. Kerr and W. B. Lanham, Jr. 14-16 p., illus. From Commercial Fisheries Review, Jan. 1949, v.11, no. 1.
- ✓ Sep 210. The marketing and processing of fish in the Philippines, by J. A. Clague. 1-16 p., illus. From Commercial Fisheries Review, Aug. 1948, v.10, no. 8.
- ✓ Sep 211. The Indo-Pacific Fisheries Council, by A. W. Anderson. 17-22 p. From Commercial Fisheries Review, Aug. 1948, v.10, no. 8.
- *Sep 212. The fisheries and fishery resources of Mexico, by M. J. Lindner. 23-30 p., illus. From Commercial Fisheries Review, Aug. 1948, v.10, no. 8.

- Sep 213. Some data on pH and freshness of shucked eastern oysters, by S. R. Pottinger. 1-3 p., illus. From Commercial Fisheries Review, Sept. 1948, v.10, no. 9.
- Sep 214. Management of the oyster resources, by J. S. Darling. 4-6 p., illus. From Commercial Fisheries Review, Sept. 1948, v.10, no. 9.
- ✓Sep 215. Sanitary control practices for the oyster industry, by S. R. Pottinger and J. M. Lemon. 7-11 p., illus. From Commercial Fisheries Review, Sept. 1948, v.10, no. 9.
- Sep 216. Mechanization of oyster cultivation, by J. Richards Nelson, H. Butler Flower and A. E. Hopkins. 12-26 p., illus. From Commercial Fisheries Review, Sept. 1948, v.10, no. 9.
- Sep 217. Current haddock situation on Georges Bank, by Howard A. Schuck. 1-6 p., illus. From Commercial Fisheries Review, Oct. 1948, v.10, no. 10.
- ✓Sep 218. Fat in fish meal, by M. E. Stansby. 7-10 p. From Commercial Fisheries Review, Oct. 1948, v.10, no. 10.
- *Sep 219. Gulf Coast shrimp fisheries, January-June, 1948, by S. C. Denham. 11-18 p., illus. From Commercial Fisheries Review, Oct. 1948, v.10, no. 10.
- *Sep 220. United States per capita consumption of fishery products, prepared by Harry Sherr, Edward A. Power and Richard A. Kahn. 1-10 p., illus. From Commercial Fisheries Review, Nov. 1948, v.10, no. 11. Excerpted from article "Supply and distribution of fishery products in the continental United States, 1930-47", in National Food Situation, July-Sept. 1948. Superseded by FL 352.
- ✓*Sep 221. Preliminary study of total bacterial plate count method for fishery products, by R. Paul Elliott. 11-25 p., illus. From Commercial Fisheries Review, Nov. 1948, v.10, no. 11.
- Sep 222. United States policy with regard to high seas fisheries, by W. M. Chapman. 1-9 p., illus. From Commercial Fisheries Review, Dec. 1948, v.10, no. 12.
- *Sep 223. Chicago receipts of fishery products, 1947, by C. M. Reardon. 10-16 p., illus. From Commercial Fisheries Review, Dec. 1948, v.10, no. 12.
- ✓*Sep 224. Studies on methods of extracting vitamin A and oil from fishery products. Part 2 - Experiments on the solvent extraction of low-fat livers, by F. B. Sanford and A. D. Manalo. 18-22 p., illus. From Commercial Fisheries Review, Feb. 1949, v.11, no. 2.
- Sep 225. Fishery exploration in the western Pacific (January to June 1948, by vessels of the Pacific Exploration Company), by O. R. Smith and M. B. Schaefer. 1-18 p., illus. From Commercial Fisheries Review, Mar. 1949, v. 11, no. 3.
- ✓Sep 226. E value ratios for some commercial vitamin A oils, by F. B. Sanford and D. T. Miyauchi. 19-20 p., illus. From Commercial Fisheries Review, Mar. 1949, v.11, no. 3.
- Sep 227. The United States fishery mission to Venezuela (May 1947-December 1948), by R. O. Smith. 1-8 p., illus. From Commercial Fisheries Review, Apr. 1949, v.11, no. 4.
- ✓Sep 228. Vitamin A in liver of the Alaska fur seal, by F. B. Sanford, K. W. Kenyon and V. B. Scheffer. 9-15 p., illus. From Commercial Fisheries Review, Apr. 1949, v.11, no. 4.
- Sep 229. Spiny lobsters - identification, world distribution, and U. S. trade, by Fenner A. Chace, Jr. and William H. Dumont. 1-12 p., illus. From Commercial Fisheries Review, May 1949, v.11, no. 5.
- ✓Sep 230. Vitamin A and D potencies of the liver oil of Pacific cod (*Gadus Macrocephalus*), by F. B. Sanford and H. W. Nilson. 13-15 p. From Commercial Fisheries Review, May 1949, v.11, no. 5.
- *Sep 231. Fishery exploration in the Hawaiian Islands (August to October 1948, by the vessel Oregon of the Pacific Exploration Company), by Howard H. Eckles. 1-9 p., illus. From Commercial Fisheries Review, June 1949, v.11, no. 6.
- *Sep 232. Receipts of fishery products at Seattle, 1948, by E. C. Hinsdale. 10-17 p., illus. From Commercial Fisheries Review, June 1949, v.11, no. 6.
- ✓*Sep 233. Storage life of whole and split rockfish fillets, by Maurice E. Stansby and John Dassow. 1-8 p., illus. From Commercial Fisheries Review, July 1949, v.11, no. 7.
- *Sep 234. Chicago receipts of fishery products, 1948, by C. M. Reardon. 9-16 p., illus. From Commercial Fisheries Review, July 1949, v.11, no.7.

- Sep 235. Japanese methods of oyster culture, by John B. Glud. 1-7 p., illus. From Commercial Fisheries Review, Aug. 1949, v.11, no. 8.
- Sep 236. Use of pyrex test and culture tubes as solution cells with Pfaltz and Bauer photoelectric fluorophotometer, by Charles S. Myers. 8-13 p., illus. From Commercial Fisheries Review, Aug. 1949, v.11, no. 8.
- ✓ Sep 237. E value ratios for grayfish, soupfin shark, sablefish and halibut liver oils produced in the Pacific Northwest, by F. Bruce Sanford and Elizabeth Vaughan. 11-12 p. From Commercial Fisheries Review, Sept. 1949, v.11, no. 9.
- Sep 238. Interstate fishery cooperation and conservation, by Albert M. Day. 1-7 p., illus. From Commercial Fisheries Review, Oct. 1949, v.11, no. 10.
- *Sep 239. The mussel resources of the North Atlantic region. Part 1-3, by Leslie W. Scattergood and Clyde C. Taylor. [33] p., illus. From Commercial Fisheries Review, Sept.-Nov. 1949, v.11, no. 9-11. Superseded by FL 364.
- ✓ Sep 240. pH data on Pacific oysters, by R. B. Anderson, C. W. Betzold and W. J. Carr. 1-2 p. From Commercial Fisheries Review, Nov. 1949, v.11, no. 11.
- ✓ *Sep 241. Fisheries technological research program, 1949-50. 15-20 p., illus. From Commercial Fisheries Review, Nov. 1949, v.11, no. 11.
- Sep 242. Identification of the commercial common shrimp species, by Carter Broad. 1-4 p., illus. From Commercial Fisheries Review, Dec. 1949, v.11, no. 12. Superseded by FL 366.
- *Sep 243. Fishery products production at Boston fish pier, 1948 (Landings, prices and trends) by John J. O'Brien. 5-12 p., illus. From Commercial Fisheries Review, Dec. 1949, v.11, no. 12.
- Sep 244. Preliminary fisheries survey of the Hawaiian-Line Islands area. Part 1 - The Hawaiian long-line fishery, by Fred C. June. 23 p., illus. From Commercial Fisheries Review, Jan. 1950, v.12, no. 1.
- ✓ Sep 245. Gallic acid ester antioxidants for fish oils, by C. D. Bittenbender. 1-20 p., illus. From Commercial Fisheries Review, Feb. 1950, v.12, no. 2.
- Sep 246. The Fish and Wildlife Service - ten years of progress, by Albert M. Day. 1-9 p., illus. From Commercial Fisheries Review, Mar. 1950, v.12, no.3.
- Sep 247. A new fishery for grooved shrimp in southern Florida, by Clarence P. Idyll. 10-16 p., illus. From Commercial Fisheries Review, Mar. 1950, v.12, no. 3.
- ✓ Sep 248. Vitamin A in 155 grayfish livers, by F. Bruce Sanford, Gilbert A. Holland, and Glenn C. Bucher. 17-21 p., illus. From Commercial Fisheries Review, Mar. 1950, v.12, no. 3.
- *Sep 249. The Japanese long-line fishery for tunas, by Sidney Shapiro. 1-26 p., illus. From Commercial Fisheries Review, Apr. 1950, v.12, no. 4. Superseded by FL 317.
- Sep 250. Organization and scope of Iceland's fish-inspection service, by Magnus Kr. Magnusson. 1-10 p., illus. From Commercial Fisheries Review, May 1950, v.12, no. 5.
- *Sep 251. The fisheries potential along the east coast of Mexico, by Milton J. Lindner. 11-16 p., illus. From Commercial Fisheries Review, May 1950, v.12, no. 5.
- ✓ *Sep 252. Experimental production of blown menhaden oil, by C. D. Bittenbender. 17-21 p., illus. From Commercial Fisheries Review, May 1950, v.12, no. 5.
- Sep 253. "John N. Cobb" uses new rig for slow-speed trolling, by Sheldon W. Johnson. 1-3 p., illus. From Commercial Fisheries Review, June 1950, v.12, no. 6. Superseded by FL 385, Pt. 2.
- ✓ Sep 254. Studies on methods of extracting vitamin A and oil from fishery products. Part 3 - Experiments on the extraction of low-oil-content livers with petroleum ether by the shaking method, by F. Bruce Sanford and Neva L. Karrick. 4-8 p. From Commercial Fisheries Review, June 1950, v.12, no. 6.
- Sep 255. Observations on the commercial fishing potentialities in the offshore waters of North Carolina (January-February 1950), by Donald E. Powell. 1-7 p., illus. From Commercial Fisheries Review, July 1950, v.12, no. 7.
- Sep 256. Development of trash fishery at New Bedford, Massachusetts, by George W. Snow. 8-10 p., illus. From Commercial Fisheries Review, July 1950, v.12, no. 7.

Sep 257. Releasing small fish and shrimp from trawl nets, by Eugene W. Roelofs. 1-11 p., illus. From Commercial Fisheries Review, Aug. 1950, v.12, no. 8. Superseded by FL 382.

Sep 258. Salmon cannery trimmings. Part 1 - Relative amounts of separated parts, by H. W. Magnusson and W. H. Hagevig. 9-12 p., illus. From Commercial Fisheries Review, Sept. 1950, v.12, no. 9.

Sep 259. Some processing and technological methods in the Japanese fisheries, by D. T. Miyauchi. 1-20 p., illus. From Commercial Fisheries Review, Oct. 1950, v.12, no. 10.

Sep 260. Japanese skipjack (*Katsuwonus pelamis*) fishing methods, by Fred C. Cleaver and Bell M. Shimada. 1-27 p., illus. From Commercial Fisheries Review, Nov. 1950, v.12, no. 11.

Sep 261. The Technological Section aids the fisheries. 1-7 p., illus. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 262. Utilization of salmon eggs for production of cholesterol, lipide, and protein, by G. Ivor Jones, Edward J. Carrigan and John A. Dassow. 8-14 p. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 263. Feeding studies with the gum of *Gracillaria confervoides* and carboxymethylcellulose, by Hugo W. Nilson and Maurice Bender. 15-17 p., illus. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 264. Studies on analytical methods of extracting vitamin A and oil from fishery products. Part 4 - Experiments on the extraction of low-oil-content livers with acetone, ethyl ether, and petroleum ether, by F. Bruce Sanford and William Clegg. 18-20 p. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 265. A chemical evaluation of tuna-liver and beef-liver meals prepared by different methods, by G. Ivor Jones and William H. Hoyer. 21-27 p. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 266. Technical note no. 5 - "Pink yeast" isolated from oysters grows at temperatures below freezing, by Grace McCormack. p. 28. From Commercial Fisheries Review, v.12, no. 11a.

Sep 267. Technical note no. 6 - Vitamin-A potencies of liver oils of Bering Sea cod and flounder, by F. Bruce Sanford, John A. Dassow and Ernest F. Dietrich. 29-30 p. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 268. Technical note no. 7 - Results of some tests with frozen lobsters and lobster meat, by S. R. Pottinger. 31-33 p. From Commercial Fisheries Review, Nov. 1950 - Supplement, v.12, no. 11a.

Sep 269. Feeding value of fish meals, by Hugo W. Nilson. 8-11 p., illus. From Commercial Fisheries Review, Dec. 1950, v.12, no. 12.

Sep 270. Preliminary fisheries survey of the Hawaiian-Line Islands area. Part 2 - Notes on the tuna and bait resources of the Hawaiian, Leeward, and Line Islands, by Fred C. June. 1-22 p., illus. From Commercial Fisheries Review, Jan. 1951, v.3, no. 1.

Sep 271. Preliminary fisheries survey of the Hawaiian-Line Islands area. Part 3 - The live-bait skipjack fishery of the Hawaiian Islands, by Fred C. June. 1-18 p., illus. From Commercial Fisheries Review, Feb. 1951, v.13, no. 2.

Sep 272. Effect of fluctuating storage temperatures on quality of frozen fish fillets, by S. R. Pottinger. 19-27 p. From Commercial Fisheries Review, Feb. 1951, v.13, no. 2.

*Sep 273. Use of echo sounders in the fisheries, by Ewing Lawrence, Jr. 1-5 p., illus. From Commercial Fisheries Review, Mar. 1951, v.13, no. 3.

Sep 274. Control of fish spoilage by icing and freezing, by H. E. Crowther. 6-10 p., illus. From Commercial Fisheries Review, Mar. 1951, v.13, no. 3.

Sep 275. Technical note no. 8 - Processing canned king and dungeness crab meat, by M. E. Stansby. 29-30 p. From Commercial Fisheries Review, Feb. 1951, v.13, no. 2.

Sep 276. Technical note no. 10 - Paper bags for fish meal, by George M. Pigott. 13-14 p. From Commercial Fisheries Review, Mar. 1951, v.13, no. 3.

*Sep 277. The Oregon's fishery explorations in the Gulf of Mexico, 1950 (a preliminary report) by Stewart Springer. 1-8 p., illus. From Commercial Fisheries Review, Apr. 1951, v.13, no. 4.

- Sep 278. The John N. Cobb's shellfish explorations in certain southeastern Alaskan waters, spring and fall of 1950 (a preliminary report) by Edward A. Schaefer. 9-19 p., illus. From Commercial Fisheries Review, Apr. 1951, v.13, no. 4.
- ✓ Sep 279. Use of frozen salmon for canning, by Maurice E. Stansby and John Dassow. 20-25 p., illus. From Commercial Fisheries Review, Apr. 1951, v.13, no. 4.
- Sep 280. Preliminary report on 1950 north Pacific albacore tuna explorations of the John N. Cobb, by Donald E. Powell. 1-10 p., illus. From Commercial Fisheries Review, Dec. 1950, v.12, no. 12.
- Sep 281. Tuna production and export potentialities of Japan, by William C. Herrington. 1-5 p., illus. From Commercial Fisheries Review, May 1951, v.13, no.5.
- ✓ Sep 282. Fishery products as a source of animal protein, by Hugo W. Nilson. 6-9 p. From Commercial Fisheries Review, May 1951, v.13, no.5.
- Sep 283. Trade agreements and the fishery industries, by A. M. Sandberg. 10-25 p., illus. From Commercial Fisheries Review, May 1951, v.13, no.5.
- *Sep 284. Japanese tuna-mothership operations in the western equatorial Pacific Ocean, by Bell M. Shimada. 1-26 p., illus. From Commercial Fisheries Review, June 1951, v.13, no.6.
- Sep 285. 1950 - An unusual haddock year on Georges Bank, by Howard A. Schuck and John R. Clark. 27-29 p., illus. From Commercial Fisheries Review, June 1951, v.13, no.6.
- Sep 286. The trash fishery of southern New England in 1950, by Richard E. Sayles. 1-4 p., illus. From Commercial Fisheries Review, July 1951, v.13, no.7.
- ✓ Sep 287. Effect of ascorbic acid on keeping quality of frozen oysters, by S. R. Pottinger. 5-8 p. From Commercial Fisheries Review, July 1951, v.13, no.7.
- Sep 288. Experimental testing of fish tags on albacore in a water tunnel, by Dayton L. Alverson and Harry H. Chenoweth. 1-7 p., illus. From Commercial Fisheries Review, Aug. 1951, v.13, no.8.
- Sep 289. Expansion of Gulf of Mexico shrimp fishery 1945-50, by Stewart Springer. 1-6 p., illus. From Commercial Fisheries Review, Sep. 1951, v.13, no.9.
- ✓ Sep 290. Results of some tests with frozen oysters, by S. R. Pottinger. 1-5 p., illus. From Commercial Fisheries Review, Oct. 1951, v.13, no.10.
- Sep 291. Social security for self-employed persons in fishery industries, by Walter H. Stolling. 6-9 p. From Commercial Fisheries Review, Oct. 1951, v.13, no.10.
- Sep 292. Deep-water trawling survey off the coast of Washington (Aug 27 - October 19, 1951), by Dayton L. Alverson. 1-16 p., illus. From Commercial Fisheries Review, Nov. 1951, v.13, no.11.
- Sep 293. United States lobster and spiny lobster production (1921-49) and imports (1920-49), by Leslie W. Scattergood and D. Arthur McKown. 1-11 p., illus. From Commercial Fisheries Review, Dec. 1951, v.13, no.12.
- ✓ Sep 294. Program of the Technological Section of the Service's Branch of Commercial Fisheries. 1-7 p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- ✓ Sep 295. A study of pH of strictly fresh commercially-shucked eastern oysters, by S. R. Pottinger. 8-10 p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- ✓ Sep 296. Chemistry of menhaden; report on literature study, by C. F. Lee. p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- ✓ Sep 297. Cytological studies on Lactobacillus leichmannii in the assay of vitamin B₁₂, by Sigurdur H. Petursson. 20-25 p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- ✓ Sep 298. Utilization of Alaska salmon cannery waste as a source of feed for hatchery fish, by R. G. Landgraf, Jr., D. T. Miyauchi, and M. E. Stansby. 26-33 p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- ✓ Sep 299. Technical note no.12 -- Suggested code for fish meal. 34-35 p. From Commercial Fisheries Review, Nov.1951 - Supplement, v.13, no.11a.
- ✓ Sep 300. Technical note no.13 - Acceptability and keeping quality of Pacific ocean perch fillets, by M. E. Stansby. 36-38 p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.

- ✓ Sep 301. Technical note no.14 -- A brief study of the alkali process for recovery of oil from pink salmon cannery waste, by R. N. Ten Eyck, H. W. Magnusson, and J. E. Bjork. 39-43 p., illus. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- ✓ Sep 302. Technical note no.15 -- Conducting organoleptic tests in the laboratory, by M. E. Stansby. 44-46 p. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- Sep 303. Recent technological publications. 47-48 p. From Commercial Fisheries Review, Nov. 1951 - Supplement, v.13, no.11a.
- Sep 304. The northern shrimp fishery of Maine, by Leslie W. Scattergood. 1-1b p., illus. From Commercial Fisheries Review, Jan. 1952, v.14, no.1.
- ✓ Sep 305. Technical note no.16. - A simple penetrometer for the measurement of texture changes in canned salmon, by H. J. Craven and John A. Dassow. 18-21 p., illus. From Commercial Fisheries Review, Jan. 1952, v.14, no.1.
- ✓ Sep 306. Freezing fish at sea - New England. 1-29 p., illus. From Commercial Fisheries Review, Feb. 1952, v.14, no.2. Contents: Part 1 - Preliminary experiments, by Jean C. Hartshorne and Joseph F. Puncchar. Part 2 - Experimental procedures and equipment, by H. W. Magnusson, S. R. Pottinger, and J. C. Hartshorne. Part 3 - The experimental trawler Delaware and shore facilities, by C. Butler, J. F. Puncchar, and B. O. Knake. Part 4 - Commercial processing of brine-frozen fish, by Charles Butler, and Harris W. Magnusson.
- ✓ Sep 307. Technical note no.17 -- Refractive index of free oil in canned salmon. 31-33 p., illus. From Commercial Fisheries Review, Feb. 1952, v.14, no.2.
- ✓ Sep 308. King crab recipes, by Kathryn Osterhaug. 43-45 p., illus. From Commercial Fisheries Review, Feb. 1952, v.14, no.2.
- Sep 309. Report on 1951 exploratory bluefin-tuna fishing in the Gulf of Maine, by John J. Murray. 1-19 p., illus. From Commercial Fisheries Review, Mar. 1952, v.14, no.3.
- ✓ Sep 310. Technical note no.18 - Proximate composition of the classified trimmings from pink salmon, by H. W. Magnusson and R. K. Whitaker. 23-26 p., illus. From Commercial Fisheries Review, Mar. 1952, v.14, no.3.
- Sep 311. The John N. Cobb's shellfish explorations in certain southeastern Alaskan waters, spring 1951, by J. G. Ellson and Robert Livingstone, Jr. 1-20 p., illus. From Commercial Fisheries Review, Apr. 1952, v.14, no.4.
- ✓ Sep 312. Technical note no.19 - The Alaska sheefish; description and proximate composition. 22-23 p., illus. From Commercial Fisheries Review, Apr. 1952, v.14, no.4.
- Sep 313. North Pacific albacore tuna exploration -- 1951, by Edward A. Schaefer. 1-12 p., illus. From Commercial Fisheries Review, May 1952, v.14, no.5.
- ✓ Sep 314. Technical note no.20 - Federal specifications for fishery products. 14-16 p., illus. From Commercial Fisheries Review, May 1952, v.14, no.5.
- Sep 315. Japanese tuna-mothership expeditions in the western equatorial Pacific Ocean (June 1950 to June 1951), by Kenji Ego and Tamio Otsu. 1-19 p., illus. From Commercial Fisheries Review, June 1952, v.14, no.6.
- Sep 316. Increasing the spread of shrimp trawls, by Carl B. Carlson. 13-15 p., illus. From Commercial Fisheries Review, July 1952, v.14, no.7.
- ✓ Sep 317. Technical note no.21 - Equipment and procedure for thawing fish frozen at sea, by H. W. Magnusson. 18-19 p., illus. From Commercial Fisheries Review, July 1952, v.14, no.7.
- ✓ Sep 318. Technical note no.22 -- Fish frozen in brine at sea; preliminary laboratory and taste-panel tests, by S. R. Pottinger, John Holston and Grace McCormack. 20-23 p. From Commercial Fisheries Review, July 1952, v.14, no.7.
- Sep 319. Georges Bank haddock fishery -- 1951. Part 1 -- Analysis of 1951 fishery, by John R. Clark. Part 2 - Accuracy of 1951 prediction, by Howard A. Schuck. 1-4 p., illus. From Commercial Fisheries Review, Aug. 1952, v.14, no.8.
- ✓ Sep 320. Potential markets for Alaska salmon cannery waste, by Norman B. Wigutoff. 5-12 p., illus. From Commercial Fisheries Review, Aug. 1952, v.14, no.8.
- Sep 321. Experiments on the escape of undersized haddock through otter trawls, by John R. Clark. 1-7 p., illus. From Commercial Fisheries Review, Sept. 1952, v.14, no.9.

- ✓ Sep 322. Preliminary investigation of the south-eastern Alaska abalone (*Haliotis kamtschatkana*). Part 1 - Exploratory diving, by Robert Livingstone, Jr. Part 2 - Technological studies on handling aboard ship and preparation ashore, and acceptability of the cooked products, by C. J. Carlson and J. A. Dassow. 8-18 p., illus. From Commercial Fisheries Review, Sept. 1952, v.14, no.9.
- Sep 323. Hard-clam fishery of the Atlantic coast, by Richard E. Tiller, John B. Glude and Louis D. Stringer. 1-25 p., illus. From Commercial Fisheries Review, Oct. 1952, v.14, no.10.
- ✓ Sep 324. Freezing fish at sea, defrosting, filleting, and refreezing the fillets. Review for period December 1950 - September 1952. 28-39 p., illus. From Commercial Fisheries Review, Oct. 1952, v.14, no.10.
- Sep 325. German Federal Republic; electrical-fishing experiments in salt water reported successful, by C. E. Peterson. 62-64 p., illus. From Commercial Fisheries Review, Oct. 1952, v.14, no.10.
- Sep 326. Japanese mothership-type tuna-fishing operations in the western equatorial Pacific, June-October 1951 (report on the seventh, eighth, and ninth expeditions), by Wilvan G. Van Campen. 1-9 p., illus. From Commercial Fisheries Review, Nov. 1952, v.14, no.11.
- ✓ Sep 327. Progress on technological research projects of the Service's Branch of Commercial Fisheries, 1951-52. 1-7 p., illus. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- ✓ Sep 328. Freezing fish at sea -- New England. Part 5 - Freezing and thawing studies and suggestions for commercial equipment, by H. W. Magnusson and J. C. Hartshorne. 8-23 p., illus. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- ✓ Sep 329. Freezing and cold storage of Pacific Northwest fish and shellfish. Part 1 - Storage life of various rockfish fillets, by D. T. Miyauchi and M. E. Stansby. 24-28 p., illus. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- ✓ Sep 330. Freezing and cold storage of Pacific Northwest fish and shellfish. Part 2 - King crab, by Martin Heerdt, Jr., and John A. Dassow. 29-35 p., illus. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- ✓ Sep 331. Technical note no.22 [i.e.23] - A new liquid medium for freezing round fish, by John A. Holston. 36-40 p. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- Sep 332. Technological publications, fiscal year 1951-1952. 43-45 p. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- ✓ Sep 333. Odor control in fish-processing plants. p.47. From Commercial Fisheries Review, Dec. 1952 - Supplement, v.14, no.12a.
- Sep 334. A minimum net-mesh size for the New England haddock fishery, by Herbert W. Graham. 1-6 p., illus. From Commercial Fisheries Review, Dec. 1952, v.14, no.12.
- Sep 335. Further experiments on the escape of undersized haddock through otter trawls, by John R. Clark. 7-12 p., illus. From Commercial Fisheries Review, Dec. 1952, v.14, no.12.
- ✓ Sep 336. Sea-food products in Armed Forces rations, by Stanley R. Peterson. 1-7 p., illus. From Commercial Fisheries Review, Jan. 1953, v.15, no.1. Reprinted from Third quarter 1952 activities report on food and container research and development for the Armed Forces, v.4, no.3, 218-224 p., published by Research and Development Associates, Food and Container Institute Inc.
- Sep 337. A report on the Cuban tuna fishery, by John E. Rawlings. 8-21 p., illus. From Commercial Fisheries Review, Jan. 1953, v.15, no.1.
- Sep 338. Japanese 1952 north Pacific salmon-fishing expedition, by Francis M. Fukuhara. 1-17 p., illus. From Commercial Fisheries Review, Feb. 1953, v.15, no.2.
- Sep 339. Use of fish in New England schools increased by demonstrations, by B. E. Lindgren and R. P. Seifert. 18-22 p., illus. From Commercial Fisheries Review, Feb. 1953, v.15, no.2.
- Sep 340. Louisiana school-lunch program uses more fish, by William I. Cabaniss. 23-26 p., illus. From Commercial Fisheries Review, Feb. 1953, v.15, no.2.
- Sep 341. Experiments with a "fish pump", by J. G. Ellson. 27-29 p., illus. From Commercial Fisheries Review, Feb. 1953, v.15, no.2.
- Sep 342. Technical note no.24 - A portable immersion freezer, by C. G. P. Oldershaw, John A. Holston and S. R. Pottinger. 32-34 p., illus. From Commercial Fisheries Review, Feb. 1953, v.15, no.2.
- Sep 343. Shellfish explorations in certain south-eastern Alaskan waters by the John N. Cobb, spring 1952, by Edward A. Schaefer. 1-18 p., illus. From Commercial Fisheries Review, Mar. 1953, v.15, no.3.

- ✓ Sep 344. Alaska's shrimp industry, by Norman B. Wigutoff. 19-24 p., illus. From Commercial Fisheries Review, Mar. 1953, v.15, no.3.
- ✓ Sep 345. Freezing fish at sea -- New England. Part 6 - Changes and additions to experimental equipment on the trawler Delaware, by C. G. P. Oldershaw. 25-28 p., illus. From Commercial Fisheries Review, Mar. 1953, v.15, no.3.
- ✓ Sep 346. Technical note no.25 - Amino-acid content of salmon roe, by Harry L. Seagran. 31-34 p. From Commercial Fisheries Review, Mar. 1953, v.15, no.3.
- Sep 347. Experimental tuna purse seining in the central Pacific, by Garth I. Murphy and Edwin L. Niska. 1-12 p., illus. From Commercial Fisheries Review, Apr. 1953, v.15, no.4.
- Sep 348. Status of New England sea-scallop fishery, by Ernest D. Premetz and George W. Snow. 1-17 p., illus. From Commercial Fisheries Review, May 1953, v.15, no.5.
- Sep 349. Salmon tagging by the 1952 Japanese north Pacific fishing expedition, by C. J. Burner. 18-19 p., illus. From Commercial Fisheries Review, May 1953, v.15, no.5.
- ✓ Sep 350. Technical note no.26 - Glazing brine-frozen salmon, by D. T. Miyauchi. 24-25 p. From Commercial Fisheries Review, May 1953, v.15, no.5.
- Sep 351. Construction details of tuna long-line gear used by Pacific Oceanic Fishery Investigations, by Edwin L. Niska. 1-6 p., illus. From Commercial Fisheries Review, June 1953, v.15, no.6.
- Sep 352. Oyster growth as affected by latitudinal temperature gradients, by Philip A. Butler. 7-12 p., illus. From Commercial Fisheries Review, June 1953, v.15, no.6.
- Sep 353. Gulf of Maine bluefin tuna exploration -- 1952, by J. J. Murray. 1-17 p., illus. From Commercial Fisheries Review, July 1953, v.15, no.7.
- ✓ Sep 354. Technical note no.27 -- Alaska pollock; proximate composition; amino acid, thiamine, and riboflavin content; use as mink feed, by R. G. Landgraf, Jr. 20-22 p., illus. From Commercial Fisheries Review, July 1953, v.15, no.7.
- ✓ Sep 355. Report on the Norwegian frozen fish fillet industry, by R. T. Whiteleather. 1-13 p., illus. From Commercial Fisheries Review, Aug. 1953, v.15, no.8.
- Sep 356. Trap lift net for catching tuna bait fishes, by J. B. Siebenaler. 14-17 p., illus. From Commercial Fisheries Review, Aug. 1953, v.15, no.8.
- Sep 357. North Pacific albacore tuna exploration, 1952, by Edward A. Schaefers. 1-6 p., illus. From Commercial Fisheries Review, Sept. 1953, v.15, no.9.
- Sep 358. Tuna fishing at Tahiti, by Wilvan G. Van Campan. 1-4 p., illus. From Commercial Fisheries Review, Oct. 1953, v.15, no.10.
- Sep 359. Deep-water trawling survey off the Oregon and Washington coasts (August 25-October 3, 1952), by Dayton L. Alverson. 5-15 p., illus. From Commercial Fisheries Review, Oct. 1953, v.15, no.10.
- ✓ Sep 360. Progress on fishery technological research projects, fiscal year 1953. Program for fishery technological research, fiscal year 1954. Reports published during fiscal year 1953 on specific phases of fishery technological research. 19-29 p. From Commercial Fisheries Review, Oct. 1953, v.15, no.10.
- Sep 361. Southeastern Alaska exploratory herring fishing operations, winter 1952/53, by Lawrence N. Kolloen and Keith A. Smith. 1-24 p., illus. From Commercial Fisheries Review, Nov. 1953, v.15, no.11.
- ✓ Sep 362. Freezing fish at sea - New England. Part 7 - Pictorial story of operations at sea and shore, prepared by the technical staff, Fishery Technological Laboratory, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Boston, Massachusetts. 1-12 p., illus. From Commercial Fisheries Review, Dec. 1953, v.15, no.12.
- Sep 363. Fishing vessel live-bait equipment, by Carl B. Carlson. 1-7 p., illus. From Commercial Fisheries Review, Jan. 1954, v.16, no.1.
- ✓ Sep 364. Salt content of salmon canned from brine-frozen fish, by D. T. Miyauchi and M. Heerdt, Jr. 8-10 p. From Commercial Fisheries Review, Jan. 1954, v.16, no.1.
- Sep 365. Drum seining - a new development in the Puget Sound salmon fishery, by Keith A. Smith. 1-6 p., illus. From Commercial Fisheries Review, Feb. 1954, v.16, no.2.
- ✓ Sep 366. Vitamin content of fishery byproducts. Part 1 - Effect of processing methods on riboflavin, nicotinic acid, and vitamin B₁₂ content of solubles and meal, by N. L. Karrick and M. E. Stansby. 7-10 p. From Commercial Fisheries Review, Feb. 1954, v.16, no.2.
- ✓ Sep 367. Technical note no.29 - Effect of salt on the storage life of salmon eggs preserved with sodium bisulfite, by R. G. Landgraf, Jr. 13-15 p. From Commercial Fisheries Review, Feb. 1954, v.16, no.2.

- Sep 368. Shellfish explorations in the Yakutat Bay area, Alaska, by the John N. Cobb, spring 1953, by Edward A. Schaefer and Keith A. Smith. 1-12 p., illus. From Commercial Fisheries Review, Mar. 1954, v.16, no.3.
- Sep 369. Relative productivity and value of the fisheries of the United States and Alaska, 1951, by Bobby Finley. 1-11 p., illus. From Commercial Fisheries Review, Apr. 1954, v.16, no.4.
- Sep 370. California, loss of sardine fishery may become permanent. 15-19 p., illus. From Commercial Fisheries Review, Mar. 1954, v.16, no.3.
- Sep 371. Offshore salmon explorations adjacent to the Aleutian Islands, June-July 1953, by Edward A. Schaefer and Francis M. Fukuhara. 1-20 p., illus. From Commercial Fisheries Review, May 1954, v.16, no.5.
- ✓ Sep 372. Freezing and cold storage to Pacific northwest fish and shellfish. Part - 3 Storage characteristic of six species of oily fish, by M. Heerdt, Jr., and M. E. Stansby. 1-5 p., illus. From Commercial Fisheries Review, June 1954, v.16, no.6.
- ✓ Sep 373. Freezing Gulf-of-Mexico shrimp at sea, by John A. Dassow. 1-9 p., illus. From Commercial Fisheries Review, July 1954, v.16, no.7.
- Sep 374. Gulf-of-Maine bluefin tuna exploration - 1953, by J. J. Murray. 10-19 p., illus. From Commercial Fisheries Review, July 1954, v.16, no.7.
- ✓ Sep 375. Freezing fish at sea - New England. Part 8 - Some factors affecting the salt (sodium chloride) content of haddock during brine-freezing and water-thawing, by J. Holston and S. R. Pottinger. 1-11 p., illus. From Commercial Fisheries Review, Aug. 1954, v.16, no.8.
- Sep 376. Analysis of the Hawaiian long-line fishery, 1948-52, by Tamio Otsu. 1-17 p., illus. From Commercial Fisheries Review, Sept. 1954, v.16, no.9.
- ✓ Sep 377. Cold-storage life of fresh-water fish - no.1, by D. T. Miyauchi and M. E. Stansby. 18-20 p. From Commercial Fisheries Review, Sept. 1954, v.16, no.9.
- ✓ Sep 378. Technical note no.30 - Proposed method for estimating amount of solubles added to whole fish meal, by Charles F. Lee. 21-23 p. From Commercial Fisheries Review, Sept. 1954, v.16, no.9.
- ✓ Sep 379. The development of federal specifications. 24-26 p., illus. From Commercial Fisheries Review, Sept. 1954, v.16, no.9.
- Sep 380. Exploratory shrimp fishing in the Gulf of Mexico, summary report for 1952-54, by Stewart Springer and Harvey R. Bullis. 1-16 p., illus. From Commercial Fisheries Review, Oct. 1954, v.16, no.10.
- Sep 381. Observation of Japanese high-seas salmon gill-net fishery off Hokkaido, by C. E. Atkinson. 17-19 p., illus. From Commercial Fisheries Review, Oct. 1954, v.16, no.10.
- Sep 382. Tuna fishing at American Samoa, January-April 1954, by Wilvan G. Van Campen. 1-9 p., illus. From Commercial Fisheries Review, Nov. 1954, v.16, no.11.
- Sep 383. Recent developments in fishing-vessel deck gear, by C. B. Carlson. 10-16 p., illus. From Commercial Fisheries Review, Nov. 1954, v.16, no.11.
- ✓ Sep 384. Cooperative fish-product-acceptability project with Quartermaster Food and Container Institute, by Harris W. Magnusson. Keeping quality of chilled dungeness crab meat packed in hermetically-sealed containers, by Clarence J. Carlson. 17-21 p., illus. From Commercial Fisheries Review, Nov. 1954, v.16, no.11.
- Sep 385. §
- Sep 386. The 1953 Japanese king-crab factory-ship expedition, by Takashi Miyahara. 1-12 p., illus. From Commercial Fisheries Review, Dec. 1954, v.16, no.12.
- ✓ Sep 387. Chemical changes in fish protein during freezing and storage, by Harry L. Seagran. 13-14 p. From Commercial Fisheries Review, Dec. 1954, v.16, no.12.
- ✓ Sep 388. A comparative study of fish meals made from Haddock offal, by Joseph H. Carver. 14-16 p., illus. From Commercial Fisheries Review, Dec. 1954, v.16, no.12.

SPECIAL SCIENTIFIC REPORTS

- *SSR 1. Pollution of the Coeur D'Alene River and adjacent waters by mine wastes, by M. M. Ellis. 1940. 61 p., illus.
- *SSR 2. Water purity standards for fresh-water fishes, by M. M. Ellis. 1944. 18 p.
- *SSR 3. Stream pollution studies in the state of Mississippi, by M. M. Ellis. 1943. 13 p.
- *SSR 4. Report on the Pensacola Dam impoundment of the Grand River with special reference to fishery problems in the completed reservoir, by M. M. Ellis. 1940. 12 p., illus.
- *SSR 5. Observations on the occurrence, life history, and distribution of the redfish parasite Sphyrion lumpi, by William C. Herrington, H. M. Bearse, and Frank E. Firth. 1940. 12 p., illus.
- *SSR 6. The white marlin fishery of Ocean City, Maryland, by Swepson Earle. 1940. 15 p., illus.
- *SSR 7. Pulp-mill pollution of the Rainy River near International Falls, Minnesota, by B. A. Westfall and M. M. Ellis. 1944. 8 p.
- *SSR 8. A study of the Mississippi River from Chain of Rocks, St. Louis, Missouri, to Cairo, Illinois, with special reference to the proposed introduction of ground garbage into the river by the City of St. Louis, by M. M. Ellis. 1943. 22 p.
- *SSR 9. Pollution studies of effluents from the Dickinson Salt Works, Malden, West Virginia, by M. M. Ellis. 1943. 13 p.
- *SSR 10. An investigation of fish-salvage problems in relation to Shasta Dam, by Harry A. Hanson, Osgood R. Smith and Paul R. Needham. 1940. 200 p., illus.
- *SSR 11. Pollution survey of the Cumberland River in the vicinity of Nashville, Tenn., Aug. 1936, by M. M. Ellis and B. A. Westfall. 1943. 16 p., illus.
- *SSR 12. Mine-waste pollution of Bear Butte Creek, Black Hills, South Dakota, by M. M. Ellis. 1945. 9 p.
- *SSR 13. Industrial and organic pollution of the Buffalo River, Buffalo, New York, by B. A. Westfall. 1943. 23 p., illus.
- *SSR 14. A survey of the Sandy River and its tributaries, 1940, with reference to fish management, by Joseph A. Craig and A. J. Suomela. 1940. 20 p., illus.
- *SSR 15. Preliminary investigation of methods for freezing and storing fillets of some Pacific Northwest fish, by Maurice E. Stansby and Roger W. Harrison. 1942. 25 p.
- *SSR 16. Decline in abundance of the blue crab, Callinectes sapidus, in Chesapeake Bay during 1940 and 1941 with suggested conservation measures, by John C. Pearson. 1942. 27 p., illus.
- *SSR 17. Statistical review of the pink salmon trap fishery of southeastern Alaska, by Elizabeth Vaughan. 1942. [237] p., illus.
- *SSR 18. Fishery management, by William C. Herrington and Robert A. Nesbit. 1943. 69 p., illus.
- *SSR 19. Studies on the Pacific pilchard or sardine, (Sardinops caerulea). 1 - Structure of a research program to determine how fishing affects the resource, by Oscar E. Sette. 1943. 27 p., illus. Reissued as part of SSR-F 15, May 1950.
- *SSR 20. Studies on the Pacific pilchard or sardine, (Sardinops Caerulea). 2 - Determination of the age of juveniles by scales and otoliths, by Lionel A. Walford and Kenneth H. Mosher. 1943. 19, [46] p., illus. Reissued as part of SSR-F 15, May 1950.
- *SSR 21. Studies on the Pacific pilchard or sardine, (Sardinops Caerulea). 3 - Determination of age of adults by scales, and effect of environment on first year's growth as it bears on age determination, by Lionel A. Walford and Kenneth Mosher. 1943. 29 p., illus. Reissued as part of SSR-F 15, May 1950.
- *SSR 22. Studies on the Pacific pilchard or sardine, (Sardinops Caerulea). 6 - Thermal and diurnal changes in the vertical distribution of eggs and larvae, by Ralph P. Silliman. 1943. 17 p., illus. Reissued as part of SSR-F 15, May 1950.
- *SSR 23. Studies on the Pacific pilchard or sardine, (Sardinops Caerulea). 4 - Influence of temperature on the rate of development of pilchard eggs in nature, by Elbert H. Ahlstrom. 1943. 26 p., illus. Reissued as part of SSR-F 15, May 1950.

- *SSR 24. Studies on the Pacific pilchard or sardine, (Sardinops Caerulea). 5 - A method of computing mortalities and replacements, by Ralph P. Silliman. 1943. 10 p., illus. Reissued as part of SSR-F 15, May 1950.
- *SSR 25. Outlook for the Alaska herring fishery in 1944, by E. H. Dahlgren and L. N. Kolloen. 1944. 18 p.
- *SSR 26. Supplementary report on investigations of fish-salvage problems in relation to Shasta Dam, by Paul R. Needham, Harry A. Hanson, and Lewis P. Parker. June 1943. 50 p., illus.
- *SSR 27. The retention of adult salmon with particular reference to the Grand Coulee fish-salvage program, by Frederick F. Fish. 1944. 29 p., illus.
- *SSR 28. Harbor seals and sea lions in Alaska, by Ralph H. Imler and Hosea R. Sarber. Apr. 1947. 23 p., illus.
- *SSR 29. The condition of the natural oyster reefs and other public oyster bottoms of Alabama in 1943 with suggestions for their improvement, by James B. Engle. 1945. 42 p., illus.
- *SSR 30. Water quality studies of the Mississippi river, by Wesley S. Platner. 1946. 77 p., illus.
- *SSR 31. Studies of ichthyosporidian-like parasite of oceanpout, (Zoarces anguillaris), by Leslie A. Sandholzer, Thomas Nostrand and Leo Young. 1945. 12 [11] p., illus.
- *SSR 32. Oyster bars of the Potomac River, by David G. Frey. Nov. 1946. 93 p., illus.
- *SSR 33. An investigation of fish maintenance problems in relation to the Willamette Valley project, by Joseph A. Craig and Lawrence D. Townsend. 1946. 78 l., illus.
- *SSR 34. Intraseasonal and interseasonal variations in average weight of Columbia River chinook salmon, (Oncorhynchus tshawytscha), by Ralph P. Silliman, Willis H. Rich and Floyd G. Bryant. Feb. 1947. 11, [20] p., illus.
- *SSR 35. §
- *SSR 36. Studies on substitute containers for canned fishery products, by Norman D. Jarvis and Lynne G. McKee. 1948. 26 p.
- *SSR 37. Studies on gum extracts from Gracilaria confervoides (North Carolina), by Charles F. Lee and Leonard S. Stoloff. 1946. 11 p., illus.
- *SSR 38. Water quality studies of the Delaware River with reference to shad migration, by M. M. Ellis, B. A. Westfall, D. K. Meyer and W. S. Platner. Feb. 1947. 19, [37] p., illus.
- *SSR 39. Effects of aquatic weed infestations on the fish and wildlife of the Gulf states, by J. J. Lynch, J. E. King, T. K. Chamberlain and Arthur L. Smith, Jr. Feb. 1947. 71 p.
- *SSR 40. Evaluation of fisheries in determining benefits and losses from engineering projects, by Richard A. Kahn and George A. Rounsefell. Mar. 1947. 10 p.
- *SSR 41. DDT investigations by the Fish and Wildlife Service in 1946, by Arnold L. Nelson and Eugene W. Surber. May 1947. 8 p.
- *SSR 42. Toxicity of phenyl-mercuric lactate for fish, by M. M. Ellis. May 1947. 6 p.
- SSR 43. §
- *SSR 44. Echo-ranging for fish schools and observations on temperature and plankton in waters off central California in the spring of 1946, by Osgood R. Smith and Elbert H. Ahlstrom. Feb. 1948. 30 p., illus.
- SSR 45. §
- *SSR 46. Red tide; progress report on the investigations of the cause of the mortality of fish along the west coast of Florida conducted by the U. S. Fish and Wildlife Service and cooperating organizations, by Paul S. Galtsoff. Feb. 1948. 44 p., illus.
- *SSR 47. Development of fishery statistics in the North Atlantic, by George A. Rounsefell. Feb. 1948. 18 p., illus.
- *SSR 48-49. §
- *SSR 50. Estimation of the troll catch of Columbia River chinook salmon, Oncorhynchus tshawytscha, by Ralph P. Silliman. May 1948. 15, [18] p., illus.

- *SSR 51. A survey of the Columbia River and its tributaries with special reference to the management of its fishery resources, by Willis H. Rich. May 1948. 25 p.
- *SSR 52. Outlook for the Alaska herring fishery in 1948, by L. N. Kolloen and C. H. Elling. May 1948. 23 p., illus.
- *SSR 53. History, development, and problems of electric fish screen, by Harlan B. Holmes. June 1948. 62 p.
- *SSR 54. A record of pilchard eggs and larvae collected during surveys made in 1939 to 1941, by Elbert H. Ahlstrom. June 1948. 76 p., illus.
- *SSR 55. A report upon the Grand Coulee fish-maintenance project 1939-1947, by Fred-eric F. Fish and Mitchell G. Hanavan. Nov. 1948. 63 p., illus.
- *SSR 56. Observations on the horizontal distribution and the numbers of eggs and larvae of the northern anchovy (Engraulis mordax) off California in 1940 and 1941, by John C. Marr and Elbert H. Ahlstrom. Oct. 1948. 13 p.
- SSR 57. §
- *SSR 58. A report on the appearance of the fungus Ichthyosporidium hoferi in the herring of the northwestern Atlantic, by Leslie W. Scattergood. Oct. 1948. 33 p., illus.
- *SSR 59. Investigations of the oyster reefs of Mississippi, Louisiana, and Alabama, following the hurricane of Sept. 19, 1947, by James B. Engle. Nov. 1948. 70 p., illus.
- SSR 60. §
- *SSR 61. Conditions affecting shellfish production in Lynnhaven Bay, Virginia, and the possibilities of improving them by increasing tidal flow, by Walter A. Chipman, Jr. Dec. 1948. 20 p., illus.
- *SSR 62. A survey of the Columbia River and its tributaries with special reference to its fishery resources. 2. Washington streams from the mouth of the Columbia River to and including the Klickitat River (Area 1), by Floyd G. Bryant. Jan. 1949. 110 p., illus.
- *SSR 63. Summary of oyster farming experiments in South Carolina 1939-1940, by R. O. Smith. Apr. 1949. 20, [17] p., illus.
- *SSR 64. A bibliography of lobster culture, by Leslie W. Scattergood. Jan. 1949. 26 p.
- *SSR 65-66. §
- *SSR 67. The production and the fishing methods of the Maine herring industry with notes on the 1947 season, by Leslie W. Scattergood. Mar. 1949. 26 p., illus.

SPECIAL SCIENTIFIC REPORTS-
FISHERIES

- SSR-F 1. Effects of oil mixed with carbonized sand on aquatic animals, by Walter A. Chipman and Paul S. Galtsoff. Aug. 1949. 52 p., illus.
- SSR-F 2. Water temperature records from California's Central Valley 1939-1948, by Oliver B. Cope. Sept. 1949. 77 p.
- SSR-F 3. Effects of feeding DDT-sprayed insects to fresh-water fish, by C. H. Hoffmann and E. W. Surber. Oct. 1949. 9 p.
- SSR-F 4. Effects of various concentrations of DDT on several species of fish of different sizes, by Eugene W. Surber and Clarence H. Hoffmann. Nov. 1949. 19 p., illus.
- SSR-F 5. Preliminary surveys of Roosevelt Lake in relation to game fishes, by Harold A. Gangmark and Leonard A. Fulton. Sept. 1949. 29 p., illus.
- SSR-F 6. Translations of foreign literature concerning lobster culture and the early life history of the lobster, edited by Leslie W. Scattergood. Oct. 1949. 173 p.
- SSR-F 7. A survey of the sports fishery of the middle Atlantic bight in 1948, by Raymond J. Buller and Harlan S. Spear. Jan. 1950. 20 p., illus.
- SSR-F 8. An investigation of oyster producing areas in Louisiana and Mississippi damaged by flood waters in 1945, by Philip A. Butler. Dec. 1949. 29 p., illus.
- SSR-F 9. Possibilities for oyster culture in Puerto Rico and the Virgin Islands, by Walter A. Chipman and Paul E. Thompson. Jan. 1950. 19 p., illus.
- *SSR-F 10. Drift bottle releases off New Jersey; a preliminary report on experiments begun in 1948, by John R. Webster and Raymond J. Buller. Jan. 1950. 21 p., illus.
- SSR-F 11. Observations of the effect of acid-iron waste disposal at sea on animal populations, by Edgar L. Arnold, Jr., and William F. Royce. Jan. 1950. 12 p., illus.
- SSR-F 12. Biological investigations of the fishery resources of Trinity River, California, by James W. Moffett and Stanford H. Smith. Feb. 1950. 71 p., illus.
- *SSR-F 13. The rational exploitation of the sea fisheries with particular reference to the fish stock of the North Sea, by G. P. Baerends. Mar. 1950. 102 p., illus. Paper no. 36 of the Dept. of Fisheries, Ministry of Agriculture, Fishery and Food Supply, The Hague, Netherlands, July 1947. Translated from the Dutch by Jan Hahn; edited by Howard A. Schuck.
- SSR-F 14. The 1950 opening of the Bonnet Carre Spillway: its effect on oysters, by Philip A. Butler and James B. Engle. Mar. 1950. 10 p., illus.
- *SSR-F 15. Studies on the Pacific pilchard or sardine (*Sardinops caerulea*). May 1950. 200 p., illus. Reissue of SSR 19-24, issued in 1943.
- *SSR-F 16. Three papers on the stocks of tunas in Japanese waters, by Morisaburō Tauchi. Translated from the Japanese language by W. G. Van Campen. Apr. 1950. 15 p.
- *SSR-F 17. Report of investigations of skipjack and tuna resources in 1947, by Nakamura Research Staff. Translated from the Japanese language by W. G. Van Campen. Apr. 1950. 19 p.
- *SSR-F 18. Spawning grounds of tuna and skipjack, translated from the Japanese language by SCAP translators. Edited by B. M. Shimada and W. G. Van Campen. Apr. 1950. 14 p.
- *SSR-F 19. Larval and juvenile tunas and skipjacks, by Kamakichi Kishinouye. Translated from the Japanese language by W. G. Van Campen. Apr. 1950. 14 p., illus.
- *SSR-F 20. Gonads of skipjack from Palao waters, by Kizō Matsui. Translated from the Japanese language by W. G. Van Campen. Apr. 1950. 6 p., illus.
- *SSR-F 21. Age determination of fish (preliminary report 1), by Hiroaki Aikawa and Masuo Katō. Translated from the Japanese language by W. G. Van Campen. Apr. 1950. 22 p., illus.
- *SSR-F 22. Morphometry, growth, and age of tunas, translated from the Japanese language by SCAP translators and W. G. Van Campen. Edited by B. M. Shimada and W. G. Van Campen. May 1950. 30 p., illus.

- *SSR-F 23. The food habits of the yellowfin tuna *Neothunnus macropterus* (Schlegel) from the Celebes Sea, by Hiroshi Nakamura. Translated from the Japanese language by W. G. Van Campen. Apr. 1950. 8 p., illus.
- *SSR-F 24. A study of the mackerels, cybiids, and tunas, by Kamakichi Kishinouye. Translated from the Japanese language by W. G. Van Campen. May 1950. 14 p.
- SSR-F 25. Poisonous fishes of the South Seas, translated from the Japanese language by W. G. Van Campen. May 1950. 221 p.
- SSR-F 26. The pearl fishery of Venezuela, by Paul S. Galtsoff. May 1950. 26 p., illus.
- *SSR-F 27. Ciguatera: tropical fish poisoning, by William Arcisz. May 1950. 23 p.
- *SSR-F 28. The pearl-oyster resources of Panama, by Paul S. Galtsoff. May 1950. 53 p., illus.
- *SSR-F 29. Injured and dead fish in the vicinity of Bonneville Dam, by Harry A. Hanson, Paul D. Zimmer and Ivan J. Donaldson. June 1950. 41 p., illus.
- SSR-F 30. Pollution in the lower Columbia Basin in 1948 - with particular reference to the Willamette River, by Frederic F. Fish and Robert R. Rucker. June 1950. 22 p., illus.
- *SSR-F 31. Doctoral dissertations on the management and ecology of fisheries, prepared in the Branch of Fishery Biology. July 1950. 35 p. Revised by SSR-F 87.
- ✓ *SSR-F 32. Vitamin A in selected, pale-colored livers of Alaska fur seals, 1948, by Victor B. Scheffer, Neva L. Karrick and F. Bruce Sanford. July 1950. 8 p., illus.
- *SSR-F 33. Albacore fishing grounds development in 1939, translated from the Japanese language by W. G. Van Campen. [Nov. 1950?] 175 p., illus.
- *SSR-F 34. Upper Sacramento River sport fishery, by Stanford H. Smith. Sept. 1950. 44 p., illus.
- *SSR-F 35. English translations of fishery literature, compiled by Leslie W. Scattergood. Mar. 1951. 65 p.
- SSR-F 36. Survey of the Columbia River and its tributaries - Part 3, by Zell E. Parkhurst, Floyd G. Bryant and Reed S. Nielson. Sept. 1950. 103 p., illus.
- *SSR-F 37. Survey of the Columbia River and its tributaries - Part 4, by Floyd G. Bryant and Zell E. Parkhurst. Sept. 1950. 108 p., illus.
- *SSR-F 38. Survey of the Columbia River and its tributaries - Part 5, by Reed S. Nielson. Aug. 1950. 41 p., illus.
- SSR-F 39. Survey of the Columbia River and its tributaries - Part 6, by Zell E. Parkhurst. Oct. 1950. 58 p., illus.
- *SSR-F 40. Survey of the Columbia River and its tributaries - Part 7, by Zell E. Parkhurst. Nov. 1950. 95 p., illus.
- SSR-F 41. Oxygen block in the main-stem Willamette River, by Frederic F. Fish and Richard A. Wagner. Sept. 1950. 19 p.
- *SSR-F 42. Tuna fishing in Palau waters, translated from the Japanese language by SCAP translators and W. G. Van Campen, edited by B. M. Shimada and W. G. Van Campen. Jan. 1951. 26 p., illus.
- *SSR-F 43. Fishing conditions south of the Marshall Islands, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 23 p., illus.
- *SSR-F 44. Tuna bait resources at Saipan, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 15 p.
- *SSR-F 45. Exploratory tuna fishing in Indonesian waters, translated from the Japanese language by SCAP translators and W. G. Van Campen. Edited by B. M. Shimada and W. G. Van Campen. Jan. 1951. 17 p., illus.
- *SSR-F 46. Exploratory tuna fishing in the Caroline Islands, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 42 p., illus.
- *SSR-F 47. Exploratory tuna fishing in the Marshall Islands, translated from the Japanese language by SCAP translators and W. G. Van Campen. Edited by B. M. Shimada and W. G. Van Campen. Jan. 1951. 21 p., illus.

- *SSR-F 48. Japanese tuna surveys in tropical waters, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 40 p., illus.
- *SSR-F 49. The Japanese skipjack fishery, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 67 p., illus.
- *SSR-F 50. Kishinouye's order Plecostei, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 16 p.
- *SSR-F 51. Japanese skipjack studies, translated from the Japanese language by W. G. Van Campen. Jan. 1951. 30 p., illus.
- *SSR-F 52. On the Japanese black tuna (*Thunnus orientalis*), translated from the Japanese language by W. G. Van Campen. Jan. 1951. 22 p., illus.
- SSR-F 53. Seasonal variations in toxicity of butter clams from selected Alaska beaches, by John S. Chambers and Harris W. Magnusson. Aug. 1950. 10 p., illus.
- *SSR-F 54. Mid-Pacific oceanography, January-March 1950, by Townsend Cromwell. July 1951. 9 p., [67] l., illus.
- *SSR-F 55. Natural history of the sea lamprey (*Petromyzon marinus*) in Michigan, by Vernon C. Applegate. Dec. 1950. 237 p., illus.
- *SSR-F 56. Sacramento - San Joaquin Delta fishery resources; effects of Tracy Pumping Plant and Delta Cross Channel, by Leo F. Erkkila, James W. Moffett, Oliver B. Cope, Bernard R. Smith, and Reed S. Nielson. Dec. 1950. 109 p., illus.
- *SSR-F 57. Survey of the Columbia River and its tributaries - Part 8, by Zell E. Parkhurst. Dec. 1950. 19 p., illus.
- SSR-F 58. Fishery survey of southern coastal waters, by Raymond J. Buller. Feb. 1951. 21 p., illus.
- *SSR-F 59. Tests of hatchery foods for blue-back salmon (*Oncorhynchus nerka*) 1944-1948, by Roger E. Burrows, Leslie A. Robinson and David D. Palmer. Mar. 1951. 39 p., illus.
- *SSR-F 60. Tests of hatchery foods for blue-back salmon, 1949, by Leslie A. Robinson, David D. Palmer and Roger E. Burrows. Apr. 1951. 21 p.
- *SSR-F 61. Sea lamprey spawning runs in the Great Lakes in 1950, by Vernon C. Applegate and Bernard R. Smith. Apr. 1950. 49 p., illus.
- *SSR-F 62. A study of the causes of death of bait fishes, by Yasuo Suehiro. Translated from the Japanese language by W. G. Van Campen. Mar. 1951. 57 p., illus.
- *SSR-F 63. Tests of hatchery foods for blue-back salmon, 1950, by Leslie A. Robinson, Merl H. Payne, Jr., David D. Palmer and Roger E. Burrows. May 1951. 23 p.
- SSR-F 64. Effect of tagging on the subsequent behavior and condition of red salmon, by G. J. Eicher, Jr. May 1951. 4 p.
- SSR-F 65. A fishway that shad ascend, by Gerald B. Collins. July 1951. 17 p., illus.
- SSR-F 66. A survey of former shad streams in Maine, by Clyde C. Taylor. Aug. 1951. 29 p., illus.
- *SSR-F 67. Salmon research at Deer Creek, Calif., by Frederick K. Cramer and David F. Hammack. Jan. 1952. 16 p., illus.
- *SSR-F 68. Sea lamprey spawning runs in the Great Lakes, 1951, by Vernon C. Applegate, Bernard R. Smith, Alberton L. McLain and Matt Patterson. Mar. 1952. 37 p., illus.
- *SSR-F 69. Water temperatures of the Willamette River Basin, 1950, by Kingsley G. Weber and Lyle G. Schedin. Feb. 1952. 25 p., illus.
- *SSR-F 70. Sea lamprey spawning; Michigan streams of Lake Superior, by Howard A. Loeb and Albert E. Hall, Jr. Feb. 1952. 68 p., illus.
- *SSR-F 71. Establishing tuna and other pelagic fishes in ponds and tanks, by Albert L. Tester. Feb. 1952. 20 p., illus. This report is also Contribution no. 18, Hawaii Marine Laboratory, University of Hawaii.

- SSR-F 72. English translations of fishery literature; additional listings, compiled by Leslie W. Scattergood. Mar. 1952. 32 p.
- *SSR-F 73. Zooplankton volumes off the Pacific coast, 1951, prepared by the Staff of the South Pacific Fishery Investigations. May 1952. 37 p.
- *SSR-F 74. Status of Columbia River blueback salmon runs, 1951, by Harold A. Gangmark and Leonard A. Fulton. Apr. 1952. 29 p., illus.
- *SSR-F 75. Water temperatures of California's Central Valley 1949-51, by Oliver B. Cope. May 1952. 48 p., illus.
- *SSR-F 76. Migrations and habitat of the tuna (*Thunnus thynnus* L.), studied by the method of the hooks, with observations on growth, on the operation of the fisheries, etc., by M. Sella. R. Comitato Talassografico Italiano, Memoria 156, Venice, 1929. Translated by Wilvan G. Van Campen. July 1952. 20 p., illus.
- *SSR-F 77. Oceanographic conditions and the albacore grounds east of Cape Nojima. (Contributions to fisheries guidance, no. 2) (Published by the Miyagi Prefecture Experiment Station, Apr. 1939) Translated from the Japanese language by Wilvan G. Van Campen. July 1952. 18 p., illus.
- *SSR-F 78. On the relation between the tuna fishery and oceanographic conditions, by Takeshi Kawana. Report of Fisheries investigations, v. 31, Hokkaido Fisheries Experiment Station, published Mar. 1934. Translated from the Japanese language by Wilvan G. Van Campen. July 1952. 33 p., illus.
- *SSR-F 79. The Japanese tuna fishing industry; five articles translated from the Japanese language by Wilvan G. Van Campen. July 1952. 32 p.
- *SSR-F 80. Pilchard eggs and larvae and other fish larvae, Pacific coast, 1950, by Elbert H. Ahlstrom. Oct. 1952. 58 p.
- *SSR-F 81. Yellowstone lake trout creel censuses, 1950-51, by Harvey L. Moore, Olive B. Cope, and Richard E. Beckwith. Sep. 1952. 41 p., illus.
- SSR-F 82. The tunas and their fisheries, by Hiroshi Nakamura. Published by Takeuchi Shobō, Tokyo, 1949. Translated from the Japanese language by W. G. Van Campen. Aug. 1952. 115 p., illus.
- SSR-F 83. Five Japanese papers on skipjack, translated from the Japanese language by W. G. Van Campen. Aug. 1952. 78 p., illus.
- *SSR-F 84. Furunculosis of fish, by Bruce M. McCraw. Dec. 1952. 87 p.
- SSR-F 85. 25 years of federal fishery research on the Great Lakes, by Ralph Hile. Oct. 1952. 48 p.
- *SSR-F 86. Tests of hatchery foods for salmon, 1951, by Roger E. Burrows, David D. Palmer, H. William Newman and Robert L. Azevedo. Nov. 1952. 24 p.
- *SSR-F 87. Doctoral dissertations on the management and ecology of fisheries; additional listings, 1952, prepared in the Branch of Fishery Biology. Oct. 1952. 44 p. Revision of SSR-F 31.
- *SSR-F 88. High speed plankton samplers, by Edgar L. Arnold, Jr., and Jack W. Gehringer. Sept. 1952. 12 p., illus.
- SSR-F 89. Offshore fishing in Bristol Bay and Bering Sea, by Joseph T. Barnaby. Oct. 1952. 30 p., illus.
- *SSR-F 90. Experimental surface gill net fishing for skipjack (*Katsuwonus pelamis*) in Hawaiian waters, by Walter M. Matsumoto. Nov. 1952. 20 p., illus.
- *SSR-F 91. Reaction of tunas and other fishes to stimuli. Nov. 1952. 83 p., illus. This report is also Contributions nos. 22-26, of the Hawaii Marine Laboratory, University of Hawaii.
- SSR-F 92. Use of electricity in the control of sea lampreys: electromechanical weirs and traps and electrical barriers, by Vernon C. Applegate, Bernard R. Smith, and Willis L. Nielsen. Dec. 1952. 52 p., illus.
- SSR-F 93. Directing the movement of fish with electricity, by Alberton L. McLain and Willis L. Nielsen. Jan. 1953. 24 p., illus.

- *SSR-F 94. Passage of shad at the Bonneville fishways, by G. B. Talbot. Mar. 1953. 30 p., illus.
- SSR-F 95. Morphometric measurements of Pacific scombrids, by Dorothy I. Y. Dung and William F. Royce. Feb. 1953. 170 p., illus.
- SSR-F 96. Destruction of undersized haddock on Georges Bank, 1947-51, by Ernest D. Premetz. May 1953. 31 p., illus.
- *SSR-F 97. Sea lamprey spawning; Wisconsin and Minnesota streams of Lake Superior, by Howard A. Loeb. June 1953. 36 p.
- *SSR-F 98. Longline fishing for deep-swimming tunas in the central Pacific, 1950-51, by Garth I. Murphy and Richard S. Shomura. May 1953. 47 p., illus.
- SSR-F 99. Trial of Denil-type fish ladder on Pacific salmon, by Leonard A. Fulton, Harold A. Gangmark, and Scott H. Bair. May 1953. 16 p., illus.
- SSR-F 100. Zooplankton volumes off the Pacific coast, 1952, prepared by the Staff of the South Pacific Fishery Investigations May 1953. 41 p.
- SSR-F 101. Fluctuation in trap net catches in the upper Mississippi River, by D. W. Kelley. May 1953. 38 p., illus.
- *SSR-F 102. Pilchard eggs and larvae and other fish larvae, Pacific coast, 1951, by Elbert H. Ahlstrom. May 1953. 55 p.
- *SSR-F 103. Length measurements of Lake Yellowstone trout, by Oliver B. Cope. June 1953. 17 p.
- ✓ SSR-F 104. Survey of the domestic tuna industry, by A. W. Anderson and W. H. Stolting and associates. June 1953. 436 p., illus.
- *SSR-F 106. Use of fish products in blueback salmon diets. Nov. 1953. 59 p., illus.
- SSR-F 107. Live-bait fishing for tuna in the central Pacific, by Isaac I. Ikehara. July 1953. 20 p., illus.
- *SSR-F 108. Longline fishing for deep-swimming tunas in the central Pacific; Jan. -June 1952, by Garth I. Murphy and Richard S. Shomura. Aug. 1953. 32 p., illus.
- SSR-F 109. Utilization of Alaskan salmon cannery waste, Parts 1 and 2, by Maurice E. Stansby and associates. Sept. 1953. 107 p., illus.
- SSR-F 110. Biological effects on hard clams of hand raking and power dredging, by John B. Glude and Warren S. Landers. Oct. 1953. 43 p., illus.
- SSR-F 111. Attempts to guide small fish with underwater sound, by Clifford J. Burner and Harvey L. Moore. Sept. 1953. 38 p., illus.
- *SSR-F 112. Tuna longline fishery and fishing grounds, by Hiroshi Nakamura. Published by the Association of Japanese Tuna Fishing Cooperatives, Tokyo, 1951. Translated from the Japanese language by W. G. Van Campen. Jan. 1954. 168 p., illus.
- SSR-F 113. Artificial fertilization of lakes and ponds, a review of the literature, by John A. Maciolek. Jan. 1954. 41 p.
- SSR-F 114. Experimental transportation of live shad past Susquehanna River dams, by Charles H. Walburg. Jan. 1954. 13 p., illus.
- SSR-F 115. Weakfish migration in relation to its conservation, by Robert A. Nesbit. Jan. 1954. 81 p., illus.
- *SSR-F 116. Progress in Pacific Oceanic Fishery Investigations, 1950-53, by Oscar E. Sette and the staff of P.O.F.I. Feb. 1954. 75 p., illus.
- SSR-F 117. Seasonal abundance of clam larvae in Rhode Island waters, 1950-52, by Warren S. Landers. Mar. 1954. 29 p., illus.
- *SSR-F 118. Variations in zooplankton abundance in Hawaiian waters, 1950-52, by Joseph E. King and Thomas S. Hida. Mar. 1954. 66 p., illus.
- *SSR-F 119. Variability of longline catches of yellowfin tuna, by Garth I. Murphy and Keith C. Elliott. Mar. 1954. 30 p., illus.
- *SSR-F 120. Creel census and expenditure study, North Fork Sun River, Montana, 1951, prepared in the Office of Missouri River Basin Studies, Billings, Montana. May 1954. 39 p., illus.

- SSR-F 121. Angling on Little Pigeon River, Great Smoky Mountains National Park, 1953, by Robert E. Lennon. Apr. 1954. 27 p., illus.
- SSR-F 122. Phosphorus content of waters along the west coast of Florida, by Herbert W. Graham, John M. Amison and Kenneth T. Marvin. Apr. 1954. 43 p., illus.
- SSR-F 123. Pacific sardine (pilchard) eggs and larvae and other fish larvae, Pacific Coast - 1952, by Elbert H. Ahlstrom. Apr. 1954. 76 p., illus.
- SSR-F 124. Tests on hatchery foods for salmon, 1952, by H. William Newman, David D. Palmer and Roger E. Burrows. Apr. 1954. 12 p.
- SSR-F 125. Zooplankton volumes off the Pacific Coast, 1949-50, by staff of the South Pacific Fishery Investigations. Apr. 1954. 54 p.
- SSR-F 126. Creel census and expenditure study, Madison River, Montana, 1950-52, prepared in the Office of Missouri River Basin Studies, Billings, Montana. Apr. 1954. 39 p., illus.
- SSR-F 127. Selected bibliography on the applications of electricity in fishery science, by Vernon C. Applegate, Paul T. Macy and Virgil E. Harris. Apr. 1954. 55 p.
- *SSR-F 128. Analysis of catches of nine Japanese tuna longline expeditions to the western Pacific, by Garth I. Murphy and Tamio Otsu. Dec. 1954. 46 p., illus.
- SSR-F 129. Destruction of undersized haddock on Georges Bank, 1952, by Ernest D. Premetz, with Robert L. Cory, James W. McKee, and Craig Slater. June 1954. 34 p., illus.
- SSR-F 130. §
- SSR-F 131. Mid-Pacific oceanography 2, by Townsend Cromwell and Mid-Pacific oceanography 3, by Thomas S. Austin. June 1954. 13, [139], 17, [34] p., illus.
- SSR-F 132. Zooplankton volumes off the Pacific Coast, 1953, prepared by staff of the South Pacific Fishery Investigations, U. S. Fish and Wildlife Service. June 1954. 38 p.
- SSR-F 133. §
- *SSR-F 134. Reaction of tuna to stimuli, 1953, by Albert L. Tester, Heeny Yuen and Michio Takata. July 1954. 33 p., illus. This report is also Contribution no. 56 of the Hawaii Marine Laboratory, University of Hawaii.
- SSR-F 135. Mid-Pacific oceanography, Part 4, Transequatorial waters, Jan.-Mar. 1952, by E. D. Stroup. Aug. 1954. 52 p., illus.
- SSR-F 136. Mid Pacific oceanography, Part 5, Transequatorial waters, May-June 1952, Aug. 1952, by Thomas S. Austin. Nov. 1954. 86 p., illus.
- SSR-F 137. §
- SSR-F 138. A virus disease of sockeye salmon: interim report, by Stanley W. Watson, Raymond W. Guenther and Robert R. Rucker. Dec. 1954. 36 p., illus.

STATISTICAL DIGESTS

- SD 1. Fishery statistics of the United States: 1939, by R. H. Fiedler. 1942. 220 p.
- SD 2. Alaska fishery and fur seal industries: 1940, by Ward T. Bower. 1942. 74 p.
- SD 3. Propagation and distribution of food fishes, fiscal year 1941, by Glen C. Leach, M. C. James, and E. J. Douglass. 1942. 25 p.
- SD 4. Fishery statistics of the United States: 1940, by R. H. Fiedler. 1943. 225 p.
- SD 5. Alaska fishery and fur seal industries: 1941, by Ward T. Bower. 1943. 71 p.
- SD 6. Propagation and distribution of food fishes, calendar year 1941, by Glen C. Leach, M. C. James, and E. J. Douglass. 1943. 26 p.
- SD 7. Fishery statistics of the United States: 1941, by R. H. Fiedler. 1945. 174 p.
- SD 8. Alaska fishery and fur seal industries: 1942, by Ward T. Bower. 1944. 52 p.
- SD 9. Propagation and distribution of food fishes, calendar year 1942, by M. C. James, O. Lloyd Meehan and E. J. Douglass. June 1944. 27 p.
- SD 10. Alaska fishery and fur-seal industries: 1943, by Ward T. Bower. 1944. 57 p.
- SD 11. Fishery statistics of the United States: 1942, by A. W. Anderson and E. A. Power. 1946. 248 p., illus.
- SD 12. Propagation and distribution of food fishes, calendar year 1943, by M. C. James, O. Lloyd Meehan and E. J. Douglass. 1945. 25 p.
- SD 13. Alaska fishery and fur seal industries: 1944, by Ward T. Bower. 1946. 79 p., illus.
- SD 14. Fishery statistics of the United States: 1943, by A. W. Anderson and E. A. Power. 1947. 241 p., illus.
- SD 15. Alaska fishery and fur-seal industries: 1945, by Ward T. Bower. 1948. 63 p., illus.
- SD 16. Fishery statistics of the United States: 1944, by A. W. Anderson and E. A. Power. 1948. 283 p., illus.
- SD 17. Alaska fishery and fur-seal industries: 1946, by Ward T. Bower. 1948. 70 p., illus.
- SD 18. Fishery statistics of the United States: 1945, by A. W. Anderson and E. A. Power. 1949. 372 p., illus.
- SD 19. Fishery statistics of the United States: 1946, by A. W. Anderson and E. A. Power. 1950. 265 p., illus.
- SD 20. Alaska fishery and fur-seal industries: 1947, by Seton H. Thompson. 1950. 78 p., illus.
- SD 21. Fishery statistics of the United States: 1947, by A. W. Anderson and W. A. Power. 1950. 285 p., illus.
- SD 22. Fishery statistics of the United States: 1948, by A. W. Anderson and E. A. Power. 1951. 305 p., illus.
- SD 23. Alaska fishery and fur-seal industries: 1948, by Seton H. Thompson. 1952. 60 p., illus.
- SD 24. Propagation and distribution of food fishes for the calendar years, 1944-1948, by O. Lloyd Meehan, E. J. Douglass, and Lee M. Duncan. 1952. 82 p.
- SD 25. Fishery statistics of the United States: 1949, by A. W. Anderson and C. E. Peterson. 1952. 298 p., illus.
- SD 26. Alaska fishery and fur-seal industries: 1949, by Seton H. Thompson. 1952. 68 p., illus.
- *SD 27. Fishery statistics of the United States: 1950, by A. W. Anderson and C. E. Peterson. 1953. 492 p., illus.
- SD 28. Propagation and distribution of food fishes for the calendar years, 1949-1950, by Lee M. Duncan and O. Lloyd Meehan. 1953. 38 p.
- SD 29. Alaska fishery and fur-seal industries: 1950, by Seton H. Thompson. 1953. 68 p., illus.
- SD 30. Fishery statistics of the United States, 1951, by A. W. Anderson and C. E. Peterson. 1954. 341 p., illus.
- SD 31. Alaska fishery and fur-seal industries: 1951, by Seton H. Thompson. 1954. 70 p., illus.
- SD 32. Propagation and distribution of food fishes for the calendar years 1951-1952, by Lee M. Duncan and O. Lloyd Meehan. 1954. 36 p.
- SD 33. Alaska fishery and fur-seal industries: 1952, by Seton H. Thompson. 1954. 68 p., illus.

STATISTICAL LISTS

- SL 1. Wholesale dealers in fishery products, Maine, 1954. Rev. Sept. 1954. 6 p.
- SL 2. Wholesale dealers in fishery products, New Hampshire, 1953. Rev. Dec. 1953. 1 p.
- SL 3. Wholesale dealers in fishery products, Massachusetts, 1954. Rev. Aug. 1954. 9 p.
- SL 4. Wholesale dealers in fishery products, Rhode Island, 1954. Rev. Aug. 1954. 2 p.
- SL 5. Wholesale dealers in fishery products, Connecticut, 1954. Rev. Aug. 1954. 1 p.
- SL 6. Wholesale dealers in fishery products, New York, coastal area, 1951. Rev. Oct. 1951. 12 p.
- SL 7. Wholesale dealers in fishery products, New Jersey, 1954. Rev. Oct. 1954. 3 p.
- SL 8. Wholesale dealers in fishery products, Pennsylvania, 1954. Rev. Oct. 1954. 3 p.
- SL 9. Wholesale dealers in fishery products, Delaware, 1954. Rev. Sept. 1954. 1 p.
- SL 10. Wholesale dealers in fishery products, Maryland, 1953. Rev. Dec. 1953. 12 p.
- *SL 11. Partial list of wholesale dealers in fishery products, Washington, D. C., 1949. 1 p.
- SL 12. Wholesale dealers in fishery products, Virginia, 1953. Rev. Dec. 1953. 12 p.
- SL 13. Wholesale dealers in fishery products, North Carolina, 1954. Rev. Aug. 1954. 6 p.
- SL 14. Wholesale dealers in fishery products, South Carolina, 1953. Rev. Dec. 1953. 2 p.
- SL 15. Wholesale dealers in fishery products, Georgia, 1953. Rev. Dec. 1953. 2 p.
- SL 16. Wholesale dealers in fishery products, Florida, 1954. Rev. Jan. 1954. 9 p.
- SL 17. Wholesale dealers in fishery products, Alabama, 1954. Rev. May 1954. 3 p.
- SL 18. Wholesale dealers in fishery products, Mississippi, 1954. Rev. Oct. 1954. 3 p.
- SL 19. Wholesale dealers in fishery products, Louisiana, 1954. Rev. Mar. 1954. 7 p.
- SL 20. Wholesale dealers in fishery products, Texas, 1954. Rev. Aug. 1954. 4 p.
- SL 21. Wholesale dealers in fishery products, California, 1954. Rev. Apr. 1954. 9 p.
- SL 22. Wholesale dealers in fishery products, Oregon, 1954. Rev. Apr. 1954. 4 p.
- SL 23. Wholesale dealers in fishery products, Washington, 1954. Rev. Apr. 1954. 9 p.
- SL 24. Wholesale dealers in fishery products, Minnesota, 1950 (Lakes area). Rev. Nov. 1951. 1 p.
- SL 25. Wholesale dealers in fishery products, Wisconsin, 1950 (Lakes area). Rev. Nov. 1951. 2 p.
- SL 26. Wholesale dealers in fishery products, Illinois, 1950. Rev. May 1951. 3 p.
- SL 27. Wholesale dealers in fishery products, Indiana, 1951. Rev. June 1951. 1 p.
- SL 28. Wholesale dealers in fishery products, Michigan, 1950. Rev. Nov. 1951. 3 p.
- SL 29. Wholesale dealers in fishery products, Ohio, 1952. Rev. Aug. 1952. 2 p.
- SL 30. Wholesale dealers in fishery products, Pennsylvania, 1951. Oct. 1952. 1 p.
- SL 31. Wholesale dealers in fishery products, New York, 1952. Rev. Aug. 1952. 2 p.
- SL 32. Wholesale dealers in fishery products, Minnesota, 1952. Aug. 1952. 2 p.
- SL 33. Wholesale dealers in fishery products, North Dakota, 1952 (Mississippi River and tributaries area). Aug. 1952. 1 p.
- SL 34. Wholesale dealers in fishery products, Wisconsin, 1952 (Mississippi River and tributaries area). Aug. 1952. 2 p.
- SL 35. Wholesale dealers in fishery products, Illinois, 1952 (Mississippi River and tributaries area). Aug. 1952. 3 p.

- SL 36. Wholesale dealers in fishery products, Iowa, 1952 (Mississippi River and tributaries area). Aug. 1952. 2 p.
- SL 37. \$
- SL 38. Wholesale dealers in fishery products, Missouri, 1952 (Mississippi River and tributaries area). Aug. 1952. 2 p.
- SL 39. Wholesale dealers in fishery products, Tennessee, 1952. Aug. 1952. 1 p.
- SL 40. Wholesale dealers in fishery products, Oklahoma 1951. Rev. Mar. 1953. 1 p.
- SL 41. Wholesale dealers in fishery products, Arkansas, 1952. Aug. 1952. 2 p.
- SL 42. Wholesale dealers in fishery products, Kentucky, 1952. Aug. 1952. 1 p.
- SL 43. Wholesale dealers in fishery products, Alabama, 1952 (Mississippi River and tributaries area). Aug. 1952. 1 p.
- SL 44-50. \$
- *SL 51. Cold storage warehouses in the United States and Alaska catering to the storage of fishery products, 1945. 1945. 7 p. Replaced by the annual cold storage bulletin in the CFS series.
- SL 52. Buyers and tanners of shark hides or fish skins, 1945. 1 p.
- SL 53-100. \$
- SL 101. Firms canning salmon, 1953. Rev. Apr. 1954. 3 p.
- SL 102. Firms canning Maine sardines, 1953 (including sea herring). Rev. Apr. 1954. 2 p.
- SL 102A. Firms canning California sardines, 1953 (pilchards). Rev. Apr. 1954. 1 p.
- SL 103. Firms canning tuna and tunalike fishes, 1953. United States, Puerto Rico and Hawaii. Rev. May 1954. 2 p.
- SL 104. Firms canning mackerel, 1953. Rev. May 1954. 1 p.
- SL 105. Firms canning alewives and alewife roe, 1953. Rev. Apr. 1954. 1 p.
- SL 106. Firms canning shad or shad roe, 1953. Rev. Apr. 1954. 1 p.
- SL 107. Firms canning fish and shellfish specialties, 1953. Rev. May 1954. 6 p.
- SL 108. Firms canning salmon eggs for bait, 1953. Rev. Apr. 1954. 1 p.
- SL 109. Firms canning caviar and fish roe, 1953. Rev. Apr. 1954. 2 p.
- SL 110. Firms canning oysters, 1953. Rev. May 1954. 2 p.
- SL 111. Firms canning clam products, 1953. Rev. May 1954. 2 p.
- SL 112. Firms canning shrimp, 1953. Rev. Apr. 1954. 2 p.
- SL 113. Firms canning crab meat, 1953. Rev. May 1954. 2 p.
- *SL 114. Firms canning mussels, 1945. 1946. 1 p. Later issues incorporated with SL 115.
- *SL 115. Firms canning miscellaneous shellfish and turtle products, 1947. 1949. 2 p. Later issues combined with SL 107.
- SL 116. Firms canning food for animals, from marine-animal products, 1953. Rev. Apr. 1954. 2 p.
- SL 117. Firms canning Pacific sea herring, 1953. Rev. May 1954. 1 p.
- SL 118. Firms canning groundfish flakes, 1952. Rev. Mar. 1953. 1 p.
- SL 119. Firms canning squid, 1953. Rev. May 1954. 1 p.
- SL 120. Firms canning anchovies, 1953. Rev. Apr. 1954. 1 p.
- SL 121-150. \$
- SL 151. Firms manufacturing fish meal, scrap, body and liver oils, 1953. Rev. Apr. 1954. 8 p.
- SL 152. Firms manufacturing oyster shell products, 1953. Rev. May 1954. 2 p.
- SL 153. Firms manufacturing fish glue and isinglass, 1953. Rev. May 1954. 1 p.
- SL 154. Firms manufacturing seaweed products, 1953. Rev. May 1954. 1 p.

SL 155. Firms manufacturing marine pearl-shell buttons, 1953. Rev. Apr. 1954. 1 p.

SL 156. Firms manufacturing pearl essence, 1953. Rev. May 1954. 1 p.

*SL 157. Firms manufacturing fish-liver oils, 1948. 1949. 2 p. Later issues combined with SL 151.

SL 158. §

SL 159. Firms manufacturing fresh-water musselshell products, 1953. Rev. Apr. 1954. 1 p.

SL 160. Firms manufacturing menhaden oil and meal, 1953. Rev. Apr. 1954. 2 p.

SL 161. Producers of packaged fish, 1953. Rev. July 1954. 6 p.

TEST KITCHEN SERIES

TKS 1. Fish cookery for one hundred, by Rose G. Kerr. 1950. 44 p., illus.

TKS 2. Basic fish cookery, by Rose G. Kerr. Design and photographs by Shirley A. Briggs. 1954. 26 p., illus.

TKS 3. How to cook oysters, by Rose G. Kerr and Jean Burtis. 1953. 13 p., illus.

TKS 4. How to cook salmon, by Kathryn L. Osterhaug and Rose G. Kerr. 1951. 14 p., illus.

TKS 5. Fish recipes for school lunches. 1952. 15 p.

TKS 6. How to cook ocean perch, by Dorothy M. Robey and Rose G. Kerr. 1952. 10 p., illus.

TKS 7. How to cook shrimp, by Jean Burtis and Rose G. Kerr. 1952. 14 p., illus.

TKS 8. How to cook clams, by Kathryn L. Osterhaug and Rose G. Kerr. 1953. 14 p., illus.

AUTHOR INDEX

A

- Abernethy, R. F.
Vilbrandt, F. C., and. Doc 1078
- Adams, Claude M. FL 263
- Adamson, John. Sep 28
- Ahlstrom, Elbert H. FB 93; SSR 23, 54;
SSR-F 80, 102, 123
and Ball, O. P. FB 97
Marr, J. C., and. SSR 56
Smith, O. R., and. SSR 44
- Aikawa, Hiroaki
and Kato, M. SSR-F 21
- Alberts, Hugo W. FL 227
- Aldrich, A. D. PFC v.9, no.2 D, v.11, no.1 C
- Alexander, Devora R.
Stolting, W. H., and. FL 410
- Allen, Walter M. PFC v.9, no.2 J
- Aller, Barbara B. FL 200, 300
- Allison, Leonard N. PFC v.13, no.3 A
Carr, F. V., and. PFC v.11, no.4 J
- Altmeyer, Arthur J. Sep 69
- Almario, Crisanto
Clague, J. A., and. RR 27
- Alverson, Dayton L. Sep 292, 359
and Chenoweth, H. H. Sep 288
Powell, D. E., and Livingstone, R., Jr.
FL 402
- Amison, John M.
Graham, H. W., and Marvin, K. T.
SSR-F 122
- Anderson, A. L. PFC 26 B
- Anderson, Andrew W. Sep 17, 56, 211
and Harrison, R. W., Pottinger, S. R.
IR 32
and Peterson, C. E. SD 25, 27, 30
and Power, E. A. SD 11, 14, 16, 18, 19,
21, 22
and Stolting, W. H. SSR-F 104
Harrison, R. W., and Pottinger, S. R.
IR 30
Harrison, R. W., and with others. IR 36,
40
Harrison, R. W., with others, and. IR 28
Pottinger, S. R., Harrison, R. W., and.
IR 31
- Anderson, Bertil G. PFC v.16, no.2 B
- Anderson, Lyle. Sep 46, 99
and Piskur, F. FL 93
- Anderson, R. B.
and Betzold, W. W., Carr, W. J. Sep 240
- Anderson, W. W.
and Lindner, M. J., King, J. E. FL 368,
Sep 121
- Pearson, J. C., and. FL 142
- Weymouth, F. W., Lindner, M. J., and.
FB 14
- Anderson, Wallace L. PFC v.10, no.3 A
- Anderson, Wendel
Herman, E. F., and. PFC v.9, no.4 G
- Andrews, A. E. PFC 10 B
- Andrews, Emmett. FL 262, 276, 291
- Anglo-American Caribbean Commission.
FL 135
- Anson, B. J.
Barney, R. L., and. Doc 938
- Anzulovic, J. V.
and Reedy, R. J. FL 415

Applegate, Vernon C. FL 384; SSR-F 55
 and Macy, P. T., Harris, V. E. SSR-F 127
 and Smith, B. R. SSR-F 61
 and Smith, B. R., Nielsen, W. L. SSR-F 92
 and Smith, B. R., with others. SSR-F 68
 Arana, Francisca
 Puncochar, J. F., and. FL 240
 Arcisz, William. SSR-F 27
 and Sandholzer, L. A. Sep 176
 Sandholzer, L. A., and. Sep 128
 Sandholzer, L. A., and with others. FL 335 (pt 2)
 Arnold, Edgar L., Jr. PFC v.13, no.1 B
 and Gehringer, J. W. SSR-F 88
 and Royce, W. F. SSR-F 11
 Schuck, H. A., and. FB 67
 Atkinson, C. E. Sep 381
 Audigé, J.
 Mir, E., and. FL 40
 Austin, Thomas S. SSR-F 131, 136
 Avery, Arthur C. FL 377; RR 26
 Azevedo, Robert L.
 Burrows, R. E., with others, and. SSR-F 86
 Palmer, D. D., and with others. PFC v.14, no.3 G

B

Babcock, John Pease. Doc 1073
 Bacon, Edward H.
 Ball, R. C., and. PFC v.16, no.3 B
 Baerends, G. P. SSR-F 13
 Baievsky, Boris. Doc 1006
 Bailey, Lloyd P.
 Cleary, R. E., and. PFC v.12, no.2 F
 Baker, Ralph C. FL 299, 380
 Balch, A. C. PFC v.9, no.3 K

Baldwin, W. H.
 and Parks, L. E. FL 63
 Pottinger, S. R., and. Sep 145
 Ball, Edward M.
 Rich, W. H., and. Doc 1041, 1102; FB 7, 13
 Ball, Orville P.
 Ahlstrom, E. H., and. FB 97
 Ball, Robert C.
 and Bacon, E. H. PFC v.16, no.3 B
 Bair, Scott H.
 Fulton, L. A., Gangmark, H. A., and, SSR-F 99
 Baltzo, C. Howard
 and Erickson, D. W. FL 322
 Balzer, George C., Jr.
 Phillips, A. M. Jr., with others, and. PFC v.14, no.2 E
 Barker, Will
 Rhode, C. J., and. Cir 17
 Barnaby, Joseph T. FB 39;
 SSR-F 89
 Barney, R. L. Doc 917
 and Anson, B. J. Doc 938
 Baten, William Dowell
 and Tack, P. I. PFC v.14, no.2 B
 Bates, Donald H., Jr., FL 351
 Bauer, A. D.
 Lane, F. W., and with others. Doc 995
 Bauman, Aden C. PFC v.9, no.2 B
 Beard, Harry R. Doc 1020
 Bearse, Henry M. Sep 57, 62
 and Royce, W. F. FL 167
 Herrington, W. C., and Firth, F. E. SSR 5
 Beckman, William C.
 and Kutkuhn, J. H. PFC v.15, no.3 L
 Beckwith, Richard E.
 Moore, H. L., Cope, O. B., and. SSR-F 81
 Bell, Frank T. PFC 15 A, 28 A
 Bell, Frank T.
 and Higgins, E. IR 42
 Bell, Joe O.
 Collier, A., with others, and. FB 84

- Bender, Maurice
Nilson, H. W., and. Sep 263
- Bengard, Frank A. PFC v.13, no.1 I
- Bennett, C. H.
Noble, R. D., and. FL 56
- Bennett, Leslie H. PFC 30 C,
v.9. no.3 M, v.10, no. 2 L
Sharp, R. W., and Saeugling, E. C.
PFC v.14, no.1 G
- Benson, Norman G.
Cooper, E. L., and. PFC v.13, no.4 B
- Bernier, A. F.
Rucker, R. R., and with others. PFC
v.13, no.3 F
- Berry, E. P.
and Carrick, C. W., with others. FL 159
- Betzold, C. W.
Anderson, R. B., and Carr, W. J.
Sep 240
- Bigelow, Henry B. Doc 968, 969
and Schroeder, W. C. FB 20, 74
and Welsh, W. W. Doc 965
- Binson, Lucille S.
Lusby, R. M., and. Sep 90
- Birge, Edward A.
and Juday, C. Doc 905, 1012
- Bishop, Clinton G.
Phenicie, C. K., and. PFC v.12, no.3 J
- Bittenbender, C. D. Sep 245, 252
- Bjork, Jeanne E.
Leekley, J. R., and with others. FL 405
Ten Eyck, R. N., Magnusson, H. W.,
and. Sep 301
- Blair, Buell W.
and Cameron, E. J., and Jarvis, N. D.
FL 104, Sep 7
- Bjosz, John. PFC v.10, no.2 I, v.14, no.2 D
- Blystad, Chester N. Doc 950
- Bogdanov, Alexander S. Sep 168
- Bolster, H. G. FL 304 (pt.2)
- Bond, Lyndon H.
Rounsefell, G. A., and White, G. K.
PFC v.12, no.3 K
- Bonham, Kelshaw
and Williams, R. W. PFC v.10, no.1 B
- Sanford, F. B., and. Sep 139, 184
Sanford, F. B., and with others. Sep 94
Sanford, F. B., Clegg, W., and. Sep 116
- Boorman, W. R.
Kemmerer, G., Bovard, J. F., and.
Doc 944
- Borell, A. E. PFC v.11, no.4 I
- Borovicka, Robert L. PFC v.12, no.1 I
- Bourgois, Francois. FL 389
- Bovard, J. F.
Kemmerer, G., and Boorman, W. R.
Doc 944
- Bower, Ward T.
AR 2, 7, 11, 16, 19, 23, 28, 31, 36,
40; Doc 909, 933, 951, 973, 992, 1008,
1023, 1040, 1064, 1086; EC 69; FL 77;
SD 2, 5, 8, 10, 13, 15, 17
- Bradley, Martha C.
Sandholzer, L. A., with others, and.
FL 335 (pt.2)
- Branch of Commercial Fisheries see Commercial
Fisheries, Branch of.
- Branch of Fishery Biology see Fishery Biology,
Branch of.
- Branch of Federal Aid see Federal Aid,
Branch of.
- Branch of Game-Fish and Hatcheries see
Game-Fish and Hatcheries, Branch of.
- Brann, W. Paul. FL 246
- Branum, Rudolph W. PFC v.13, no.3 M
- Brass, John L. PFC 32 F
- Breder, C. M., Jr. Doc 927
Welsh, W. W., and. Doc 945
- Brennan, Jean D. FL 238
- Brice, Richard F.
Johnson, H. E., and. PFC v.14, no.3 C,
v.15, no.1 G, v.15, no.3 B, v.15,
no.4 G; RR 35
- Broad, Carter. FL 366; Sep 242
- Broadbent, Verne W. FL 230

- Brockway, Donald R. PFC v.12, no. 3 B,
v.15, no. 2 L
- Phillips, A. M. Jr., and. PFC v.9,
no. 3 G, v.10, no. 3 B, v.16, no. 2 C
- Phillips, A. M., Jr., and Maxwell, J. M.
PFC v.14, no.1 D
- Phillips, A. M., Jr., and Rodgers, E. O.
PFC v.11, no.2 C, v.11, no.3 A, v.12,
no. 2 C
- Phillips, A. M., Jr., and with others
PFC v.14, no. 2 E
- Phillips, A. M. Jr., Nielsen, R. S., and.
PFC v.16, no. 4 B
- Brown, E. D. PFC 33 C
- Brown, Lewis Dean. FL 356
- Brown, William H. PFC v.14, no. 2 I,
v.14, no. 4 H
- Jurgens, K. C., and. PFC v.16, no. 4 F
- Bryan, Paul
and Miller, L. F. PFC v.15, no. 2 E
- Bryant, Floyd G. SSR 62
- and Parkhurst, Z. E. SSR-F 37
- Parkhurst, Z. E., and Nielson, R. S.
SSR-F 36
- Silliman, R. P., Rich, W. H., and.
SSR 34
- Bryant, Maurice, Jr. PFC v.11, no. 2 J,
v.12, no. 2 J, v.13, no. 2 J
- Bucher, Dorris L. Sep 82, 107
- and Heerdt, M., Osterhaug, K. FL 265
(pt. 1)
- and Osterhaug, K. L. Sep 43
- Heerdt, M., and Stansby, M. E. FL 128
- Osterhaug, K. L., and. FL 144
- Bucher, Glenn C.
and Clegg, W., Sanford, F. B. FL 290;
Sep 88
- and Hamm, W. S., with others. FL 289;
Sep 87
- and Osterhaug, K. L. Sep 81
- and Sanford, F. B., Miyauchi, D. T.
Sep 180
- McKee, L. G., Sanford, F. B., and.
FL 141; Sep 84
- Sanford, F. B. and. FL 226; Sep 97
- Sanford, F. B., and Clegg, W. FL 138;
Sep 72
- Sanford, F., Cantillo, M., and. FL 205;
Sep 93, 98
- Sanford, F. B., Holland, G. A., and.
Sep 248
- Sanford, F. B., with others, and.
Sep 94
- Buckner, Cecelia R.
Sandholzer, L. A., and. Sep 160
- Buettner, Howard J.
Hile, R., Lunger, G. F., and. FB 75
- Buller, Raymond J. SSR-F 58
and Spear, H. S. SSR-F 7
- Webster, J. R., and. SSR-F 10
- Bullis, Harvey R. FL 394
- Springer, S., and. FL 406; Sep 380
- Burner, Clifford J. FB 61; Sep 349
and Moore, H. L. SSR-F 111
- Burr, Keith O. Sep 96
- Russell, R., and. Sep 2
- Burrows, Charles R; PFC v.11, no. 4 A
- Burrows, Roger E. PFC 46 F, 53 C, v.11,
no. 2 A, v.11, no. 3 H, v.13, no. 1 D,
v.13, no. 2 E, v.13, no. 4 H
- and Manning, J. E. PFC v.9, no. 1 I
- and Palmer, D. D. PFC v.11, no. 3 B
- and Palmer, D. D., Newman, H. W.
PFC v.14, no. 3 E
- and Palmer, D. D., with others.
SSR-F 86
- and Robinson, L. A., Palmer, D. D.
SSR-F 59
- Fish, F. F., and. PFC 45 E
- Hewitt, G. S., and. PFC v.10, no. 1 D
- Newman, H. W., Palmer, D. D., and.
SSR-F 124

Burrows, Roger E. (Continued)

Palmer, D. D., and with others.
PFC v.16, no.3 A

Palmer, D. D., with others, and.
PFC v.13, no.2 A, v.14, no.3 G

Palmer, D. D., Robinson, L. A., and.
PFC v.13, no.4 E

Robinson, L. A., Palmer, D. D., and.
SSR-F 60

Robinson, L. A., with others and.
SSR-F 63

Rucker, R. R., with others, and.
PFC v.13, no.3 F

Burtis, Jean. FL 219

and Kerr, R. G. FL 404; TKS 7

Kerr, R. G., and. TKS 3

Kerr, R. G., with others, and. FL 285

Burton, L. V. FL 54

Butcher, A. Dunbavin. PFC v.9, no.1 D

Butler, Charles. FL 126, 233; Sep 91, 124,
133

and Magnusson, H. W. Sep 306 (pt. 4)

and Puncoschar, J. F., Knake, B. O.
Sep 306 (pt. 3)

Butler, Philip A. RR 31; SSR-F 8; Sep 352

and Engle, J. B. SSR-F 14

Butler, Robert L.

and Smith, L. L., Jr. PFC v.15, no.4 D

C

Cabaniss, William I. Sep 340

Cable, Louella E. Doc 1037; Sep 45

Hildebrand, S. F., and. Doc 1093;
FB 16, 24

Cahn, Alvin R. FL 309, 314, 357, 383, 399;
PFC 29 B

Calderwood, Howard N.

Galtsoff, P. S., with others, and. FB 43

Calderwood, Margaret M. SSR-F 105

California Division of Fish and Game
and Washington (State) Dept. of Fisher-
ies, Oregon Fish Commission.
Sep 203

Cameron, E. J.

Blair, B. W., and Jarvis, N. D. FL 104;
Sep 7

Campen, W. G. See Van Campen, Wilvan G.

Canfield, H. L. EC 56; PFC v.9, no.1 E

and Wiebe, A. H. EC 73

Cannady, Bruce B. PFC v.10, no.2 E

Cantillo, Manuel

Heerdt, M., Jr., Hoyos, F., and. Sep
174

Sanford, F. B., and Bucher, G. C.
FL 205; Sep 93, 98

Carbine, W. F. PFC v.10, no.4 C, v.15,
no.2 H

Carl, G. Clifford. PFC 45 H, 47 B, 53 G

Carl, John

and Hodgson, J. R. PFC 31 D

Carlander, Kenneth D.

and Lewis, W. M. PFC v.10, no.3 D

Lewis, W. M., and. PFC v.11, no.4 H

Carlson, Tom E. PFC v.12, no.2 I

Carlson, Carl B. FL 301, 316, 326, 414;
Sep 101, 106, 161, 316, 363, 383

and Firth, F. E., Christey, L. S.
Sep 16

Firth, F. E., and. FL 66; Sep 27

Lemon, J. M., and. FL 278

Wigutsoff, N. B., and. FL 361
414 (pt. 5)

Carlson, Clarence J. Sep 384

and Dassow, J. A. Sep 322 (pt. 2)

Wigutsoff, N. B., and. FL 375

Carp, Bertha. FL 390

Carr, Fred V.

and Allison, L. N. PFC v.11, no.4 J

Carr, W. J.

Anderson, R. B., Betzold, C. W., and.
Sep 240

Authors

- Carrick, C. W.
Berry, E. P., and with others. FL 159
- Carrigan, Edward J.
Jones, G. I., and Dassow, J. A.
Sep 262
- Carson, Rachel L. CB 33, 34, 37, 38
- Carver, Joseph H. Sep 388
- Cating, James P. FB 85
- Chace, Fenner A., Jr.
and Dumont, W. H. Sep 229
- Chamberlain, Thomas K. Doc 1103; PFC v. 9,
no. 2 C
and Huber, W. W. PFC v. 9, no. 4 C
Lynch, J. J., and with others. SSR 39
Mottley, C. M., and. PFC v. 10, no. 4 B
- Chambers, John S.
and Magnusson, H. W. SSR-F 53
- Chance, C. J.
Miller, L. F., and. PFC v. 16, no. 1 A
- Chapman, Wilbert McLeod. FL 95; Sep 222
- Chenoweth, Harry H.
Alverson, D. L., and. Sep 288
- Chilton, Cyrus H. FL 353
Timmis, H. E., and. MDL 60
- Chipman, Jack R. PFC v. 12, no. 4 G
- Chipman, Walter A., Jr. SSR 61; Sep 205
and Galtsoff, P. S. SSR-F 1
and Thompson, P. E. SSR-F 9
Galtsoff, P. S., and with others.
FB 43; IR 37
- Christey, Leroy S. Sep 77
and Power, E. A. Sep 15
Carlson, C. B., Firth, F. E., and.
Sep 16
Davidson, F. A., and. FB 25
- Churchill, E. P., Jr.
and Lewis, S. I. Doc 963
- Churchill, Warren S. PFC v. 14, no. 1 A
- Clague, John A. Sep 210
and Almario, C. RR 27
- and Datingaling, B. RR 22
- Hamm, W. S., and. RR 24
- Warfel, H. E., and. RR 15
- Clark, E. D.
Clough, R. W., and Jarvis, N. D. FL 80
- Clark, Howard Walton
Jordan, D. S., Evermann, B. W.
and. Doc 1055
- Clark, John R. Sep 319 (pt. 1), 321, 335
Schuck, H. A., and. Sep 285
- Clark, Minor. PFC v. 12, no. 1 E
- Clark, O. H. PFC v. 15, no. 2 C
- Clarke, George M.
Perlmutter, A., and. FB 45
- Classen, T. E. A. FL 188
- Cleary, Robert E.
and Bailey, L. P. PFC v. 12, no. 2 F
- Cleaver, Fred C.
and Shimada, B. M. Sep 260
- Clegg, William
and Sanford, F. B., Stansby, M. E.
Sep 103
Bucher, G. C., and Sanford, F. B.
FL 290; Sep 88
Bucher, G. C., with others, and.
FL 289; Sep 87
Sanford, F. B., and. Sep 264
Sanford, F. B., and Bonham, K.
Sep 116
Sanford, F. B., and with others. Sep 94
Sanford, F. B., Bucher, G. C., and.
FL 138; Sep 72
- Clemens, Howard P. PFC v. 14, no. 1 H
- Cliff, E. P.
Needham, P. R., and. PFC 40 D
- Clough, R. W.
and Clark, E. D., Jarvis, N. D. FL 80
- Coates, John A.
and Woodall, A. N. PFC v. 15, no. 2 F
- Cobb, Eugene S. PFC v. 15, no. 1 D
- Cobb, John N. Doc 902, 1014, 1092

Cobb, Mary Curtis
Fish, C. J., and. RR 36

Code, Mark R. PFC v.12, no.2 G

Coker, Robert E. Doc 911, 936, 1004, 1063, 1072

Coleman, R. A. Doc 937

Collier, Albert W.
and Marvin, K. T. FB 79
and Ray, S. M., with others. FB 84

Collins, Gerald B. FB 73; SSR-F 65
and Volz, C. D., Trefethen, P. S.
FB 92

Comelli, Alfredo
and Stora, D. L. FL 266

Commercial Fisheries, Branch of. FL 2,
30, 33, 48, 53, 61, 117, 178, 195, 199,
215, 224, 336, 359

Commercial Fisheries, Branch of. Economics
and Cooperative Marketing Section.
FL 149, 150, 151, 152, 153, 154, 171

Commercial Fisheries, Branch of. Educat-
ional and Market Development
Section. FL 69, 243

Commercial Fisheries, Branch of. Fishery
Technological Laboratory, Boston.
Sep 362

Conn, W. T. Doc 1075; EC 74; FL 35
Webster, A. I., and. FC 19

Connell, Frank H. PFC 34 B
and Palmer, E. D. PFC 44 C

Conner, Jack E. FL 329

Cooper, Edwin L. PFC v.15, no.4 B
and Benson, N. G. PFC v.13, no.4 B

Cope, Oliver B. PFC v.14, no.3 H, v.15,
no.1 I, v.15, no.3 K, v.16, no.3 J;
SSR-F 2, 75, 103

Erkkila, L. F., and with others.
SSR-F 56

Moore, H. L., and Beckwith, R. E.
SSR-F 81

Copeland, T. H. PFC v.9, no.4 D

Cornell, J. H. PFC v.11, no.2 D
Ratlidge, H. M., and. PFC v.14, no.3 F,
v.15, no.2 B

Cory, Robert L.
Premetz, E. D., and with others.
SSR-F 129

Cottam, Clarence
and Higgins, E. Cir 11
and Uhler, F. M. PFC 14 A

Coulson, E. J. IR 17, 18, 25
and Remington, R. E., Lynch, K. M.
IR 23

Nilson, H. W., and. IR 41

Cowles, R. P. Doc 1091

Cox, Fred L. PFC v.11, no.3 J

Craig, Joseph A.
and Hacker, R. L. FB 32
and Suomela, A. J. SSR 14
and Townsend, L. D. SSR 33

Cramer, Frederick K.
and Hammack, D. F. SSR-F 67

Craven, H. J.
and Dassow, J. A. Sep 305

Crawford, D. R.
and De Smidt, W. J. J. Doc 925

Crocker, Richard S. FL 220

Cromwell, Townsend. SSR-F 54, 131

Crowe, Walter R. PFC v.12, no.4 A

Crowther, H. E. Sep 274

Culler, C. F. PFC 36 C, v.10, no.1 I; Sep 8

Cummins, Robert, Jr. PFC v.16, no.2 F

D

Dahlgren, Edwin H.
and Kolloen, L. N. FL 16; SSR 25

Rounsefell, G. A., and. FB 9, 17

Danglade, Ernest. Doc 934

Daniel, Esther Peterson
and McCollum, E. V. IR 2

- Darling, Dorothy B.
and Nilson, H. W. Sep 146
- Nilson, H. W., Martinek, W. A., and.
FL 296
- Darling, J. S. Sep 214
- Dassow, John A. FL 265 (pt.2), 374; Sep 373
and Stansby, M. E. FL 332
Carlson, C. J., and. Sep 322 (pt.2)
Craven, H. J., and. Sep 305
Ellson, J. G., Knake, B. and. FL 342
Heerdt, M., Jr., and. Sep 330
Jones, G. I., Carrigan, E. J., and.
Sep 262
Sanford, F. B., and Dietrich, E. F.
Sep 267
Stansby, M. E., and. Sep 233, 279
- Datingaling, Bienvenido
Clague, J. A., and. RR 22
- Davidson, Frederick A. FB 15
and Christey, L. S. FB 25
and Hutchinson, S. J. FB 26; PFC 30 B
and Shostrom, O. E. IR 33
- Davis, H. S. Doc 924, 957, 987, 988, 1061;
FB 41; FC 26; FL 70; IR 22, 35;
PFC 9 B, 13 A, 27 C, 42 D, 50 A;
RR 12
and Lord, R. F., Jr. Doc 1079
and Wiebe, A. H. Doc 1085
Hayford, C. O., and. PFC 17 B
- Day, Albert M. PFC v.12, no.2 A; Sep 238,
246
- Dean, Margaret E.
Sandholzer, L. A., and with others.
FL 335 (pt.2)
- Deason, H. J. FL 101
- Dees, Lola Tidwell. FL 360
- DeLoach, Barton. IR 39
- Demon, Joan
King, J. E., and. FB 82
- Denham, S. C. Sep 207, 219
- Denmead, Talbott. FC 9, 16, 20, 24, 27;
PFC v.12, no.1 F
- Dequine, John F. PFC v.14, no.3 B
- De Smidt, W. J. J.
Crawford, D. R., and. Doc 925
- Desmond, Richard C. FL 381
- Deuel, Charles R. PFC 29 A
- DeWitt, John W., Jr. PFC v.16, no.4 A
- Dieffenbach, Rudolph. PFC v.9, no.1 B
- Dietrich, Ernest F.
Sanford, F. B., Dassow, J. A., and.
Sep 267
- Dillon, W. R. PFC 54 B
- Dinsmore, A. H. PFC 46 D
- Division of Commercial Fisheries see Com-
mercial Fisheries, Branch of.
- Division of Fish Culture see Game-fish and
Hatcheries, Branch of.
- Division of Fishery Biology see Fishery
Biology, Branch of.
- Division of Fishery Industries see Commer-
cial Fisheries, Branch of.
- Division of Game-fish and Hatcheries see
Game-fish and Hatcheries, Branch of.
- Division of Game Management see Game
Management, Branch of.
- Division of Information see Information
Division.
- Dobie, John R. PFC v.13, no.3 E, v.14, no.1 E
and Meehean, O. L., Washburn, G. N.
Cir 12
- Donaldson, Ivan J.
Hanson, H. A., Zimmer, P. D., and.
SSR-F 29
- Donaldson, John R.
Seymour, A. H., and. PFC v.15, no.3 J
- Donaldson, Lauren R.
and Foster, F. J. PFC 19 A, 27 B, 32 A,
40 B, 46 C, 47 F, 53 E
and Foster, R. F. PFC 44 B
Katz, M., and. PFC v. 12, no. 1 C
- Donovan, Walter W. Sep 118

Dorr, Thomas H. PFC v.9, no.3 J

Douglass, E. J.
James, M. C., Meehean, O. L., and.
CB 35; SD 9, 12

Leach, G. C., James, M. C., and. AR 34,
38, 42; SD 3, 6

Meehean, O. L., and Duncan, L. M. SD 24

Dubets, Harry. PFC v.16, no.3 H

Dumont, William H.
Chace, F. A., Jr., and. Sep 229

Dunavant, Ruth L.
Sandberg, A. M., and. FL 421

Duncan, Enoch S. FL 310

Duncan, Lee M. PFC v.9, no.1 G, v.13, no.1 F
and Meehean, O. L. SD 28, 32

Meehean, O. L., Douglass, E. J., and.
SD 24

Dung, Dorothy I. Y.
and Royce, W. F. SSR-F 95

Dunn, W. A.
Wood, E. M., and. PFC v.10, no.2 D

Dunsford, H. W. FL 203

Duthrie, R. J. FL 44

E

Earle, Swepson. PFC 31 A; SSR 6

Earp, B. J.
and Schwab, R. L. PFC v.16, no.3 D

Eckles, Howard H. FB 48; Sep 231

Eddy, Samuel. PFC 41 B, 48 E

Edmondson, Charles H. Doc 920

Ego, Kenji
and Otsu, T. Sep 315

Eicher, George J., Jr. PFC v.9, no.2 G;
SSR-F 64

Elling, C. H.
Kolloen, L. N., and. SSR 52

Elliott, Keith C.
Murphy, G. I., and. SSR-F 119

Elliott, R. Paul. FL 274, 298; Sep 221
and Osterhaug, K. L. FL 264; Sep 151

Shockey, C. F., Stansby, M. E., and.
Sep 37

Ellis, Marion D.
Ellis, M. M., Merrick, A. D., and.
Doc 1097

Ellis, M. M., Westfall, B. A., and. RR 9

Ellis, Max M. FB 22, 34; FC 5, 7; FL 221;
PFC 20 A, 38 A; SSR 1-4, 8, 9, 12,
42

and Merrick, A. D., Ellis, M. D.
Doc 1097

and Westfall, B. A. SSR 11

and Westfall, B. A., Ellis, M. D. RR 9

and Westfall, B. A., with others, SSR 38

Westfall, B. A., and. SSR 7

Ellson, J. G. FL 385 (pt.1); Sep 341
and Knake, B., Dassow, J. FL 342
and Livingstone, R., Jr. Sep 311
and Powell, D. E., Hildebrand, H. H.
FL 369

Engle, Earl Theron. Doc 994

Engle, James B. SSR 29, 59
and Loosanoff, V. L. FB 33

Butler, P. A., and. SSR-F 14

Galtsoff, P. S., and with others. FB 43

Galtsoff, P. S., Prytherch, H. F., and.
FC 25

Galtsoff, P. S., with others, and. IR 37

Loosanoff, V. L., and. FB 42; RR 2;
Sep 19

Ennis, W. B., Jr.
Surber, E. W., Minarik, C. E., and.
PFC v.9, no.3 F

Erickson, Donald W.
Baltzo, C. H. and. FL 322

Erkkila, Leo F. PFC 20 C
and Moffett, J. W., with others.
SSR-F 56

Eschmeyer, Paul H. PFC v.15, no.2 G

Eschmeyer, Paul H. (Continued)
 Hile, R. and Lunger, G. F. FB 60
 Eschmeyer, R. W. PFC 19 C, 47 E
 Espenshade, Ada V. FL 279
 Eustis, A. B.
 and Hillen, R. H. PFC v.16, no.1 E
 Evans, C. A.
 Rucker, R. R., with others, and. FB 76
 Evans, Prentiss W. FL 184
 Evans, William
 Stephens, R. F., and. PFC v.12, no.3 I
 Everhart, Max H.
 Surber, E. W., and. PFC v.12, no.3 D
 Evermann, Barton Warren
 Jordan, D. S., and Clark, H. W. Doc 1055

F

Fearnow, Edgar C. Doc 935, 980; EC 67; FC 6
 and James, M. C. EC 65
 Fearnow, Theodore C. PFC 53 D
 Feast, C. N.
 and Hagie, C. E. PFC v.10, no.1 F
 Federal Aid, Branch of. Cir 21, 26
 Federighi, Henry. EC 70; FB 4
 Felin, Frances E. FB 86
 Ferguson, M. S.
 and Hayford, R. A. PFC 54 A
 Ferris, Robert E. FL 328
 Fessler, Floyd R. PFC v.12, no.1 A
 Fiedler, Reginald H. AR 3, 8, 13, 20, 24, 27,
 32, 37, 41; Doc 1026, 1036, 1039, 1067,
 1087, 1095; EC 63; FC 21; FL 32, 47,
 75, 229, 396; SD 1, 4, 7
 and Jarvis, N. D. IR 14
 and Lobell, M. J., Lucas, C. R. FL 259
 and Manning, J. R., Johnson, F. F. AR 15
 and Matthews, J. H. Doc 996
 Sette, O. E., and. Doc 1050

Field, Irving A. Doc 922, 929; EC 51
 Finley, Bob. FL 108; Sep 369
 Firth, Frank E. FL 64, 111, 127, 177; Sep 3,
 54, 73
 and Carlson, C. B. FL 66; Sep 27
 Carlson, C. B., and Christey, L. S.
 Sep 16
 Herrington, W. C., Bearse, H. M., and.
 SSR 5
 Fischthal, Jacob H. PFC v.11, no.2 F
 Fish, Charles J. Doc 975, 1032
 and Cobb, M. C. RR 36
 Fish, Frederic F. FL 222; PFC 3 A, 5 A,
 6 A, 8 B, 16 C, 39 A, 43 A, 48 A, 49 D;
 SSR 27
 and Burrows, R. E. PFC 45 E
 and Hanavan, M. G. SSR 55
 and McKernan, D. L. PFC 51 D
 and Rucker, R. R. SSR-F 30
 and Wagner, R. A. SSR-F 41
 Fish, Frederick F. See Fish, Frederic F.
 Fish, Marie Poland. FB 10
 Fisher, Charles K., Jr.
 Lagler, K. F., and. PFC v.9, no.4, H
 Fisher, H. F.
 Lane F. W., and with others. Doc 995
 Fishery Biology, Branch of. FL 5, 12, 43, 58,
 68, 72, 73, 76, 96, 100, 102, 110, 112,
 114, 130, 131, 133, 134, 145, 161, 163,
 164, 165, 169, 175, 182, 183, 282, 319,
 337; SSR-F 31, 87
 and Game-fish and Hatcheries, Branch
 of. FL 350
 Fishery Biology, Branch of. South Pacific
 Fishery Investigations. SSR-F 73,
 100, 125, 132
 Fishery Biology, Branch of. South Pacific
 Section. FL 129
 Fishery Technological Laboratory, Boston
 See Commercial Fisheries, Branch
 of. Fishery Technological Labora-
 tory, Boston.
 Fitzgerald, Gerald Arthur. EC 62

Flakas, Kenneth G. PFC v.12, no.2 B, v.12,
no.2 H

Flower, H. Butler
Nelson, J. R., and Hopkins, A. E. Sep 216

Flowers, R. H.
Kapalka, E. F., and. FL 155; Sep 32

Foerster, R. E. PFC 25 B, 26 A

Fortney, Robert. PFC 45 I, 47 J, 49 G

Foster, Fred J.
and Pelnar, J., Hagen, W., Jr. PFC 47 G
and Woodbury, L. PFC 18 C

Donaldson, L. R., and. PFC 19 A, 27 B,
32 A, 40 B, 46 C, 47 F, 53 E

Foster, Kenneth P. Sep 113

Foster, Richard F. PFC 54 D
and Olson, P. A. PFC v.13, no.3 D
Donaldson, L. R., and. PFC 44 B

Frank, Philip T.
Walker, M. C., and. PFC v.14, no.3 J

Fredin, Reynold A. FB 88

French, Tom A. PFC v.10, no.2 F

Frey, David G. SSR 32

Friddle, S. B.
Rodgers, E. O., and with others. PFC
v.13, no.2 C
Snieszko, S. F., and. PFC v.10, no.3 G,
v.11, no.3 E

Frostenson, Georg. FL 327

Fruchter, Nathan B. PFC 39 B

Fuess, John C. FL 305, 347

Fukuhara, Francis M. Sep 338

Schaefers, E. A., and. Sep 371

Fulton, Leonard A.
and Gangmark, H. A., Bair, S. H.
SSR-F 99

Gangmark, H. A., and. SSR-F 5, 74

Fuqua, Charles L. PFC 43 B, v.9, no.2 F,
v.9, no.3 B, v.11, no.3 I

and Topel, H.C. PFC 46 E

G

Gabrielson, Ira N. PFC 53 A

Galtsoff, Paul S. Doc. 958, 1035, 1066, 1069;
FB 89; FC 12; FL 3, 4, 22, 187; IR
6; RR 11; SSR 46; SSR-F 26, 28

and Chipman, W. A., Jr., with others.
FB 43; IR 37

and Loosanoff, V. L. FB 31

and Luce, R. H. Doc. 1077

and Prytherch, H. F. EC 61

and Prytherch, H. F., Engle, J.B. FC
25

and Prytherch, H. F., McMillin, H. C.
Doc 1088

and Prytherch, H. F., with others. FB 18

and Seiwel, H. R. EC 66

and Whipple, D. V. Doc 1094

Chipman, W. A., and. SSR-F 1

Hopkins, A. E., and McMillin, H. C.
FB 6

Game-fish and Hatcheries, Branch of. FL 6,
10, 17, 23, 24, 28, 41, 46, 57, 59,
62, 65, 91, 97, 119, 147, 148, 186,
190, 191, 193, 218, 315, 323, 398,
401, 403, 411

Fishery Biology, Branch of, and. FL 350

Game Management, Branch of. FL 1

Gangmark, Harold A.
and Fulton, L. A. SSR-F 5, 74

Fulton, L. A., and Bair, S. H. SSR-F 99

Gardner, R. R. PFC 53 F

Garfield, Morton J. Cir 23

Stolting, W. H., and. FL 407, 408, 409

Garlick, Lewis R. PFC v.12, no.2 D

Gastineau, Alfred C.
Johnson, H. E., and. PFC v.14, no. 2 H

Gee, Merle A.

Swift, L. W., and. PFC v.12, no. 3 A

Gehring, Jack W.
 Arnold, E. L., Jr., and. SSR-F 88

Gerking, Shelby D. PFC v.11, no.1 F

Gilbert, Charles H. Doc 928, 943
 and O'Malley, H. Doc 909a
 and Rich, W. H. Doc. 991, 1021

Ginsburg, Isaac. Doc 1058, 1089, FB 5, 71,
 96, FL 8, 418

Hildebrand, S. F., and. Doc 993, 1013

Glass, A. W.
 Scidmore, W. J., and. PFC v.15, no. 3 D

Glud, John B. See Glude, John B.

Glude, John B. Sep 235
 and Landers, W. S. SSR-F 110
 Tiller, R. E., and Stringer, L. D.
 Sep 323

Goldbeck, Clara Gale. Sep 182
 Martinek, W. A., and. Sep 171

Graham, Herbert W. Sep 334
 and Amison, J. M., Marvin, K. T.
 SSR-F 122

Graham, Joseph H. PFC v.16, no.3 F

Grice, Frank
 Stroud, R. H., and. PFC v.14, no.2 C

Griffin, Philip J. PFC v.14, no.2 G
 and Snieszko, S. F. FB 68
 Wood, E. M., and Snieszko, S. F.
 PFC v.16, no.1 C

Griffiths, Francis P.
 Lemon, J. M. IR 20
 Jarvis, N. D., and. IR 34
 Stansby, M. E., and. RR 6

Guenther, Raymond W.
 Watson, S. W., and Rucker, R. R.
 SSR-F 138

Gustafson, Paul V.
 Rucker, R. R., and. PFC v.15, no. 4 E

Gutsell, James S. Doc 910, 960, 1043, 1100;
 FL 55; PFC 45 F, 48 F, 50 C, v.9,
 no.1 C,v.10, no.2 H

and Snieszko, S. F. PFC v.10, no. 3 E

Surber, E. W., and. PFC 28 C

H

Haberland, Homer. FL 192; Sep 138

Hacker, Robert L.
 Craig, J. A., and. FB 32

Hagen, William, Jr. Cir 24; PFC 47 I, 48 D,
 51 B
 Foster, F. J., Pelnar, J., and. PFC 47 G

Hagevig, W. H. See Hagevig, William A.

Hagevig, William A.
 Leekley, J. R., with others, and. FL 405

Magnusson, H. W., and. Sep 258

Hagie, C. E.
 Feast, C. N., and. PFC v.10, no.1 F

Hahn, Jan, tr. SSR-F 13

Hall, Albert E., Jr.
 Loeb, E. A., and. SSR-F 70

al-Hamid, Mahmoud Ibrahim. PFC v.16,
 no.1 D

Hamilton, Wm. J., Jr. PFC 16 B

Hamm, William S. RR 23; Sep 175
 and Clague, J. A. RR 24
 and Rust, W. A. FL 270; Sep 164
 Bucher, G. C., and with others. FL 289;
 Sep 87
 Harrison, R. W., and. FL 99

Hammack, David F.
 Cramer, F. K., and. SSR-F 67

Hanavan, Mitchell G.
 and Skud, B. E. FB 95
 Fish, F. F., and. SSR 55

Hanson, Harry A. PFC 37 C
 and Smith, O. R., Needham, P. R.
 SSR 10

- Hanson, Harry A. (Continued)
 and Zimmer, P. D., Donaldson, I. J.
 SSR-F 29
 Needham, P. R., and Parker, L. P.
 SSR 26
 Harding, P. N.
 Lane, F. W., with others, and. Doc 995
 Harper, D. C. PFC 38 C
 Harris, Virgil E.
 Applegate, V. C., Macy, P. T., and.
 SSR-F 127
 Harrison, A. Cecil. PFC 42 B, 45 D
 Harrison, Roger W. IR 1, 7; Sep 30
 and Anderson, A. W., Pottinger, S. R.
 IR 30
 and Anderson, A. W., with other. IR 36,
 40
 and Hamm, Wm. S. FL 99
 and Pottinger, S. R. IR 4
 and Pottinger, S. R., with others. IR 28
 Anderson, A. W., and Pottinger, S. R.
 IR 32
 Pottinger, S. R., and Anderson, A. W.
 IR 31
 Pottinger, S. R., with others, and.
 IR 27
 Sanford, F. B., and Stansby, M. E.
 FL 212; Sep 129
 Stansby, M. E., and. SSR 15
 Hartshorne, Jean C. Sep 187
 and Puncocochar, J. F. Sep 306 (pt. 1)
 Magnusson, H. W., and. Sep 328
 Magnusson, H. W., Pottinger, S. R., and.
 Sep 306 (pt. 2)
 Haskell, David C. PFC 32 B, 49 E, v. 10,
 no. 2 B, v. 12, no. 3 C, v. 14, no. 1 C,
 v. 14, no. 2 J, v. 14, no. 3 A
 and Zilliox, R. G., Lawrence, W. M.
 PFC v. 14, no. 2 F
 Hasler, Arthur D.
 Galtsoff, P. S., and with others. IR 37
 Nursall, J. R., and. PFC v. 14, no. 4 E
 Hasslauer, Victor. FL 281
 Hathaway, Edward S. Doc 1030
 Hatsel, Charles
 Hildebrand, S. F., and. EC 60
 Hauge, S. M.
 Berry, E. P., with others, and. FL 159
 Hayford, Charles O.
 and Davis, H. S. PFC 17 B
 Hayford, Robert A. PFC v. 10, no. 2 M
 Ferguson, M. S., and. PFC 54 A
 Hazen, B. H.
 Rodgers, E. O., and with others. PFC
 v. 13, no. 2 C
 Hazzard, Albert S. PFC 21 B, 34 A, 46 A
 and Leonard, J. W., Shetter, D. S.
 PFC v. 9, no. 2 A
 Hedgpeth, Joel W. PFC 55, C, v. 9, no. 4 B
 Heerdt, Martin, Jr. FL 181, 213; Sep 148, 166
 and Bucher, D. L., Stansby, M. E.
 FL 128
 and Dassow, J. A. Sep 330
 and Hoyos, F., Cantillo, M. Sep 174
 and Stansby, M. E. Sept 372
 Bucher, D., and Osterhaug, K. FL 265
 (pt. 1)
 Miyauchi, D. T., and. Sep 364
 Hemphill, Jack E. PFC v. 16, no. 1 H
 Henderson, Crowell. PFC v. 11, no. 3 D,
 v. 11, no. 4 D
 Herman, Elmer F.
 and Anderson, W. PFC v. 9, no. 4 G
 Herre, Albert W. RR 20
 and Umali, A. F. Cir 14
 Herrington, William C. Cir 4; FC 23; FL 395;
 IR 24; Sep 102, 125, 281
 and Bearse, H. M., Firth, F. E. SSR 5
 and Nesbit, R. A. SSR 18
 and Scattergood, L. W. FL 11
 and Stringer, L. D. PFC v. 9, no. 4 E

Hewitt, Edward R. PFC 33 F, 35 D

Hewitt, George S.
and Burrows, R. E. PFC v.10, no.1 D

Hida, Thomas S.
King, J. E., and. SSR-F 118

Higgins, Elmer. AR 4, 9, 12, 17, 21, 26, 29,
30, 35, 39; Doc 1029, 1044, 1068,
1096; FL 158; PFC 20 B

and Lord, R. Doc 1009

and Pearson, J. C. Doc 1019

Bell, F. T., and. IR 42

Cottam, C., and. Cir 11

Hildebrand, Henry H.
Ellson, J. G., Powell, D. E., and.
FL 369

Powell, D. E., and. FL 376

Hildebrand, Samuel F. Doc 918, 940, 985,
1060; EC 72; FL 123, 355

and Cable, L. E. Doc 1093; FB 16, 24

and Ginsburg, I. Doc 993, 1013

and Hatsel, C. EC 60

and Prytherch, H. F. FL 216

and Schroeder, W. C. Doc 1024

and Towers, I. L. Doc 1027

Hile, Ralph. FB 19, 91; FL 132; PFC 23 A;
SSR-F 85

and Eschmeyer, P. H., Lunger, G. F.
FB 60

and Lunger, G. F., Buettner, H. J. FB 75

Van Oosten, J., and Jobes, F. W. FB 40

Hillen, R. H.
Eustis, A. B., and. PFC v.16, no.1 E

Hines, R. W.
Jarvis, N. D., and. FL 26

Hinkle, Harry B.
Russell, R., and. Sep 12

Hinsdale, E. C. Sep 58, 85, 105, 136, 169,
197, 232

Hodgeboom, K.
Rucker, R. R., and. PFC v.15, no.1 E

Hodgson, J. R.
Carl, J. and. PFC 31 D

Hoffmann, Clarence H.
and Surber, E. W. PFC v.11, no.4 B;
SSR-F 3

Surber, E. W., and. SSR-F 4

Hoffman, Glenn L. PFC v.11, no.3 G

Holland, Gilbert A.
Sanford, F. B., and Bucher, G. C.
Sep 248

Holloway, Ancil D. FL 137; PFC v.9, no.3 H,
v.13, no.4 A, v.14, no.1 F

Holmes, Arthur D.
Harrison, R. W., and with other. IR 36

Holmes, Harlan B. SSR 53

and Morton, F. G. PFC 45 A

Rich, W. H., and. Doc 1047

Weymouth, F. W., McMillin, H. C., and.
Doc 984

Holston, John A. Sep 331

and Pottinger, S. R. Sep 375

Oldershaw, C. G. P. and Pottinger, S. R.
Sep 342

Pottinger, S. R., and McCormack, G.
Sep 318

Holton, George D.
and Sullivan, C. R., Jr. PFC v.16,
no.1 B

Hool, Alan E. FL 339

Hopkins, A. E. FB 1, 3, 8, 21, 23

and Galtsoff, P. S., McMillin, H. C.
FB 6

Nelson, J. R., Flower, H. B., and.
Sep 216

Hopkins, Edith E. FL 34

and Ritchie, C. M. FL 19, 21

Hopkinson, L. T. Doc 939; EC 50, 52, 54, 55

and Studdert, W. P. Doc 930

Houston, Robert D., Jr. FL 251, 348

Howard, Arthur Day. Doc 916

Hoyer, William H.
Jones, G. I. and. Sep 265

Hoyos, F.
Heerdt, M., Jr., and Cantillo, M.
Sep 174

Huber, W. W.
Chamberlain, T. K., and. PFC v.9,
no. 4 C

Hund, Frederick, translator. FL 311

Hundley, Louis R. PFC v.16, no. 4 D

Hunter, Albert C. FL 172; Sep 26

Hutchinson, Samuel J.
Davidson, F. A., and. FB 26; PFC 30 B

Hutton, S. E. PFC 52 F

Hvatum, Arthur R.
Wallace, M. M., Pertuit, C. J., and.
FL 340

Hynes, Frank W. Doc 1052

I

Idyll, Clarence P. Sep 247

Ithering, R. von. PFC no. 34, E

Ikehara, Isaac I. SSR-F 107

Imler, R. H.,
and Sarber, H. R. SSR 28

Information Division. FL 9

J

Jackson, C. R.
Manning, J. E., and. PFC v.10, no.1 K

Jacobs, Barbara
Martinek, W. A., and. Sep 34

Nilson, H. W., Martinek, W. A., and.
Sep 178

Jacocks, C. West. Sep 47

James, Milton C. Doc 1056; FC 8; PFC 2 A,
52 B 55 F; Sep 5, 122

and Meehean, O. L., Douglass, E. J.
CB 35; SD 9, 12

Fearnow, E. C., and. EC 65

Leach, G. C., and. AR 18, 22, 25, 33

Leach, G. C., and Douglass, E. J.
AR 34, 38, 42; SD 3, 6

Jamieson, George S.
Nelson, E. M., Tolle, C. D., and. IR 12

Jarvis, Norman D. FL 18, 20, 31, 37, 38, 45,
51, 60, 78, 79, 81, 83-90, 122, 136,
180, 196, 275; IR 13, 26;
RR 7, 18; Sep 39

and Griffiths, F. P. IR 34

and Hines, R. W. FL 26

and McKee, L. G. SSR 36; Sep 35

and Puncochar, J. F. CB 28

Blair, B. W., Cameron, E. J., and.
FL 104; Sep 7

Clough, R. W., Clark, E. D., and. FL 80

Fiedler, R. H., and. IR 14

Lang, O. W., and. FL 82

Treichler, R., Lee, C. F., and. FL 295

Young, L., and. Sep 55

Jensen, Chris C. PFC v.14, no.1 J

Jobes, Frank W. FB 70

Van Oosten, J., Hile, R., and. FB 40

Joeris, Leonard. PFC v.11, no.2 E, v.11, no.2
I, v.12, no.4 E

John, Kenneth R. PFC v.16, no.2 D

Johnson, Fred F. FC 11, 15; FL 287; IR 38

and Lindner, M. J. IR 21

Fiedler, R. H., Manning, J. R., and.
AR 15

Johnson, Harlan E. PFC 30 D, v.13, no.2 G

and Brice, R. F. PFC v.14, no.3 C, v.15,
no.1 G, v.15, no.3 B, v.15, no.4 G;
RR 35

and Gastineau, A. C. PFC v.14, no.2 H

Johnson, Harlan E. (Continued)

Palmer, D. D., and with others PFC
v.13, no.2 A

Rucker, R. R., and Kaydas, G. M. PFC
v.14, no.1 B

Johnson, Leon D. PFC v.15, no.2 K, v.16,
no.4 I

Johnson, Malcolm C. PFC v.16, no.3 G

Swingle, H. S., and. PFC v.15, no.1 F

Johnson, Sheldon W. FL 385 (pt.2); Sep 253

Joint Brazil-United States Technical Commis-
sion. FL 349

Jones, G. Ivor. Sep 183

and Carrigan, E. J., Dassow, J. A.
Sep 262

and Hoyer, W. H. Sep 265

and Sanford, F. B., Miyauchi, D. Sep 170

Sanford, F. B., Miyauchi, D., and.
Sep 167

Jones, Richard O. PFC v.12, no.1 B

Jordan, David Starr
and Evermann, B. W., Clark, H. W.
Doc 1055

Juday, Chancey. PFC 39 D

and Rich, W. H., with others. FB 12

and Schloemer, C. L., Livingston, C.
PFC 40 C

Birge, E. A., and. Doc 905, 1012

June, Fred C. FB 77; Sep 244, 270, 271

and Reintjes, J. W. RR 34

Jurgens, Kenneth C.
and Brown, W. H. PFC v.16, no.4 F

K

Kahn, Richard A. FL 277, 303; Sep 61, 64,
111, 155, 194

and Rounsefell, G. A. SSR 40

and Sandven, L. B. FL 170

and Stolting, W. H. FL 365

and Timmis, H. E. FL 313

Sherr, H., Power, E. A., and. FL 352;
Sep 220

Kapalka, E. F.
and Flowers, R. H. FL 155; Sep 32

and Pottinger, S. R. Sep 83

Pottinger, S. R., and Shockey, C. F.
Sep 104

Kaplan, Harold M.
Smith, C. G., Lewis, W. M., and. PFC
v.14, no.4 F

Kaplan, Rae
Lindner, M. J., and, translators. FL 283

Karrick, Neva L. FL 325

and Stansby, M. E. Sep 366

Sanford, F. B., and. Sep 254

Scheffer, V. B., and Sanford, F. B.
SSR-F 32

Kask, John L. FL 234, 236, 268

Katō, Masuo
Aikawa, H., and. SSR-F 21

Katz, Max PFC v.10, no.4 F

and Donaldson, L. R. PFC v.12, no.1 C

Kauffman, Donald E. RR 16

Kawana, Takeshi. SSR-F 78

Kaydas, George M.
Rucker, R. R., Johnson, H. E., and.
PFC v.14, no.1 B

Keefe, Ruth V. FL 160, 168, 362

Keil, William M. PFC 9 A, 18 B, 22 A, 25 A,
35 A, 41 A, 44 A

Kelez, George B. PFC 31 C

Rounsefell, G. A., and. FB 27

Kelley, D. W. SSR-F 101

Kemmerer, George I.
and Bovard, J. F., Boorman, W. R.
Doc 944

Juday, C., and with others. FB 12

Kendall, William Converse. Doc 901, 914,
1015; PFC 25 C, 43 C

Smith, H. M., and. Doc 904

Kenyon, K. W.
Sanford, F. B., and Scheffer, V. B.
Sep 228

Kenyon, Walter A. Doc 977

Kerr, Rose G. FL 106, 269; TKS 1, 2
and Burtis, J. TKS 3
and Robey, D. M., with others. FL 285
Burtis, J., and. FL 404; TKS 7
Osterhaug, K. L., and. TKS 4, 8
Pottinger, S. R., and Lanham, W. B., Jr.
Sep 209
Robey, D. M., and. FL 416; TKS 6

Kibbe, T. S. PFC 44 D

Kimsey, J. Bruce
Parsons, J. W., and. PFC v.16, no.4 H

King, Joseph E. FL 330
and Demond, J. FB 82
and Hida, T. S. SSR-F 118
Anderson, W. W., Lindner, M. J., and.
FL 368; Sep 121
Lynch, J. J., and with others. SSR 39
Reintjes, J. W., and. FB 81

King, Willis. PFC 29 C, v.14, no.4 A

Kishinouye, Kamakichi. SSR-F 19, 24

Kjerskog-Agersborg, P. H. FL 39

Klak, George E.
Surber, E. W., and. PFC 47 D

Klein, Randall, T., Jr. FL 367

Knake, Boris O. FL 189, 241, 373, 379;
Sep 110, 135
and Whiteleather, R. T. FL 49
Butler, C., Puncochar, J. F., and.
Sep 306 (pt. 3)
Ellson, J. G., and Dassow, John. FL 342

Knapp, Frank T. PFC v.12, no.4 D

Koehring, Vera
and Prytherch, H. F. IR 15
Galtsoff, P. S., with others, and. FB 18

Koelz; Walter. Doc 1001, 1048

Kolloen, Lawrence N. FL 113, 252
and Elling, C. H. SSR 52
and Smith, K. A. Sep 361
Dahlgren, E. H., and. FL 16; SSR 25

Kossoris, M. D.
and Zisman, J. Sep 149

Krason, William S. FL 343, 345

Kraybill, Herman F.
and Nilson, H. W. Sep 185, 188

Kronholm, Harold G. PFC v.13, no.3 N

Kutkuhn, Joseph H.
Beckman, W. C., and. PFC v.15, no.3 L

L

Lagler, Karl F. PFC no. 50 B, v.11, no.4 C
and Fisher, C. K., Jr. PFC v.9, no.4 H

Landers, Warren S. SSR-F 117
Glude, J. B., and. SSR-F 110

Landgraf, Raymond G., Jr. Sep 354, 367
and Miyauchi, D. T., Stansby, M. E.
Sep 298
Leekley, J. R., and with others. FL 405

Lane, F. W.
and Bauer, A. D., with others. Doc 995

Lang, O. W. FL 140
and Jarvis, N. D. FL 82

Langlois, T. H. PFC 7 A

Lanham, William B., Jr.
and Nilson, H. W. RR 3; Sep 181
Pottinger, S. R., Kerr, R. G., and.
Sep 209
Puncochar, J. F., and Nilson, H. W.
IR 43

Lawrence, Ewing, Jr. Sep 273

Lawrence, J. M. PFC v.12, no.3 E, v.16,
no.2 G, v.16, no.4 G

- Lawrence, W. Mason
Haskell, D. C., Zilliox, R. G., and.
PFC v. 14, no. 2 F
- Lawson, Edward B. PFC 33 B
- Leach, Glen C. AR 5, 10, 14; Doc 912, 941,
949, 955, 964, 978, 981, 999, 1011,
1018, 1033, 1049, 1070, 1098; EC 59
and James, M. C. AR 18, 22, 25, 33
and James, M. C., Douglass, E. J.
AR 34, 38, 42; SD 3, 6
- Leathers, Adelbert L. Doc 915
- Ledgerwood, Edgar. PFC 55 H
- Lee, Charles F. Cir 29; FL 391, 412;
Sep 193, 196, 199, 202, 204, 206,
208, 296, 378
and Nilson, H. W. IR 44
and Stoloff, L. S. SSR 37
and Young, L. Sep 24
Harrison, R. W., and with others. IR 28
Harrison, R. W., with others, and. IR 40
Pottinger, S. R., and with others. IR 27
Stoloff, L. S., and. FL 173, 335 (pt. 1)
Treichler, R., and Jarvis, N. D.
FL 295
- Leekley, James R.
and Landgraf, R. G., Jr., with others.
FL 405
- Lefevre, Lorin
Stubblefield, A. G., and Smart, R.
PFC v. 11, no. 4 F
- Lehman, Burton A. RR 33
- Leitritz, Earl. PFC v. 12, no. 4 C, v. 13,
no. 1 E
- Lemon, James M. FC 3; FL 103, 214, 286;
IR 9, 16; Sep 189
and Carlson, C. B. FL 278
and Pottinger, S. R. Sep 36
Griffiths, F. P., and. IR 20
Nilson, H. W., and. RR 4
Pottinger, S. R., and. Sep 215
Stansby, M. E., and. RR 1
- Lennon, Robert E. FB 98; SSR-F 121
- Leonard, Justin W.
Hazzard, A. S., and Shetter, D. S.
PFC v. 9, no. 2 A
- Levardsen, Norman O. PFC v. 15, no. 3 C
- Lewis, R. C.
Needham, P. R., and. PFC 29 D
- Lewis, Sara L.
Churchill, E. P., Jr., and. Doc 963
- Lewis, William M.
and Carlander, K. D. PFC v. 11, no. 4 H
Carlander, K. D., and. PFC v. 10, no. 3 D
Schuster, G. A., and. PFC v. 16, no. 2 H
Smith, C. G., and Kaplan, H. M.
PFC v. 14, no. 4 F
- Lindgren, B. E. Sep 21, 76
and Seifert, R. P. Sep 339
- Lindgren, O. W. PFC 45 B
and Spencer, J. PFC 45 C
- Lindner, Milton J. FB 78; FL 260; Sep 212.
251
and Kaplan, R., translators. FL 283
Anderson, W. W., and King, J. E.
FL 368; Sep 121
Johnson, F. F., and. IR 21
Weymouth, F. W., and Anderson, W. W.
FB 14
- Lindquist, A. W.
Sandholzer, L. A., and. FL 146
- Lindquist, Muhrl
Moen, T., and. PFC v. 16, no. 2 I
- Linduska, Joseph P.
and Surber, E. W. Cir 15
- Linton, Edwin Doc 907
- Livingston, Clarence
Juday, C., Schloemer, C. L., and.
PFC 40 C
- Livingstone, Robert, Jr. Sep 322 (pt. 1)
Ellson, J. G., and. Sep 311
Powell, D. E., Alverson, D. L., and.
FL 402

Lloyd, Charles N. PFC v.15, no.3 G

Lobell, Milton J.
and Puncoschar, Joseph F. FL 240

Fiedler, R. H., and Lucas, C. R.
FL 259

Locke, S. B. Doc 1062

Loeb, Howard A. SSR-F 97
and Hall, A. E., Jr. SSR-F 70

Loosanoff, Victor L. FL 13, 223; Sep 6, 9,
154
and Engle, J. B. FB 33, 42; RR 2; Sep 19
Galtsoff, P. S., and. FB 31

Lord, Russell F. PFC 4 A, 11A, 20 D, 33 A,
55 E
Davis, H. S., and. Doc 1079
Higgins, E., and. Doc 1009

Lovelace, Floyd E.
and Podoliak, H. A. PFC v.14, no.4 C
Phillips, A. M., Jr., and with others.
PFC v.14, no.2 E

Lowry, Edward M. PFC v.13, no.4 D

Lucas, Clarence R. FC 2; PFC 19 B; Sep 150,
152, 201
Fiedler, R. H., Lobell, M. J., and.
FL 259

Luce, R. H.
Galtsoff, P. S., and. Doc 1077

Lunger, George F.
Hile, R., and Buettner, H. J. FB 75
Hile, R., Eschmeyer, P. H., and. FB 60

Lusby, Ruth M.
and Binson, L. S. Sep 90

Lyle, Clay. PFC v.11, no.1 E

Lynch, J. J.
and King, J. E., with others. SSR 39

Lynch, Kenneth M.
Coulson, E. J., Remington, R. E., and.
IR 23

M

McCay, C. M. PFC 1 A, 11 B, 14 B, 17 C,
30 A, 49 C, v.9, no.1 A
and Phillips, A. M. PFC 52 E

McClelland, A. L.
Parry, E. P., and. PFC v.16, no.4 C

McCollum, E. V.
Daniel, E. P., and. IR 2
Newell, J. M., and. IR 5

M'Conigle, R. H.
and Smith, M. W. PFC 38 B

McCormack, Grace. Sep 266
Pottinger, S. R., Holston, J., and.
Sep 318

McCraw, Bruce M. SSR-F 84

MacDonald, Rose M. E. Doc 899

MacDougal, R. L. PFC 33 E

MacIntire, Charles S. PFC 41 C

Maciolek, John A. SSR-F 113

McKee, James W.
Premetz, E. D., and with others. SSR-F
129

McKee, Lynn G. See McKee, Lynne G.

McKee, Lynne G. FL 52; Sep 140
and Sanford, F. B. Sep 153
and Sanford, F. B., Bucher, G. C.
FL 141; Sep 84
Jarvis, N. D., and. SSR 36; Sep 35

McKernan, Donald L. PFC 50 E
Fish, F. F., and. PFC 51 D

McKown, D. Arthur
Scattergood, L. W., and. Sep 293

McLain, Alberton L.
and Nielsen, W. L. SSR-F 93

Applegate, V. C., and with others.
SSR-F 68

- McMillan, F. O. Doc 1042
- McMillin, H. C. EC 64
- Galtsoff, P. S., Prytherch, H. F., and.
Doc 1088
- Hopkins, A. E., Galtsoff, P. S., and.
FB 6
- Weymouth, F. W., and. Doc 1099
- Weymouth F. W., and Holmes, H. B.
Doc 984
- McMillin, Stewart E. FL 253
- McMullen, Richard J. PFC v.10, no.1 G
- Macy, Paul T.
Applegate, V. C., and Harris, V. E.
SSR-F 127
- Magnitzky, A. W.
Collier, Albert, and with others. FB 84
- Magnusson, Harris W. Sep 317, 384
- and Hagevig, W. H. Sep 258
- and Hartshorne, J. C. Sep 328
- and Pottinger, S. R., Hartshorne, J. C.
Sep 306 (pt.2)
- and Whitaker, R. K. Sep 310
- Butler, C., and. Sep 306 (pt.4)
- Chambers, J. S., and. SSR-F 53
- Ten Eyck, R. N., and Bjork, J. E.
Sep 301
- Magnússon, Magnús Kr. Sep 250
- Manacop, Porfirio R.
Warfel, H. E., and. RR 25
- Manalo, A. D.
Sanford, F. B., and. Sep 224
- Mann, Albert
Juday, C., with others, and. FB 12
- Manning, John E.
and Jackson, C. R. PFC v.10, no.1 K
- Burrows, R. E., and. PFC v.9, no.1 I
- Manning, John Ruel. Doc. 1065, 1090; FL 29
- and Nelson, E. M., Tolle, C. D. IR 3
- Fiedler, R. H., and Johnson, F. F.
AR 15
- Marks, A. Louise
and Nilson, H. W. Sep 156, 158
- Markus, Henry C. FC 28
- Marr, John C. FB 52
- and Ahlstrom, E. H. SSR 56
- and Schaefer, M. B. FB 47
- Schaefer, M. B., and. FB 44
- Schaefer, M. B., Sette, Oscar E., and.
RR29
- Martin, Jerry. PFC 55 D
- Martinek, William A. Sep 63
- and Goldbeck, C. G. Sep 171
- and Jacobs, B. Sep 34
- Nilson, H. W., and Darling, D. B.
FL 296
- Nilson, H. W., and Jacobs, B. Sep 178
- Martinez, Joseph L. FL 250, 284, 294, 308
- Marvin, Kenneth T.
Collier, A. W., and. FB 79
- Graham, H. W., Amison, J. M., and.
SSR-F 122
- Mason, James E. PFC v.15, no.2 A
- Masters, Charles Otto. PFC v.10, no.2 G
- Matsui, Kizo. SSR-F 20
- Matsumoto, Walter M. SSR-F 90
- Matthews, J. H.
Fiedler, R. H., and. Doc 996
- Maúrtua, Luz de, translator. FL 378
- Maxwell, John M.
Phillips, A. M., Jr., Brockway, D. R.,
and. PFC v.14, no.1 D
- Mead, Giles W. FB 63
- Meehan, Otis Lloyd See Meehean, O. Lloyd
- Meehean, O. Lloyd. FL 27; PFC 16 A, 32 C,
33 D, 34 C, 47 A
- and Douglass, E. J., Duncan, L. M.
SD 24
- Dobie, J. R., and Washburn, G. N.
Cir 12

Authors

- Meehean, O. Lloyd (Continued)
- Duncan, L. M., and. SD 28, 32
- James, M. C., and Douglass, E. J.
CB 35; SD 9, 12
- Tunison, A. V., Mullin, S. M., and.
PFC v. 11, no. 1 D, v. 11, no. 4 G
- Merrick, Amanda D.
Ellis, M. M., and Ellis, M. D. Doc 1097
- Merriman, Daniel. FB 35
- Meyer, D. K.
Ellis, M. M., and with others. SSR 38
- Millenbach, Cliff. PFC v. 12, no. 3 G
- Miller, Fred. PFC v. 14, no. 4 G
- Miller, Lawrence F. PFC v. 16, no. 3 C
and Chance, C. J. PFC v. 16, no. 1 A
Bryan, P., and. PFC v. 15, no. 2 E
- Minarik, C. E.
Surber, E. W., and Ennis, W. B., Jr.
PFC v. 9, no. 3 F
- Mir, Eugene
and Audigé, J. FL 40
- Missouri River Basin Studies, Office of.
SSR-F 120, 126
- Mitchell, C. R. PFC no. 55 G, v. 9, no. 1 J
- Miyahara, Takashi. Sep 386
- Miyauchi, D. T. Sep 259, 350
and Heerdt, M., Jr. Sep 364
and Sanford, F. B. Sep 115, 173, 186, 190
and Stansby, M. E. Sep 329, 377
Bucher, G. C., Sanford, F. B., and
Sep 180
Jones, G. I., Sanford, F. B., and.
Sep 170
Landgraf, R. G., Jr., and Stansby, M. E.
Sep 298
Sanford, F. B., and. Sep 226
Sanford, F. B., and Jones, G. I. Sep 167
- Moen, Tom
and Lindquist, M. PFC v. 16, no. 2 I
- Moffett, James W.
and Smith, S. H. SSR-F 12
Erkkila, L. F., and with others. SSR-F 56
- Moore, Emeline. PFC 18 D
- Moore, Harvey L. FB 65
and Cope, O. B., Beckwith, R. E.
SSR-F 81
Burner, C. J., and. SSR-F 111
- Moore, J. Percy. Doc 923
- Moorman, Robert B.
and Ruhr, C. E. PFC v. 13, no. 3 J
- Morris, A. G. PFC 44 E
- Morris, Robert W. PFC v. 12, no. 1 G
- Morton, Frederick G.
Holmes, H. B., and. PFC 45 A
Rich, W. H., and. Doc 1057
- Morton, Kenneth E. PFC v. 10, no. 1 E, v. 15, no. 3 A
- Mosher, Kenneth H. FB 54
Walford, L. A., and. SSR 20, 21
- Mottley, Charles M. FL 235
and Chamberlain, T. K. PFC v. 10, no. 4 B
- Mullin, S. M.
Tunison, A. V., and Meehean, O. L.
PFC v. 11, no. 1 D, v. 11, no. 4 G
and Elliott, K. C. SSR-F 119
and Niska, E. L. Sep 347
and Otsu, T. SSR-F 128
and Shomura, R. S. SSR-F 98, 108
- Murray, John J. Sep 309, 353, 374
- Murray, Thomas B. PFC v. 9, no. 3 I
- Myers, Charles S. Sep 236
- Myers, George S. PFC v. 9, no. 4 A
- Myers, Gerald F. PFC v. 13, no. 4 J

N

Nakamura, Hiroshi. SSR-F 23, 82, 112

Nakamura Research Staff. SSR-F 17

Needham, Paul R. PFC 10 A, 37 A

and Cliff, E. P. PFC 40 D

and Hanson, H. A., Parker, L. P.
SSR 26

and Lewis, R. C. PFC 29 D

Hanson, H. A., Smith, O. R., and.
SSR 10

Needler, A. W. H. Doc 1074

Sette, O. E., and. IR 19

Nelson, Arnold L.

and Surber, E. W. SSR 41

Nelson, E. Clifford. PFC 55 A

Nelson, E. M.

and Tolle, C. D., Jamieson, G. S. IR 12

Manning, J. R., and Tolle, C. D. IR 3

Nelson, J. Richards

and Flower, H. B., Hopkins, A. E.
Sep 216

Nelson, T. F. PFC 56 G

Nesbit, Robert A. SSR-F 115

and Neville, W. C. FC 18

Herrington, W. C., and. SSR 18

Neville, William C.

Nesbit, R. A., and. FC 18

Newell, John M.

and McCollum, E. V. IR 5

Newman, H. William

and Palmer, D. D., Burrows, R. E.
SSR-F 124

Burrows, R. E., and with others.
SSR-F 86

Burrows, R. E., Palmer, D. D., and.
PFC v. 14, no. 3 E

Palmer, D. D., and with others.
PFC v. 14, no. 3 G

Palmer, D. D., with others, and.
PFC v. 16, no. 3 A

Nicholson, H. P.

Young, L. A., and. PFC v. 13, no. 4 C

Nielsen, Willis L.

Applegate, V. C., Smith, B. R., and.
SSR-F 92

McLain, A. L., and. SSR-F 93

Nielson, Reed S. PFC v. 15, no. 1 J, v. 15, no. 2 J,
v. 15, no. 3 H; SSR-F 38

Erkkila, L. F., with others, and.
SSR-F 56

Parkhurst, Z. E., Bryant, F. G., and.
SSR-F 36

Phillips, A. M., Jr., and Brockway, D. R.
PFC v. 16, no. 4 B

Nilson, Hugo W. FL 36; Sep 142, 269, 282

and Bender, M. Sep 263

and Coulson, E. J. IR 41

and Lemon, J. M. RR 4

and Martinek, W. A., Darling, D. B.
FL 296

and Martinek, W. A., Jacobs, B.
Sep 178

and Schayer, R. W. Sep 147

Darling, D. B., and. Sep 146

Kraybill, H. F., and. Sep 185, 188

Lanham, W. B., Jr., and. RR 3; Sep 181

Lee, C. F., and. IR 44

Marks, A. L., and. Sep 156, 158

Puncochar, J. F., Lanham, W. B., Jr.,
and. IR 43

Sanford, F. B., and. Sep 230

Niska, Edwin L. Sep 351

Murphy, G. I., and. Sep 347

Noble, Roy D.

and Bennett, C. H. FL 56

Nostrand, Thomas

Sandholzer, L. A., and Young, L.
SSR 31

Nursall, J. R.
and Hasler, A. D. PFC v.14, no.4 E

O

O'Brien, John J. Sep 243

O'Donnell, D. John. PFC 56 D

Oehmcke, Arthur A. PFC v.11, no.1 A, v.13,
no.2 B

Office of Missouri River Basin Studies See
Missouri River Basin Studies, Office of.

Oldershaw, C. G. P. Sep 345

and Holston, J. A., Pottinger, S. R.
Sep 342

Olson, P. A.
Foster, R. F., and. PFC v.13, no.3 D

Olson, Ralph H. PFC 52 D

O'Malley, Henry. EC 48, 71; FC 13

Gilbert, C. H., and. Doc 909a

Oregon Fish Commission
California Division of Fish and Game,
Washington (State) Dept. of Fisheries,
and. Sep 203

Orn, James G. FL 272

Osborn, Paul E. PFC v.13, no.2 D

Osborne, Lithgow. PFC 54 C

Osburn, Raymond C. Doc 972

Oshima, Kokichi. IR 8

Osterhaug, Kathryn L. FL 194, 202, 247;
Sep 131, 308

and Bucher, D. L. FL 144

and Kerr, R. G. TKS 4, 8

Bucher, D. L., and. Sep 43

Bucher, D., Heerdt, M., and. FL 265
(pt.1)

Bucher, G. C., and. Sep 81

Elliot, R. P., and. FL 264; Sep 151

Stansby, M. E., and. FL 232

Otsu, Tamio. Sep 376

Ego, K., and. Sep 315

Murphy, G. I., and. SSR-F 128

P

Paget, Richard. PFC 46 B

Palmer, David D.
and Burrows, R. E., with others.
PFC v.16, no.3 A

and Johnson, H. E., with others
PFC v.13, no.2 A

and Newman, H. W., with others.
PFC v.14, no.3 G

and Robinson, L. A., Burrows, R. E.
PFC v.13, no.4 E

Burrows, R. E., and. PFC v.11, no.3 B

Burrows, R. E., and Newman, H. W.
PFC v.14, no.3 E

Burrows, R. E., and with others.
SSR-F 86

Burrows, R. E., Robinson, L. A., and.
SSR-F 59

Newman, H. W., and Burrows, R. E.
SSR-F 124

Robinson, L. A., and Burrows, R. E.
SSR-F 60

Robinson, L. A., and with others.
SSR-F 63

Palmer, Eddy Davis. PFC 45 G

Connell, F. H., and. PFC 44 C

Panos, John
and Roberts, Q. F. FL 363

Parker, Lewis P.
Needham, P. R., Hanson, H. A., and.
SSR 26

Parkhurst, Zell E. SSR-F 39, 40, 57

and Bryant, F. G., Nielson, R. S.
SSR-F 36

Bryant, F. G., and. SSR-F 37

Authors

- Parks, L. E.
Baldwin, W. H., and. FL 63
- Parry, E. P
and McClelland, A. L. PFC v.16, no.4 C
- Parsons, John W.
and Kimsey, J. B. PFC v.16, no.4 H
- Parvin, J. R.
Rucker, R. R., and with others. FB 76
- Patterson, Matt.
Applegate, V. C., with others, and.
SSR-F 68
- Payne, Merl H., Jr.
Robinson, L. A., and with others.
SSR-F 63
- Pearse, A. S. Doc 906; EC 49
- Pearson, John C. Doc 1046; FB 28, 30, 36;
FC 1; IR 10; PFC v.10, no.2 C, v.14,
no.1 I; RR 14; SSR 16
and Anderson, W. W. FL 142
Higgins, E., and. Doc 1019
- Pells, F. PFC v.10, no.1 H
- Pelnar, John. PFC v.9, no.2 H
Foster, F. J., and Hagen, W., Jr.
PFC 47 G
- Pelz, Bernard L.
Whipple, W. J., and. PFC v.9, no.3 L
- Perkins, Curtis L.
Wagner, E. D., and. PFC v.14, no.3 I
- Perlmutter, Alfred
and Clarke, G. M. FB 45
- Pertuit, Camile J.
Wallace, M. M., and Hvatum, A. R.
FL 340
- Peterson, C. E. FL 197; Sep 10, 325
and Peterson, L. D. Sep 20
Anderson, A. W., and. SD 25, 27, 30
Power, E. A., and. FL 393
- Peterson, Lorraine D. Sep 65, 95
Peterson, C. E., and. Sep 20
- Peterson, Stanley R. Sep 336
- Petursson, Sigurdur H. Sep 297
- Phenicie, Charles K.
and Bishop, C. G. PFC v.12, no.3 J
- Phillips, Arthur M., Jr. PFC 48 B, 51 C
and Brockway, D. R. PFC v.9, no.3 G,
v.10, no.3 B, v.16, no.2 C
and Brockway, D. R., Maxwell, J. M.
PFC v.14, no.1 D
and Brockway, D. R., Rodgers, E. O.
PFC v.11, no.2 C, v.11, no.3 A,
v.12, no.2 C
and Brockway, D. R., with others.
PFC v.14, no.2 E
and Nielsen, R. S., Brockway, D. R.
PFC v.16, no.4 B
McCay, C. M., and. PFC 52 E
- Pigott, George M. Sep 276
- Pigott, Madeleine G.
Harrison, R. W., with others, and.
IR 36
- Pillsbury, Harold
Siegler, H. R., and. PFC v.11, no.2 G
- Piskur, Frank. Sep 134, 177
and Stansby, M. E. Sep 132
Anderson, L., and. FL 93
- Pister, Edwin P.
Reimers, N., and. PFC v.15, no.1 H
- Platner, Wesley S. SSR 30
Ellis, M. M., with others, and. SSR 38
- Podoliak, Henry A.
Lovelace, F. E., and. PFC v.14, no.4 C
- Portland Cement Association. PFC v.10,
no.4 A
- Pottinger, S. R. FL 50, 185, 321, 324; Sep 33,
38, 213, 268, 272, 287, 290, 295
and Baldwin, W. H. Sep 145
and Harrison, R. W., Anderson, A. W.
IR 31
and Holston, J., McCormack, G. Sep 318
and Kapalka, E. F., Shockey, C. F.
Sep 104
and Kerr, R. G., Lanham, W. B., Jr.
Sep 209

Pottinger, S. R. (Continued)
 and Lee, C. F., with others. IR 27
 and Lemon, J. M. Sep 215
 Anderson, A. W., Harrison, R. W., and.
 IR 32
 Harrison, R. W., and. IR 4
 Harrison, R. W., and with others.
 IR 28, 40
 Harrison, R. W., Anderson, A. W., and.
 IR 30
 Holston, J., and. Sep 375
 Kapalka, E. F., and. Sep 83
 Lemon, J. M., and. Sep 36
 Magnusson, H. W., and Hartshorne, J. C.
 Sep 306 (pt. 2)
 Oldershaw, C. G. P., Holston, J. A.,
 and. Sep 342
 Puncochar, J. F., and. Sep 165, 192
 Powell, Donald E. Sep 255, 280
 and Alverson, D. L., Livingstone, R.,
 Jr. FL 402
 and Hildebrand, Henry H. FL 376
 Ellson, J. G., and Hildebrand, H. H.
 FL 369
 Power, Edward A. Sep 127
 and Peterson, C. E. FL 393
 Anderson, A. W., and. SD 11, 14, 16, 18,
 19, 21, 22
 Christey, L. S., and. Sep 15
 Sherr, H., and Kahn, R. A. FL 352;
 Sep 220
 Pratt, H. S. EC 42
 Premetz, Ernest D. SSR-F 96
 and Cory, R. L., with others. SSR-F 129
 and Snow, G. W. Sep 348
 Prevost, Gustave. PFC 55 B
 Prud'homme, J. G. PFC v. 11, no. 1 B
 Prytherch, Herbert F. Doc 959, 961, 1054,
 1076

Galtsoff, P. S., and. EC 61
 Galtsoff, P. S., and Engle, J. B. FC 25
 Galtsoff, P. S., and McMillin, H. C.
 Doc 1088
 Galtsoff, P. S., and with others. FB 18
 Hildebrand, Samuel F., and. FL 216
 Koehring, V. and. IR 15
 Puncochar, Joseph F. Sep 137
 and Arana, F. FL 240
 and Lanham, W. B., Jr., Nilson, H. W.
 IR 43
 and Pottinger, S. R. Sep 165, 192
 Butler, C., and Knake, B. O. Sep 306
 (pt. 3)
 Hartshorne, J. C., and. Sep 306 (pt. 1)
 Jarvis, N. D., and. CB 28
 Lobell, M. J., and. FL 240

Q

Quast, Thomas. EC 68
 Quistorff, Elmer
 Smith, R. T., and. PFC 51 D

R

Radcliffe, Lewis. Doc 908, 931, 932; EC 20, 58
 Ratledge, H. M.
 and Cornell, J. H. PFC v. 14, no. 3 F,
 v. 15, no. 2 B
 Rawlings, John E. Sep 337
 Ray, S. M.
 Collier, A., and with others. FB 84
 Rayner, H. John. PFC 51 E, v. 9, no. 3 C,
 v. 11, no. 3 F

Reardon, C. M. Sep 162, 223, 234

Reedy, R. J.
Anzulovic, J. V., and. FL 415

Reid, Kenneth A. PFC v. 16, no. 4 E

Reighard, Jacob. PFC 28 D

Reimers, Norman
and Pister, E. P. PFC v. 15, no. 1 H

Reintjes, John W.
and King, J. E. FB 81
June, F. C., and. RR 34

Remington, Roe E.
Coulson, E. J., and Lynch, K. M. IR 23

Rey, Mario A. FL 271

Rhode, Clarence J.
and Barker, W. Cir 17

Rice, Theodore R. FB 80. 87

Rich, Willis H. Doc 956, 971, 974, 990, 1003,
1005, 1059; FB 11, 37; SSR 51
and Ball, E. M. Doc 1041, 1102; FB 7, 13
and Holmes, H. B. Doc 1047
and Morton, F. G. Doc 1057
and Suomela, A. J. Doc 1022
Gilbert, C. H., and. Doc 991, 1021
Juday, C., and with others. FB 12
Silliman, R. P., and Bryant, F. G.
SSR 34

Richan, Fred J. PFC v. 12, no. 4 H

Ricker, William E. PFC 31 B, 32 D, 34 D,
35 C

Ritchie, Catherine M.
Hopkins, E. E., and. FL 19, 21

Roberts, Floyd
Simon, J. R., and. PFC 56 B

Roberts, Quincy F.
Panos, J., and. FL 363

Roberts, Roy E.
Berry, E. P., and with others. FL 159

Robertson, A. C.
and Wright, W. H. Doc 1083

Robertson, O. H.
Palmer, D. D., and with others.
PFC v. 16, no. 3 A

Robey, Dorothy M.
and Kerr, R. G. FL 416; TKS 6
Kerr, R. G., and with others. FL 285

Robinson, Leslie A.
and Palmer, D. D., Burrows, R. E.
SSR-F 60
and Payne, M. H., Jr., with others.
SSR-F 63
Burrows, R. E., and Palmer, D. D.
SSR-F 59
Palmer, D. D., and Burrows, Roger E.
PFC v. 13, no. 4 E
Palmer, D. D., and with others.
PFC v. 13, no. 2 A

Robinson, R. S. PFC v. 14, no. 3 K

Rodd, J. A. PFC 18 A, 21 C, 29 E

Rodgers, Ernest O. PFC v. 11, no. 1 J, v. 11,
no. 2 H, v. 11, no. 3 K
and Hazen, B. H., with others. PFC v. 13,
no. 2 C
Phillips, A. M., Jr., Brockway, D. R.,
and. PFC v. 11, no. 2 C, v. 11,
no. 3 A, v. 12, no. 2 C

Roelofs, Eugene W. FL 382; Sep 257

Rogatnick, Joseph H. FL 257

Romeo, Vincent B.,
Wilde, C. W., and. PFC v. 13, no. 3 K

Root, John F. FL 267

Rounsefell, George A. Doc 1080; FB 2; FL 92,
98; SSR 47
and Bond, L. H., White, G. K. PFC
v. 12, no. 3 K
and Dahlgren, E. H. FB 9, 17
and Kelez, G. B. FB 27
and Stringer, L. D. FL 42
Kahn, R. A., and. SSR 40

Royal, Loyd A.
and Seymour, A. PFC 52 A

Royce, William F. FB 59; FL 225; Sep 123,
157, 200

and Schuck, H. A. FB 90

Arnold, E. L., Jr., and. SSR-F 11

Bearse, H. M., and. FL 167

Dung, D. I. Y., and. SSR-F 95

Rucker, Robert R. PFC v.10, no.1 C, v.11,
no.1 G

and Bernier, A. F., with others. PFC
v.13, no.3 F

and Gustafson, P. V. PFC v.15, no.4 E

and Hodgeboom K. PFC v.15, no.1 E

and Johnson, H. E., Kaydas, G. M.
PFC v.14, no.1 B

and Tuttle, E. M. PFC v.10, no.2 J

and Whipple, W. J. PFC v.13, no.1 G

and Whipple, W. J., with others. FB 76

Fish, F. F., and. SSR-F 30

Watson, S. W., Guenther, R. W., and,
SSR-F 138

Ruhr, C. E.
Moorman, R. B., and. PFC v.13, no.3 J

Russ, Howard C.
Stiles, E. W., and. PFC 37 B

Russell, Ralph
and Burr, K. O. Sep 2

and Hinkle, H. B. Sep 12

Rust, Walter A. FL 204; Sep 141

Hamm, W. S., and. FL 270; Sep 164

Rutherford, Robert M. RA 34

Ryckman, Matt L. PFC 27 A

S

Saeugling, Eldon C.
Sharp, R. W., Bennett, L. H., and.
PFC v.14, no.1 G

Salter, L. C. FC 22; FL 277

Sandberg, Arthur M. FL 109, 258, 417;
Sep 51, 70, 283

and Dunavant, R. L. FL 421

Sanderhoff, L. O. FL 256

Sandholzer, Leslie A. Sep 114

and Arcisz, W. Sep 128

and Buckner, C. R. Sep 160

and Dean, M. E., with others. FL 335
(pt. 2)

and Lindquist, A. W. FL 146

and Nostrand, T., Young, L. SSR 31

Arcisz, W., and. Sep 176

Winter, C. E., and. FL 201; Sep 172

Sandven, Lois B.
Kahn, R. A., and. FL 170

Sanford, F. Bruce. FL 237, 242, 370; Sep 89,
92, 100, 117

and Bonham, K. Sep 139, 184

and Bonham, K., with others. Sep 94

and Bucher, G. C. FL 226; Sep 97

and Bucher, G. C., Clegg W. FL 138;
Sep 72

and Cantillo, M., Bucher, G. C. FL 205;
Sep 93, 98

and Clegg, W. Sep 264

and Clegg, W., Bonham, K. Sep 116

and Dassow, J. A., Dietrich, E. F.
Sep 267

and Harrison, R. W., Stansby, M. E.
FL 212; Sep 129

and Holland, G. A., Bucher, G. C.
Sep 248

and Karrick, N. L. Sep 254

and Kenyon, K. W., Scheffer, V. B.
Sep 228

and Manalo, A. D. Sep 224

and Miyauchi, D. T. Sep 226

and Miyauchi, D., Jones, G. I. Sep 167

and Nilson, H. W. Sep 230

Sanford, F. Bruce (Continued)

and Vaughan, E. Sep 237

Bucher, G. C., and Miyauchi, D. T.
Sep 180

Bucher, G. C., and with others. FL 289;
Sep 87

Bucher, G. C., Clegg, W., and. FL 290;
Sep 88

Clegg, W., and Stansby, M. E. Sep 103

Jones, G. I. and Miyauchi, D. Sep 170

McKee, L. G., and. Sep 153

McKee, L. G., and Bucher, G. C.
FL 141; Sep 84

Miyauchi, D., and. Sep 115, 173, 186,
190

Scheffer, V. B., Karrick, N. L., and.
SSR-F 32

Shockey, C. F., and. Sep 66

Sarber, Hosea R.
Imler, R. H., and. SSR 28

Sater, Edna N. FL 420

Sautier, Philip M. Sep 126, 130

Sayles, Richard E. Sep 286

Scattergood, Leslie W. FL 231; SSR 58, 64,
67; SSR-F 6, 35, 72; Sep 304

and McKown, D. A. Sep 293

and Taylor, C. C. FL 364; Sep 239

Herrington, W. C., and. FL 11

Schaefer, Milner B. FB 69, 72

and Marr, J. C. FB 44

and Sette, O. E., Marr, J. C. RR 29

and Walford, L. A. FB 56

Marr, J. C., and. FB 47

Smith, O. R., and. Sep 225

Schaefers, Edward A. Sep 278, 313, 343, 357

and Fukuhara, F. M. Sep 371

and Smith, K. A. Sep 368

Schaeperclaus, Wilhelm. FL 311

Schayer, Richard W.
Nilson, H. W., and. Sep 147

Schedin, Lyle G.
Weber, K. G., and. SSR-F 69

Scheffer, Victor B. FL 25, 156; Sep 23

and Karrick, N. L., Sanford, F. B.
SSR-F 32

Sanford, F. B., Kenyon, K. W., and.
Sep 228

Schloemer, C. L.
Juday, C., and Livingston, C. PFC 40 C

Schneberger, Edward. PFC 56 C

Schott, Robert R. FL 304, Pt. 1

Schrader, Franz
and Schrader, S. H. Doc 926

Schrader, Sally Hughes
Schrader, F., and. Doc 926

Schroeder, William C. Doc 962, 1081

Bigelow, H. B., and. FB 20, 74

Hildebrand, S. F., and. Doc 1024

Schuck, Howard A. FB 66; FL 198; PFC v. 10,
no. 1 A; RR 32; Sep 217, 319 (pt. 2)

and Arnold, E. L., Jr. FB 67

and Clark, J. R. Sep 285

Royce, W. F., and. FB 90

Schuck, Howard A., editor. SSR-F 13

Schultz, Vincent. PFC v. 12, no. 2 K

Schuster, George A.
and Lewis, W. M. PFC v. 16, no. 2 H

Schwab, R. L.
Earp, B. J., and. PFC v. 16, no. 3 D

Schwartz, Louis
and Tabershaw, I. R. FL 124

Scidmore, W. J.
and Glass, A. W. PFC v. 15, no. 3 D

Scofield, W. L. Doc 983

Scott, S. A. PFC v. 10, no. 2 N

Seagran, Harry L. Sep 346, 387

Seaman, E. A. PFC v. 10, no. 1 J, v. 10,
no. 3 H, v. 10, no. 4 G, v. 13, no. 2 F
and Stephens, R. F. PFC v. 12, no. 1 D
Seaman, Wayne R. PFC v. 13, no. 3 G, v. 13,
no. 4 I
Sears, Nicholas J. PFC v. 15, no. 3 F
Seifert, R. P.
Lindgren, B. E., and. Sep 339
Seiwell, H. R.
Galtsoff, P. S., and. EC 66
Selby, Horace H. FL 118
Sella, M. SSR-F 76
Senn, Vincent J. Sep 144
Sette, Oscar E. Doc 976, 997, 1010, 1025,
1034; FB 38, 49; FC 4, 10, 14, 17;
SSR 19; SSR-F 116
and Fiedler, R. H. Doc 1050
and Needler, A. W. H. IR 19
Schaefer, M. B., and Marr, J. C. RR 29
Seymour, Allyn H.
and Donaldson, J. R. PFC v. 15, no. 3 J
Royal, L. A., and. PFC 52 A
Shackell, L. F. Doc 952
Shapiro, Sidney. FL 297, 317, 333; Sep 249
Sharp, Robert W. PFC v. 12, no. 3 F, v. 13,
no. 3 I
and Bennett, L. H., Saeugling, E. C.
PFC v. 14, no. 1 G
Sherr, Harry
and Power, E. A., Kahn, R. A. FL 352;
Sep 220
Shetter, David S. PFC v. 13, no. 4 F
Hazzard, A. S., Leonard, J. W., and.
PFC v. 9, no. 2 A
Shimada, Bell M. FB 58, 62, 64; FL 248;
Sep 284
Cleaver, F. C., and. Sep 260
Van Campen, W. G., and. FL 388
Shimada, B. M., editor
and Van Campen, W. G. SSR-F 18, 22,
42, 45, 47

Shockey, Charles F.
and Sanford, F. B. Sep 66
and Stansby, M. E., Elliott, R. P. Sep 37
Pottinger, S. R., Kapalka, E. F., and
Sep 104
Shoemaker, Hurst H. PFC v. 13, no. 3 L
Shomura, Richard S.
Murphy, G. I., and. SSR-F 98, 108
Shostrom, O. Eugene
Davidson, F. A., and. IR 33
Shuman, Richard F. FB 50
Shuster, Carl N., Jr. PFC v. 16, no. 1 G
Siebenaler, J. B. Sep 356
Siegler, Hilbert R.
and Pillsbury, H. PFC v. 11, no. 2 G
Silliman, Ralph P. FB 51; PFC 22 C; SSR 22,
24, 50
and Rich, W. H., Bryant, F. G. SSR 34
Simon, James R.
and Roberts, F. PFC 56 B
Skud, Bernard Einar
Hanavan, M. G., and. FB 95
Slater, Craig
Premetz, E. D., with others, and.
SSR-F 129
Slater, Daniel W. PFC v. 10, no. 3 F
Smart, Rex
Stubblefield, A. G., Lefevre, L., and.
PFC v. 11, no. 4 F
Smith, A. B. PFC v. 12, no. 1 H
Smith, Arthur L., Jr.
Lynch, J. J., with others, and. SSR 39
Smith, Bernard R.
Applegate, V. C., and. SSR-F 61
Applegate, V. C., and Nielsen, W. L.
SSR-F 92
Applegate, V. C., and with others.
SSR-F 68
Erkkila, L. F., and with others.
SSR-F 56

- Smith, Charles G. PFC 54 E
and Lewis, W. M., Kaplan, H. M.
PFC v.14, no.4 F
- Smith, E. V.
Swingle, H. S., and. PFC 53 B
- Smith, Frank. Doc 970
- Smith, Hugh M.
and Kendall, W. C. Doc 904
- Smith, Keith A. Sep 365
Kolloen, L. N., and. Sep 361
Schaefers, E. A., and. Sep 368
- Smith, Lloyd L., Jr.
Butler, R. L., and. PFC v.15, no.4 D
- Smith, M. W.
M'Gonigle, R. H., and. PFC 38 B
- Smith, Osgood R. PFC 36 B; Sep 159
and Ahlstrom, E. H. SSR 44
and Schaefer, M. B. Sep 225
Hanson, H. A., and Needham, P. R.
SSR 10
- Smith, Richard T. PFC 47 H
and Quistorff, E. PFC 51 D
- Smith, Robert O. FL 239, 273; Sep 14, 18,
195, 198, 227; SSR 63
Galtsoff, P. S., and with others. FB 18
- Smith, Robert O., translator. FL 338
- Smith, Stanford H. PFC v.16, no.2 E;
SSR-F 34
Moffett, J. W., and. SSR-F 12
- Smither, Harold T. FL 7
- Snieszko, Stanislas F. PFC 52 C, v.11,
no.1 I, v.11, no.3 C, v.14, no.2 A,
v.15, no.2 D
and Friddle, S. B. PFC v.10, no.3 G,
v.11, no.3 E
Griffin, Philip J., and. FB 68
Gutsell, James S., and. PFC v.10,
no.3 E
Rodgers, E. O., with others, and.
PFC v.13, no.2 C
- Wood, E. M., Griffin, P. J., and.
PFC v.16, no.1 C
- Snow, George W. Sep 256
Premetz, E. D., and. Sep 348
- Snow, J. R. PFC v.11, no.2 B
- Snyder, J. O. PFC 12 A
- Solberg, Archie Norman. PFC 40 A
- South Pacific Fishery Investigations See
Fishery Biology, Branch of. South
Pacific Fishery Investigations
- Southall, J. B. EC 57
- Speaker, E. B. PFC 36 A
- Spear, Harlan S.
Buller, R. J., and. SSR-F 7
- Spencer, John
Lindgren, O. W., and. PFC 45 C
- Sprecher, G. E. PFC 42 C
- Springer, Stewart. Sep 277, 289
and Bullis, H. R. FL 406; Sep 380
- Stansby, Maurice E. FL 94, 107, 115, 116,
120; Sep 31, 71, 218, 275, 300, 302;
SSR-F 109
and Dassow, J. Sep 233, 279
and Griffiths, F. P. RR 6
and Harrison, R. W. SSR 15
and Lemon, J. M. RR 1
and Osterhaug, K. L. FL 232
Clegg, W., Sanford, F. B., and. Sep 103
Dassow, J. A., and. FL 332
Heerdt, M., Jr., and. Sep 372
Heerdt, M., Bucher, D. L., and. FL 128
Karrick, N. L., and. Sep 366
Landgraf, R. G., Jr., Miyauchi, D. T.,
and. Sep 298
Miyauchi, D. T., and. Sep 329, 377
Piskur, F., and. Sep 132
Sanford, F. B., Harrison, R. W., and.
FL 212; Sep 129
Shockey, C. F., and Elliott, R. P. Sep 37

Stejneger, Leonhard. Doc 986

Stephens, Reobert F.
and Evans, W. PFC v. 12, no. 3 I
Seaman, E. A., and. PFC v. 12, no. 1 D

Stewart, Norman Hamilton. Doc 1007

Stiles, Earl W.
and Russ, H. C. PFC 37 B

Stockley, Clinton. PFC v. 16, no. 3 I

Stoddard, James V. PFC v. 10, no. 2 K

Stoloff, Leonard S. FL 261, 306, 307; Sep 44
and Lee, C. F. FL 173, 335 (pt. 1)
Lee, C. F., and. SSR 37

Stolting, Walter H. Sep 179, 291
and Alexander, D. R. FL 410
and Garfield, M. J. FL 407-409
Anderson, A. W., and. SSR-F 104
Kahn, R. A., and. FL 365

Stora, DeWitt L.
Comelli, A., and. FL 266

Storer, Tracy I. PFC 35 B

Stringer, Louis D.
Herrington, W. C., and. PFC v. 9, no. 4 E
Rounsefell, G. A., and. FL 42
Tiller, R. E., Glude, J. B., and.
Sep 323

Stroud, Richard H. PFC v. 13, no. 3 H,
v. 15, no. 1 A
and Grice, F. PFC v. 14, no. 2 C

Stroup, E. D. SSR-F 135

Stubblefield, A. G.
and Lefevre, L., Smart, R. PFC v. 11,
no. 4 F

Studdert, W. P.
Hopkinson, L. T., and. Doc 930

Suehiro, Yasuo. SSR-F 62

Sullivan, Carl R., Jr.
Holton, G. D., and. PFC v. 16, no. 1 B

Suomela, Arnie J.
Craig, J. A., and. SSR 14

Rich, W. J., and. Doc 1022

Supreme Commander for the Allied Powers,
General Headquarters, Analysis and
Research Division, Civil Information
and Education Section. FL 288

Supreme Commander for the Allied Powers,
General Headquarters, Natural
Resources Section. FL 249

Surber, Eugene W. FL 217, 331, 344; IR 11;
PFC 8 A, 17 A, 21 A, 42 E, 49 A,
56 E, v. 10, no. 2 A, v. 10, no. 3 C,
v. 10, no. 4 E
and Everhart, M. H. PFC v. 12, no. 3 D
and Gutsell, J. S. PFC 28 C
and Hoffmann, C. H. SSR-F 4
and Klak, G. E. PFC 47 D
and Minarik, C. E., Ennis, W. B., Jr.
PFC v. 9, no. 3 F
Hoffmann, C. H., and. PFC v. 11, no. 4 B;
SSR-F 3
Linduska, J. P., and. Cir 15
Nelson, A. L., and. SSR 41

Swift, Lloyd W.
and Gee, M. A. PFC v. 12, no. 3 A

Swingle, H. S.
and Johnson, M. C. PFC v. 15, no. 1 F
and Smith, E. V. PFC 53 B

Sykes, James E. PFC v. 12, no. 3 H, v. 13,
no. 1 H

T

Tabershaw, Irving R.
Schwartz, L. and. FL 124

Tack, Peter I.
Baten, W. D. and. PFC v. 14, no. 2 B

Taft, A. C. PFC 2 B, 11 C

Takata, Michio
Tester, A. L., Yuen, H., and. SSR-F 134

Talbot, G. B. SSR-F 94

Authors

Tauchi, Morisaburo. SSR-F 16

Taylor, Clyde C. FB 83; SSR-F66

Scattergood, L. W., and. FL 364; Sep 239

Taylor, Harden F. Doc 903, 919, 921, 954,
989, 1016; EC 53

and Wells, A. W. Doc. 947, 998

Taylor, Henry L. FL 228

Ten Eyck, R. N.
and Magnusson, H. W., Bjork, J. E.
Sep 301

Terry, William M. FL 371

Tester, Albert L. SSR-F 71

and Yuen, H., Takata, M. SSR-F 134

Thayer, Marshall PFC v.10, no.4 H

Thompson, Bill. PFC v.12, no.4 B

Thompson, Fred A. PFC v.9, no.2 I

Thompson, Paul E. PFC v.15 no.1 B

Chipman, W. A., and. SSR-F 9

Thompson, Seton H. Doc 1084; SD 20, 23, 26,
29, 31, 33,

and Weymouth, F. W. IR 29

Weymouth, F. W., and. Doc 1101

Thompson, William H. PFC v.9, no.3 D

Thomsen, F. L. Sep 119

Tiller, Richard E.
and Glude, J. B., Stringer, L.D. Sep 323

Timmis, Harry E.
and Chilton, C. H. MDL 60

Kahn, R. A., and. FL 313

Titcomb, John W. Doc 948

Tolle, Chester D.
Manning, J. R., Nelson, E. M., and. IR 3

Nelson, E. M., and Jamieson, G. S. IR 12

Pottinger, S. R., and with others. IR 27

Toole, Marion. PFC v.13, no.1 A

Topel, Hubert C. PFC v.9, no.1 H, v.9, no.4 F,
v.11, no.4 E

Fuqua, C. L., PFC 46 E

Towers, Irving L.
Hildebrand, S. F., and Doc 1027

Townsend, Charles Haskins. Doc 1045

Townsend, Lawrence D.
Craig, J. A., and. SSR 33

Trefethen, Parker S.
Collins, G.B., Volz, C.D., and. FB 92

Treichler, Ray
and Lee, C. F., Jarvis, N. D. FL 295

Tressler, Donald K.
and Wells, A. W. Doc 967

Tryon, Clarence A., Jr. PFC v.9, no.3 E

Tunison, A. V. FL 378; PFC 50 D, v.13, no.3 C

and Mullin, S. M., Meehean, O. L. PFC
v.11, no.1 D, v.11, no.4 G

Tuttle, Edward M.
Rucker, R. R., and. PFC v.10, no.2 J

U

Uhler, F. M.
Cottam, C. and . PFC 14 A

Umali, Agustin F. RR 17, 21

and Warfel, H. E. FL 354

Herre, A. W., and. Cir 14

U. S. Dept. of the Interior. Library. FL 162

U. S. Office of Naval Operations. FL 157

V

Vaughan, Elizabeth. SSR 17

Sanford, F. B., and. Sep 237

Van Buren, Henry T. FL 341

Van Campen, Wilvan G. Sep 326, 358, 382

and Shimada, B. M. FL 388

Van Campen, Wilvan G., editor
Shimada, B. M., and. SSR-F 18, 22, 42,
45, 47

Van Campen, Wilvan G., translator SSR-F 16,
17, 19-25, 33, 42-52, 62, 76-79, 82, 83,
112

Van Cleve, Richard. PFC v.14, no.4 D

Van Deusen, R. D. PFC v.15, no.1 C
and Hile, R., Jobs, F. W. FB 40

Van Oosten, John. Doc 1053; FL 15, 166; PFC
28 B, v.15, no.2 I; Sep 112

Vestal, Elden H. PFC v.13, no.4 G

Vilbrandt, F. C.
and Abernethy, R. F. Doc 1078

Visscher, J. Paul. Doc 1031

Volz, Charles D.
Collins, G. B., and Trefethen, P. S. FB 92

Von Ihering, R. See Ihering, R. von

W

Wade, Charles B. FB 46, 53, 55, 57

Wagner, Edward D. PFC v.16, no.1 F
and Perkins, C. L. PFC v.14, no.3 I

Wagner, Richard A.
Fish, F. F., and. SSR-F 41

Walburg, Charles H. SSR-F 114

Wales, J. H. PFC v.9, no.2 E, v.16, no.3 E

Walford, Lionel A. FB 29; FL 121, 318; Sep 68
and Mosher, K. H. SSR 20, 21
Schaefer, M. B., and FB 56

Walker, C. H. PFC v.10, no.3 I

Walker, Meddie C. PFC v.11, no.1 H
and Frank, P. T. PFC v.14, no.3 J

Wall, Roy PFC 49 B

Wallace, M. Marvin
and Pertuit, C. J., Hvatum, A. R. FL 340

Warfel, Herbert E. PFC 56 A; RR 28
and Clague, J. A. RR 15
and Manacop, P. R. RR 25
Umali, A. F., and. FL 354

Warner, Kendall. PFC v.15, no.4 C

Washburn, G. N.
Dobie, J. R., Meehan, O. L., and. Cir 12

Washington (State) Dept. of Fisheries
California Division of Fish and Game,
and Oregon Fish Commission. Sep 203

Watanabe, M. PFC 48 C

Watson, Stanley W.
and Guenther, R. W., Rucker, R. R.
SSR-F 138

Weber, Kingsley G.
and Schedin, L. G. SSR-F 69

Webster, Agnes I
and Conn, W. T. FC 19

Webster, Dwight A. PFC v.12, no.2 E

Webster, John R.
and Buller, R. J. SSR-F 10

Weems, Sarah P. FL 320
Kerr, R. G., and with others. FL 285

Wells, Arthur W. Doc 979
Taylor, H. F., and. Doc 947, 998
Tressler, D. K., and. Doc 967

Welsh, William W.
and Breder, C. M., Jr. Doc 945
Bigelow, H. B., and. Doc 965

Werner, Eunice M. Sep 60

Westfall, B. A. FL 174; SSR 13
and Ellis, M. M. SSR 7
Ellis, M. M., and. SSR 11
Ellis, M. M., and Ellis, M. D. RR 9
Ellis, M. M., and with others. SSR 38

Weyer, Albert E. PFC 51 A

Weymouth, F. W.
and Lindner, M. J., Anderson, W. W.
FB 14
and McMillin, H. C. Doc 1099
and McMillin, H. C., Holmes, H. B.
Doc 984
and Thompson, S. H. Doc 1101
Thompson, S. H., and. IR 29
Wharton, James FL 358; Sep 191
Whipple, Dorothy V.
Galtsoff, P. S., and. Doc 1094
Whipple, Wilburn J.
and Pelz, B. L. PFC v.9, no.3 L
Rucker, R. R., and. PFC v.13, no.1 G
Rucker, R. R., and with others. FB 76;
PFC v.13, no.3 F
Whitaker, R. K.
Magnusson, H. W., and. Sep 310
White, George K.
Rounsefell, G. A., Bond, L. H., and.
PFC v.12, no.3 K
Whiteleather, R. T. FL 245, 302; Sep 355
Knake, B. O., and. FL 49
Whiteman, Elizabeth F. CB 27
Widrig, T. M. FB 94
Wiebe, A. H. Doc 1028, 1082
Canfield, H. L., and. EC 73
Davis, H. S., and. Doc 1085
Wigutoff, Norman B. FL 386, 387, 413; Sep
320, 344
and Carlson, C. B. FL 361, 414 (pt.5)
and Carlson, C. J. FL 375
Wilde, Cole W.
and Romeo, V. B. PFC v.13, no.3 K
Williams, R. Walter
Bonham, K., and. PFC v.10, no.1 B
Willoughby, Harvey. PFC v.15, no.3 I
Wilson, Albert J. PFC v.12, no.4 F
Wilson, Charles Branch. Doc 942, 953
Wilson, Shirley J. FL 334
Winter, Charles E.
and Sandholzer, L. A. FL 201; Sep 172
Wolf, Harold. PFC v.15, no.4 F
Wolf, Ken. PFC v.16 no.2 A

Wolf, Louis E. PFC 32 E, 39 C, 42 A, 49 F,
v.9, no.3 A, v.13, no.1 C, v.13, no.2 H,
v.13, no.3 B, v.14, no.3 D, v.14, no.4 B
Wood, Edward M. PFC v.15, no.4 A
and Dunn, W. A. PFC v.10, no.2 D
and Griffin, P. J., Snieszko, S. F.
PFC v.16, no.1 C
Wood, F. M. Sep 40
Woddall, A. Neal
Coates, J. A., and. PFC v.15, no.2 F
Woodbury, Lowell
Foster, F. J., and. PFC 18 C
Wright, Alice. PFC 24 A
Wright, W. H.
Robertson, A. C., and. Doc 1083

Y

Young, L. A.
and Nicholson, H. P. PFC v.13, no.4 C
Young, Leo. FL 143, 312; Sep 78, 108, 109
and Jarvis, N. D. Sep 55
Lee, C. F., and. Sep 24
Sandholzer, L. A., Nostrand, T., and.
SSR 31
Young, Ralph W. PFC 38 D
Yuen, Heeny
Tester, A. L. and Takata, M. SSR-F 134

Z

Zilliox, Robert G.
Haskell, D. C., and Lawrence, W. M.
PFC v.14, no.2 F
Zimmer, Paul D.
Hanson, H. A., and Donaldson, I. J.
SSR-F 29
Zisman, Joseph
Kossoris, M. D., and. Sep 149
Zobairi, A. R. K. PFC v.15, no.3 E

SUBJECT INDEX

A

Abaca (See also Fibers):

- Manila rope restrictions again tightened by M-84. Sep 74
- report on tests made in commercial fisheries. FL 177

Abalone:

- exploratory diving for. Sep 322
- investigations in southeastern Alaska. Sep 322

Abstracts on commercial fisheries, filing system for. FL 232

Abundance, fluctuations in (See particular species).

Acinetaria (See Parasites, protozoan).

Aden, Gulf of, fishing industry. FL 328

Adventure (See Vessels, fishing and research).

Advertising:

- Colorado's glass fish tank. PFC v. 10, no. 1 F
- display tanks, trout; neutralizing chlorine in. PFC v. 11, no. 1 J
- fishery products, institutional advertising of. Sep 96

Africa, fisheries of. FL 251, 305, 341, 347, 363

Agar (See also Marine plant products):

- agar, agaroids, and the American agar industry. FL 118

agar and other seaweed gums; summary of data on chemical and physical properties. FL 173

the agar situation, 1943. Sep 44

agar-weed, a fishery resource. Sep 144

bacteriological studies of. FL 335

bibliography relating to. FL 261

gels, strength measurement of. FL 306

gels, syneresis. FL 307

Gracilaria confervoides, studies on gum extracts from. SSR 37; Sep 263

Japanese agar-agar industry. FL 263

resources of the United States. Doc 929

Agave, description. Sep 54

Age determination (See Fishes - age, growth).

Aids for small business. FL 243

Airplane, planting fish by. PFC v. 13, no. 1 E

Akita Maru (See Vessels, fishing and research).

Alabama (See also Landings):

- oyster bottoms, destruction by flood, Mobile Bay; 1929. Doc 1069

- oyster reefs, conditions and suggestions for improvement 1943. SSR 29

- oyster reefs, following the hurricane of September 19, 1947; investigations of. SSR 59

Alabama spotted bass, description. FL 76

Alaska (See also Fisheries, Alaska; Fisheries, United States and Alaska):

- abalone. Sep 322

- albacore tuna exploration in Alaskan waters. FL 376

Alaska (Continued)

- associations, list of fishery. FL 254
- clam fishery, near Cordova. IR 29
- clams. SSR-F 53; Sep 132
- cod fisheries, Pacific. Doc 1014
- cooperatives, list of fishery. FL 292
- crab, king. FL 374; Sep 308, 330
- employment possibilities in the Alaskan fishing industry. FL 298
- explorations, fish and shellfish. FL 330, 342, 369, 375, 376, 402; Sep 278, 311, 343, 368, 371
- fish and shellfish. Cir 17
- fish and shellfish, commercial, common or local names. FL 413
- fish production in the United States and Alaska, fluctuations in. Sep 179
- fisheries, commercial; possibilities of Seward Peninsula and Kotzebue Sound area. FL 375
- fisheries, development of latent. FL 95
- fisheries, opportunities for small business in. FL 107; Sep 71
- fisheries, preliminary review of. FL 393
- fisheries of the United States and Alaska, relative productivity and value. FL 108, 393; Sep 51, 369
- fishery and fur-seal industries. 1921, Doc 933; 1922, Doc 951; 1923, Doc 973; 1924, Doc 992; 1925, Doc 1008; 1926, Doc 1023; 1927, Doc 1040; 1928, Doc 1064; 1929, Doc 1086; 1930, AR 2; 1931, AR 7; 1932, AR 11; 1933, AR 16; 1934, AR 19; 1935, AR 23; 1936, AR 28; 1937, AR 31; 1938, AR 36; 1939, AR 40; 1940, SD 2; 1941, SD 5; 1942, SD 8; 1943, SD 10; 1944, SD 13; 1945, SD 15; 1946, SD 17; 1947, SD 20; 1948, SD 23; 1949, SD 26; 1950, SD 29; 1951, SD 31; 1952, SD 33
- fishery industries and their administration. FL 322; Sep 246
- fur seal, vitamin A content of oils and livers. SSR-F 32; Sep 190
- fur-seal herd, legislation for protection of. FL 299
- fur-seal industry, byproducts of. FL 380
- fur-seal industry, Commander Islands, 1897-1922. Doc 986
- herring fisheries, decline and rehabilitation in southeastern. FL 252
- herring fisheries, outlook. FL 16; SSR 52
- Karluk Lake, limnological studies, 1926-1930. FB 12
- Ketchikan laboratory. Sep 246
- laws and regulations, commercial fisheries, game fishes, walruses, and sea lions (See Laws and regulations).
- Little Port Walter, complete census of salmon migrants. PFC 56 F
- Marshall Islands, Caroline Islands, and Truk cruise, 1949. Sep 225
- peninsula fisheries reservation, experiment in tagging adult red salmon. Doc 943
- pink salmon trap fishery, statistical review. SSR 17
- pollock. Sep 354
- Pribilof Islands, fur-seal industry. EC 71; FL 77
- salmon, intertidal spawning of. FB 95
- salmon, red, of Karluk River; fluctuations in abundance. FB 39
- salmon, red, of Karluk River; runs. Doc 1021
- salmon cannery waste. Sep 258, 320
- salmon fisheries; Part 1 - Bristol Bay and the Alaska peninsula, statistical review. Doc 1041
- salmon fisheries; Part 2 - Chignik to Resurrection Bay, statistical review. Doc 1102
- salmon fisheries; Part 3 - Prince William Sound, Copper River and Bering River, statistical review. FB 7
- salmon fisheries; Part 4 - southeastern, statistical review. FB 13
- salmon fisheries (See also Alaska, fishery and fur-seal industries). Doc 902, 909, 928, 1092; SSR-F 89
- seals and sea lions in. SSR 28
- sheefish, description and proximate composition of. Sep 312
- shrimp fishery. Doc 1052; Sep 344

Alaska (Continued)

sport fishing in. FC 13

statistics, annual summaries (See also Fisheries, United States and Alaska). 1941, CFS 54; 1942, CFS 97; 1943, CFS 143; 1944, CFS 202; 1945, CFS 331; 1946, CFS 401; 1947, CFS 438; 1948, CFS 565; 1949, CFS 640; 1950, CFS 712; 1951, CFS 811; 1952, CFS 892; 1953, CFS 993

unions, fishermen's and fish shore workers, list of. FL 293

Alaska, motor vessel (See Vessels, fishing and research).

Albacore Fishing Grounds Development Conference. SSR-F 33

Albacore tuna (See also Tuna):

age determination. SSR-F 21

description. FL 82; SSR-F 104

fish tags on. Sep 288

fishery, east of Cape Nojima; oceanographic conditions. SSR-F 77

fishing grounds development in 1939. SSR-F 33

John N. Cobb, in the north Pacific, explorations of, 1950, 1951, 1952. Sep 280, 313, 357

long-line fishing for. SSR-F 108

stocks in Japanese waters. SSR-F 16

Albatross III (See Vessels, fishing and research).

Alewives:

and alewife roe, firms canning. SL 105

in fresh water. PFC v. 16, no. 3 F

life history. FL 42

river herring (alewives), salted, in Chesapeake Bay. FL 26

river herring (alewives), salting, improvements in process of. Doc 903

roe, canning. FL 87; RR 7

runs, management of. FL 42

stocking, restoration by. FL 42

suitability of Maine river for. FL 42

Algae (See also Marine plant products):

fish ponds, control of algae. PFC v. 16, no. 2 G

growth, biotic influences affecting. FB 87 in the Gulf of Mexico. FB 89

seaweed gums. FL 156, 173; Sep 23

seaweed products, manufacturers of. SL 154

water-bloom, manganese to increase production in ponds. PFC v. 11, no. 3 D

Algin (See also Marine plant products):

algal gelatines; sources, preparation, and properties. Doc 929; EC 51

algal growths, control in hatching ponds and raceways. PFC v. 9, no. 4 G

and gelatin, metabolism studies. RR 4

Alligators, life history. FL 164

Ambergris:

description, use, and identification. FL 280

in perfume extracts. FL 281

American lobster (See also Lobsters):

description. FL 74

Amino acids (See also Fish as food):

content in Alaska pollack. Sep 354

content in salmon roe. Sep 346

content in seafood. FL 36; Sep 145

percentage of certain amino acids in fish and shellfish. FL 116

Anadromous fishes, factors influencing the orientation of migrating. FB 73

Analytical methods (See Fish oil; Quality, freshness tests; Vitamins).

Anatomy of fishes (See Fishes - anatomy).

Anchovies:

canning, commercial. FL 88; RR 7

eggs and larvae. SSR-F 56, 80, 102, 123

firms, canning. SL 120

Anemia in trout (See Diseases, trout).

Anglerfish:

- description and use. Sep 62
- nutritive value of cooked. Sep 63

Angling:

- and fishery equipment, list of books on. FL 218
- laws, black bass. FL 1
- Little Pigeon River, Great Smoky Mountains National Park. SSR-F 121

Animal food (See Pet food).Anna A (See Vessels, fishing and research).Antillas, shrimp trawler, (See Vessels, fishing and research).Antioxidants. Sep 107, 245, 287Aomori Maru (See Vessels, fishing and research).Applications for fish. PFC v. 13, no. 1 FAquariums:

- care of aquarium fishes. FL 43, 165, 411
- care of goldfish. Doc 935; FL 57
- chlorine, treatment for removing from city water. Doc 1045
- construction of, in the home workshop. FL 315
- construction of a garden fish pool. FL 57, 59
- converting carboys into jars and. PFC v. 16, no. 3 J
- dealers in goldfish, aquarium fishes, plants and accessories, partial list of. FL 193
- public; construction, equipment, and management. Doc 1045
- tropical aquarium fishes. FL 165, 411
- turtles in the home aquarium. FL 91
- Washington Aquarium. PFC v. 10, no. 2 C

Aquatic animals:

- acid-iron waste disposal, effect on. SSR-F 11
- oil mixed with carbonized sand, effect on. SSR-F 1

Aquatic insects:

- midges and some related insects, ecological study. Doc 915

Aquatic life as affected by water conditions. FB 34Aquatic plants (See Vegetation, submerged).Aquatic products (See Fishery products).Aquatic shell industries:

- history and description. FC 15

Aquatic vegetation (See Vegetation, submerged).Armed Forces, sea-food products in rations. Sep 336Art, decorative:

- aquatic products in costume jewelry, use of. FL 2

Ascorbic acid:

- effect on keeping quality of frozen oysters. Sep 287

Asiatic fisheries (See also Japan). Doc 902, 1006, 1092; FL 304, 310, 328, 333, 372, 396; SSR-F 45Associations (See Fishery associations and unions).Asterias forbesi (Desor) (See Starfish).Atkins, Charles Grandison. PFC 25 CAtlantic salmon (See also Salmon):

- life history. FL 176

Atlantic States, Service activities in. Sep 122Australian red snail. FL 323Auxis thazard (See Mackerel, frigate).

B

Bacteria (See also Diseases):

Bacillus columnaris. PFC 5 A

bacterial population of brining tanks in fish filleting plants. Sep 187

bacteriological studies of oyster conditioning. Sep 160

bacteriological studies of Philippine fishery products. RR 27

Paracolobactrum aerogenoides, pathogenic for fish. FB 68

plate count for fishery products, study of methods. Sep 221

Saprolegnia. PFC 5 A

Streptococcus lactis R, test organism for study of folic acid requirements of trout. PFC v. 11, no. 3 A

technological study of the ocean quahog fishery. Sep 176

Bacterium salmonicida (See Diseases, furunculosis).

Bagoong:

salted fish product of Philippines. Sep 120

Bait (See also Bait fishes):

collection, care, preparation, and propagation. Cir 12; FC 28; FL 28, 163

dealers and producers. FL 191

earthworms. FL 23

fish waste as bait in Oregon. FL 370

keeping live shrimp for. FL 337

salmon eggs, firms canning. SL 108

salmon eggs as. FL 87, 370

Bait fishes:

death, causes of. SSR-F 62

equipment, live-bait. Sep 363

fishing in the South Seas. Sep 260

for Oregon tuna fishing trip. Sep 231

Hawaiian Islands, live-bait skipjack fishery. Sep 271

Japanese fisheries for skipjack. Sep 260

live, for tuna fishing. SSR-F 107

long-line fishing, bait for. FL 317

long-line fishing, Hawaiian. Sep 244

majua, used by Cuban tuna fisheries. Sep 337

minnow preferences of anglers. FC 28

minnows, shiners and bait fish culture and care of. FL 163

observations on, during cruise of the Oregon and the Alaska, 1949. Sep 225

propagation of minnows and other bait species. Cir 12; FC 28; PFC v. 16, no. 3 B

resources; Hawaiian Islands, Leeward, and Line Islands. Sep 270

Saipan skipjack resources. SSR-F 44

trap lift net for catching tuna bait fishes. Sep 356

tuna bait resources. RR 34; SSR-F 44

Balanus (See Vessels, fishing and research).

Bangos:

culture in the Philippines. PFC v. 10, no. 4 C

Bass (See also under individual common names):

and other warm-water fishes. PFC 50 A

belly tags for. PFC 56 E

calico, culture in Texas. PFC 38 C

feeding methods at Fairport, Iowa, station. PFC 30 C

fry, production. PFC 8 A

gill disease. PFC 27 C

largemouth, chilling eggs of. PFC v. 16, no. 4 F

largemouth, feeding habits. PFC v. 16, no. 3 H

ponds, fertilizing. PFC 56 G

production, pond record of. PFC v. 11, no. 4 E

production program. PFC v. 10, no. 2 I

propagation, cooperative. EC 59

rearing pools. PFC 21 A

results of experimental studies. PFC 28 C

Beaufort, North Carolina, laboratory. Sep 246

Bentonite (See Fish ponds).

Bering Sea:

 fishing, exploratory, 1947, 1948, 1949.
 FL 330, 342, 369

 fishing, offshore. SSR-F 89

Bibliographies (and lists):

 agar, partial bibliography relating to. FL 261

 angling and fishery equipment, list of books on. FL 218

 aquatic biology and oceanography; a selected list of books. FL 162

 Bureau of Fisheries, analytical subject bibliography of publications, 1871-1920. Doc 899

 check list of fishes. Doc 1055; RR 20

 electricity in fishery science, applications of. SSR-F 127

 farm ponds and closely related subjects, a selected bibliography. PFC v. 12, no. 2 K

 fish-culturist's library. PFC 34 A

 fish ponds, publications on. FL 24

 fisheries, publications on. FL 9, 200, 300, 400

 fisheries, sources of information concerning. FL 362

 fisheries of lower California and west coast of Mexico, a bibliography relating to, 1922. Doc 937

 fishery biology, fresh-water. PFC v. 9, no. 4 H

 fishery motion pictures. FL 255

 fishery periodicals, partial list of. FL 160

 freezing. FL 265

 game-fish and sport fishing, some publications on. FL 398

 Georgia, annotated list of fishes of. Doc 940

 Irish moss, publications on. FL 25

 lobster culture. SSR 64

 Mississippi, annotated list of fishes. Doc 1027

 reservoirs. PFC, v. 15, no. 3 L

 tunas, Pacific; annotated bibliography on biology of. FB 58

Biological inquiries, progress in. 1921, Doc 911; 1922, Doc 936; 1923, Doc 956; 1924, Doc 971, 990; 1925, Doc 1003; 1926, Doc 1029; 1927, Doc 1044; 1928, Doc 1068; 1929, Doc 1096; 1930, AR 4; 1931, AR 9; 1932, AR 12; 1933, AR 17; 1934, AR 21; 1935, AR 26; 1936, AR 29; 1937, AR 30; 1938, AR 35; 1939, AR 39

Biotin (See Vitamins):

Birds, fish-eating. PFC 14 A, 19 B

Black bass:

 angling laws. FL 1

 culture. Doc 1085

 description. FL 76

 game fish laws. 1932, FC 9; 1933-1934, FC 16; 1935-1936, FC 20; 1936-1937, FC 24; 1937-1938, FC 27

Maryland. PFC v. 12, no. 1 F

 propagation and spawning of, artificial. PFC 42 C

Black bullhead:

 description. FL 133

Black Douglas (See vessels, Fishing and research).

Black drum:

 life history. FL 134

Black tuna:

 age determination. SSR-F 21

 favorable temperature for long-line fishing, catch, and homogeneity of groups in Satsunan Sea area SSR-F 52

 fishery, east of Cape Nojima, oceanographic conditions. SSR-F 78

Blackfish:

 fish jaw oil. Sep 137

Bloaters:

how to make. FL 44

smoking. FL 196

Blowfish (See Swellfish):

Blue catfish:

description. FL 133

Blue crab (See Crabs).

Blue River system of Nebraska, survey. EC 73

Blueback salmon (See Salmon, blueback, red or sockeye).

Bluefin tuna (See also Tuna):

fishing in the Gulf of Maine. Sep 309, 353, exploratory report on, 1951, 1952

New England fishery, commercial aspects. Sep 309

Bluegill:

from Maryland makes good in South Africa. PFC 45 D

increasing production for farm pond stocking. PFC, v.10, no.4 D

production, pond record of. PFC, v.11, no.4 E

production program. PFC, v.10, no.2 I

propagation in federal hatcheries of the southeast. PFC, v.14, no.2 D

Boat builders, partial list of Fishing. FL 178

"Bob" method of picking blue crabs. FL 276

Bonin Islands, Japanese whaling in. FL 248

Bonito:

canning. FL 82; RR 7

description. FL 82, SSR-F 104

Japanese fishery. FL 273

Bonnet Carre Spillway:

opening, effects on oysters in Louisiana and Mississippi. SSR-F 8

Boneville Dam:

fish, injured and dead, in vicinity. SSR-F 29

fishways, passage of shad at. SSR-F 94

fishways, success during first year of operation. PFC 45 A

Branch of Fishery Biology (See Fishery Biology, Branch of).

Brazil:

fishing and fisheries. FL 267, 329, 349.

Breathing in fishes. FL 55

Breeding (See Fish culture).

Brevoortia tyrannus (See Menhaden).

Brine-Salting (See Salting).

Brining fish for freezing (See Frozen fish; Salting).

Bristol Bay, fishing offshore. SSR-F 89

British Honduras, fisheries. FL 259

British West Indies:

fisheries. FL 259

fisheries in St. Lucia. FL 228

Brown shellfish harvester. Sep 216

Brown trout (See Trout, brown).

Browns Bank (See Georges Bank).

Buffalofish:

care and feeding in fish ponds. EC 56

propagation. PFC, v.14, no.3 J

Bullheads:

description. FL 133

food of. Doc 1037

Burbot:

cooking. FL 21

liver oil and vitamin content, chemical and physical properties of. IR 12

utilization as food. Sep 8

Bureau of Biological Survey (See United States Department of the Interior, Fish and Wildlife Service).

Bureau of Fisheries (See United States Department of the Interior, Fish and Wildlife Service).

Subjects

Business aids:

hatchery records and accounting. PFC 2 B
suggestions. FL 243

Butter clams:

canning. FL 84; RR 7
description. FL 223

from Alaskan beaches, seasonal variations in. SSR-F 53

Butyl ester (See Vegetation, submerged).

Buyers of fresh and processed fish for chain store companies operating in Virginia, North Carolina, South Carolina and Georgia. MDL 49

Byproducts (See Fish meal; Fish oil; Vitamins, etc.).

C

California:

Central Valley, water temperatures of,
1949-1951. SSR-F 75

Fish and Game Division, plans for
management of Pacific coast fisheries.
Sep 203

fisheries. Doc 1087

fisheries prosecuted by California
fishermen in Mexican waters, 1922.
Doc 937

fishery resources of Sacramento - San
Joaquin Delta. SSR-F 56

fishery resources of Trinity River, bio-
logical investigations. SSR-F 12

San Francisco Bay area, trade in fresh
and frozen fishery products. IR 39

sardines. FL 5, 81, 129; RR 7; Sep 370

Shasta Dam, fish-salvage problems in
relation to. SSR 10, 26

Shasta Dam, game fish population change
after construction of. SSR-F 34

trout investigations. PFC 35 B

tuna fishery (See also Tuna). SSR-F 104

water temperature, Central Valley,
1949-1951. SSR-F 75

water temperature stations and records,
Central Valley. SSR-F 2

Calistar, tuna clipper (See Vessels, fishing
and research).

Callinectes sapidus (See Crab, blue).

Calomel:

for treatment of trout. PFC v.10, no.3 E

in diet of hatchery salmon. PFC 51 D

versus carbarsone. PFC 51 D

Cambarus (See Crayfish).

Camps, fishing. FL 35

Canada:

food supplies of the United States, Canada,
and Great Britain compared. Sep 67

Manitoba, fresh water fishing industry.
FL 253

New Brunswick, fisheries. FL 356

Canady egg enumeration method: PFC, v.13,
no.2 E

Canned fishery products (See also Fishery
products):

canned and frozen fish trade, important
products in. FL 224

canned fish and byproducts, annual
summaries. 1941, CFS 42; 1942,
CFS 93; 1943, CFS 156; 1944, CFS
220; 1945, CFS 304; 1946, CFS 373;
1947, CFS 444; 1948, CFS 497; 1949,
CFS 577; 1950, CFS 671; 1951, CFS
772; 1952, CFS 882; 1953, CFS 1004

canned products hermetically sealed but
not processed. FL 88; RR 7

chemical composition. FL 295

examination of. FL 80; RR 7

iodine content. Doc 979

nutritive value. FL 90; RR 7

Canners of fishery products:

alewives and alewife roe. SL 105

anchovies. SL 120

caviar. SL 109

clam products. SL 111

crab meat. SL 113

fish and shellfish specialties. SL 107

fish roe. SL 109

food for animals. SL 116

groundfish flakes. SL 118

mackerel. SL 104

oysters. SL 110

salmon. SL 101

salmon eggs for bait. SL 108

Canners of fishery products (Continued)

sardines, California. SL 102A

sardines, Maine. SL 102

sea herring. SL 102

shad and shad roe. SL 106

shrimp. SL 112

squid. SL 119

tuna. SL 103

Canning (See also Factory ships):

alewives. FL 83, RR 7

alkali process for revocery of oil from
pink salmon cannery waste. Sep 301

balls, Norwegian fish. FL 86; RR 7

butter clams. FL 84; RR 7

cakes, fish. FL 86; RR 7

canneries, factors to consider in estab-
lishing and constructing. RR 7

canners (See Canners of fishery products).

cannery waste, utilization. SSR-F 109;
Sep 258, 298

caviar. FL 87; RR 7

chowder, fish. FL 86; RR 7

clam broth, juice, and nectar. FL 84;
RR 7

clam chowder. FL 86; RR 7

clams. FL 84; RR 7; Sep 132

crabs. FL 85; IR 8; RR 7

crayfish bisque. FL 86; RR 7

eels. FL 83; RR 7

equipment manufacturers. FL 359

finnan haddie. FL 83; RR 7

fish, miscellaneous. FL 83; RR 7

fish paste and sauce. RR 7, 24

fish roe. FL 87; RR 7

fishery products, historical outline of
the canning of. FL 78; RR 7

flakes, fish. FL 83; RR 7

foods, new, from salmon cannery waste.
FL 93

frog legs. FL 86; RR 7

future of industry. Sep 119

groundfish. Sep 39

hard clams. FL 84; RR 7

hermetically sealed but not processed.
anchovies. FL 88; RR 7

codfish. FL 88; RR 7

crabmeat. FL 88; RR 7

oysters. FL 88; RR 7

seafood cocktails and sauces. FL 88;
RR 7

shrimp meat (Alaska). FL 88; RR 7

smoked and spiced herring. FL 88;
RR 7

smoked salmon. FL 88; RR 7

herring. FL 83, 104; RR 7; Sep 7

herring (report 4 - Certain aspects of the
German fishing industry). FL 209historical outline of the canning of
fishery products. FL 78, RR 7home canning of fish. CB 28; FL 180;
IR 34Japanese tuna, inspection of canned.
Sep 259

king crab. FL 85, 374; RR 7; Sep 50

little-necks. FL 84; RR 7

lobsters. FL 85; RR 7

mackerel. FL 83; RR 7

Maine sea herring. FL 104; Sep 7

manufacturers of equipment for canneries.
FL 359

mussels. FL 84; RR 7; Sep 239

operations involved in. FL 79; RR 7

oysters. FL 84; RR 7; Sep 14

penetrometer for measurement of texture
changes in canned salmon. Sep 305pet food from fish waste. FL 83, 370;
RR 7

Canning (Continued)

- Philippine fish. RR 26; Sep 210
- preservation of fish by canning and related processes in Germany. FL 209
- principles and methods of. RR 7
- razor clams. FL 84; RR 7
- roe fish. FL 87; RR 7
- salmon. Doc 902; FL 80; RR 7; Sep 364
- salmon, pink and chum. EC 48
- salmon cannery to clam packing, conversion of. Sep 140
- salmon cannery trimmings, utilization. SSR-F109; Sep 258, 298
- salmon eggs for bait. FL 87; RR 7
- salt content of salmon canned from brine-frozen fish. Sep 364
- sanitation in. RR 7
- sardines, Maine and Pacific coast. FL 81; RR 7
- sardines, preparation of fish for. Doc 1020
- sardines in Norway. Sep 175
- shad. FL 83; RR 7
- shrimp. FL 85; RR 7
- soft clams. FL 84; RR 7
- sources of information on. FL 362
- specialty products. FL 86; RR 7
- spoilage. FL 89; RR 7, 26
- spoilage in canned fishery products. FL 85; RR 26
- squid. FL 83; RR 7
- sturgeon. FL 83; RR 7
- tuna. FL 82; RR 7
- turtle and terrapin products. FL 86; RR 7
- waste, utilization of cannery. SSR-F 109; Sep 258, 298

Canning equipment manufacturers:

- partial list of. FL 359

Canning firms (See Cannery products).

Capture, methods of (See Fishing equipment and methods).

Carbarsone:

- treatments for octomitus. PFC 55 A
- treatments for trout. PFC v. 10, no. 3 E
- versus calomel. PFC 51 D

Carbohydrates (See Fishes-food).

Carbon black (See Fish ponds).

Carboxymethylcellulose. Sep 263

Carboys, converting into jars and aquaria. PFC v. 16, no. 3 J

Card file subject headings for fishery technology. FL 232

Cardium corbis (See Cockles).

Caribbean area:

- fishery resources. Doc 931; FL 135, 228, 250, 259, 284, 294, 308; IR 13, 14; Sep 337
- fishes, list of. FL 259

Caroline Islands:

- fisheries. FL 273
- sponge culture experiments. FL 309
- tuna fishing. SSR-F 46

Carp:

- cooking. FL 19; PFC v. 13, no. 4 I
- cooking, manual for demonstrating. FL 34
- haemorrhagic septicaemia, a bacterial disease. PFC 52 C
- smoking. FL 122
- utilization as food. Sep 8

Caryn (See Vessels, fishing and research).

Catfishes (See also under individual common names):

- description of species. CB 34; FL 133
- nomenclature, confusion in. FL 133
- tumor, black, of. Doc 972

- Catostomus commersoni (See Sucker, white).
- Caviar (See Fish roe).
- Caviar, canning (See Canning).
- Central Valley (See California).
- Chain pickerel:
- life history. FL 166
- Channel catfish:
- culture in Texas. PFC v. 13, no. 1 A
 - description. FL 133
 - propagation. PFC 44 E
 - propagation, artificial. PFC v. 9, no. 1 E
 - tagging in West Virginia. PFC v. 10, no. 3 H
- Charles H. Gilbert, research vessel (See Vessels, fishing and research).
- Charter boats. SSR-F 7
- Check list of fishes. Doc 1055
- Chicago, Ill., trade in fresh and frozen fishery products. EC 54
- Chicago, Ill., wholesale receipts of fishery products. Sep 58, 118, 162, 223, 234
- Chesapeake Bay (See also Fisheries, Chesapeake):
- blue crab, abundance, decline in 1940-41. SSR 16
 - blue crab, abundance; fluctuations in, 1948. RR 14
 - blue crab, effect of DDT on. Sep 114
 - crab industry (See also Crabs). FL 358; Sep 191
 - fishes. Doc 1024
 - soft crab industry. FL 184
 - sport fishing in. FC 1
 - waters, offshore, biological study. Doc 1091
- Chilodon (See Parasites, protozoan).
- Chinook salmon (See also Salmon, chinook):
- biological investigations. SSR-F 56
 - canning. FL 80; RR 7
 - Columbia River, fluctuations in abundance, 1935-45. FB 51
 - Columbia River, spawning nests. FB 61
 - Columbia River, troll catch, estimation of. SSR 50
 - Columbia River, weight variations, intra-seasonal and interseasonal. SSR 34
 - fingerlings reared in circular tanks and Foster-Lucas ponds; comparison of growth rates. PFC v. 14, no. 3 G
 - fingerlings reared in ponds, troughs, and circular tanks; a comparison. PFC v. 14, no. 2 H
 - growth and degree of maturity in the ocean. Doc 974
 - life history. Cir 24, 25; FL 14
 - spawning and seaward migrations. FB 61; SSR-F 56
 - sport fishery in Willamette River. SSR 33
 - young; experiments on use of beef liver, seal meal, salmon meal, and apple flour in diet. PFC 46 C
 - young, experiments on use of blood as a substitute for beef liver in diet. PFC 47 F
 - young; experiments on use of salmon viscera, seal meal, beef pancreas, and apple flour in diet. PFC 44 B
- Chlorethane (See Fishes-tagging).
- Chlorination:
- oysters, reaction to. RR 11
- Chlorine:
- disinfection of ponds to prevent ulcer disease. PFC 49 F
 - liquid, to sterilize hatchery water supplies. PFC 48 D
 - removal unit at full-scale operating hatchery. PFC 13, no. 3 I
 - to sterilize trout hatchery pond. PFC 12, no. 2 F
- Cholesterol (See Salmon eggs).

Subjects

Chowder, canning. FL 86; RR 7

Chucuaa, research vessel (See Vessels, Fishing and research).

Chum salmon (See also Salmon, chum or Reta);

canning. FL 80, RR 7

life history. FL 14

spawning nests. FB 61

Ciguatera (See Fish poisoning).

Cisco:

age and growth in the lakes of north-eastern highlands, Wisconsin. FB 19

Clam chowder, canning of. FL 86, RR 7

Clams:

Alaska, shucked, preservation of. Sep 132

butter. FL 223

butter clams from Alaskan beaches; seasonal variations in. SSR-F 53

canning. FL 84; RR 7

canning firms. SL 111

clam bakes. FC 11

clam culture in Japan. FL 399

commercial, Atlantic Coast. FL 13

commercial, Pacific Coast. FL 223

conversion of salmon cannery to clam packing. Sep 140

cultivation. FL 13

effects of red water on. SSR 46

fishery, ocean quahog, technological study. Sep 176

food value. FL 13

gaper. FL 223

geoduck. FL 223

hard. FL 13, 72, 84; RR 7; Sep 323

hard; handraking and power dredging, biological effects on. SSR-F 110

heart cockles. FL 223

home canning. CB 28; FL 180; IR 34

industry of southern Florida. Doc 962

larvae, seasonal abundance of. SSR-F 117

little-neck. FL 84, 223; RR 7

measurements, method for recording. PFC v. 16, no. 1 G

ocean quahog. FL 13; Sep 176

pismo. FL 223

razor. FL 84, 223

razor; fishery near Cordova, Alaska. IR 29

regulation of fisheries. FL 13

soft. FL 13, 73, 84; RR 7

surf clam. FL 13

Classification of fish. SSR-F 50

Clupea pallasi (See Herring, Pacific).

Cobequid Hatchery (See Fish hatcheries).

Cockles:

Pacific, age and growth. Doc 1101

Cod:

beef of the sea. FL 269

Bering Sea, vitamin A potencies of liver oils. Sep 267

brine-cured. FL 45

catch, off east coast of North America, statistics to 1926. Doc 1034

dehydration of, in Norway. Sep 175

distribution. FL 269

drying waste. IR 32

eggs, production and distribution in Massachusetts Bay, 1924 and 1925. Doc 1032

a factor in New England history. FL 269

industry in northern Portugal. FL 367

liver oil, Iceland. FL 345

liver oil, vitamin A and D potencies of Pacific. Sep 230

liver oil in animal feeding. Doc 1065

Cod (Continued)

liver oil in diet of trout. PFC v. 10, no. 2 H
migrations off New England. Doc 1081

North Sea resources, study of. SSR-F 13
nutritive value of protein, effect of cooking
on. Sep 156

Pacific fishery. Doc 1014

recipes. FL 269

Cod liver oil (See Cod).

Coeur d'Alene River (See Pollution).

Coho salmon (See also Salmon, silver or coho):

canning. FL 80; RR 7

erythrocytes in blood of hatchery-reared
and wild fingerlings, comparison of
number. PFC v. 12, no. 1 C

fingerling; oat flour combined with salmon
meal in diet. PFC 32 A

hatchery-reared, relation of size at
release to proportionate return.
PFC 31 C

life history. FL 14

spawning nests. FB 61

Cold storage (See Frozen fish).

Cold storage holdings (See Fishery products).

Coliform organisms (See Oysters).

Colombia:

fish names with English equivalents.
FL 259

fisheries and fishery resources. FL 259

Color standards, preparation of. PFC v. 16,
no. 4 C

Colorado:

fish marketing in. Sep 201

stream sediment removal. PFC v. 16,
no. 1 E

Columbia River:

and tributaries, survey of, with special
reference to fishery resources.
SSR 51, 62; SSR-F 36, 37, 38, 39,
40, 57

fisheries, history and development. FB 32

pollution in. SSR-F 30

salmon runs, 1938. FB 37

sockeye salmon runs, status of, 1951.
SSR-F 74

Columnaris (See Diseases).

Commander Islands:

fur-seal industry, 1897-1922. Doc 985

Commercial Fisheries, Branch of:

Fish and Wildlife Service policy on com-
mercial and sport fishing interests.
PFC v. 15, no. 1 B

fishery offices and laboratories of. FL 117

positions in. FL 117

technological research programs. Sep 30,
241, 294, 327, 360

Technological Section aids fisheries.
Sep 261

Commercial fishing (See Fisheries).

Commissioner of Fisheries annual reports
(See United States Department of
Interior, Fish and Wildlife Service,
Bureau of Fisheries).

Composition of fish and fishery products (See
also Fish as food). Doc 902, 922,
967, 979, 1000, 1090, 1092; FL 116,
214, 295, 391; IR 5, 12, 17, 25, 31,
33, 36, 40, 41, 44; RR 23; Sep 126,
130, 145

Condition factor (See Fishes-growth).

Connecticut River:

shad, causes of fluctuations in abundance.
FB 88

Conservation, interstate fishery cooperation.
Sep 238

Conservation of fisheries (See Fisheries).

Consumption of fish (See Fish consumption).

Subjects

Containers (See also Packaged fish):

- canned fishery products, studies on substitute containers for. SSR 36; Sep 35
- crab meat, fresh cooked, icing of. Sep 38
- crab meat, spoilage, effect of packaging methods on. Sep 37
- crab meat in fibre containers and in tin cans, keeping quality. Sep 33
- fibre fillet boxes refrigerated with dry ice. Sep 32
- fish meal, paper bags for. Sep 124
- frozen fish, wrapping materials for. Sep 148
- sardines, packing, in Norway. Sep 175
- seafoods, fresh, suitability of non-tin containers for. Sep 36
- shrimp, fresh-cooked and peeled, studies on the icing of. Sep 83
- thermocouple seal for, new type. Sep 174
- use of glass, tin, fiber board, and wooden boxes. RR 7
- used in shipping shucked oysters. EC 62
- war-time studies of. Sep 104
- wrapping materials for frozen fish. Sep 148

Controlled Materials Plan with relation to the fishery industry. Sep 15

Cookery:

- basic recipes. CB 27; FC 19; FL 106; TKS 2
- burbot. FL 21
- canapes and hors d'oeuvres. FL 275
- carp. FC 19; FL 19, 34
- chowders. CB 27; FC 19
- clams. CB27; FC 19; TKS 8
- cod. FL 269
- cod, effect of cooking on nutritive value. Sep 156
- composition of cooked fish dishes. Cir 29

- cosmopolitan fish cookery for the Philippines. FL 377
- crabs. CB 27; FC 19; Sep 308
- croaker, baked, nutritive value. Sep 171
- demonstration manual. FL 219, 320
- dried fish. FL 18
- fish cookery for one hundred. TKS 1
- fish cookery in camp; including recipes for 6, 32, and 100 people. FL 35
- fish for breakfast. FL 247
- fish recipes for school lunches. TKS 5
- flaked fish. CB 27; FC 19
- frozen fish preparations, pre-cooked including recipes. FL 144
- garfish. FL 61
- king crab. Sep 308
- lingcod. FL 30
- little tuna. FL 416
- lobsters. CB 27; FC 19
- ocean perch. FL 285, 320; TKS 6
- oysters. CB27; EC 58; FC 19, 21; TKS 3
- oysters, baked and simmered, thiamine and riboflavin in. Sep 158
- Pacific rockfish. FL 194
- pickled fish. CB 27; FL 18
- rosefish (See Cookery, ocean perch).
- salmon. EC 48; FL 202; TKS 4
- salted fish. CB 27; FC 19; FL 18
- saucers for seafoods. CB27; FC 19; FL 53
- scallops. CB 27; FC 19
- shad. FL 30; IR 38
- shark. FL 30
- shrimp. CB 27; FC 19; TKS 7
- smoked fish. CB 27; FC 19; FL 18
- sources of information concerning the commercial fisheries. FL 362
- South American fish recipes. FL 31

Cookery (Continued)

striped mullet. FL 48

tilefish. FL 404

turtles. FL 69

wartime recipes. CB 27

whalemeat. FL 33

Cooperatives:

fishery cooperative marketing
associations, organizing. FC 22;
FL 277fishery cooperatives, Cuban government
fosters. FL 250fishery cooperatives in the United States
and Alaska, list of. FL 292

taxation of. Sep 111

Copper content of oysters, studies on. IR 23

Corals, publications on. FL 183

Cordage (See Fibers).Coregonid (See Great Lakes fishes, coregonid).Cornell University fishery research program.
PFC v.12, no.2 E

Corning, directions for. FL 18, 35

Costa Rica, fisheries of. FL 259

Costia (See Parasites, protozoan).

Cotton fiber, description. FL 111; Sep 54

Crab pots (See Fishing equipment and
methods).

Crabs:

Alaska, Reconstruction Finance
Corporation motor vessel, experi-
mental fishing trip for king crabs.
FL 330blue (See also Crabs, Chesapeake Bay).
FL 71, 85, 282, 358; RR 7; Sep 191

"Bob" method of picking. FL 276

canned crab industry of Japan. FL 314;
IR 8canning, commercial. FL 85, 88, 374;
IR 8; RR 7; Sep 50

canning, home. CB 28; FL 180

canning firms. SL 113

capture, methods of. FL 262, 291, 358;
Sep 191Chesapeake Bay, decline in abundance
1940-1941. SSR 16Chesapeake Bay, effect of DDT on.
Sep 114Chesapeake Bay, fluctuations in
abundance. RR 14Chesapeake Bay crab industry. FL 358;
Sep 191crab meat, fresh cooked; icing of.
Sep 38crab meat, frozen; retarding the
toughening of. Sep 166crab meat, king and dungeness, processing
of. Sep 275crab meat, spoilage; effect of packaging
methods on. Sep 37

crab scrap as poultry feed. FL 29

dungeness. FL 71, 85; RR 7; Sep 275, 384

dungeness taken on John N. Cobb's shell-
fish explorations in Alaskan waters,
1950. Sep 278

edible. FL 71

Jonah. FL 71

keeping quality in fiberboard containers
and in tin cans. FL 185, 384; Sep 33

king. FL 71, 85; RR 7; Sep 386

king, biology of. FL 340

king, canning. FL 85, 374; RR 7; Sep 50
275

king, freezing. FL 374

king, taken on John N. Cobb's shellfish
explorations in Alaskan waters, 1950.
Sep 278

pasteurization of crab meat. FL 415

processing activities, S. S. Pacific
Explorer. FL 361

rock. FL 71

Russian floating crab cannery. Sep 106

soft, Chesapeake Bay industry. FL 184,
358

Subjects

Crappies:

culture in Texas. PFC 38 C

Crawfish (See Crayfish).

Crayfish:

as bait. Cir 28; FC 28

bisque, canning. FL 86, RR 7

Cambarus; in Nebraska and eastern Colorado. Doc 994

control. FL 131, 401; PFC v.11, no.1 E

culture in Europe. FL 131

life history and habits. Cir 28; FC 28; FL 131

propagation of. Cir 12; FC 28

Creel census:

and expenditure study in Montana. SSR-F 120, 126

as aid to fish stocking program. PFC 37 C

Little Pigeon River, Great Smoky Mountains National Park. SSR-F 121

Michigan, an aid to the hatchery man. PFC 19 C

sport-fishing activities, survey. Cir 21, 26

sport-fishing of upper Sacramento River, methods used for. SSR-F 34

TVA dams and reservoirs. PFC v.16, no.1 A, v.16, no.3 C

trout, marked, in two West Virginia streams. PFC v.12, no.1 D

Yellowstone Lake trout, 1950-1951. SSR-F 81

Crest, (See Vessels, fishing and research).

Crickets:

as bait, propagation of. Cir 12

Cristivomer namaycush (See Lake trout).

Croakers:

baked, nutritive value. Sep 171

life history. Doc 1046

reproduction and development. FB 16

Crustacea (See also under individual species):

as food for fishes. Doc 914; FL 114

doctoral dissertations on. SSR-F 31, 87

Cuba:

cooperatives fostered by Cuban government. FL 250

fisheries. FL 259, 308

frog leg industry. FL 284

salt water fish produced commercially, list of. FL 308

shark industry. FL 250

spiny lobster industry. FL 294

tuna fishery. Sep 337

Culture (See Fish culture; Shellfish).

Curing (See also Salting, Smoking etc.):

fishery products. RR 18

salmon. Doc 902, 983

Current fishery trade (See Fishery trade, current).

Cuts of fish. Cir 20; FL 258; TKS 2

Cybiids:

in Japanese waters. SSR-F 24

Cyclochaeta (See Parasites, protozoan).

Cynoscion (See Weakfishes).

Cynoscion nebulosus (See Trout, spotted).

Cynoscion regalis (See Fisheries, trout, gray).

D

DDT:

- effect on fish. Cir 11, 15; PFC, v.10, no. 3 C
- effect upon the Chesapeake Bay blue crab. Sep 114
- effects of aerial application on fish and fish-food organisms. PFC, v.11, no. 4 B
- effects of feeding DDT-sprayed insects to fresh-water fish. SSR-F 3
- effects of various concentrations on several species of fish of different sizes. SSR-F 4
- insecticides, in the fishery industry. FL 146
- investigations by Fish and Wildlife Service, 1946. SSR 41

Daphnia:

- description and culture. FL 331; PFC 17 A
- pollution, its nature and evaluation. PFC, v.16, no. 2 B
- use in fish ponds. PFC 47 A

Darters:

- new genus from western North Carolina. Doc 1004

Dealers (See also Cannerys; Manufacturers; and Producers):

- fishery products,
 - Alabama. SL 17, 43
 - Arkansas. SL 41
 - California. SL 21
 - Connecticut. SL 5
 - Delaware. SL 9
 - Florida. SL 16
 - Georgia. SL 15
 - Illinois. SL 26, 35
 - Indiana. SL 27
 - Iowa. SL 36
 - Kentucky. SL 42.
 - Louisiana. SL 19
 - Maine. SL 1.

- Maryland. SL 10
- Massachusetts. SL 3
- Michigan. SL 28
- Minnesota. SL 24, 32
- Mississippi. SL 18
- Missouri. SL 38
- New Hampshire. SL 2
- New Jersey. SL 7
- New York. SL 6, 31
- North Carolina. SL 13, 33.
- Ohio. SL 29
- Oklahoma. SL 40
- Oregon. SL 22
- Pennsylvania. SL 8, 30
- Rhode Island. SL 4
- South Carolina. SL 14
- Tennessee. SL 39
- Texas. SL 20
- Virginia. SL 12
- Washington. SL 23
- Wisconsin. SL 25, 34

trout and pondfishes. FL 46

Deep Sea (See Vessels, fishing and research).

Dehydration of fishery products (See Fishery products).

Delaware, experimental trawler (See Vessels, fishing and research).

Demonstrations (See School lunch program).

Depth recorder (See Echo sounders).

Dermatitis (See Fish poisoning).

Derris root:

Cobequid hatchery. PFC 38 B

powdered, to sterilize hatchery water supplies. PFC 48 D

wetting agent added to attain suspension. PFC, v.13, no. 3 H

Dichlorophenoxy acetic acid (See Vegetation, submerged).

Diet:

effect of seafood diet on red cell count, hemoglobin value, and hematocrit of human blood. FL 334.

fishes considered kosher. FL 8, 418

Dietary studies (See Fishes - food).

Dingell-Johnson program:

federal aid in fish restoration. PFC, v.14, no. 4 A; RA 34

report on projects by state. Cir 21, 26

Diplostomum (See Diseases, eye fluke).

Diseases (See also Parasites):

and parasites, publications on. FL 58. SSR-F 31, 87

bacterial. PFC 5 A; Doc 924.

blue-sac. PFC v.16, no.2 A

blue-slime, trout. PFC v.12, no.2 C

columnaris. PFC 5 A

columnaris, control with sulfa drugs. PFC v.10, no.3 F

columnaris in salmon PFC v.14, no.3 C, v.15, no.4 G

columnaris in trout. PFC v.13, no.2 E, v.14, no.3 C, v.15, no.4 G

contagious, of salmon. FB 76

control, at Cobequid hatchery. PFC 38 B

control, general viewpoints on. FL 311

control, new substances for. PFC v.10, no.4 F

diplostomiasis, a hatchery disease of fresh water fishes new to North America. PFC 45 G

doctoral dissertations on. SSR-F 31, 87

epizootic, among rainbow trout. PFC v.15, no.4 E

epizootics. SSR-F 138

eye fluke, life history and control. PFC 54 A

fin rot. PFC 5 A, 24 A, 34 B

fin rot, bacterial, dual treatment for. PFC v.9, no.2 G

fin rot, bacterial; formalin for. PFC 53 C

furunculosis. SSR-F 84, PFC 5 A

furunculosis, method of disinfecting hatchery water supplies after outbreak. PFC 48 D

furunculosis, prophylaxis by oral immunization and sulfamerazine. PFC v.11, no.3 E

furunculosis, rapid presumptive test for. PFC v.14, no.2 G

furunculosis, sulfamerazine in treatment. PFC v.9, no.3 A

furunculosis, treatment. PFC v.9, no.1 C, v.10, no.3 E

furunculosis and another case of ichthyophthiriasis. PFC 45 H

gas-bubble. PFC v.15, no.1 E

gill, bacterial. PFC 5 A

gill, bacterial, new compounds for control. PFC v.10, no.1 C

gill, bacterial; pyridylmercuric acetate to control. PFC v.10, no.4 E, v.11, no.3 C

gill, of smallmouth black bass. PFC 27 C

gill, report. PFC v.14, no.1 B

haemorrhagic septicaemia, bacterial disease of carp in central Europe. PFC 52 C

ichthyophthiriasis. PFC 45 E

ichthyophthiriasis in Australian trout hatchery. PFC v.9, no.1 D

Ichthyophthirius, and methods of control. Doc 959

Ichthyophthirius multifiliis in channel catfish, and treatment. PFC v.9, no.1 E

in hatchery experiments. RR 35

in hatchery fish, control of. FL 222

kidney, sulfadiazine for. PFC v.13, no.3 F

minnows. Cir 12

octomitiiasis. PFC 24 A, v.10, no.3 E

Octomitus, carbarsone treatments for. PFC 51 D, 55 A

Octomitus salmonis, treatment. PFC v.10, no.3 E

Diseases (Continued)

of hatchery fish. PFC 6 A, 8 B

of pond-fishes - symptoms, classification, non-parasitic, fungus parasitic, animal parasitic. FL 311

of sockeye salmon. FB 76; SSR-F 138

prevention and treatment. PFC 39 A

prevention by use of closed water system. PFC 47 B

prevention in trout hatchery. PFC 43 A

protozoan, of hatchery fish. PFC 6 A

Pseudomonas hydrophila cause of "red-mouth" in trout. PFC v.14, no.3 I

pyridylmercuric acetate. PFC v.10, no.4 E

pyridylmercuric acetate; control for bacterial gill, treatment frequency and concentration necessary for adequate prophylaxis. PFC v.13, no.4 H

pyridylmercuric acetate, high mortality among large rainbow trout after treatment with. PFC v.13, no.3 D

pyridylmercuric acetate; to control. PFC v.10, no.4 F, v.11, no.3 B, v.11, no.3 C

pyridylmercuric acetate, toxicity to rainbow trout. PFC v.13, no.2 C

"red-mouth" in trout. PFC v.14, no.3 I

shiner, ulcer in. PFC v.16, no.2 H

sport-fishery activities, survey of. Cir 21, 26

sulfadiazine for kidney. PFC v.13, no.3 F

sulfamerazine and oral immunization for treatment of furunculosis. PFC v.11, no.3 E

sulfamerazine for treatment of trout. PFC v.10, no.3 E

sulfamerazine in treatment of trout for furunculosis and ulcer disease. PFC. v.9, no.3 A

sulfamerazine treatments of coho salmon. PFC v.15, no.1 G

tapeworms in trout, treatment. PFC 50 E

treatment. FL 70

trout. IR 22, 35; PFC 24 A, 42 A, 43 A; RR 12

trout, anemia in hatchery reared. PFC v.9, no.3 G

trout, blue-slime. PFC v.12, no.2 C

trout, rainbow, epizootic among. PFC v.15, no.4 E

trout, rainbow, in a Colorado hatchery; a bacterial disease. PFC v.13, no.3 G

trout, "red-mouth", and cause. PFC v.14, no.3 I

ulcer. PFC 5 A, v.16, no.2 H

ulcer, outbreak among brook trout yearlings; bacteriological findings. PFC v.12, no.2 B

ulcer, sulfamerazine in treatment. PFC v.9, no.3 A

ulcer, value of disinfection. PFC 49 F

ulcer in brook trout; economic importance, diagnosis, treatment and prevention. PFC v.14, no.2 A

virus, treatment and prevention. PFC v.15, no.2 D

Displacement method of egg enumeration. PFC v.13, no.1 D, v.13, no.2 E

Distribution of fishes (See Fishes - distribution).

Dog salmon (See Salmon, chum or keta).

Dogfish (See also Shark and dogfish):

as a food. Sep 43

body length of and vitamin A in liver, relationship between. Sep 184

E value ratios for liver oils produced in Pacific northwest. Sep 237

effect of liver freshness on E value ratio of resulting oil. Sep 103

liver color related to fin-spine length. Sep 139

liver trading on a potency basis fosters conservation. Sep 92

livers, fetal. Sep 94

livers, vitamin A from. FL 99

Subjects

Dogfish (Continued)

vitamin A, deterioration of. Sep 167,
170, 173

vitamin A, method of extracting. Sep 186

vitamin A in 155 grayfish livers. Sep 248

vitamin A potencies of livers of female
grayfish. Sep 117

Dolomieu (See Black bass, smallmouth).

Dominican Republic, fisheries. FL 259

Dorena Dam. RR 35

Draft deferment (See Employment).

Dressing, shucking, etc. Doc 1014, 1043, 1052,
1078; FL 54, 128, 143, 206, 214, 276;
IR 15; RR 1; Sep 233, 306, 355

Drift bottle:

releases off New Jersey. SSR-F 10

Drill, oyster (See Oyster drills).

Drill sampling device:

for fish livers. FL 141, Sep 84.

for livers frozen in drums. Sep 153

Drum:

black. FL 134; Doc 1046

genera and species, key to. Doc 945

life history. Doc 945

red, conservation. Doc 1046

red, dry-salting. FL 136

red, life history. Doc 1046

reproduction and development. FB 16

Drying:

commercial. RR 18

home. FL 18

Philippine fish, methods. RR 26

Dungeness crab:

canning. FL 85, 88; RR 7; Sep 275

description. FL 71

frozen crab meat, retarding toughening.
Sep 166

home canning. CB 28; FL 180

taken on John N. Cobb's shellfish explo-
rations in Alaskan waters, 1950.
Sep 278

Dynamiting rough fish. PFC 31 D

E

Ear snails, description. FL 323

Earthworms:

bait. FL 23, 28

propagation. Cir 12; FL 28

Ebon Maru, research vessel (See Vessels, fishing and research).

Echinoderms (See Starfish).

Echo sounders:

for small boats. PFC v.11, no.4 A

graphic-recording, on Maine lakes.
PFC v.15, no.4 C

in fisheries. Sep 273

location of sardine schools by. Sep 159

Massachusetts lakes, ponds, and
reservoirs. PFC v.14, no.2 C

Economic Cooperation Administration:

and the fishery industries. FL 303

program as it affects the fishery industry,
sixty questions and answers on.
FL 313

Economics of commercial fisheries (See
Fisheries, commercial).

Ecuador, fishing industry. FL 227

Education:

carp, cooking; sample presentation to
demonstrate. FL 34

demonstrations in Louisiana to increase
use of fish in schools. Sep 340

fishery biologists, qualifications for.
FL 96, 101

fishery biologists, survey of institutional
facilities for training. FL 101

procedure for conducting demonstrations
to increase use of fish in schools.
Sep 339

Eel catfish, description. FL 133

Eel pots (See Fishing equipment and methods).

Eels, fishing and equipment. FL 127

Egg enumeration (See Fish culture).

Egg picker (See Fish culture).

Eggs (See Fish culture).

Egypt, fisheries. FL 363

El Salvador:

fisheries. FL 259

fishes of. Doc 985

Electric fish screen:

bibliography on. SSR-F 127

design. Doc 1042

history, development, and problems.
SSR 53

laws, protective. Doc 1042

salmon fingerlings, mortality of. FB 92

Electric shocker boat design. PFC v.13,
no.4 J

Electrical fishing (See also Sonar):

bibliography on. SSR-F 127

collecting fish by electricity. PFC v.12,
no.1 G, v.12, no.3 C, v.16, no.1 B

device, German. FL 348

directing the movement of fish with.
SSR-F 93

electricity in the control of sea lampreys.
SSR-F 92

electrocution of whales. FL 348

experiments in salt water. Sep 325

requirements for successful prosecution.
PFC v.11, no.3 F

seine, electric, used in Kentucky.
PFC v.11, no.2 E

Electricity:

bibliography on. SSR-F 127

stunning fish by. PFC 49 E

Electrostatic smoking of sardines. FL 270;
Sep 164

Elephant Butte reservoir, water conditions
affecting aquatic life. FB 34

Subjects

Employment:

- activities, essential, listed by Selective Service. Sep 11
- fish culture as a livelihood. FL 97
- Fishery Biology, Division of, biological positions in. FL 96
- fishery industries, critical occupations in. Sep 4, 12
- fishery industries, draft deferment in. Sep 1
- fishery manpower, information on. Sep 12
- manning tables and replacement schedules. Sep 12
- possibilities in Alaska. FL 298
- sources of information concerning. FL 362

Emulsifiers:

- a protein product manufactured from fish (report 5 - Certain aspects of the German fishing industry). FL 210

Enemy of food fishes. EC 49

Engraulis mordax (See Anchovies).

Enterococci:

isolation from natural sources. FL 201

Enzymes (See Fishes - physiology).

Epistylis (See Parasites, protozoan).

Epizootic (See Diseases).

Equipment manufacturers (See Manufacturers and producers).

Escabeche, recipe for. FL 18

Esox (See Pikes).

Ethyl carbarnate (See Fishes - tagging, urethane).

Eupleura caudata Say (See Oyster drills).

Euthynnus (See Tuna).

Evorthodus (See Gobies).

Exploitation of sea fisheries. SSR-F 13

Exploratory fishing (See also Vessels, fishing and research). FL 330, 342, 364, 369, 402, 406; RR 28; SSR-F 45, 46, 47, 48, 116; Sep 225, 231, 244, 255, 277, 278, 280, 289, 292, 304, 309, 311, 313, 321, 322, 335, 343, 347, 353, 357, 358, 359, 361, 368, 371, 374, 380

F

- Factory ships (See also Vessels, fishing and research):
- crab cannery, Russian floating. Sep 106
 - king-crab expedition, Japanese. Sep 386
 - S.S. Pacific Explorer. FL 301, 316, 326, 361, 414; Sep 161
 - tuna-mothership operations, Japanese. Sep 284, 315, 326
- Fall salmon (See Salmon, chum or keta).
- Farm ponds (See Fish ponds).
- Federal aid in fish restoration (See Dingell-Johnson program).
- Feeding fish (See Fishes - food).
- Fertilization of fish ponds (See Fish ponds).
- Fertilizer:
- brackish-water ponds. PFC, v.16, no.3 G
 - effect on fish growth in a Wisconsin Lake. PFC 40 C
 - effect on plankton production. PFC 40 C
 - fish ponds, method of applying to. PFC, v.16, no.4 G
 - starfish as. Sep 204
- Fibers:
- comparable value of. FL 111, Sep 73
 - cordages made from various fibers, report on tests made in commercial fisheries. FL 177
 - definitions and recommended substitutes for vessel and gear cordage items. Sep 16
 - Manila rope restrictions. Sep 74
 - origin and characteristics of. FL 111; Sep 54
- Filing system for abstracts on commercial fisheries. FL 232
- bacterial population of brining tanks in fish filleting plants. Sep 187
- Fillets:
- dry ice refrigeration of. Sep 32
 - filleting plant, operations of. Sep 187
 - freezing fish at sea. Sep 306, 324, 328, 345, 362
 - freshness, judging by evaluation of surface Ph. FL 274
 - freshness index, search for. Sep 134
 - how to cut. FL 128; RR 26
 - Norwegian frozen fillet industry. Sep 355
 - Pacific northwest fish, investigations of methods for freezing and storing. SSR 15
 - Pacific ocean perch fillets, keeping quality. Sep 300
 - quality, effect of fluctuating storage temperatures on. Sep 272
 - rockfish, storage life. Sep 233, 329
 - trout, effect of refreezing on quality. Sep 209
- Fin rot (See Diseases).
- Finnan haddie, canning. FL 83; RR 7
- Fins and scales, partial list of common food fishes that have both. FL 8, 418
- Firms (See Cannery; Dealers; Manufacturers; Producers).
- Fish and shellfish (See also individual species):
- Gulf of Mexico. FB 89
 - Middle Atlantic. CB 38
 - Middle West. CB 34
 - New England. CB 33
 - South Atlantic and Gulf. CB 37
- Fish and Wildlife Service (See United States, Department of the Interior, Fish and Wildlife Service).
- Fish as food:
- as source of animal protein. Sep 282
 - canned fish as food. FL 90
 - chemical composition of some canned fishery products. FL 295
 - composition of cooked fish dishes. Cir 29
 - composition of fish. Doc 967, 1000; FL 36, 116; Sep 178
 - consider the fishes. FL 32
 - consumption of fish. FL 287, 352, 407, 408, 409, 410; Sep 134, 220, 336, 339, 340, 384
 - dietary regulations, religious. FL 8, 418
 - dogfish as a food. Sep 43
 - effect of seafood diet on red cell count, hemoglobin value, and hematocrit of human blood. FL 334
 - fish for breakfast. FL 247; Sep 131
 - food supplies of the United States, Canada, and Great Britain compared. Sep 67

Fish as food (Continued)

food value. Doc 967, 1000; FL 36, 90, 116, 295, 296, 334; IR 25; Sep 171, 178, 282, 310, 312, 346, 354

iodine content of sea foods. Doc 967; IR 25

mineral content. FL 116

mussels valuable addition to diet. Sep 239

nutritive value. Doc 1000; FL 36; Sep 178

nutritive value of canned fish. FL 90

oil and protein content. FL 116

plankton as a food. Sep 45

protein, chemical changes in. Sep 387

protein, nutritive value, effect of cooking on. Sep 156

protein, nutritive value, evaluating. FL 296

protein of cooked anglerfish, rajafish, and bay mussels, study of nutritive value. Sep 63

rough fish in midwestern states as a food, utilization of. Sep 8

sea-food products in armed forces rations. Sep 336

sharks as source of human food. FL 135

sheefish, proximate composition of. Sep 312

Fish baits (See Bait).

Fish balls:

Norwegian, canning. FL 86; RR 7

Fish cakes, canning. FL 86; RR 7

Fish consumption:

market surveys. Doc 930, 939, 996, 1026, 1036, 1039; EC 50, 52, 54, 55, 63; IR 39

per-capita consumption. FL 287, 352; Sep 220

preferences of consumers. FL 407, 408, 409, 410.

rations, armed forces. Sep 134, 336, 384

school-lunch program. Sep 339, 340

tuna. SSR-F 104

Fish culture (See also Diseases; Fish hatcheries; and under name of particular species):

age and growth determination (See Fishes-age, Fishes-growth).

age determination for scales; method and application to fish cultural problems. PFC 23 A

American, a century of, 1853-1953.

PFC, v.15, no.4 A

another hatchery meat room. PFC 45 I

aquatic plant control with 2, 4-D. FL 217

as a livelihood. FL 97

Austria. PFC 34 D

available knowledge as a spur to practical.

PFC, v.9, no.1 A

bangos, in the Philippines. PFC, v.10, no.4 C

bass. PFC 38 C

bass, largemouth, production on natural food in fertilized ponds. PFC 47 A

bass and other warm-water fishes.

PFC 50 A

bass production in a Kentucky hatchery.

PFC, v.12, no.1 E

block system, use of. PFC, v.10, no.2 E

boat, fish distribution. FL 56

breeding, selective. PFC 38 D

catfish, propagation. PFC 44 E

cement, preparation and use in fish-management projects. PFC, v.10, no.4 A

channel catfish in Texas. PFC, v.13, no.1 A

closed water system for a hatchery.

PFC 47 B

cooperative. EC 59

counting small fish, methods. PFC 2 B

crappie. PFC 38 C

crustaceans as food for fishes. FL 114

Czechoslovakia. PFC 34 D

diets and growth. PFC 49 C

disease, blue-sac. PFC, v.16, no.2 A

disease, protozoan, of hatchery fish.

PFC 6 A

disease control in fish hatcheries. FL 222

distribution policy, new Federal. PFC 52 B

effect of temperature upon eyed eggs.

PFC 45 E

egg enumeration, displacement method.

PFC, v.13, no.2 E; v.13, no.1 D

egg enumeration, methods. PFC, v.13, no.2 E; v.14, no. 2 I.

egg handling experiment. PFC 22 C

Fish culture (Continued)

- egg picker, natural siphon. PFC, v.12, no.1 H
- egg picker, power. PFC, v.10, no.1 G
- egg picker, siphon. PFC 46 F
- egg production of walleyed pike and sauger. PFC 54 E
- eggs, estimating abundance of sardine. FB 93
- eggs, green; use of glacial acetic acid to determine percentage of fertilization. PFC, v.10, no.1 E
- eggs, rainbow trout; disinfection with sulfo-merthiolate. PFC v.10, no.3 G
- eggs, salmon; a method for enumeration by displacement. PFC, v.13, no.1 D
- eggs, salmon method of planting. PFC, v.16, no.3 I
- eggs; test of fertilization, and viability of gametes by minute quantities of sperm. PFC, v.14, no.4 E
- eggs and larvae of jack mackerel. FB 97; SSR-F 80, 102, 123
- eggs and larvae of sardine (pilchard) and other fish. SSR-F 80, 102, 123
- eggs of infected trout as carrier of furunculosis. PFC, v.10, no.3 G
- eggs of largemouth bass, effect of chilling. PFC, v.16, no.4 F
- England. PFC 35 C
- erythrocytes in blood of hatchery-reared and wild fingerlings, comparison of number. PFC, v.12, no.1 C
- Europe. PFC 14 B, 32 D, 34 D, 35 C
- European origins. PFC 16 C
- experiments with forage minnows in bass ponds. PFC 47 D
- feeding records in New York hatcheries, 1936. PFC 29 A
- feeds for fish hatcheries. PFC 52 E
- fish culturist's library. PFC 34 A
- fish-food beater. PFC, v.10, no.1 K
- fish populations, improved method for enumerating. PFC, v.10, no.1 D
- France. PFC 32 D
- freshwater, a national policy. PFC 18 A
- future trends. PFC 50 A
- Germany. PFC 32 D
- graphic record for rearing artificially fed fish. PFC, v.12, no.2 J
- Great Lakes, artificial propagation of commercial species of fish. PFC 28 B
- growth, indeterminate, especially of trout. PFC 1 A
- hatchery foods, dry meals as. PFC 4 A
- hatchery foods, practical methods of feeding various classes with a minimum of loss. PFC 4 A
- hatchery foods for sockeye salmon. SSR-F 59, 60, 63, 86
- hematology of silver salmon. PFC, v.12, no.1 C
- historical review of. PFC, v.15, no.4 A
- Indiana. PFC 10 B
- kingfisher, appraisal by fishculturist. PFC, v.9, no.2 F
- Lake Titicaca. PFC 55 F
- larval and juvenile tunas and skipjacks. SSR-F 19.
- malachite green as a fish fungicide and antiseptic. PFC 18 C
- Morocco. PFC, v.11, no.1 B
- mortality in fresh water ponds and lakes. FL 112
- mortality rates of trout. PFC, v.15, no.4 B
- muskellunge, fingerling; in Wisconsin. PFC, v.11, no.4 A
- muskellunge, yearling; and its application to lake management. PFC, v.13, no.2 B
- mussels, fresh-water; propagation. PFC, v.12, no.1 B
- nets, dip. PFC, v.12, no.4 H
- nutrition of fish in hatcheries. FL 311
- Oklahoma, improvement in fish cultural practices. PFC, v.11, no.1 C
- Operation Mackinaw. PFC, v.14, no.3 K
- perfection in hatchery intakes. PFC 46 D
- pike, at New London, Minnesota, station. PFC, v.10, no.2 L
- pike, northern; separation of. PFC, v.9, no.3 M
- Pisgah National Game Preserve, management, 1938. PFC 44 A

Fish culture (Continued)

Pisgah National Game Preserve, ten years of trout stream management. PFC, v.9, no.4 C

planting fish by boat. PFC 49 G, PFC 51 E

planting fish by plane. PFC, v.13, no.1 E

Poland. PFC 34 D

pond culture. FL 311

pond fishes, evaluation. PFC, v.9, no.2 C

ponds, brackish-water. PFC, v.16, no.3 G

production program in southeastern United States, 1947. PFC, v.10, no.2 I

program. PFC 12 A

program, why necessary. PFC 41 C

propagation, artificial; survival percentage. PFC 49 B

propagation, classification of Minnesota lakes for. PFC 41 B

propagation and distribution of food fishes. 1921, Doc 912; 1922, Doc 941; 1923, Doc 964; 1924, Doc 978; 1925, Doc 999; 1926, Doc 1011; 1927, Doc 1033; 1928, Doc 1049; 1929, Doc 1070; 1930, Doc 1098; 1931, AR 5; 1932, AR 10; 1933, AR 14; 1934, AR 18; 1935, AR 22; 1936, AR 25; 1937, AR 33; 1938, AR 34; 1939, AR 38; 1940, AR 42; fiscal 1941, SD 3; calendar 1941, SD 6; 1942, SD 9; 1943, SD 12; 1944-48, SD 24; 1949-50, SD 28; 1951-52, SD 32.

propagation of channel catfish. PFC, v.13, no.1 A

propagation of largemouth black bass and blue gill sunfish in federal southeast. PFC, v.14, no.2 D

propagation of minnows. Cir 12; FC28; PFC, v.12, no.3 B

propagation projects, WPA fish. PFC 33 E

raceways with drop centers. PFC, v.11, no.3 K

rat control on fish cultural stations. PFC, v.9, no.3 I

Russia. PFC 34 D

salmon, calomel in diet. PFC 51 D

salmon, intertidal spawning of. FB 95

salmon, mortality effects of transportation of green eggs and of water temperature during incubation on. PFC, v.15, no.3 B

salmon, Leavenworth. PFC 52 F

salmon, sockeye, building new runs. PFC 52 A

salmon, sockeye; propagation. PFC 25 A

salmon cannery waste as feed in hatcheries. SSR-F 106; Sep 298

salmon eggs; care, fertilization and transportation. PFC, v.11, no.3 H

salmon eggs, possible cause of heavy losses. PFC 53 G

salmon eggs, storage life of. Sep 367

salmon fry, high mortality after recharge of a charcoal filter. PFC, v.15, no.3 J

salmon hatchery. Cir 24, 25

Scandinavia. PFC 31 B

Scotland. PFC 35 C

screen frames that seal. PFC, v.9, no.2 J

screens, perforated aluminum, for circular pools. PFC, v.12, no.3 I

screens, well casing for. PFC, v.9, no.2 I

shad, transportation and release of live. PFC, v.12, no.3 H; PFC, v.13, no.1 H; SSR-F 114

sorting table. PFC, v.9, no.4 F

spawn from Lake San Cristobal. PFC, v.10, no.2 F

spawn-taking operations. PFC 22 A; v.16, no.4 I

spawn-taking program at University of Washington, School of Fisheries. PFC, v.11, no.1 G

spawn-taking program at Yellowstone National Park. PFC, v.10, no.2 D

spawning, method to induce. PFC 34 E

spawning eastern brook trout by means of artificially prolonged light intervals. PFC, v.13, no.3 A

spawning grounds of tuna and skipjack. SSR-F 18

spawning knife for taking salmon eggs. PFC 55 H

spawning of sockeye salmon, effects of injected pituitary material upon. PFC, v.14, no.3 E

sport-fishing activities. Cir 21, 26

stations, list of federal. FL 147

suiting the diet to the hatchery. PFC 51 B

publications on. FL 6

raceways, an expansion gate. PFC, v.12, no.2 I

Fish culture (Continued)

- raceways for young trout. PFC 47 J;
 v.10, no.1 I
 surveys of. PFC, v.11, no.1 D; v.11,
 no.4 G
 transportation of channel catfish eggs and
 fry. PFC 46 E
 transportation of live shad. PFC, v.12,
 no.3 H; v.13, no.1 H; SSR-F 114
 trap nets, construction and use of.
 PFC, v.12, no.4 A
 trap new type of. PFC, v.15, no.1 J
 trout, anemia in hatchery reared. PFC,
 v.9, no.3 G
 trout; brook, brown, and rainbow; coef-
 ficient of condition in comparison with
 wild. PFC, v.13, no.4 B
 trout, eastern brook, urethane anesthesia
 in spawning. PFC, v.16, no.4 I
 trout, fingerling; lost, 10,839. PFC 49 A
 trout, hatchery; survival in streams.
 PFC, v.10, no.1 A
 trout, heating water for. PFC 44 D
 trout, improvement of brood stock through
 selective breeding. PFC 13 A
 trout, methods of improving quality of
 hatchery. PFC, v.10, no.1 A
 trout, mortality rates of. PFC, v.15,
 no.4 B
 trout, pond rearing on natural foods.
 PFC 29 D
 trout, prevention of disease in. PFC 43 A
 trout, selecting and developing brood stock.
 PFC 25 A
 trout, studies. PFC 50 A
 trout in the west. PFC, v.16, no.4 A
 trout stocking experiments, summary.
 FL 137
 turtles, friends or foes. PFC 50 B
 United States, big business. PFC 31 A
 United States, northwestern lakes, biologi-
 cal and chemical studies with reference
 to. Doc 944
 United States, survey. PFC, v.11, no.1 D;
 v.11, no.4 G
 use of impounded water for. RR 35
 warm-water, notes. PFC 36 C
 wild trout, supplementing with legal sized
 hatchery to meet fishing pressure on
 a controlled area. PFC, v.9, no.4 C
 Fish distribution tank (See Fishes - distribu-
 tion).
 Fish-eating birds. PFC 14 A, 19 B
 Fish eggs (See Fish culture; Bait; Caviar;
 Fish roe).
 Fish-farming industries. FC 2
 Fish flakes:
 canning. FL 83; RR 7
 ground fish, canners. SL 118
 Fish glue:
 manufacturers of. SL 153
 Fish graders:
 metal. PFC, v.13, no.1 I
 three-way, mechanically adjustable.
 PFC, v.15, no.3 A
 Fish hatcheries (See also Fish culture; Rearing
 ponds):
 applications for fish, handling of. PFC,
 v.13, no.1 F
 Big White Salmon. SSR-F 29
 Bonnaville. SSR-F 29
 cement for. PFC, v.10, no.4 A
 Chitose Salmon hatchery. PFC 48 C
 chlorine-removal unit. PFC, v.13, no.3 I
 chlorine to sterilize trout hatchery pond.
 PFC, v.12, no.2 F
 circular tanks to increase capacity.
 PFC 56 B
 closed water system. PFC 47 B
 Cobequid, fish production in Second River.
 PFC 38 B
 compressed air apparatus for feeding fish.
 PFC, v.9, no.2 H
 concrete, use in construction work.
 PFC 32 B
 Cortland Experimental, summary of
 research on feeds for. PFC 52 E
 description of a Federal. Cir 28
 diets and natural food, comparison.
 PFC, v.16, no.4 B
 diseases of hatchery fish (See also
 Diseases). PFC 6 A
 distribution unit for warm-water fish.
 PFC, v.12, no.4 F
 drain plug for trouts. PFC, v.9, no.1 J

Fish hatcheries (Continued)

drip incubator and heater combination solves limited water supply and low temperature problem. PFC 56 B

employment possibilities. FL 97

Erie. PFC 46 B

experiments in use of impounded water. RR 35

Federal, visit to a. Cir 28

feeds for (See also Fishes-food). PFC 52 E

fingerlings, relative survival. PFC, v.16, no.3 E

fish tub carrier. PFC, v.10, no.2 N

fishery research in Wisconsin. PFC 56 C

fishery research program at Cornell University. PFC, v.12, no.2 E

fungus, malachite green oxalate used to control. PFC, v.14, no.1 G; v.16, no.2 F

hatchery men, observations of interest to. PFC 33 F

hatchery troughs. PFC, v.9, no.3 K; v.11, no.1 I

intakes, perfection in. PFC 46 D

list of state-owned. FL 41

list with addresses, state and federal. PFC, v.11, no.1 D

logbooks. PFC, v.10, no.1 H

management. PFC 24 A, 51 F

meat cutter, Chipman. PFC, v.12, no.4 G

meat room. PFC 45 I

Michigan creel census as an aid to the hatchery man. PFC 19 C

microscope in the hatchery. PFC 3 A

operation as a business. FL 97

Oregon trout, cold storage plants at. PFC 27 A

pike, northern, spawn-taking and production. PFC, v.16, no.2 I

potato ricer for pond feeding. PFC 55 G, v.9, no.1 I; v.11, no.2 J

potential markets for Alaska salmon cannery waste. Sep 320

production in New York, 1936. PFC 29 A

production program in southeastern United States, 1947. PFC, v.10, no.2 J

program for New Hampshire based on biologist's findings. PFC 56 A

propagation and distribution of food fish (See Fish culture)

rat control in. PFC 16 B

rearing tanks, dual purpose, for trout. PFC, v.13, no.2 J

records and accounting. PFC 2 A

salmon. Cir 24, 25

salmon, tests of hatchery foods for. SSR-F 59, 60, 63, 86, 124

salmon, virus disease of. SSR-F 138

salmon eggs, prophylactic treatment for control of fungus on. PFC, v.11, no.2 A

salmon eggs, storage life of. Sep 367

salmon fry and eggs, leech-infestation. PFC, v.16, no.3 D

slots for screens at outlets of ponds. PFC 33 C

soldering and sheet-metal work. PFC 39 B

a sportsman-operated rearing station. PFC 55 D

sterilizing hatchery water supplies. PFC 48 D

stocking interior waters. FC 8

trap for taking spawners. FL 148

trout, colored pellets in diet of. PFC, v.15, no.4 F

trout, commercial. PFC, v.16, no.4 A

trout fingerlings, growth of. PFC, v.16, no.1 F

wartime problems. PFC, v.9, no.1 F

water supply, removal of excess nitrogen in. PFC, v.10, no.2 J

Fish jaw oil. Sep 137

Fish ladders:

cement for. PFC, v.10, no.4 A

Denil-type. SSR-F 99

Pool-type. SSR-F 99

Fish Lake, Umpqua National Forest (See Trout, production).

Fish liver oil (See Fish oil).

Fish meal (See also Poultry feeds):

analysis, spectrographic. IR 5

code for. Sep 299

Fish meal (Continued)

condensed fish press water and fish liver meal in chick rations. FL 159

dry meals as hatchery food. PFC 4 A

drying cod and haddock waste, studies. IR 32.

effect of manufacture on quality. IR 30, 31

fat in. Sep 218

feeding to ducklings. Sep 142

feeding to pullets. Sep 147

feeding value of. IR 2; RR 3; Sep 181, 269

from salmon wastage. Doc 902

fur-seal meal used as fish food. FL 380

haddock offal. Sep 388

in animal feeding. Doc 1090; Sep 142, 147, 354

industry in Japan. Sep 259

kelp in diets of young salmon. PFC 27 B

lipoid extracts from menhaden fish meal, chemical studies of. Sep 185

lipoid extracts from menhaden fish meal, feeding studies with. Sep 188

lipoids, extraction of. Sep 185

manufacturers of. SL 151

menhaden. IR 1; Sep 296

menhaden, manufacturers of. SL 151, 160

method for estimating amount of solubles added to whole fish meal. Sep 378

nutritive value. Sep 181, 269; IR 2

odor control in processing plants. Sep 333

Pacific Explorer reduction plant for. FL 361, 414

paper bags for. Sep 124, 276

pilchard meal, effect of heat and moisture on feeding value. RR 3

pollack as mink feed. Sep 354

production in Norway. Sep 175

production statistics, by months, beginning with June 1945 (See Title List of Current Fishery Statistics-CFS-series).

proteins, haddock; effect of manufacture on composition of. IR 31

reduction equipment, manufacturers of. FL 359

reduction processes. FL 126

sharks as source of. FL 135; RR 15

sources of information on. FL 362

starfish, value of. FL 391; Sep 199

thiaminase in. Sep 204

tuna-liver and beef liver meals, chemical evaluation of. Sep 265

utilization in Pacific northwest. FL 370

vitamin content. Sep 366

Fish nets (See Nets).

Fish oil:

alkali process for manufacture of commercial oil from salmon cannery trimmings. Sep 99, 301

antioxidants for. Sep 107, 245

blackfish. Sep 137

burbot-liver, chemical and physical properties and vitamin content. IR 12

cod (See Cod).

drill sampling device for fish livers. FL 141; Sep 66

effect of fish liver freshness on E value ratios of resulting oil. Sep 103

fish jaw oil. Sep 137

from salmon wastage. Doc 902

gallic acid ester antioxidants. Sep 245

haddock liver. IR 27

liver oil, manufacturers of. SL 151

liver oil industry. FL 233

liver oil properties of Philippine sharks and rays. RR 23

liver oils, vitamin potency of. FL 233; Sep 68, 133

mackerel, variations in oil content of. RR 1

menhaden. Sep 296

menhaden, for animal feeding, commercial production. IR 4

menhaden, manufacturers of. SL 151, 160

methods of extracting vitamin A and oil from fishery products, analytical. Sep 186, 224, 254, 264

oil content of fish livers, field method for determination. FL 205; Sep 98

Fish oil (Continued)

production statistics, by months, beginning with June 1945 (See Title List of Current Fishery Statistics-CFS-series).

reduction equipment, manufacturers of. FL 359

reduction plant, estimations of extinction ratios and vitamin A potency of. Sep 180

reduction processes. FL 126

salmon, Pacific. IR 40

sampling of fish livers. FL 289

shark liver, vitamin potency. FL 121

shark livers, oil content. RR 15

sources of information on. FL 362

swordfish livers, utilization. IR 28

utilization in Pacific northwest. FL 370

Fish paste (See Canning).

Fish-planting (See Stocking).

Fish poisoning:

ciguatera, tropical. SSR-F 27

dermatitis in the fish industry. FL 124

prevention. FL 140

Fish poisons:

DDT and other insecticides; effect on fish. Cir 11, 15

doctoral dissertations on. SSR-F 31, 87

Fish ponds (See also Aquariums; Pond fishes):

acid, use of lime. PFC, v.11, no.1 H

algae, control of. PFC, v.16, no.2 G

aquatic plant control. FL 217

aquatic plants in pond culture. Doc 949

aquatic plants in ponds and lakes, control of. FL 344

bass, fertilizing. PFC 56 G

bentonite to stop seepage. PFC, v.9, no.1 G

bluegills, increasing production. PFC, v.10, no.4 E

bookkeeping for. FL 311

carbon black for early removal of ice coverings. PFC, v.12, no.1 I

care and feeding of buffalo fish in. EC 56

care of. FL 311

carp culture for fish ponds. FL 311

cattail control with scythe and 2, 4-D. PFC, v.10, no.3 I

chlorine, use for disinfecting. PFC 42 D

chlorine disinfection to prevent ulcer disease. PFC 49 F

compressed air apparatus for feeding fish. PFC, v.9, no.2 H

concrete versus dirt, a symposium of opinion. PFC 22 B

construction of. FL 17, 27, 57, 59, 311

Czechoslovakia, fertilization of. PFC 33 B

Dactylogyrus control. PFC 32 C

daphnia, culture. FL 331

Daphnia magna, use in. PFC 47 A

drainage, outlet gate for. FL 65

farm. PFC, v.9, no.3 H

farm, real and potential values. PFC, v.9, no.3 D

farm, summary of inspections, 1949. PFC, v.12, no.3 F

farm pond types. PFC, v.9, no.3 B

fertilization of. FL 12, 27; PFC 53 B; v.16, no.3 G; v.16, no.4 G; SSR-F 113

fish culture in brackish-water. PFC, v.16, no.3 G

fish distribution boat. FL 56

for goldfish. FL 57

forage fish, use in bass ponds. PFC 47 A, 47 D

improving old. PFC 53 B

largemouth bass fry, rate of survival. PFC, v.14, no.4 H

larvae and predacious insects, control. PFC 33 D

management. Cir 21, 26; FL 27, 211; PFC 53 B

manganese to increase water-bloom algae. PFC, v.11, no.3 D

the minnow pond. Cir 12

phosphate in natural waters, determination of. PFC, v.16, no.4 C

pond fish culture, production-biological principles of. FL 311

pond fish industries. FC 2

pond fishery bookkeeping. FL 311

Fish ponds (Continued)

- pond record of bass and bluegill production. PFC, v.11, no.4 E
- pond scrubbing machine. PFC, v.13, no.3 M
- populations, methods of estimating. PFC, v.16, no.4 D
- publications on. FL 24
- reclamation, aid in the application of rotenone. PFC, v.14, no.1 H
- reclamation, techniques. PFC, v.11, no.2 A
- reclamation, use of wetting agent to facilitate. PFC, v.13, no.3 H
- renovations. PFC, v.14, no.1 F
- sealing, new and successful method. PFC 28 B
- "Shellbugs", control. PFC 34 C
- stocking new. PFC 53 B
- structure. PFC 47 A
- surveys of, instructions for conducting. FC 26
- toxaphene as a fish toxin. PFC, v.16, no.1 H
- trout cultures for fish ponds. FL 311
- tuna and other pelagic fishes. SSR-F 71
- turtles, ridding ponds of. FL 161
- unfinished, catch basins for. PFC, v.9, no.3 L
- vegetation, control of. FL 10, 27; IR 11
- Washington Monument lot. PFC, v.10, no.4 D
- water beetles in relation to pondfish culture. Doc 953
- weeds, control of. PFC, v.11, no.2 B

Fish population (See also Fishes - age; Fishes - growth):

- electrical fish-collecting methods. PFC v.16, no.1 B
- estimation of. FB 69, 94. PFC v.10, no.3 C; v.16, no.4 D
- heterogeneity in Pacific pilchard. FB 86
- in some Iowa farm ponds, survey. PFC v.12, no.1 A
- methods for enumerating. PFC v.10, no.1 D

Mississippi River, upper, fluctuations in trap-net catches. SSR-F 101

Pacific sardine, distribution and abundance of egg and larval populations. FB 93

precautions in estimating. PFC v.10, no.3 C

sampling, spot poisoning applied to the Massachusetts fisheries survey. PFC v.15, no.1 A

sport-fishing activities, survey of. Cir 21, 26

spot poisoning compared with seines and rotenone. PFC v.15, no.1 A

toxaphene as a fish toxin. PFC v.16, no.1 H

weakfish migration in relation to conservation. SSR-F 115

Fish processing:

- in Norway. Sep 175
- in the Philippines. RR 26; Sep 210
- Japanese. Sep 259, 275
- king crab. Sep 275
- tuna; canning-efficiency, quality, grades, regulations, and markets. SSR-F 104

Fish pump:

- experiments with. Sep 341

Fish retailing (See Marketing).

Fish roe:

- and caviar, canners of. SL 109
- caviar, preparation of. EC 20; FL 87; RR 7
- deep sea, canning. FL 87; RR 7
- shad, canners of. SL 106

Fish scales (See also Fishes - age; Fishes - growth):

- growth rates. PFC v.12, no.4 E
- impression method for age and growth studies. PFC v.13, no.1 B; v.15, no.4 D; v.16, no.2 E
- mounting, simple method of. PFC v.11, no.4 H

Fish scaling machine. FL 54
 Fish screens (See Fisheries, screening).
 Fish sorter, "non-grilling." FL 186
 Fish specifications. Sep 314, 379

Fish trap:

for taking spawners. FL 148; PFC v. 15,
 no. 1 J

Fish troughs (See Fish hatcheries, hatchery
 troughs).

Fish waste (See Waste, fish).

Fisheries (See also individual subjects):

Alabama landings (See Landings, Ala-
 bama).

Alaska (See Alaska, fishery and fur-seal
 industry; Fisheries, Alaska; Fisher-
 ies, United States and Alaska).

Alaska, annual summaries. 1941, CFS 54;
 1942, CFS 97; 1943, CFS 143; 1944,
 CFS 202; 1945, CFS 331; 1946, CFS
 401; 1947, CFA 438; 1948, CFS 565;
 1949, CFS 640; 1950, CFS 712; 1951,
 CFS 811; 1952, CFS 892; 1953, CFS
 993

Alaska, development of latent. FL 95

Alaska herring. Doc 1080

Alaska herring, outlook for 1943, 1944,
 1948. FL 16; SSR 25, 52

Alaska herring, southeastern decline and
 rehabilitation. FL 252

Alaska salmon (See also Alaska, fishery
 and fur-seal industries). Doc 902,
 909, 928, 1092; SSR-F 89

Alaska salmon; Part 1 - Bristol Bay and
 the Alaska peninsula, statistical re-
 view. Doc 1041

Alaska salmon; Part 2 - Chignik to Res-
 urrection Bay, statistical review.
 Doc 1102

Alaska salmon; Part 3 - Prince William
 Sound, Copper River and Bering
 River, statistical review. FB 7

Alaska salmon; Part 4 - southeastern
 Alaska, statistical review. FB 13

Alaska shrimp. Doc 1052; Sep 344

Alaskan fishery industries and their ad-
 ministration. FL 322

Alaskan rivers and lakes, Seward Penin-
 sula area, Kotzebue Sound—com-
 mercial fishery possibilities of. FL
 375

alewife, Maine. FL 42

Austria. PFC 34 D

bait, for Japanese skipjack. Sep 260

Bermudas, 1922. Doc 931

Brazil. FL 269, 349

British Honduras. FL 259

British West Indies. FL 259

California. Doc 908, 1087

California, biological investigations of
 the resources of Trinity River.
 SSR-F 12

Cariaco. Sep 227

Caribbean area. FL 259

Caroline Islands. FL 273

Central America, 1922. Doc 931

Chesapeake, annual summaries. 1940,
 CFS 19; 1941, CFS 66; 1942, CFS
 181; 1944, CFS 342; 1945, CFS 417;
 1946, CFS 468; 1947, CFS 524; 1948,
 CFS 564; 1949, CFS 683; 1950, CFS
 749; 1951, CFS 894; 1952, CFS 1002

Colombia. FL 259

Columbia River, history and development.
 FB 32

commercial, economics of. FL 303; Sep
 194

commercial, Lake Okeechobee. Sep 48

commercial, management. PFC 15 A

commercial, on Alabama portion of the
 Tennessee River; changes. PFC
 v. 15, no. 2 E

commercial, sources of information con-
 cerning. FL 362

commercial fishing in privately stocked
 waters. FC 11

Fisheries (Continued)

- commercial fishing on Reelfoot Lake.
PFC v. 15, no. 1 D
- conservation; Goofy business: Is fishery
conservation businesslike. PFC 33 A
- conservation, river development projects.
PFC v. 9, no. 1 B
- conservation, screening irrigation diver-
sions. PFC 53 F
- conservation, "stream-feeders" as an
aid. PFC v. 10, no. 2 G
- conservation, weakfish migration in re-
lation to. SSR-F 115
- conservation problem, proposals for
solution. PFC 15 A
- conservation progress by Bureau of
Fisheries. PFC 28 A
- Costa Rica. FL 259
- crayfish in Oregon. FL 131
- Cuba. FL 250, 259, 284, 294, 308; Sep
337
- Czechoslovakia. PFC 34 D
- DDT as an insecticide in the fishery in-
dustries. FL 146
- Dominican Republic. FL 259
- East Bengal, Pakistan. PFC v. 15, no. 3 E
- echo sounders. PFC v. 11, no. 4 A; v. 14,
no. 2 C; v. 15, no. 4 C; Sep 159, 273
- ecology, doctoral dissertations on.
SSR-F 31, 87
- Economic Cooperation Administration and
the fishery industries. FL 303
- economic review, 1947, and prospects
for 1948. Sep 194
- Egyptian. FL 363
- El Salvador. FL 259
- England. PFC 35 C
- Europe. PFC 32 D, 34 D, 35 C
- evaluation in determining benefits and
losses from engineering projects.
SSR 40
- Fish and Wildlife Service policy on com-
mercial and sport fishing interests.
PFC v. 15, no. 1 B
- fish culture as a livelihood. FL 97
- Florida landings (See Landings, Florida).
- France. FL 381; PFC 32 D
- Germany. PFC 32 D
- Great Lakes (See Fisheries, Lake).
- groupers. IR 26
- Guatemala. FL 259
- Gulf States, annual summaries (See also
Fisheries, South Atlantic and Gulf):
1940, CFS 23; 1945, CFS 378; 1948,
CFS 563; 1949, CFS 682; 1950, CFS
817; 1951, CFS 913; 1952, CFS 1005
- Gulf states, review of, 1947. Sep 207
- haddock, crisis in. Cir 4
- haddock, destruction of undersized on
Georges Bank, 1947-1951. SSR-F 96
- haddock, Georges Bank, analysis. Sep
319
- haddock, Georges Bank, remedy for de-
cline. FC 23
- haddock, north American waters, statis-
tics. Doc 1074
- haddock, offshore grounds important.
RR 32
- Haiti. FL 259; Sep 150
- handling fresh fish. FL 115
- hard clam, Atlantic coast. FL 13; Sep
323
- Hawaii, live-bait skipjack survey. Sep
271
- Hawaii-Line Islands area, survey. Sep
244, 264, 270, 271
- Hawaiian, long-line. Sep 244, 376
- Hawaiian, plan for development. IR 42
- Hunt Creek, Michigan, experiment sta-
tion. PFC v. 9, no. 2 A
- Iceland. FL 344
- Iceland, state trading with. FL 257
- Iceland, whaling. FL 345
- Indo-Pacific Fisheries Council. Sep 211
- Indonesia. FL 396
- Japan (See also Japan). FL 229

Fisheries (Continued)

Japanese (See also Japan). FL 229

Japanese, coastal, a program for, 1951. FL 395

Japanese, education and research on. FL 236

Japanese, export, 1951. Sep 281

Japanese, glossary of terms. FL 220

Japanese, processing and technological methods in. Sep 259

Japanese albacore fishery of the north central Pacific. FL 388

Japanese bonito. FL 273

Japanese fisheries production, 1908-1946, a statistical report. FL 279

Japanese skipjack. Sep 260

Japanese tuna. FL 273, 297; Sep 249

Keokuk Dam. Doc 1063

Key West. Doc 962

Korea, report on fisheries industry. FL 372

Lake, annual summaries, 1940, CFS 13; 1941, CFS 72; 1942, CFS 114; 1943, CFS 207; 1944, CFS 326; 1945, CFS 351; 1946, CFS 413; 1947, CFS 518; 1948, CFS 571; 1949, CFS 662; 1950, CFS 815; 1951, CFS 860; 1952, CFS 983

Lake of the Ozarks, management. PFC 51 A

Lake trout, Lake Michigan, decline. FB 60

Lake Yellowstone. SSR-F 81, 103

literature on, English translations. SSR-F 35

mackerel, east coast of North America, statistics, 1804-1930. IR 19

mackerel, outlook for, 1931, 1932, 1933, 1934. FC 4, 10, 14, 17

Maine alewife. FL 42

Maine herring, production and fishing methods, 1947. SSR 67

Maine landings (See Landings, Maine).

Maine northern shrimp. Sep 304

management. Cir 21, 24, 26; PFC v. 15, no. 1 A; SSR 18

management, application of rainbow brood-stock, selection to. PFC v. 12, no. 3 G

management, doctoral dissertations on. SSR-F 31, 87

management, for Pacific coast; plans made by California Division of Fish and Game. Sep 203

management, in Oklahoma. PFC v. 9, no. 2 C, v. 12, no. 4 B

management, instructions for conducting stream and lake surveys. FC 26

management, of the national forests. PFC v. 12, no. 3 A

management, Lake of the Ozarks. PFC 51 A

management, land use applied to. PFC v. 15, no. 2 C

management, laying the foundations. PFC 50 A

management, of game fish at Conchas Reservoir, New Mexico. PFC v. 10, no. 4 B

management, of ponds for fish production. PFC 53 B

management, public sentiment important factor. PFC v. 14, no. 3 B

management, river development projects, effect on fish. PFC v. 9, no. 1 B

management, screening irrigation diversions. PFC 53 F

management, suggestions for lakes surveyed in national forests of Michigan, 1937. PFC 47 E

management, survey of Columbia River and tributaries with reference to. SSR 51

management, survey of problems. PFC v. 11, no. 4 C

Mariana Islands. FL 273

marine. Cir 21, 26

marine, doctoral dissertations on. SSR-F 31, 87

marine, of Texas. Doc 1009

Marshall Islands. FL 273

Fisheries (Continued)

- Maryland landings (See Landings, Maryland).
- Massachusetts landings (See Landings, Massachusetts).
- Mexico. Doc 931; FL 339; Sep 212, 251
- Michigan waters of Green Bay, fluctuations in. FB 75
- Micronesia. FL 239
- Middle Atlantic, fish and shellfish. CB 38
- Middle Atlantic States, annual summaries. 1940, CFS 24; 1942, CFS 165; 1943, CFS 334; 1944, CFS 339; 1945, CFS 422; 1946, CFS 469; 1947, CFS 525; 1948, CFS 586; 1949, CFS 693; 1950, CFS 763; 1951, CFS 904; 1952, CFS 1006
- Middle West, fishes of. CB 34
- Mississippi landings (See Landings, Mississippi).
- Mississippi River. Doc 1063
- Mississippi River, annual summary, 1950. CFS 840
- Mississippi River, upper, survey of conditions. FC 5
- mussels, sea; development of. Sep 239
- New Bedford landings (See Landings, New Bedford).
- New Brunswick, Canada. FL 356
- New England, alewife. FL 42
- New England, annual summaries, 1940, CFS 25; 1942, CFS 164; 1943, CFS 341; 1944, CFS 350; 1945, CFS 426; 1946, CFS 480; 1947, CFS 534; 1948, CFS 593; 1949, CFS 692; 1950, CFS 800; 1951, CFS 893; 1952, CFS 966
- New England, fish and shellfish. CB 33
- New England landings (See Landings, New England).
- New Jersey landings (See Landings, New Jersey).
- New York landings (See Landings, New York).
- Newfoundland, outlook for. FL 256
- Nicaragua. FL 259
- North America, with special reference to the United States. FL 47
- north Atlantic, statistics on development. SSR 47
- North Carolina, Pamlico and Core Sounds, examination of. Doc 1019
- North Carolina; scallop, sea. Doc 1043
- north Pacific otter-trawl, brief history. Sep 292
- North Sea, progress of fishing, 1903-40, and future exploitation. SSR-F 13
- northwest Atlantic, effect of technological advances on. Sep 56
- ocean quahog, technological study of. Sep 176
- Oregon's fishery explorations in the Gulf of Mexico, 1950. Sep 277
- oysters. FC 21
- Pacific Coast States, annual summaries. 1940, CFS 26; 1941, CFS 117; 1942, CFS 180; 1943, CFS 276; 1944, CFS 332; 1945, CFS 385; 1946, CFS 481; 1947, CFS 488; 1948, CFS 580; 1949, CFS 653; 1950, CFS 764; 1951, CFS 876; 1952, CFS 1026
- Pacific cod. Doc 1014
- Pacific Northwest and Alaska, opportunities for small business. FL 107; Sep 71
- Panama. FL 259; Sep 152
- party boat. SSR-F 7
- pearl, of Venezuela. SSR-F 26
- Pensacola Dam, Oklahoma, fishery problems. SSR 4
- pepitonas in Gulf of Cariaco, Venezuela. Sep 227
- Peruvian. FL 75
- pilchard, growth of Pacific coast. FL 129; RR 29; Sep 370
- Pisgah National Game Preserve, management. PFC 35 A, 44 A, v.9, no. 4 C
- Poland. PFC 34 D
- pollution from oil and tar. Doc 910
- production, distribution, and marketing outlook. FL 215, 336

Fisheries (Continued)

- production and value of. FL 108, 393;
Sep 51, 369
- publications on. FL 9
- Puerto Rico. IR 13
- razor clams, of Washington. EC 64
- razor clams, Pacific; relative growth
and mortality and their bearing on
the commercial fishery. Doc 1099
- red snapper. IR 26, Sep 195
- Rhode Island landings (See Landings,
Rhode Island).
- rosefish (See Ocean perch). Sep 3
- Russia. PFC 34 D
- Ryukyu Islands. FL 333
- Sacramento - San Joaquin delta. SSR-F
56
- St. Lucia, British West Indies. FL 228
- salmon, Japanese. Sep 338, 349, 381
- salmon, Pacific. Cir 24; Doc 902, 1092;
FL 14; Sep 365
- salmon, trap fishery, southeastern
Alaska, statistical review. SSR 17
- salmon, Willamette River. SSR 33
- salmon, Yukon River. Doc 909
- Samoa, tuna fishing at American.
Sep 382
- sardine, Norway. Sep 175
- sardine, Pacific. FL 129; RR 29;
Sep 370
- Scandinavian. PFC 31 B
- School of Fisheries. PFC v. 14, no. 4 D
- Scotland. PFC 35 C
- screen, self-cleaning. PFC v. 16, no. 2 D
- screening, new type of fence for use in
streams. PFC v. 9, no. 4 E
- screening irrigation diversions important
phase of western fishery management.
PFC 53 F
- screens, "quick change", for fish hatchery
ponds. PFC v. 11, no. 4 J
- sea, Gold Coast. FL 251
- sea urchin. FL 231
- shark, Gulf of California. FL 121; Sep 68
- shrimp, grooved; new fishery in southern
Florida. Sep 247
- shrimp, Gulf coast. FL 368, 406;
Sep 121, 219, 277, 289, 380
- Siberia. Doc 1006
- South African, growth of. FL 347
- South America, 1922. Doc 931
- South Atlantic and Gulf, fish and shell-
fish. CB 37
- South Atlantic and Gulf States, annual
summaries. 1940, CFS 23; 1945,
CFS 378; 1950, CFS 781, 816; 1951,
CFS 914; 1952, CFS 1021
- southern coastal waters, survey.
SSR-F 58
- southern winter trawl, conditions af-
fecting. FC 18
- sponge. FL 4, 170
- sport; a catalogue by state of current re-
search and management projects per-
taining to, 1953. Cir 21, 26
- sport, of upper Sacramento River.
SSR-F 34
- sport fishing grounds, Chesapeake Bay.
FC 1
- sport fishing in Alaska. FC 13
- sport fishing in TVA dams and reservoirs.
PFC v. 16, no. 1 A; v. 16, no. 3 C
- sport fishing on Reelfoot Lake.
PFC v. 15, no. 1 D
- sports, of the middle Atlantic bight in
1948, survey of. SSR-F 7
- statistics (See individual areas). FL 197
- statistics, sources of information con-
cerning. FL 362
- surveys, general. Cir 21, 26
- Texas landings (See Landings, Texas).
- trash. Sep 256, 286
- trout, gray. Doc 945, 1019
- trout, Oregon. PFC v. 9, no. 3 C
- tuna, albacore, east of Cape Nojima,
oceanographic conditions. SSR-F 7
- tuna, American Samoa. Sep 382

Fisheries (Continued)

tuna, California. SSR-F 104

tuna, Gulf-of-Maine bluefin. Sep 309, 353, 374

tuna, Japanese longline. SSR-F 112

tuna, Pacific Northwest. SSR-F 104

tuna purse seine, description of. Sep 309

tunas and their fisheries. SSR-F 82

Turkey, resources. FL 390

25 years of federal fishery research on the Great Lakes. SSR-F 85

United States, fishery industries of (statistics). 1920, Doc 908; 1921, Doc 932; 1922, Doc 954; 1923, Doc 976; 1924, Doc 997; 1925, Doc 1010; 1926, Doc 1025; 1927, Doc 1050; 1928, Doc 1067; 1929, Doc 1095; 1930, AR 3; 1931, AR 8; 1932, AR 13; 1933, AR 15; 1934, AR 20; 1935, AR 24; 1936, AR 27; 1937, AR 32; 1938, AR 37; 1939, AR 41; 1939, SD 1; 1940, SD 4; 1941, SD 7; 1942, SD 11; 1943, SD 14; 1944, SD 16; 1945, SD 18; 1946, SD 19; 1947, SD 21; 1948, SD 22; 1949, SD 25; 1950, SD 27; 1951, SD 30

United States and Alaska, annual summaries. 1940, CFS 27; 1941, CFS 90; 1942, CFS 183; 1943, CFS 354; 1944, CFS 357; 1945, CFS 433; 1946, CFS 487; 1947, CFS 536; 1948, CFS 604; 1949, CFS 703; 1950, CFS 841; 1951, CFS 915; 1952, CFS 1050

United States and Alaska, preliminary review. FL 393

United States and Alaska, relative productivity and value. FL 108; Sep 51

United States fishery mission to Venezuela. Sep 227

United States policy with regard to high seas fisheries. Sep 222

United States special mission reviews Japanese fisheries situation. FL 346

Uruguay. FL 266

Venezuela. FL 259

Venezuela, pearl. SSR-F 26

Venezuela, United States fishery mission to. Sep 227

Virgin Islands. IR 14

visual aids of interest to. FL 362

Washington, development of latent. FL 95

West Indies, 1922. Doc 931

white marlin, Ocean City. SSR 6

whitefish, Lake Huron and Lake Michigan. FB 40

winter trawl off Virginia and North Carolina coasts. IR 10

world. FL 109; Sep 70

Fishery associations and unions:

associations, cooperative. FL 292

associations, United States and Alaska. FL 254

unions, fishermen's and fish shore workers'. FL 293

Fishery Biology, Branch of:

biological positions in. FL 96

Fishery Leaflets:

list of 1-200. FL 200

list of 201-300. FL 300

list of 301-400. FL 400

Fishery Market News:

index to volume 5, Nos. 1 to 12, inclusive, 1943. Sep 53

index to volume 6, Nos. 1 to 12, inclusive, 1944. Sep 86

index to volume 7, Nos. 1 to 12, inclusive, 1945. Sep 120

Fishery motion pictures. FL 255

Fishery periodicals, partial list of. FL 160

Fishery products (See also Canned fishery products; Landings; Pet food):

acceptability project with Quartermaster Food and Container Institute. Sep 384

Alaska fur-seal industry, government operated; by-products. FL 380

analysis, spectrographic. IR 5

as source of animal protein. Sep 282

Fishery Products (Continued)

- byproducts, utilization of in Washington and Oregon. FL 370
- byproducts production (See Fishery products, canned fish and byproducts; Fish meal; Fish oil).
- canned fish, chemical composition of some. FL 295
- canned fish and byproducts, annual summaries. 1941, CFS 42; 1942, CFS 93; 1943, CFS 156; 1944, CFS 220; 1945, CFS 262, 304; 1946, CFS 317, 373; 1947, CFS 444; 1948, CFS 497; 1949, CFS 577; 1950, CFS 671; 1951, CFS 772; 1952, CFS 882; 1953, CFS 1004
- canning ground fish. Sep 39
- canning of; historical outline. FL 78
- Chicago, Ill., trade in fresh and frozen. EC 54
- Chicago, Ill., wholesale receipts of. Sep 58, 118, 162, 223, 234
- cold storage holdings (See Fishery products, frozen fish report).
- consumption (See Fish consumption).
- costume jewelry. FL 2
- crab scrap as poultry feed. FL 29
- current fishery trade, annual summary. 1945, CFS 259; monthly, CFS 204, 208, 213, 216, 221, 222, 232, 239, 246, 255, 274, 283, 289, 294, 297, 311
- dealers in (See Dealers).
- dehydrated; study of nutritive value of the protein. Sep 34
- dehydration of. FL 120
- emulsifiers. FL 210
- fish press water and fish liver meal in chick rations. FL 159
- freezing, bibliography. FL 265
- frozen fish, annual summaries. 1941, CFS 16; 1942, CFS 78; 1943, CFS 148; 1944, CFS 176; 1945, CFS 245; 1946, CFS 318; 1947, CFS 391; 1948, CFS 457; 1949, CFS 516; 1950, CFS 606; 1951, CFS 721; 1952, CFS 843; 1953, CFS 956
- frozen fish, by months, beginning with August 1941 (See Title List of Current Fishery Statistics-CFS-series).
- imported fish, a major New England problem. Sep 125
- imports (See Foreign trade).
- imports and exports, annual summaries. 1942, CFS 189; 1943-1945, CFS 368; 1946-1948, CFS 476; 1949, CFS 551; 1950, CFS 651; 1951, CFS 757; 1952, CFS 889; 1953, CFS 1003
- in the arts and industries. FL 2
- iodine content. IR 25
- Louisville, Kentucky, trade in fresh and frozen, 1921. EC 50
- manufactured products, annual summaries. 1940, CFS 30; 1941, CFS 68; 1942, CFS 182; 1943, CFS 355; 1944, CFS 356; 1945, CFS 434; 1946, CFS 504; 1947, CFS 539; 1948, CFS 578; 1949, CFS 702; 1950, CFS 812; 1951, CFS 833; 1952, CFS 1051
- market in Mexico, Central America, South America, West Indies, and Bermudas. Doc 931
- marketing surveys. Doc 930, 939, 996, 1026, 1036, 1039; EC 50, 52, 54, 55, 63; IR 39
- mineral content of. IR 41
- mink feed. FL 405; Sep 354
- net weights and conversion factors summarized (WFA). FL 139
- packaged fish, annual summaries. 1941, CFS 35; 1942, CFS 82; 1943, CFS 133; 1944, CFS 230; 1945, CFS 388; 1946, CFS 389; 1947, CFS 439; 1948, CFS 492; 1949, CFS 579; 1950, CFS 672; 1951, CFS 735; 1952, CFS 863; 1953, CFS 985
- pet food from fish. FL 83
- plate count for, study of methods. Sep 221
- preferences of consumers (See Fish consumption).
- processing into fish food. PFC 19 A
- production and value of fishery products and byproducts, preliminary review (issued annually). FL 393

Fishery products (Continued)

production in Alabama, Louisiana, Mississippi, and Texas. Sep 20, 65, 95
 quarterly outlook for marketing. FL 336
 sales, program for increasing. Sep 108
 sales, purchasers for institutions; suggestions. MDL 61

Seattle, Wash., wholesale receipts of.
 Sep 40, 85, 105, 136, 169, 197, 232

seaweed gums. FL 156

thaiminase in. Sep 202

thiamine and anti-thiamine factor in.
 Sep 182

transportation rates for. Cir 23

United States consumption of. FL 352;
 Sep 220

Fishery statistics (See Fisheries; Fishery products; Landings).

Fishery trade, current (See Fishery products, current fishery trade).

Fishes, anadromous, migrating factors influencing the orientation of. FB 73

Fishes, foreign introduction of North American. PFC v.9, no. 4 A

Fishes - age:

age determination. FB 19.

age determination, outstanding works on.
 FL 100.

age determination and composition of
 walleye. FB 91.

age determination from scales. FB 54, 85;
 PFC 23 A; v.13, no. 1 B; v.15, no. 4 D;
 v.16, no. 2 E

age determination of Atlantic shad. FB 85

age determination of fish. SSR-F 21

age determination of pilchard. FB 86;
 SSR 20, 21

age determination of skipjack. SSR-F 21

age determination of white sucker by use
 of pectoral fin rays. PFC, v.15, no. 3 D

weakfish; abundance, age, and size composition of. SSR-F 115

Fishes- anatomy:

development of a bony fish. PFC 40 A

gonadotrophins, salmon and mammalian.
 PFC, v.16, no. 3 A

gonads of skipjack from Palao waters.
 SSR-F 20

structure of fish. FL 132.

with fins and scales. FL 8, 418

Fishes - blood:

morphologic and physiologic study. PFC,
 v.14, no. 4 F

Fishes - distribution (See also Fish culture):

and abundance of egg and larval populations of Pacific sardine. FB 93

jack mackerel, distribution and abundance
 of larvae. FB 97

propagation and distribution of food fish
 (See Fish culture).

sport-fishery activities, survey of. Cir
 21, 26

stocking interior waters. FC 8

tank, fish-planting. PFC, v.12, no. 4 C

tank, for Montana fish distribution. PFC,
 v.11, no. 4 F

tank, improved, for distribution of blue-
 gills. PFC, v.11, no. 3 I

trout, in West Virginia. PFC v.10, no. 4 G

units for warm-water fish. PFC v.12, no. 4 F

Fishes - food:

Alaska salmon cannery waste as feed for
 hatchery fish. Sep 298

analysis of food in stomachs of trout. PFC
 49 A

bass, feeding methods. PFC 30 C

bass, largemouth, feeding habits. PFC
 v.16, no. 3 H

bass, largemouth, production on natural
 food in fertilized ponds. PFC 47 A

carbohydrates, absorption and digestion
 by brook trout. PFC 51 C.

cold storage plants at Oregon trout
 hatcheries. PFC 27 A

crustaceans, as food for fishes. Doc 914;
 FL 114

diet experiments on Atlantic salmon in
 Maine. PFC v.12, no. 3 K

doctoral dissertations on. SSR-F 31, 87

Fishes - food (Continued)

- dry meals as. PFC 4 A
- effect of amount of food on fin conditions of fingerling trout. PFC 39 C
- farm fish ponds, production in. Sep 5
- feeding records in New York hatcheries, 1936. PFC 29 A
- feeding values, comparative, of meals fed to fish. PFC 40 B
- feeds for hatcheries; summary of research at Cortland Experimental hatchery. PFC 52 E
- fish-food beater. PFC v.10, no. 1 K
- folic acid requirements. PFC v.11, no. 2 A
- forage fish, propagation of. FC 28
- fresh-water fish, effects of feeding DDT-sprayed insects to. SSR-F 3
- frozen fish in hatchery diets. PFC 48 F
- grayling, feeding at the Bozeman, Montana, station. PFC 30 D, 43 B
- hatcheries, federal; comparison of fish food costs in, 1945 and 1949. PFC v.13, no. 3 C
- hatchery diets and growth. PFC 49 C
- hatchery diets and natural food, comparison. PFC v.16, no. 4 B
- hatchery foods, practical methods of feeding with a minimum of loss. PFC 4 A
- measuring natural food content of rearing ponds. PFC v.13, no. 3 E
- meat cutter, Chipman. PFC v.12, no. 4 G
- organic material of Wisconsin lakes which can be used for food. PFC 38 D
- pellets. PFC v.15, no. 2 L; v.15, no. 3 I; v.15, no. 4 F
- salmon, blueback; diets, use of cannery waste and other fish products. SSR-F 106
- salmon, calomel in diet. PFC 51 D
- salmon, chinook, young; experiments on use of beef blood as a substitute for beef liver in diet. PFC 47 F
- salmon, chinook, young; experiments on use of beef liver, seal meal, salmon meal and apple flour in diet. PFC 46 C
- salmon, chinook, young; experiments on use of salmon viscera, seal meal, beef pancreas, and apple flour in diet. PFC 44 B
- salmon, coho, fingerlings; oat flour combined with salmon meal in diet. PFC 32 A
- salmon, fingerlings; effect of retardation of initial feeding on growth. PFC v.13, no. 2 A
- salmon, sockeye, fingerlings; role of feeding frequency in rearing. PFC v.13, no. 4 E
- salmon, sockeye; hatchery foods for. SSR-F 59, 60, 86
- salmon, tests of hatchery foods for SSR-F 59, 60, 63, 86, 124
- salmon, young; bulk foods in diet. PFC 53 E
- salmon, young; experiments on inclusion of apple flour in foods fed to. PFC 47 G
- salmon, young; kelp in diets. PFC 27 B
- suiting the diet to the hatchery. PFC 51 B
- trout, brood stock; feeding. PFC 50 C
- trout, brook; absorption of radio-active calcium by. PFC v.14, no. 4 C
- trout, brook; fats supplemental. PFC, v.14, no. 1 D
- trout, brown, dry-meal diets; comparison of yeast and penicillin mat as supplements to. PFC v.13, no. 3 B
- trout, brown, fingerlings. PFC v.11, no. 2 H
- trout, brown, fingerlings, experiments with antibiotics and vitamin B₁₂ in diet. PFC v.14, no. 4 B
- trout, brown, on all-meal diet; some pathological symptoms. PFC v.14, no. 3 D
- trout, cheaper food for. PFC 9 B
- trout, cod-liver oil in diet. PFC v.11, no. 2 C
- trout, cod-liver oil in diet of. PFC v.10, no. 2 H
- trout, development of anemia when fed a synthetic diet, and cure by feeding of fresh beef liver. PFC 48 B
- trout, diet experiments. PFC v.13, no. 1 C, v.16, no. 1 C

Fishes - food (Continued)

- trout, experiments with canned fish as food. PFC v.13, no. 2 H
- trout, fingerlings; feeding experiments. PFC 45 F
- trout, folic acid requirements. PFC v.11, no. 3 A
- trout, hatchery; feeding of cooked carp. PFC v.13, no. 4 I.
- trout, nutrition. PFC 30 A
- trout, pond rearing on natural foods. PFC 29 D
- trout, protein requirement. PFC 50 D
- trout, rainbow; diet in relation to quantity, quality, and cost of eggs. PFC 50 C
- trout, starch digestion. PFC 44 C
- trout, synthetic binding of diets. PFC v.16, no. 1 C
- trout, torula yeast in diet. PFC v.14, no. 1 A
- trout, vitamins in diet. PFC v.10, no. 3 B
- tuna, yellowfin; food habits. SSR-F 23
- vitaminology. PFC v.10, no. 3 B
- yeast and penicillin mat. PFC v.13, no. 3 B

Fishes - growth:

- and degree of maturity of chinook salmon in the ocean. Doc 974.
- back-calculation of fish lengths. PFC v.13, no. 4 D
- bony fish, development of. PFC 40 A
- cisco. FB 19
- computing average lengths from scales of fishes, technique. PFC v.15, no. 2 I
- condition factor alinement charts. PFC v.12, no. 3 J
- diets and growth. PFC 49 C
- effect of fertilizer on. PFC 40 C
- estimation of growth rate by tagging. FB 78
- fish scales, growth rates. PFC v.12, no. 4 E
- fishes scales, impression method for. PFC v.13, no. 1 B; v.15, no. 4 D; v.16, no. 2 E
- growth determination, outstanding works on. FL 100

lake trout, fingerlings from eggs taken in Seneca, Saranac, and Raquette Lakes; comparison. PFC v.14, no. 1 C

lengths and weights, measuring. PFC v.12, no. 4 D; v.13, no. 3 L; v.13, no. 4 D; v.16, no. 1 G

pilchard, growth data. FB 86.

salmon, chinook, fingerlings reared in circular tanks and Foster-Lucas ponds; comparison of growth rate. PFC v.14, no. 3 G

salmon, chinook, fingerlings reared in ponds, troughs, and circular tanks; a comparison. PFC v.14, no. 2 H

sardines, age determination. SSR-F 15

sardines, effect of environment on growth. SSR-F 15

trout. PFC 1 A

trout, growth, graphical method for presenting data on. PFC v.10, no. 2 B

trout, growth rate and fin regeneration. PFC v.9, no. 2 E

trout, rainbow fingerlings; comparison of growth in concrete and dirt-bottomed circular pools of same size. PFC 42 E

trout, rainbow, fingerlings, effects of antibiotics and arsanilic acid. PFC v.16, no. 1 F

tuna, growth and age of. SSR-F 22

tuna, yellowfin, in Hawaiian waters; estimation of age and growth. FB 65

walleye, fluctuations in growth. FB 91

yellow perch; age, growth and production. FB 70

Fishes - Lake Erie:

life histories of sixty-two species. FB 10

Fishes - mortality (See also Diseases):

- adult, study of injured and dead in vicinity of Bonneville Dam. SSR-F 29
- brook and brown trout. PFC v.15, no. 4 B
- doctoral dissertations on. SSR-F 31, 87
- in fresh water ponds and lakes. FL 112
- red tide. FL 420; SSR 46
- salmon, mortality pattern during an epizootic. SSR-F 138

Fishes - mortality (Continued)

salmon fingerlings exposed to pulsating direct current. FB 92
shad, Connecticut River. FB 88
shiner, ulcer disease in. PFC v.16, no. 2 H
toxaphene as a fish toxin. PFC v.16, no. 1 H
variation in depth at which fish can live during summer in moderately deep lake. Doc 970

Fishes - physiology:

air bladder and specific gravity, Doc deductions concerning. Doc 921
doctoral dissertations on. SSR-F 31, 87
enzymes, digestive, with comparative studies on those of amphibians, reptiles, and mammals. Doc 977.
trout, digestion of starch in. PFC 44 C
tuna and other fishes, reaction to stimuli. SSR-F 91

Fishes - protection:

methods to minimize catch of non-marketable. SSR-F 13
of undersized. Doc 1019; SSR-F 13

Fishes - tagging:

bass, bellytags for. PFC 56 E
British Columbia troll fishery, tagging experiments. SSR 50
chlorethane as an anesthetic for cutthroat trout. PFC v.15, no. 1 I
estimation of growth rate by. FB 78
estimation of size of populations by. FB 69
ether anesthesia, effect on fin-clipping rate. PFC v.15, no. 2 G
herring. Sep 361
inks for marking plastic fish tags. PFC v.14, no. 3 H
mackerel, Atlantic; marking experiments. FB 49
marking fish, use of dyes for. PFC v.16, no. 1 D
salmon, by the Japanese North Pacific fishing expedition. Sep 349
salmon, coho, hatchery-reared; relation of size at release to proportionate return. PFC 31 C

salmon, experiments in Alaska. Doc 1005, 1022, 1057, 1084; FB 11

salmon, red. Doc 943, 991; SSR-F 64

salmon, young Chinook, on the Columbia River, 1916 to 1927. Doc 1047.

sardines or Pacific pilchards. SSR-F 15

sport-fishery activities, survey of. Cir 21, 26

tagging and marking fish. FL 113

tags on albacore in a water tunnel, testing of. Sep 288

trout, marking under anesthesia. PFC 54 D

urethane as an anesthetic. PFC v.11, no. 1 F, v.16, no. 4 I

Fishes - temperature:

acclimation; chemical, physical, physiological conditions; species differences. FL 221

changes, effect on young trout. PFC 47 I

tolerance of high, changes produced by acclimatization, study. Doc 1030

Fishes and fishlike vertebrates of North and Middle America. Doc 1055.

Fishes of Green Lake, Wisconsin:

distribution and food. Doc 906

Fishes of the Gulf of Mexico. CB 37; FB 89.

Fishes of the Middle West. CB 34.

Fishes of Yellowstone National Park. Doc 904.

Fishing:

commercial and sport on Reelfoot Lake. PFC v.15, no. 1 D

progress, 1903-40, and future exploitation of North Sea. SSR-F 13

TVA dams and reservoirs. PFC, v.16, no. 1 A; v.16, no. 3 C

Fishing camps (See Camps, fishing).

Fishing equipment and methods (See also Fibers; Nets; and Trawls):

air conditioning fish distribution tanks. PFC 52 D

balloon trawl. FL 245

Brown shellfish harvester. Sep 216

Fishing equipment and methods (Continued)

- charter boat. SSR-F 7
- cod, methods of fishing for. FL 269
- crab pot construction. FL 262; Sep 368
- crabs, methods of catching. FL 262, 291, 358
- deck gear, fishing vessel. Sep 383
- descriptions of. Doc 902
- dredging for mussels. FL 291
- drum seine. Sep 365
- echo sounders. SSR 44; Sep 159, 273
- eel pots. FL 127
- electrical fishing device. FL 348; Sep 325
- fish pump. Sep 341
- fish traps. PFC v.15, no. 1 J; FL 148
- fishing gear, key to. FL 167
- fishing gear preservatives for Philippine waters. RR 2
- floating trawl. FL 343
- flounder operations, implements in. PFC, v.9, no. 3 J.
- for hard clam fishery. Sep 323
- for releasing small fish from trawl nets. Sep 257
- garfish, capture of. FL 61
- gear, Great Lakes. Doc 1001
- gill net, New England sink. FL 379
- gill net, Pacific salmon. FL 386; Sep 371
- groupers. IR 26
- handling trawler caught fish. Sep 192
- harpoons. SSR-F 104
- Hawaiian long-line. Sep 244
- in Cuban tuna fisheries. Sep 337
- in Northern shrimp fishery in Maine. Sep 304
- in sea scallop fishery. FL 225; Sep 157
- in southern coastal fisheries. SSR-F 58
- in the Alaskan shrimp industry. Sep 334
- Japanese, for skipjack fishing. Sep 260
- Japanese fishing gear. FL 234
- Japanese long-line. FL 317; Sep 249
- Japanese offshore trawling. FL 389
- Japanese tuna - mothership operations in the western Pacific. Sep 284
- king crab, gear. Sep 49, 386
- live-bait equipment. Sep 356, 363
- lobster gear. FL 64
- long-line fishing, basket for. Sep 284
- long-line for deep-swimming tunas in the Central Pacific, 1950-1951. SSR-F 98
- long-line for Japanese tuna mothership explorations. Sep 315
- long-line for tuna. Sep 353, 374
- mackerel. FL 83, 373; RR 7
- Maine herring, fishing methods, 1947. SSR 67
- manufacturers of gear and accessories, partial list of. FL 195
- menhaden, fishing methods. FL 412
- mussels, equipment used to harvest. FL 364
- net, dip. PFC, v.12, no.4, H
- of fisheries. Doc 902
- on deep-water trawling survey off the coast of Washington, 1951. Sep 292
- on Gulf of Maine bluefin tuna exploration. Sep 309, 353, 374
- on north Pacific albacore tuna explorations of the John N. Cobb, Sep 313, 357
- on shellfish explorations in Alaskan waters. Sep 343
- on shrimp fishing Gulf of Mexico trip, 1950-1951. FL 406
- Oregon tuna fishing, methods. Sep 231
- otter trawl. FL 199, 302; Sep 368, 386
- Pacific Explorer. FL 361, 414

Fishing equipment and methods (Continued)

Philippine fishing gear, guide to the classification of. RR 17

potato ricer as fish feeder. PFC 55 G; v.9, no.1 I

pound nets. SSR-F 104

pump for unloading menhaden. Sep 383

purse seine, mackerel. FL 373

purse seining, tuna SSR-F 104; Sep 347

red snapper. IR 26; Sep 195, 198

reef fishing in the Philippines. FL 354

salmon. FL 80, 386, 387; RR 7; Sep 365, 383

salmon, two-way counting wier for. PFC 56 F

sardines. FL 81; RR 7. Sep 159

scallop dredge. FL 225; Sep 157, 368

seines, Danish. Sep 386

seines, electric; used in Kentucky. PFC v.11, no.2, E

seines, haul. SSR-F 104

seines, light weight pulling engine for. PFC v.13, no.2 I

shallower storage pens improve fish quality. Sep 165

sharks. FL 135, 158

shrimp. FL 85, 394; RR 7; Sep 121, 316, 383

shrimp trap. Sep 311, 368

snaring through ice for non-game fish in West Virginia. PFC v.13, no.2 E

sonar, fish detection by. SSR 44

sonic depth recorder. Sep 273

sorter, large. PFC 32 E

sources of information on. FL 362

tangle nets. Sep 386

tank, fish-planting. PFC v.12, no.4 C

trap for taking spawners. FL 148; PFC v.15, no.1 J

trap lift net. Sep 356

trap net for whitefish. FB 40

trap nets, construction and use of. PFC v.12, no.4 A

trawls and trawling (See also Trawls):

balloon. FL 245

floating. FL 343

handling trawler-caught fish. Sep 192

Japanese offshore. FL 389

otter. FL 199, 302

releasing small fish from. Sep 257

shrimp. FL 394; Sep 316

winter. IR 10

triple-fender developed to insure successful moorings. Sep 315

tripod derrick for small fishing vessels. Sep 135

trolling. FL 387; Sep 198

trolling, slow speed; John N. Cobb uses new rig for. Sep 253

trotlines. FL 291

tuna. FL 82; RR 7

tuna, deep swimming; long-line fishing for in the central Pacific. SSR-F 108

tuna, gill netting for; gear and operations. SSR-F 90

tuna, live-bait fishing for. SSR-F 107; Sep 363

tuna fishing gear; hood and line-trolling, live bait, keg lines, long lines. SSR-F 104; Sep 374

tuna fishing gear, Tahitian tuna lures. Sep 358

tuna long-line gear used in Pacific Oceanic Fishery Investigations, construction of. Sep 351

tuna trolling in the Line Islands. FL 351

War Production Board definitions and recommended substitutes for vessel and cordage items. Sep 16

weir. FL 81; RR 7

winter trawl fishery. IR 10

Fishing ports:

Gloucester. FL 192; Sep 138

key to (1945). FL 167

Fishing vessels (See Vessels, fishing and research).

Fishways:

Bonneville, passage of shad. SSR-F 94

Bonneville, success during first year of operation. PFC 45 A

fish screens in irrigating diversions. PFC 45 C

for small streams. FL 92

plans for constructing small fish ladder. PFC 45 B

shad. SSR-F 65, 94

Flax:

commercial fisheries, report on tests made in. FL 177

description. FL 111; Sep 54

Floating canneries (See Factory ships).Florida (See also Landings):

fish and shellfish. CB 37; Doc 1013

phosphorus content of waters along west coast of. SSR-F 122

red tide. FL 420; SSR 46

Flounder:

Paralichthys and related genera in American waters. FB 71

spawning and hatching operations, implements in. PFC v.9, no.3 J

winter, embryonic and larval stages of. Doc 927

winter, food of young. Doc 907

Fluctuations in abundance (See particular species).

Fluorine:

naturally occurring in canned salmon and mackerel, study of. IR 44

Fluorophotometer:

use of pyrex test and culture tubes as solution cells with. Spe 236

Folic acid (See Fishes - food).

Food, Drug and Cosmetic Act (See Laws and Regulations, fishery products).

Food consumption:

of deep-sea fishermen to determine ration points needed. Sep 90

Food fishes (See also Fish culture):

mud-puppy, enemy of. EC 49

propagation and distribution of (See Fish culture).

Food for fishes (See Fishes - food).

Food value (See Fish as food).

Foreign trade:

import classification and duties. FL 417

in edible fishery products. FL 421

trade agreements. Sep 283

Formalin:

for bacterial fin rot. PFC 53 C

for external protozoan parasites. PFC 48 A

treatments pass new tests. PFC 49 D

Fouling of ships' bottoms. Doc 1031

Founders of fish culture. PFC 16 C, 18 D, 21 C, 25 C, 28 D, 29 E, 43 C, 55 C

Four-horned snails:

description. FL 323

France, fisheries. FL 381

Freezing (See Frozen fish).

Fresh fish:

and shellfish preferences of household consumers. FL 407, 408, 409, 410

buying manual. Cir 20

Fresh fish (Continued)

evaluation of surface pH as a freshness index for. FL 274

for chain store companies operating in Virginia, North Carolina, South Carolina and Georgia, partial list of buyers. MDL 49

handling of. FL 115; RR 1, 26; Sep 306, 315

mackerel, studies on handling. RR 1

markets for, unusual. FC 11

organoleptic tests. FL 94; Sep 31, 306

Philippine, bacteriological studies. RR 27

sales pattern, 1936 and 1946. FL 365

shallower storage pens improve fish quality. Sep 165

spoilage control by icing and freezing. Sep 274

trade in fresh and frozen fishery products. Doc 930, 939, 996, 1026, 1036, 1039; EC 50, 52, 54, 55, 63; IR 39

Fresh-water fish;

alewife in fresh water. PFC, v.16, no.3 F

cold-storage life of. Sep 377

iodine content less than in preserved sea foods. Doc 979

parasites, protozoan, of. FB 41

parasites of. EC 42

water purity, standards for. SSR 2

Freshness tests (See Quality).

Frogs:

culture and industry. FL 102

rains of. FL 130

Frogs legs:

canning. FL 86; RR 7

industry, Cuban. FL 284

Frozen fish:

bibliography on preservation of fishery products by freezing. FL 265

brine freezing. EC 53; Sep 306, 318, 350, 364

buying manual. Cir 20

canned and frozen fish trade, important products in. FL 224

chemical changes in fish protein during freezing and storage. Sep 387

cold storage holdings (See Fishery products, frozen fish).

cold storage life of freshwater fish. Sep 377

cold storage plants at Oregon trout hatcheries. PFC 27 A

color changes in frozen pink salmon. FL 332

commercial processing of brine-frozen fish. Sep 306

control of spoilage. Sep 274

crab meat. Sep 166, 384

distribution by frozen food locker plants. Sep 78

dry ice refrigeration of fresh fish fillets. FL 155; Sep 32

effect of fluctuating storage temperatures on quality. Sep 272

effect of refreezing on quality of sea trout. Sep 209

fillet industry, Norwegian. Sep 355

freezing, basic methods. FL 128, 214; RR 26

freezing fish at sea. FL 287; Sep 306, 317, 318, 324, 328, 331, 342, 345, 350, 362, 373, 375

freezing round fish, a new liquid medium for. Sep 331

freezings and holdings (See Fishery products, frozen fish)

glazing fish for locker storage, an improved method. FL 321

handling frozen fish in the freezer warehouse. FL 286

holdings, cold storage (See Fishery products, frozen fish).

immersion freezer, portable. Sep 342

in cold storage, reducing shrinkage. IR 9

Japanese tuna-mothership operations, freezing and storage on. Sep 284

king crab, freezing. FL 374

laboratory and taste-panel tests of fish frozen in brine at sea. Sep 318

lobsters and lobster meat. Sep 268

organoleptic tests in laboratory. Sep 302

Pacific northwest, investigations of method for freezing and storing. SSR 15

Pacific northwest fish and shellfish, freezing and cold storage. Sep 329, 330, 372

Frozen fish (Continued)

packaging. FL 324

precooked fish, freezing of. FL 128, 144

quick-freezing technique. FL 203, 207

refrigerated locker storage of fish and shellfish. FL 128, 143, 144

refrigeration. FL 214; Doc 1016; IR 16

refrigeration equipment manufacturers. FL 359

refrigeration equipment on factory ship, Pacific Explorer. FL 414; Sep 161

retailing. FL 258

round frozen fish, effect of prolonged commercial storage prior to thawing, filleting and refreezing. Sep 306

sales patterns for 1936 and 1946. FL 365

salmon, brine-frozen. Sep 350, 364

salmon, use of frozen salmon for canning. Sep 279

salmon freezing. Doc 902

shrimp, freezing. Sep 189, 373

sources of information on. FL 362

statistics (See Fishery products, frozen fish).

storage experiments on frozen rockfish fillets. Sep 233

storage in refrigerated lockers with other food. FL 181

storage tests on frozen pink salmon. Sep 82

storing, suggestions. FL 103

thawing equipment, suggestions for. Sep 328

thawing fish frozen at sea, equipment and procedure. Sep 317

trade in fresh and frozen fishery products. Doc 930, 939, 996, 1026, 1036, 1039; EC 50, 52, 54, 55, 63; IR 39

transportation of frozen live fish. FL 40

tuna on Japanese mothership expeditions. Sep 315

wrapping materials for. FL 213; Sep 148

Frozen shellfish:

oysters, frozen, effect of ascorbic acid on keeping quality. Sep 287

oysters, frozen, tests with. Sep 290

Fundulus heteroclitus (See Killifish).**Fungus:**

Achlya, isolated, attempts to infect fish. PFC, v.11, no.3 G

in eggs of pike, control with malachite green. PFC, v.14, no.1 G; v.16, no.2 F

infections, combating. PFC 56 D

on salmon eggs, prophylactic treatment for control. PFC, v.11, no.2 A

Saprolegnia, isolated; attempts to infect fish. PFC, v.11, no.3 G

Saprolegnia parasitica, control by malachite green. PFC, v.11, no.3 H

Fur farms, potential markets for Alaska salmon cannery waste. FL 405; Sep 320

Fur-seals (See Seals).

Furunculosis (See Diseases).

Fusa Maru, research vessel (See Vessels, fishing and research).

G

Gabrielson, Director, discusses Fish and Wildlife Service policy. PFC 53 A

Gambusia (See Minnows).

Game fish:

Blue River system of Nebraska, survey to determine species to introduce. EC 73

Chesapeake Bay. FC 1

conflicting classifications of. PFC 13 A

doctoral dissertations on. SSR-F 31, 87

Fish and Wildlife Service policy on commercial and sport fishing interests. PFC v.15, no.1 B

laws, summary for 1945. FL 119

laws for black bass (See Black bass).

management, Conchas reservoir, New Mexico. PFC v.10, no.4 B

plantings by the United States Bureau of Fisheries, results of. EC 67

Sandy River, Oregon; survey to determine possibilities of developing. SSR 14

Gammarus (See Shrimp, freshwater).

Gaper clams, description. FL 223

Garden pools (See Aquariums).

Garfish:

capture, marketing, and recipes. FL 61

Gasteropods (See Snails).

Gastroscope. PFC v.16, no.3 H

Gear (See Fishing equipment and methods).

Gelidium (See Agar).

Gelose (See Algin).

Geoduck clams, description. FL 223

Georges Bank:

haddock, Browns Bank haddock compared to. FB 67

haddock, destruction of undersized. IR 24; SSR-F 96, 129

haddock; landings by pounds, numbers, and sizes of fish. FB 66

haddock, prediction of the catch. FB 90

haddock, remedy for decline in abundance. FC 23

haddock fishery, 1951, analysis of. Sep 319

haddock situation. Sep 217

1950 an unusual haddock year. Sep 285

Georgia:

Augusta; fishes collected in vicinity of, annotated list. Doc 940

processed fish for chain store companies operating in. MDL 49

Germany:

fish processing machinery. FL 206

Institute for the utilization of fish of the federal fisheries agency. FL 211

preservation of fish by canning and related processes. FL 209

quick freezing and cold storage of fish. FL 207

smoke curing of fish. FL 208

Wiking Eiweiss, a protein product manufactured from fish. FL 210

Germo germo (See Albacore tuna).

Gill nets (See Fishing equipment and methods).

Gilling, fish sorter to prevent. FL 186

Gills (See Respiration of fishes).

Glacier Park, fish and fishing waters. PFC 46 A

Glazing:

brine-frozen salmon. Sep 350

fish for locker storage, an improved method. FL 321

Glochidium parasiticum. PFC v. 12, no. 1 B

Gloucester:

three centuries a fishing port. FL 192; Sep 138

Glue (See Fish glue).

Gobies:

Evorthodus lyricus, juvenile and sex characters of. FB 5

Gold Coast sea fisheries. FL 251

Goldfish:

care in small aquaria and ponds. Doc 934,

dealers, partial list of. FL 193

industry. EC 68; FC 2

Gonadotrophins, salmon and mammalian. PFC v. 16, no. 3 A

Gonads (See Fishes-anatomy).

Gracilaria confervoides (See also Marine plant products). SSR 37; Sep 263

Grader (See Fish graders).

Grand Coulee Fish Maintenance Project:

report, 1939-1947. SSR 55

Grass pickerel, life history. FL 166

Grayfish (See Dogfish).

Grayling:

fry, Montana; feeding. PFC 30 D

intermountain region. Doc 1062

Montana; feeding at the Bozeman, Montana, station. PFC 30 D, 43 B

Montana; spawning habits, culture, stocking. PFC v. 9, no. 3 E

propagation, artificial. Doc 949

Great Britain:

food supplies of the United States, Canada, and Great Britain compared. Sep 67

Great Lakes (See also Fisheries, Lake):

alewife in fresh water. PFC v. 16, no. 3 F

fishes, artificial propagation of commercial species. PFC 28 B

fishes, Coregonid. Doc 1048

fishing industry of. Doc 1001

25 years of federal fishery research on the. SSR-F 85

Great Smoky Mountains National Park. SSR-F 121

Green, Seth. PFC 18 D

Group work (See Education).

Groupers:

fishery in Gulf of Mexico. IR 26

Growth of fishes (See Fishes-Growth).

Guano Islands (See Union of South Africa).

Guatemala, fisheries. FL 259

Gulf fisheries (See Fisheries, Gulf; Fisheries, South Atlantic and Gulf).

Gulf of Mexico:

origin, waters, and marine life. FB 89

Gums (See Agar).

H

Haddock:

- crisis in the industry. Cir 4
- description and distribution. FL 198
- destruction of undersized fish. IR 24; SSR-F 96, 129
- eggs and larvae, effect of currents on distribution and survival. FB 29
- fluctuations in abundance of. Cir 4
- Georges Bank, destruction of undersized. IR 24; SSR-F 96, 129
- Georges Bank, landings by pounds, numbers, and sizes of fish. FB 66
- Georges Bank, prediction of catch. FB 90
- Georges Bank, remedy for decline in abundance. FC 23
- Georges Bank, studies of. FB 66, 90
- Georges Bank and Browns Bank haddock compared. FB 67
- Georges Bank fishery. Sep 285, 319
- investigation recommends measures to improve Georges Bank situation. Sep 217
- liver oil and vitamin content. IR 27
- meal, manufacture of. IR 30, 31, 32; Sep 388
- minimum net mesh size for New England fishery. Sep 334
- North Sea resources, study of. SSR-F 13
- smoking of. IR 20
- statistics of fishery in North American waters. Doc 1074
- ultraviolet irradiation of fillets, effects of. IR 43
- undersized, escape through otter trawls, experiments on. Sep 321, 335
- waste, drying of. IR 32

Haemorrhagic septicaemia (See Diseases).

Haiti, fisheries. FL 259; Sep 150

Hake:

eggs and larvae. SSR-F 80, 102, 123

Hakuo Maru, research vessel (See Vessels, fishing and research).

Halibut:

cause of wormy. Doc 957

E value ratios for liver oils produced in the Pacific northwest. Sep 237

report of the International Fisheries Commission appointed under the Northern Pacific Halibut Treaty. Doc 1073

Haliotis kamtschatkana (See Abalone).

Handling of fish (See Fresh fish, handling).

Hard clams:

canning. FL 84; RR 7

culture. FL 13, 72

fishery of the Atlantic coast. Sep 323

handraking and power dredging, biological effects on. SSR-F 110

larvae, seasonal abundance of. SSR-F 117

Hatcheries (See Fish hatcheries).

Hawaii:

associations, fishery. FL 254

fisheries, plan for development. IR 42

fisheries survey of the Hawaiian Line Islands. Sep 244, 270, 271

fishery exploration by the Oregon and Alaska. Sep 225, 231

long-line fishery, analysis of. Sep 376

tuna, reaction to stimuli. SSR-F 91, 130, 134

tuna purse seining. Sep 347

tuna trolling in Line Islands. FL 351

unions, fisherman's and fish shore workers'; list of. FL 293

zooplankton, variations in abundance in Hawaiian waters. SSR-F 118

Subjects

Heart cockles, description. FL 223

Hemp, description. FL 111; Sep 54

Henequen, description. FL 111; Sep 54

Henry O'Malley, research vessel (See Vessels, fishing and research).

Herbicides (See Vegetation, submerged).

Herring:

Alaska, condition of fishery in. Doc 1080

Alaska, Prince William Sound; fluctuations in supply. FB 9

Alaska, southeastern; fluctuations in supply. FB 2

Alaska exploratory fishing operations, winter 1952-1953. Sep 361

Alaska fisheries, outlook for, 1943, 1944, 1948. FL 16; SSR 25, 52

bloaters, how to make. FL 44, 196

brine-salting, commercial methods. FL 38

canners of. SL 102

canning. FL 81, 83, 104; RR 7; Sep 7

fungus. SSR 58

home canning. CB 28; FL 180

Iceland fishery and oil industry. FL 257, 345

kippered. FL 83, 196; RR 7

lake, Great Lakes production of salt (flat), 1941-1944. Sep 112

lake, life history of. Doc 1053, 1080

Maine industry, production and fishing methods, 1947. SSR 67

oil (See Fish oil).

oil for use in canning in Norway. Sep 175

Pacific, biology of. Doc 1080

races of, in southeastern Alaska. FB 17

salting river. Doc 903; FL 26

smoking of. FL 122, 196; RR 18

Home utilization of fish (See Canning; Cookery; Frozen fish; Preservation of fish).

Hoover Committee recommendations on Fish and Wildlife Service. Sep 246.

Horizon, research vessel (See Vessels, fishing and research).

Hot-fish shops. FC 11

Hugh M. Smith, research vessel (See Vessels, fishing and research).

Humpback salmon (See Salmon, pink).

Hydrophilus triangularis (See Water beetle).

I

IBM card form for applications for fish.
PFC v.13, no.1 F

Iceland:

fish inspection service, organization and
scope of. Sep 250

state trading in Iceland with respect to
its fisheries. FL 257

whale and fish oil industry. FL 345

Ichthyophythrirus (See Parasites, protozoan).

Ichthyophythrirus multifiliis (See Diseases).

Ichthyosporidium (See Diseases epizootic;
Herring, fungus).

Icing (See also Frozen fish):

fish at sea. FL 189; Sep 110

shallower storage pens improve fish
quality. Sep 165

shrimp, fresh-cooked and peeled, studies
on. Sep 83

spoilage control by icing and freezing.
Sep 274

Ictalurus punctatus (See Channel catfish).

Ictiobus bubalus (See Buffalo fish).

Imports and exports of fishery products (See
Fishery products, imports and
exports; Foreign trade).

Income of fishermen (See Unemployment
insurance).

Indiana, fish culture. PFC 10 B

Indo-Pacific Fisheries Council. Sep 211

Indonesia:

fisheries. FL 396

tuna fishing. SSR-F 45

Industrial fish (See Trash fish).

Industries (See also particular country and
subject):

aids for small business. FL 243

Alaska salmon cannery waste, potential
markets for. Sep 320

aquatic products used in costume jewelry
making. FL 2

aquatic shell. FC 15

canneries, factors to consider in
establishing and constructing. RR 7

canning. FL 78-90, RR 7

canning, future of. Sep 119

conversion of salmon cannery to clam
packing. Sep 140

crab, Chesapeake Bay. FL 358

Economic Cooperation Program as it
affects the fishery industry, sixty
questions and answers. FL 313

fish culture, big business in the United
States. PFC 31 A

fish prices, ceiling in 301 A.D. Sep 64

fish prices, controlled and uncontrolled
in New York City, 1944, comparison
of. Sep 80

fish prices, fresh, effect of OPA's
maximum price regulation 507 on.
Sep 61

fish prices and value of landings in
Hawaiian long-line fishery. Sep 376

fish production in the United States and
Alaska, fluctuations in. Sep 179

fish-raising. FC 2

fish supplies in Great Britain and
northern Ireland, control and dis-
tribution. Sep 28

Great Lakes fishing. Doc 1001

hot-fish shops. FC 11

index of Federal controls pertinent to
fishery. Sep 22, 25, 29, 41, 42, 48,
52, 59

North Atlantic fish production. Sep 102

Industries (Continued)

Norwegian frozen fish fillet. Sep 355
 Norwegian sardine industry. Sep 175
 oyster canning in South Carolina. Sep 14
 oysters, Atlantic and Gulf coasts. Doc 890
 oysters, Pacific Coast. Doc 1066
 retailing fish. FL 258
 shellfish resources of the north-west coast. Doc 920
 sport-fishing, commercial; in privately stocked waters. FC 11
 tuna, government assistance. SSR-F 104
 United States, market for marine animal oils. IR 7
 Inks for marking plastic fish tags. PFC v.14, no.3 H
 Insecticides:
 effects on fish. PFC v.10, no.3 C
 organic, stream pollution from use. PFC v.13, no.4 C
 toxaphene as a fish toxin. PFC v.16, no.1 H
 Insulin from fish. Sep 259

Insurance (See Unemployment insurance).

International Fisheries Commission:

list of. FL 168
 report of. Doc 1073

Interstate Compact Commissions. FL 168

Iodine (See also Fish as food):

content of oysters. IR 18
 content of sea foods. Doc 967
 content of preserved sea foods. Doc 979
 content of some American fishery products. IR 25
 production from menhaden. FL 63

Irish moss (See also Marine plant products):

publications on. FL 25
 seaweed gums in the United States, commercial importance. FL 156; Sep 23
 sources, preparation, properties. Doc 929

Isinglass, firms manufacturing. SL 153

Iwate Maru, research vessel (See Vessels, fishing and research).

J

Jack mackerel (See Mackerel).

Japan:

agar-agar industry. FL 263

albacore fishery of the north central Pacific. FL 388

aquatic resources of the Ryukyu area. FL 333

canned crab industry (See also Japan, king crab). FL 314

clam culture in. FL 399

coastal fisheries, a program for, 1951. FL 395

conversion of selected Japanese weights and measures. FL 244

fisheries, processing and technological methods in. Sep 259

fisheries education and research in. FL 236

fisheries of former Japanese mandated islands. FL 273

fisheries production, 1908-1946, a statistical report. FL 279

fisheries situation, United States special mission reviews. FL 346

fishing companies. FL 268

fishing gear. FL 234

fishing industry. FL 157, 288

Japanese fishery terms, glossary. FL 220

Japanese offshore trawling. FL 389

Japanese skipjack studies. SSR-F 51

Japanese whaling in the Bonin Islands. FL 248

Japanese whaling industry prior to 1946. FL 371

king-crab factoryship expedition. Sep 386

long-line fishery for tuna. FL 317; Sep 249

natural resources. FL 249

operation fisheries in. FL 229

oyster culture. FL 383; Sep 235

pearl culture in. FL 357

rehabilitation of the fisheries. FL 229

salmon gill-net fishery off Hokkaido. Sep 381

salmon industry. FL 230; Sep 143

salmon tagging expedition. Sep 349

skipjack, fishing methods for. Sep 260

sponge culture in the South Pacific Islands, experiments in. FL 309

tuna, black; favorable temperature for long-line fishing, catch, and homogeneity of groups in Satsunan Sea area. SSR-F 52

tuna fisheries. FL 297; SSR-F 42, 79, 112; Sep 382

tuna-mothership operations in the western equatorial Pacific Ocean. SSR-F 128; Sep 284, 315, 326

tuna production and export potentialities. Sep 281

tuna stocks in Japanese waters. SSR-F 16

weights and measures, conversion of. FL 244

Japanese snails:

description. FL 323

Jellyfish:

classes and description. FL 68

Jigging-fishing through holes in the ice. Sep 312

John N. Cobb, exploratory fishing vessel (See Vessels, fishing and research).

John R. Manning, research vessel (See Vessels, Fishing and research).

Jonah crab:

description and habitat. FL 71

Jute (See also Fibers):

commercial fisheries, report on tests made in. FL 177

description. FL 111, Sep 54

K

Kamloops rainbow trout:

life history. FL 235

Kamui Maru, research vessel (See Vessels,
fishing and research).

Katsuobushi. Sep 259

Katsuwonus pelamis (See Skipjack).

Kelp (See Algae, seaweed).

Kench salting (See Salting).

Keokuk, Iowa (See Mississippi River, Keokuk).

Keta salmon (See Salmon, chum or keta).

Killifish:

subject for study of development of a bony
fish. PFC 40 A

King crab:

biology, description, and distribution.
FL 71, 330, 340

canning. FL 85, 374; RR 7; Sep 50, 275

experimental fishing expeditions. FL 342;
Sep 278

freezing and cold storage. FL 374; Sep
330

King mackerel, dry-salting. FL 136

King salmon (See Salmon, chinook or king).

Kingfish (See King mackerel).

Kingfisher, appraisal by fish-culturist.
PFC v. 9, no. 2 F

Kishinouye's order Plecostei (See Plecostei).

Kite rigs (See Trawls).

Kiyo Maru, research vessel (See Vessels,
fishing and research).

Kochi Maru, research vessel (See Vessels,
fishing and research).

Korea, fisheries industry. FL 372

Kosher food:

fishes with fins and scales. FL 8, 418

L

Labor to produce fifty tons of trout, a time study. PFC v.14, no.3 A

Laboratory, mobile. PFC v.10, no.1 J; Sep 172

Lactobacillus leichmannii, studies in the assay of vitamin B12. Sep 297

Ladders (See Fish ladders).

Lake Erie fishes (See Fishes-Lake Erie).

Lake fisheries (See Fisheries, Lake).

Lake herring (See Herring, Lake).

Lake Mendota, Wisconsin, organic content of water. Doc 1012

Lake of the Ozarks (See Fisheries).

Lake Pepin (See Mussels, fresh-water).

Lake Titicaca (See Fish culture).

Lake trout:

breeding habits in New York. FB 59

fingerlings from eggs taken in Seneca, Saranac, and Raquette Lakes; comparison. PFC v.14, no.1 C

home canning. CB 28; FL 180; IR 34

life history. FL 15

propagation, artificial. Doc 949

smoking. FL 122

yearlings, stocked; from Seneca and Raquette Lake breeders; survival and growth. PFC v.14, no.2 F

Lakes:

apparatus and methods for collection of attachment materials. PFC v.15, no.2 J

classification of. FC 26
echo sounder, use on Maine lakes.
PFC v.15, no.4 C

fertilization, artificial. SSR-F 113

improvement. PFC v.12, no.3 A

mapping in Wisconsin. PFC v.15, no.3 G

northwestern, of the United States;
biological and chemical studies with
reference to fish production. Doc 944

sport-fishery projects. Cir 21, 26

survey of, instructions for. FC 26

Lampreys:

biological investigations of fishery
resources of Trinity River, California.
SSR-F 12

sea, feeding mechanism of. FB 98

sea, in Michigan, natural history.
SSR-F 55

sea, of the Atlantic Coast and Great Lakes.
FL 360, 384

sea, spawning in Michigan streams of
Lake Superior. SSR-F 70

sea, spawning in Wisconsin and Minnesota
streams of Lake Superior. SSR-F 97

sea, spawning runs in the Great Lakes,
1950, 1951. SSR-F 61, 68

sea, use of electricity in control of.
SSR-F 92

Land use applied to fisheries. PFC v.15,
no.2 C

Landings, statistics on:

Alabama, by months, beginning with
September 1950, discontinued January
1952 through March 1954 (See Title
List of Current Fishery Statistics-
CFS-series).

Alabama, La., Miss., and Texas, 1942,
1943, 1944. Sep 20, 65, 95

Alaska fisheries (See Fisheries, Alaska;
Fisheries, United States and Alaska).

Boston, 1942, 1944, 1948. Sep 21, 76,
243

Chesapeake fisheries (See Fisheries,
Chesapeake).

Landings (Continued)

Florida, annual summaries. 1950, CFS 681; 1952, CFS 971; 1953, CFS 1016

Florida, by months, beginning with September 1950 (See Title List of Current Fishery Statistics-CFS-series).

Great Lakes fisheries (See Fisheries, Lake).

Gulf fisheries (See Fisheries, Gulf).

Hawaiian long-line fishery, analysis of. Sep 376

Lake fisheries (See Fisheries, Lake).

Maine, annual summaries, by counties. 1947, CFS 437; 1948, CFS 484; 1949, CFS 548; 1950, CFS 623; 1951, CFS 743; 1952, CFS 852; 1953, CFS 967

Maine, annual summaries, by months. 1948, CFS 458; 1949, CFS 544; 1950, CFS 622; 1951, CFS 747; 1952, CFS 869; 1953, CFS 969

Maine, by months, beginning with July 1946 (See Title List of Current Fishery Statistics-CFS-series).

Maryland, annual summary. 1953, CFS 1029

Massachusetts, annual summaries, by gear and area (See Landings, New England ports for previous years). 1947, CFS 505; 1948, CFS 506; 1949, CFS 562; 1950, CFS 625; 1951, CFS 788; 1952, CFS 903; 1953, CFS 970

Massachusetts, annual summaries, by ports (See Landings, New England ports for previous years). 1947, CFS 411; 1948, CFS 472; 1949, CFS 543; 1950, CFS 624; 1951, CFS 753; 1952, CFS 877; 1953, CFS 968

Massachusetts, by months, beginning with January 1947 and New England for previous years (See Title List of Current Fishery Statistics-CFS-series).

Middle Atlantic fisheries (See Fisheries, Middle Atlantic).

Mississippi, by months, beginning with January 1951 (See Title List of Current Fishery Statistics-CFS-series).

Mississippi River fisheries (See Fisheries, Mississippi River).

New Bedford, by months, beginning with July 1943 (See Title List of Current Fishery Statistics-CFS-series).

New Bedford, 1938-1945. Sep 123

New England fisheries (See Fisheries, New England).

New England ports, annual summaries, by gear and area. 1941, CFS 21; 1942, CFS 51; 1943, CFS 118; 1944, CFS 177; 1945, CFS 264; 1946, CFS 402 (Continued in Massachusetts Landings series).

New England ports, annual summaries, by months. 1941, CFS 12; 1942, CFS 55; 1943, CFS 105; 1944, CFS 169; 1945, CFS 250; 1946, CFS 320 (Continued in Massachusetts Landings).

New England, by months, beginning with August 1941 (Continued in Massachusetts Landings) (See Title List of Current Fishery Statistics-CFS-series).

New Jersey, by months, beginning with January 1952 (See Title List of Current Fishery Statistics-CFS-series).

New York City, by months, beginning with January 1954 (See Title List of Current Fishery Statistics-CFS-series).

Pacific Coast States fisheries (See Fisheries, Pacific Coast States).

production and value of the fisheries. FL 108, 393; Sep 51, 369

Rhode Island, by months, beginning with Jan. -Mar- 1954 (See Title List of Current Fishery Statistics-CFS-series).

South Atlantic fisheries (See Fisheries, South Atlantic).

Texas, by months, beginning with September 1949 (See Title List of Current Fishery Statistics-CFS-series).

Landings (Continued)

Undertonnage boat, annual summary.
1944, CFS 171

United States and Alaska fisheries (See
Fisheries, United States and Alaska).

Largemouth bass:

cotton seed meal, fertilizer best adapted
to production. PFC 47 A, 47 D

description. FL 76

fingerlings, grading. PFC v. 9, no. 1 H

fingerlings stocked in experimental farm
ponds; rate of survival. PFC v. 14,
no. 2 I

food, artificial. PFC 32 E

fry, stocked in experimental farm ponds;
rate of survival. PFC v. 14, no. 4 H

fungus infection treatment. PFC 56 D

production, factors controlling. PFC 16 A

production on natural food in fertilized
ponds. PFC 47 A

propagation in federal hatcheries of the
southeast. PFC v. 14, no. 2 D

trap. PFC v. 10, no. 2 M

trap-cropping from Lake Mills, Wisconsin,
hatchery ponds. PFC v. 15, no. 3 F

Laws and regulations:

Alaska, Fur Seal Act, 1944. FL 299

Alaska, game fishes in. 1944-1945, RA 10;
1945-1946, RA 13; 1946-1947, RA 16;
1947-1948, RA 20; 1948-1949, RA 23;
1949-1950, RA 26; 1950-1951, RA 29;
1951-1952, RA 32; 1952-1953, RA 37;
1953-1954, RA 40; 1954-1955, RA 43

Alaska, protection of commercial fisheries
of. 1941, RA 1; 1942, RA 5; 1943,
RA 7; 1944, RA 9; 1945, RA 12; 1946,
RA 15; 1947, RA 19; 1948, RA 22;
1949, RA 25; 1950, RA 28; 1951, RA 31;
1952, RA 35; 1953, RA 39; 1954, RA 42

Alaska, protection of walrus and sea
lions in. RA 4

black bass, summary of laws for. FC 9,
16, 20, 24, 27

commercial fishery. FL 168

District of Columbia. FL 403

electric fish screen, protective. Doc 1042

Federal. FL 168

Federal Aid in Fish Restoration Act,
text of. RA 34

Federal specifications for fishery products.
Sep 314

fish screen law of Wyoming, discussion on.
PFC 53 F

fisheries, U.S. policy with regard to high
seas. Sep 222

fisheries prosecuted by California fisher-
men in Mexican waters. Doc 937

fishery agencies, state. FL 168

fishery agencies in territories and island
possessions. FL 168

fishery regulations, uniform, interstate
cooperation on. Sep 238

Herring Board Law. FL 257

Iceland, organization and scope of fish
inspection service. Sep 250

International Commissions. FL 168

Interstate Compact Commissions. FL 168

marketing, fishery products; compliance
with the Federal Food, Drug, and
Cosmetic Act. FL 172, Sep 26

Mexican fishery legislation. FL 260, 283

pilchard fishery industry, 1917-1942
legal regulation of. RR 29

sardine resources, 1947, legislative
control of. FL 129

specifications for fishery products, federal.
Sep 314

Venezuela, including import duties for
fishery products. FL 338

water pollution, legislation proposed in
the 74th Congress for the abatement
of. PFC 20 B

Leeches (See Parasites).

Leeward Islands:

tuna and bait resources. Sep 270

Lengths and weights of fishes (See Fishes-growth).

Lepomis humilis (See Sunfish, orange-spotted).

Leucichthys artedi (See Lake herring).

Libya (See Africa).

Life histories (See also individual species):

alewife. FL 42

alligator. FL 164

aquatic midges. Doc 914

bait fishes. Cir 12; FL 163

bass fry. PFC 8 A

black bass. FL 76

black drum. Doc 945, 1046; FL 134

bony fish, development of. PFC 40 A

clams, razor. Doc 984

clams, soft and hard. FL 13; SSR-F 117

cod. Doc 1081

crab, blue. FL 282

crab, king. FL 340

crayfish. FL 131

croaker. Doc 1046

diamond-back terrapin. FL 216

doctoral dissertations on. SSR-F 31, 87

drums of the eastern United States coast.
Doc 945

eye fluke. PFC 54 A

frog. FL 102

haddock. FL 198

herring, lake. Doc 1053

Lake Erie fishes, sixty-two species. FB 10

Lake trout. FL 15

lamprey, sea. FL 360; SSR-F 55

lobster. FL 74; SSR-F 6

mackerel, Atlantic. FB 38, 49

mackerel, jack. FB 97

minnow. FL 163

mussels, fresh-water. PFC v. 12, no. 1 B

mussels, sea. Doc 922

oyster. FB 43; FL 187

oyster drills. FC 25

parasite. PFC 45 G

pikes. FL 166

redfish. Doc 1046

rockfish. FB 28

salmon. Cir 24, 25; Doc 902, 1021,
1092; EC 69; FB 61; FL 14, 176;
SSR 51: SSR-F 89

sardine. SSR-F 15

Sciaenidae, or drum family, of the
eastern United States coast. Doc 945

shark, skate or ray. FL 123

shipworn. FL 3

shrimp. FB 14, 30

smelts. Doc 1015

spearfish. SSR-F 82

Sphyrion lumpi, redfish parasite. SSR 5

spiny lobster. Doc 925; FL 142

sponge. FL 4

sport-fishing activities, survey of.
Cir 21, 26

spot. Doc 1046

starfish. FB 31; FL 169

striped bass. FB 28, 35; FL 175

sunfish, orange-spotted. Doc 938

teleostean fishes. Doc 1093; FB 24

Life histories (Continued)

- trout, gray. Doc 945, 1019
- trout, Kamloops rainbow. FL 235
- trout, spotted. Doc 945, 1046
- trout, steelhead. SSR 51
- tunas. SSR-F 82
- water beetle. Doc 942, 953
- white sucker. Doc 1007
- whittings on the coasts of the American continents. FB 96

Lime:

- machine for spreading quicklime on starfish-infested bottoms. Sep 6
- use in acid ponds. PFC v. 11, no. 1 H
- use to control starfish. RR 2

Limnology:

- Alaska, Karluk Lake; studies. FB 12
- doctoral dissertations on. SSR-F 31, 87
- Finger Lakes of New York, further observations on. Doc 905
- machine for sounding and operating apparatus for collection of data. PFC v. 15, no. 1 H
- Mississippi River, upper; observations, 1921. Doc 958

Limnoria lignorum (See Marine borers).

Line Islands (See Hawaii).

Lines (See Fishing equipment and methods).

Lingcod. FL 30

Lipide (See Salmon, eggs).

Lipoids (See Fish meal).

Lists (See Cannery; Dealers; Manufacturers; Producers).

Lists of publications (See Bibliographies and lists).

Little tuna:

- description. FL 353; SSR-F 104

recipes. FL 416

Little-neck clams:

- canning. FL 84; RR 7
- description. FL 223

Livers (See Fish oil).

Lobsters (See also Spiny lobster):

- American. FL 74
- canning. FL 85; RR 7
- culture, a bibliography. SSR 64
- culture, translations of foreign literature concerning. SSR-F 6
- fishing gear, construction and operation of. FL 64
- home canning. CB 28; FL 180
- keeping alive out of water or in aquariums. FL 74
- life history, translations of foreign literature concerning. SSR-F 6
- tests with frozen. Sep 268
- United States production and imports. Sep 293

Locker plant associations, officials of. MDL 51

Locker plants:

- Alabama, firms and addresses. MDL 48
- Arizona, firms and addresses. MDL 33
- Arkansas, firms and addresses. MDL 36
- California, firms and addresses. MDL 14
- Colorado, firms and addresses. MDL 26
- Connecticut, firms and addresses. MDL 37
- Delaware, firms and addresses. MDL 38
- Florida, firms and addresses. MDL 39
- Georgia, firms and addresses. MDL 5
- Idaho, firms and addresses. MDL 40
- Illinois, firms and addresses. MDL 20
- Indiana, firms and addresses. MDL 7

Locker plants (Continued)

Iowa, firms and addresses. MDL 18
 Kansas, firms and addresses. MDL 17
 Kentucky, firms and addresses. MDL 6
 Louisiana, firms and addresses. MDL 27
 Maine, firms and addresses. MDL 41
 Maryland, firms and addresses. MDL 42
 Massachusetts, firms and addresses.
 MDL 22
 Michigan, firms and addresses. MDL 2
 Minnesota, firms and addresses. MDL 35
 Mississippi, firms and addresses. MDL 15
 Missouri, firms and addresses. MDL 34
 Montana, firms and addresses. MDL 8
 Nebraska, firms and addresses. MDL 4
 Nevada, firms and addresses. MDL 53
 New Hampshire, firms and addresses.
 MDL 11
 New Jersey, firms and addresses. MDL 21
 New Mexico, firms and addresses.
 MDL 32
 New York, firms and addresses. MDL 13
 North Carolina, firms and addresses.
 MDL 30
 North Dakota, firms and addresses.
 MDL 16
 Ohio, firms and addresses. MDL 24
 Oklahoma, firms and addresses. MDL 9
 Oregon, firms and addresses. MDL 31

Pennsylvania, firms and addresses.
 MDL 10
 Rhode Island, firms and addresses.
 MDL 23
 South Carolina, firms and addresses.
 MDL 43
 South Dakota, firms and addresses.
 MDL 44
 Tennessee, firms and addresses. MDL 3
 Texas, firms and addresses. MDL 12
 Utah, firms and addresses. MDL 45
 Vermont, firms and addresses. MDL 28
 Virginia, firms and addresses. MDL 29
 Washington, firms and addresses. MDL 19
 West Virginia, firms and addresses.
 MDL 46
 Wisconsin, firms and addresses. MDL 25
 Wyoming, firms and addresses. MDL 47

Louisiana:

oyster producing areas, investigation of.
 SSR-F 8
 oyster reefs, following the hurricane of
 September 19, 1947, investigations of.
 SSR 59
 oysters, effects of Bonnet Carre Spillway,
 opening on. SSR-F 14
 school-lunch program uses more fish.
 Sep 340

Lubricants (See Fish oil).

Lutianus (See Snappers, red).

Lydell, Dwight. PFC 28 D

M

McDonald, Marshall. PFC 43 C

Mackerel (See also individual common names):

Atlantic, biology. FB 38, 49

canners. SL 104

canning, commercial. FL 83; RR 7

canning, home. CB 28; FL 180; IR 34

fishery, outlook for. FC 4, 10, 14, 17

frigate, of the Philippines. FB 46

frigate, Pacific coast of Central America.
FB 63

handling fresh, studies on. RR 1

in Japanese waters, study of. SSR F 24

jack, eggs and larvae. FB 97; SSR-F 80,
102, 123

king, dry-salting. FL 136

metabolism of naturally occurring
fluorine in canned. IR 44

oil content, variations in. RR 1

Pacific, eggs and larvae. SSR-F 102, 123

purse seine, Atlantic Coast. FL 373

sierra, eastern Pacific. FB 48

smoked, preparation and keeping quality
of. RR 6

statistics, 1804-1930. IR 19

Mackinaw trout (See Lake Trout).

Macrobrachium (See Shrimp, river).

Maine (See also Landings):

alewife fishery, restoration and manage-
ment of. FL 42

echo sounder, use on lakes. PFC v.15,
no.4 C

Gulf of, fishes. Doc 965; FB 20, 74

Gulf of, fishing grounds. Doc 1059

Gulf of; physical oceanography. Doc 969
herring, canning. FL 81, 104; RR 7

herring industry, production and
fishing methods, 1947. SSR 67

mussel fishery. Sep 239

plankton of Gulf of. Doc 968

sardine canners. SL 102

sardines, canning. FL 81, 104; RR 7

shad streams, survey of former.
SSR-F 66

shrimp fishery. FL 318; Sep 304

Majua (See Bait).

Makua (See Vessels, fishing and research).

Malachite green:

fish fungicide and antiseptic. PFC 18 C

for killing epistylis. PFC v. 11, no. 2 F

to control fungus in eggs of pike.
PFC v. 14, no. 1 G

to control fungus infections. PFC 56 D

to control fungus on salmon eggs.
PFC v. 11, no. 2 A, v. 11, no. 3 H

Malaga, Spain: volume and value of the catch
of fish and shellfish, 1946. FL 272

Management of fisheries (See Fisheries,
management).

Manganese (See Fish ponds).

Manila hemp (See Abaca).

Manitoba (See Canada).

Manufactured fishery products (See Fishery
products, manufactured).

Manufacturers and producers (See also
Canners; Dealers, wholesale):

boat builders, fishing. FL 178

canning equipment. FL 359

clam-shell products. SL 152

fish glue. SL 153

Manufacturers and producers (Continued)

fish-liver oils. SL 151, 157
 fish meal, scrap, oils. SL 151
 fish solubles. SL 151
 gear and accessories, fishing. FL 195
 homogenized condensed fish. SL 151
 isinglass. SL 151
 menhaden oil and meal. SL 160
 mussel-shell products. SL 159
 oyster-shell products. SL 152
 packaged fish. SL 161
 pearl essence. SL 156
 pearl-shell products. SL 155
 reduction equipment. FL 359
 refrigeration equipment. FL 359
 seaweed products. SL 154

Mariana Islands:

fisheries. FL 273
 Oregon, 1949. Sep 225

Marine animals (See also Aquatic animals):

noxious, of central and western Pacific
 Ocean. RR 36

Marine borers:

shipworms. FL 3
 wood, toxicities of coal tar creosote,
 creosote distillates, and individual
 constituents for. Doc 952

Marine cordage (See Fibers).

Marine plant products. Doc 929; FB 87, 89;
 FL 25, 118, 156, 173, 261, 263, 306,
 307, 335; RR 4; SSR 37; Sep 23, 44,
 144, 263

Marjorie Parker (See Vessels, fishing and research).**Marketing:**

Alaska salmon cannery waste, potential
 markets for. Sep 320

buying manual. Cir 20
 cooperative marketing associations,
 organizing. FC 22; FL 277
 crab, Chesapeake Bay. FL 358
 fish in Colorado, and development of
 greater markets. Sep 201
 fish in the Philippines. Sep 210
 fish retailing in Boston, Massachusetts.
 Sep 2
 fishery products in Mexico, Central
 America, South America, West
 Indies, and Bermudas. Doc 931
 future of. Sep 119
 market forms of fish. Cir 20; FL 258;
 TKS 2
 market surveys. Doc 930, 939, 996,
 1026, 1036, 1039; EC 50, 52, 54, 55,
 63; IR 39
 retailing fish. FL 258
 sources of information on. FL 362

Marking (See Fishes - tagging).**Marshall Islands:**

fisheries. FL 273
 fishing conditions south of. SSR-F 43
 spawning of oceanic skipjack and
 yellowfin tuna in. FB 44
 sponge culture experiments. FL 309
 tuna fishing. SSR-F 47

Maryland (See also Landings):

bluegills from Maryland make good in
 South Africa. PFC 45 D
 Ocean City, white marlin fishery. SSR 6

Massachusetts (See also Landings):

lakes, ponds, and reservoirs, echo
 sounding. PFC v. 14, no. 2 C

Meal (See Fish meal).**Measurements (See Fishes - growth).****Meat room (See Fish hatcheries).**

Megastomatobus cyprinella Valenciennes
(See Buffalo, bigmouth).

Melanogrammus aeglefinus (See Haddock).

Meleagrina margaritifera (See Oysters,
pearl).

Menhaden:

- blown oil, experimental production.
Sep 252
- chemistry of. Sep 296
- component parts of, possible uses for.
Sep 296
- fish meal, chemical studies of lipid
extracts from. Sep 185
- fish meal, feeding studies with lipid
extracts from. Sep 188
- fishery, historical statistics, 1873-1951.
SD 30
- industry. FL 412; IR 1
- oil and meal, manufacturers. SL 160
- oil for animal feeding, commercial
production. IR 4
- oil for use in chemicals, study of. FL 63
- oils, vitamin D in. IR 3
- pumps for unloading. Sep 383
- whole fish, possible new uses for.
Sep 296

Menidia beryllina (See Silversides).

Menidia menidia (See Silversides).

Metabolism:

- metabolic products. PFC v. 12, no. 3 B
- metabolic rate of brook trout. PFC v. 16,
no. 2 C

Mexico:

- fisheries and fishery resources. FL 339;
Sep 212
- fisheries potential. Sep 251
- fishery legislation. FL 260, 283

Oregon fishery explorations in the Gulf
of Mexico, 1950. Sep 277

shrimp fishery, expansion of Gulf of
Mexico. Sep 289

shrimp industry in Gulf of. FL 319,
368

Michigan:

creel census as an aid to the hatchery
man. PFC 19 C

trout, mortality rates of. PFC v. 15,
no. 4 B

Michigan Institute for Fisheries Research:

history and present activities, 1933.
PFC 21 B

Hunt Creek experiment station to in-
vestigate trout-stream problems.
PFC v. 9, no. 2 A

Micronesia, fishery resources of. FL 239

Micropogon undulatus (See Croaker).

Microprojector for scale and plankton study.
PFC v. 11, no. 2 I

Middle Atlantic fisheries (See Fisheries,
Middle Atlantic).

Migratory habits of fish (See particular
species).

Milkfish (See Bangos).

Mineral content (See also Fish as food):

- of edible portions of some American
fishery products. IR 41
- of marine products. IR 5
- of oysters, variations. IR 17

Mink:

- feed, pollack as. Sep 354
- feed, salmon cannery waste as. FL 405

Minnesota:

- lakes, classification for fish propagation.
- Rainy River near International Falls,
pulp-mill, pollution of. SSR 7

Minnows:

- culture and care of. FL 163
- feeding, artificial. FC 28
- forage, use in bass ponds. PFC 47 D
- Gambusia, top minnow, mosquito destroyer. FL 67
- propagation. Cir 12; FC 28; PFC v. 16, no. 3 B

Mississippi (See also Landings):

- Greenwood, annotated list of fishes collected in locality of. Doc 1027
- oyster producing areas, investigation of. SSR-F 8
- oyster reefs after the hurricane of September 19, 1947, investigations of. SSR 59
- oysters, effects of Bonnet Carre Spillway on. SSR-F 14
- shad, threadfin. PFC v. 16, no. 4 H
- stream pollution studies. SSR 3

Mississippi River (See also Fisheries, Mississippi River):

- biological survey with special reference to pollution. Doc 1028
- common fishes, studies of. Doc 1072
- fisheries of upper. Doc 1063; FC 5
- fluctuations in trap-net catches. SSR-F 101
- limnological observations. Doc 958
- proposed introduction of ground garbage into the river by the city of St. Louis. SSR 8
- water quality studies. SSR 30

Miyagi Maru, research vessel (See Vessels, fishing and research).

Mobile laboratories for fishery research.
PFC v. 10, no. 1 J; Sep 172

Mollusks (See Clams; Mussels; Oysters; Snails).

Montana, creel census and expenditure study.
SSR-F 120, 126

Morocco:

fish culture. PFC v. 11, no. 1 B

Mortality of fishes (See Fishes - mortality).

Mosquitoes:

control in northern fresh waters of the United States by use of fishes.
Doc 923

destroyers; Gambusia, top minnow.
FL 67

Motion pictures, fishery. FL 255

Mud Hole fishing grounds for tuna. SSR-F 7

Mud pickerel (See Pikes).

Mud-puppy, enemy of food fishes. EC 49.

Mullet:

brine salting. FL 51; Sep 24

dry-salting. FL 136

home canning. CB 28; FL 180; IR 34

striped. FL 48

Musashi Maru, research vessel (See Vessels, fishing and research).

Muskellunge:

and pickerel, interbreeding. PFC 48 E

fingerling culture. PFC v. 11, no. 4 A

life history. FL 166

yearling culture and its application to lake management. PFC v. 13, no. 2 B

Mussels:

as food. FL 11; Sep 9

bacteriological study of fresh. Sep 128

beds, location of. FL 364; Sep 239

biology. Doc 922; FL 364

canning. FL 84, 364; RR7; Sep 239

collecting, methods of. FL 364; Sep 239

economic value. Doc. 922

Subjects

Mussels (Continued)

gear. FL 364; Sep 239
 harvesting, methods of. Sep 239
 loss in weight and mortality. Sep 19
 nutritive value. Sep 63
 pearls. FL 364; Sep 239
 processing. FL 364; Sep 239
 resources, north Atlantic region.
 FL 364; Sep 239

Mussels, fresh-water:

blood under normal and adverse
 conditions. Doc 1097

Mussels, fresh-water

commercial, factors affecting
 replacement of. FC 7

culture. Doc 916

food and feeding. Doc 963

growth, annual. Doc 1103

Lake Pepin survey, 1924. EC 57

larval mantle during parasitism,
 significance of. Doc 950

propagation. PFC v. 12, no. 1 B

resources. Doc 934; FL 246

shells. FL 246; SL 159

Mytilus edulis (See Mussels).

N

N. B. Scofield, research vessel (See Vessels, fishing and research).

National Cannery Association:

canned salmon examination. FL 80; RR 7

canning of Maine sea herring, recommended method, 1942. Sep 7

National Forest fishing waters: PFC v. 12, no. 3 A

National Research Council:

acid-iron waste disposal, study of the effect on aquatic animals. SSR-F 11

drift bottle study. SSR-F 10

survey, sports fishery of the Middle Atlantic bight. SSR-F 7

Nansei Fisheries Company. Sep 315

Nelson's trout (See Trout, Mexican).

Neothunnus macropterus (See Tuna, Pacific yellowfin, Yellowfin tuna).

Netherlands:

The Hague, translation of "The Rational Exploitation of the Sea Fisheries with Particular Reference to the Fish Stock of the North Sea" by G. P. Baerends. SSR-F 13

Nets (See also Trawls):

care. FL 66; RR 22; Sep 27

deep-trap, for whitefish. FB 40

deterioration of nets in Lake Erie. Doc 1083

dip. PFC v. 12, no. 4 H

escape of undersized haddock through otter trawls. Sep 321, 335

gill. FL 379, 386; Sep 280, 313, 353, 357

gill, itemized cost of supplies for constructing 16 shackles. SSR-F 90

gill, practical sizes for sampling average Connecticut lakes.

PFC v. 13, no. 3 J

gill netting for tuna, history of. SSR-F 90

hoop. Sep 113

how to make. FL 125

Japanese bait-holding. Sep 260

mending. FL 125, 241

mesh size, minimum, for New England haddock fishery. Sep 334

mesh width enlargement to prevent catching of undersized fish. SSR-F 13

New England sink gill net. FL 379

Pacific salmon drift gill netting. FL 386

pound, for tuna. SSR-F 104

preservation. Doc 947, 998, 1075; EC 74; FL 66

purse seine, New England mackerel. FL 373

purse seine, tuna. Sep 309, 347

sampler, high speed plankton. SSR-F 88

tangle. Sep 49

trap, construction and use of. PFC v. 12, no. 4 A

trap lift, for catching tuna bait fishes. Sep 356

used on Russian floating crab cannery. Sep 106

Nettle, Richard. PFC 29 E

New Bedford (See Landings).

New Brunswick (See Canada).

New England (See also Fisheries, New England; Landings, New England):

fish, imported, a major New England problem. Sep 125

fish, production at New Bedford. Sep 123

fish, use for school lunches increased by demonstrations. Sep 339

fish and shellfish. CB 33

fishing vessels. FL 167

Subjects

New England (Continued)

freezing fish at sea. Sep 306, 328, 345,
362, 375

haddock fishery at Georges Bank, 1950,
an unusual year. Sep 285

haddock fishery at Georges Bank, 1951
analysis. Sep 319

haddock situation on Georges Bank.
Sep 217

landings at principal ports, 1938-1941.
Sep 123

shrimp fishing. FL 318

New Jersey (See Landings).

New York City (See also Landings):

fishing vessels. FL 167

Newfoundland:

fisheries, outlook for, 1947. FL 256

Nicaragua, fisheries. FL 259

Nigrosine (See Vegetation, submerged).

Nomograph:

for determination of liver potency.
Sep 93

North Carolina:

buyers of fresh and processed fish for
chain store companies. MDL 49

commercial fishing potentialities.
Sep 255

new genus of darter. Doc 1004

North Carolina Institute of Fisheries
Research. Sep 255

North Sea fishery: SSR-F 13

Northern Pacific Halibut Treaty, International
Fisheries Commission report: Doc
1073

Northern pike (See Pikes).

Norway:

fish processing in. Sep 175

frozen fish fillet industry. Sep 355

Nutritive value (See Fish as food).

Nylon, synthetic fiber. FL 111; Sep 54

O

Ocean City, Maryland (See Maryland).

Ocean currents (See Drift).

Ocean perch:

age and growth of. FB 45

fishery. Sep 3

Pacific fillets, acceptability and keeping quality of. Sep 300

parasite, Sphyrion lumpi. SSR 5

Ocean quahog:

description. FL 13

technological study of. Sep 176

Oceanic bonito (See Bonito).

Oceanography:

albacore fishery east of Cape Nojima, oceanic conditions. SSR-F 77

doctoral dissertations on. SSR-F 31, 87

Mid-Pacific, transequatorial waters. SSR-F 54, 131, 135, 136

physical, of Gulf of Maine. Doc 969

relation tuna fishery and oceanographic conditions. SSR-F 78

selected list of books. FL 162

Oceanpout:

Ichthyosporidian-like parasite of. SSR 31

Octomitis (See Diseases).

Octomitus (See Parasites, protozoan).

Odor control:

fish-processing plants. Sep 333

Oil (See also Fish oil):

mixes with carbonized sand, effects on aquatic animals. SSR-F 1

Oil content:

fish and shellfish. Doc 1000; FL 116

of cannery trimmings of salmon. IR 36

salmon, pink; physical and chemical changes during spawning migrations. IR 33

Oklahoma:

fishery management in. PFC v. 9, no. 2 D, v. 12, no. 4 B

Pensacola Dam, fishery problems. SSR 4

Oncorhynchus gorbusha (See Salmon, pink).

Oncorhynchus keta (See Salmon, chum or keta).

Oncorhynchus kisutch (See Salmon, silver or coho).

Oncorhynchus nerka (See Salmon, red or sockeye).

Oncorhynchus tshawytscha (See Salmon, chinook or king).

Oregon:

Fish Commission; plans for management of Pacific coast fisheries. Sep 203

fish waste for reduction, survey of available and potential. Sep 91

fishery byproducts, utilization. FL 370

fishing centers. FL 370

oxygen block in the main-stem Willamette River. SSR-F 41

Sandy River survey with reference to fish management. SSR 14

trout fishery. PFC v. 9, no. 3 C

Willamette Valley fish-maintenance problems. SSR 33

Oregon, exploratory fishing (See Vessels, fishing and research).

Organoleptic tests (See Quality).

Ostrea gigas (See Oysters).

Ostrea lurida (See Oysters).

Ostrea virginica (See Oysters).

Otter trawl nets (See Trawls).

Otter trawlers (See Trawls).

Oyster drills. FB 4

control of. EC 70; FC 25

life history. FC 25

Oysters:

Alabama, reefs; condition of and suggestions for improvement 1943. SSR 29

Atlantic and Gulf, canning. FL 37, 84; RR 7

bacteriological studies. RR 27; Sep 160

biology. FC 21; SSR 32

Bonnet Carre Spillway, effect of opening. SSR-F 8, 14

canned, statistics (See also Canned fishery products). CFS 22, 59, 116, 196, 260

canners. SL 110

canning, commercial. FL 37, 84; RR 7; Sep 14

canning, home. CB 28; FL 180

chlorination, reaction to. RR 11

copper content. IR 23

culture. Doc 960, 961, 1035; EC 61; FC 21; FL 50, 52, 187, 383; Sep 235; SSR 63; SSR-F 9

DDT, effect of. Cir 15

dredge. Sep 216

enemies (See also Oyster drills; and Starfish). FC 21; FL 187; Sep 6; SSR 29, 32

feeding, effect of different concentrations of microorganisms on. FB 42

food value. Doc 1000; EC 58; FC 21; FL 187; IR 17

freezing. Sep 290

Georgia, investigations in. Doc 1077

growth as affected by latitudinal temperature gradients. Sep 352

increasing production in the U.S. FL 22

industry, Atlantic and Gulf coasts. FL 50, 187

industry, Pacific Coast. Doc 920, 1066; FL 52, 187

industry, Potomac River. SSR 32

industry of York River, Virginia; cause of decline. IR 37

iodine content. IR 18

Japan, culture. FL 383; Sep 235

Japanese, introduction into the United States. FC 12

keeping quality, effect of ascorbic acid on. Sep 287

life history. Doc 961; FL 187

management of resources. Sep 214

manufacturers oyster shell products. SL 152

market for fresh. FC 3

marketing. FL 50, 52

nutritive value. Doc 1000; EC 58; FC 21; FL 187; IR 17

of the Gulf of Mexico. CB 37; FB 89

organic substances, effect on. FB 84

oxygen consumption of. Doc 1094

oyster bottoms of Mobile, Alabama, destruction by flood of 1929. Doc 1069

oyster bottoms of North Carolina. EC 66

oyster bottoms of Texas. IR 6

pH data on. Sep 177, 213, 240, 290, 295

pearl culture. FL 145, 357

pearl-oyster resources. SSR-F 28

Philippine, bacteriological studies. RR 27

pink yeast isolated from oysters. Sep 266

planting and marketing in the Pacific Northwest. FL 52

Subjects

Oysters (Continued)

pollution, crude oil; effects on. FB 18
 pollution, pulp-mill; effect on. FB 6, 43; IR 37
 preparation for market. FL 50, 52; IR 15
 recipes for cooking. EC 58; FC 21; TKS 3
 reefs of Mississippi, Louisiana, and Alabama. SSR 59; SSR-F 8, 14
 salinity, adaptation of feeding mechanism of Ostrea gigas to changes in. FB 21
 sanitary control. Doc 1035; FC 21; FL 187; Sep 215
 scarcity of marketable oysters, 1948. Sep 205
 seed, production and collection. Doc 1076, 1088; Sep 18

shell movements. FB 1
 shipping practices. EC 62
 spawning. Doc 1054; FB 3, 23, 33
 starfish, new weapon against (See also Starfish). Sep 6
 stimulation, sensory. FB 8
 story of. FC 21
 temperature. FB 1
 thiamine, content of. Sep 158, 182
 transplanting in winter and early spring. Sep 154
 Venezuela, possibility of reviving industry in. Sep 227
 York River, Virginia; effect of sulphate pulp mill wastes on. FB 43

P

pH (See also Quality):

acid treatment, effect on pH and fish.
PFC v.11, no.4 I

determinations. PFC 38 A

PMA (See Diseases, pyridylmercuric acetate).

Pacific Coast States fisheries (See Fisheries,
Pacific Coast States).

Pacific Exploration Company (See Reconstruction
Finance Corporation).

Pacific Explorer, factory ship (See Vessels,
fishing and research).

Pacific Oceanic Fishery Investigations, pub-
lications resulting from. SSR-F 116
(1950-1953), 118, 119, 131, 134,
135, 136

Pacific salmon (See Salmon).

Pacific yellowfin tuna (See Tuna).

Packaged fish (See also Containers):

methods for freezing and storing. Doc 1016;
SSR 15; Sep 324

packaging frozen. Doc 1016; Sep 324

producers. MDL 1; SL 161

production of fresh and frozen (See Fishery
products, packaged).

refrigeration and packaging. Doc 1016

wrapping materials for frozen. FL 213

Pakistan:

East Bengal, fisheries. PFC v.15, no.3 E

Panama:

fisheries. FL 259; Sep 152

pearl-oyster resources. SSR-F 28

Pantothenic acid. PFC v.10 no.3 B

and brown trout. PFC v.14 no.2 E

Panulirus argus (See Spiny lobster).

Paolina T., research vessel, (See Vessels, Fish-
ing research).

Paracolobactrum aerogenoides (See Bacteria).

Paralichthys (See Flounder).

Paralithodes camtschatica Tilesius (See King
crab).

Parasites (See also Diseases):

Costia necatrix description, prevention,
and control. PFC 48 A

Dactylogyrus. PFC 32 C

fungus, Saprolegnia parasitica, on salmon
eggs. PFC v.11 no.2 A

leech-infestation on salmon fry and eggs.
PFC v.16 no.3 D

Myxosporidian; cause of wormy halibut.
Doc 957

Octomitus salmonis, carbarsone treatments.
PFC 55 A

Octomitus salmonis, parasitic flagellate
of trout. Doc 988

protozoan. Doc 959; FB 41, 89; PFC 3 A,
6 A, 27 C, 42 A, 48 A, 49 E; v.11
no.2 G

salmon fry and eggs, leech-infestation.
PFC v.16, no.3 D

Schizamoeba salmonis, parasitic in
salmonid fishes. Doc 987

Suctoria. PFC 27 C

Pasteurization of crab meat (See Crabs).

Pearl essence:

history, chemistry, and technology. Doc 989
manufacturers of. SL 156

Pearls:

culture. FL 145, 273, 357

fishery of Venezuela. SSR-F 26

imitation; pearl essence, history,
chemistry, and technology. Doc 989

manufacturers of marine pearlshell
buttons. SL 155

resources of Panama. SSR-F 28

Penaeus aztecus (See Shrimp, grooved).

Penaeus duorarum (See Shrimp, grooved).

Penaeus setiferus (See Shrimp, common).

Penetrometer:

for measurement of texture changes in
canned salmon. Sep 305

Pensacola Dam (See Oklahoma).

Perch (See Yellow perch).

Periodicals:

fishery, partial list of. FL 160

Persian and Oman Gulfs:

fish of. FL 304

Peru:

fish culture on Lake Titicaca. PFC 55 G

fisheries. FL 75

Pet food:

canners of. SL 116

canning of. FL 83; RR 7

utilization of fish waste in. FL 83, 370;
RR 7

Petromyzon marinus (See Lampreys).

Pfaltz and Bauer photoelectric fluorophotometer
(See Fluorophotometer).

Phenoxyacetic compounds (See Vegetation,
submerged).

Phenyl-mercuric lactate for fish, toxicity of.
SSR 42

Philippines:

bagoong (fish paste) and patis (fish sauce).
RR 24

bagos culture. PFC v.10, no.4 C

cosmopolitan fish cookery for. FL 377

fish, marketing and processing. Sep 210

fish processing handbook. RR 26

fishery products, bacteriological studies
of. RR 27

fishes, check list. RR 20

fishes, common and scientific names.
Cir 14; RR 20, 21, 26

fishes, key to families of common
commercial. RR 21

fishing gear preservatives. RR 22

otter trawl explorations. RR 25

reef fishing. FL 354

shark fishing potentialities. RR 15

sharks and rays, liver oil properties of.
RR 23

tiger shark, biology of. RR 16

tuna, outlook for development of industry.
RR 28

Phoenix Islands:

tuna purse seining. Sep 347

Physiology (See Fishes - physiology).

Pickerel (See Pike-perches; Pikes).

Pickling (See Salting).

Pictures (See Motion pictures).

Pike-perches (Stizostedion):

description. Doc 1018; FL 166

eggs, mortality in hatcheries. Doc 926,
1018

propagation, artificial. Doc 1018

walleye, egg production. PFC 54 E

walleye, fluctuations in growth. FB 91

walleye, pond-rearing. PFC 36 A

walleye fingerling production. PFC v.14,
no.4 G

yellow pikeperch eggs, control fungus
on. PFC v.16, no.2 F

Pikes (Esox):

culture at New London, Minnesota, station.
PFC v.10, no.2 L

description. Doc 1018; FL 166

eggs, separation of. PFC v.9, no.3 M

fishing gear, guide to classification. RR 17

Pikes (Continued)

muskellunge and pickerel, interbreeding experiments with. PFC 48 E

northern, Clear Lake (Iowa) hatchery. PFC v.16, no.2 I

propagation, artificial. Doc 1018

Pilchard (See also Sardines):

abundance off Oregon and Washington. FB 52

canning. FL 81; RR 7

description. FL 5

eggs and larvae. FB 93; SSR 22, 23, 54; SSR-F 73, 80, 102, 123

fishery, Pacific Coast. FL 129; RR 29

length composition. SSR-F 105

meal, effect of heat and moisture on the feeding value. RR 3

mortalities and replacements, method of computing. SSR 24

population, method of estimating. FB 94

population heterogeneity in. FB 86

studies on *Sardinops caerulea*. SSR 19, 20, 21, 22, 23, 24; SSR-F 15

Pink Salmon (See Salmon, pink).

Pink Yeast (See Oysters).

Pioneer, tuna clipper (See Vessels, Fishing and research).

Pisgah National Game Preserve (See Fish Culture; Fisheries).

Pismo clam, description. FL 223

Pita floja (fiber):

description. FL 111, Sep 54

Pituitary material. PFC v. 16, no. 3 A, v. 16, no. 3 B

Plaice:

distribution in North Sea. SSR-F 13

Plankton:

change. FB 80

distribution, seasonal, in Woods Hole region. Doc 975

doctoral dissertations on. SSR-F 31, 87

growth of planktonic algae. FB 87

Gulf of Maine. Doc 968

Gulf of Mexico, phytoplankton and zooplankton of. FB 89

method of measuring. PFC v.13, no.3 E

observations in waters off Central California. SSR 44

phosphorus content of waters along west coast of Florida. SSR-F 122

production, effect of fertilizers on. PFC 40 C

production in fish ponds, investigations. Doc 1082

sampler, high speed. SSR-F 88

value as food. Sep 45

zooplankton, abundance in central Pacific. FB 82

zooplankton, variations in abundance in Hawaiian waters. SSR-F 118

zooplankton volumes off Pacific Coast. SSR-F 73, 100, 125, 132

Planting (See Stocking).

Plate count method for fishery products, bacterial (See also Quality). Sep 221

Plecostei. SSR-F 50

Pogonias cromis (See Drum).

Poisoning of fish (See Rotenone).

Poisonous fish. RR 36; SSR-F 25; Sep 259

Pollack or pollock:

proximate composition. Sep 354

use as mink feed. Sep 354

Pollution:

bottom sampler. PFC v.11, no.4 D

Coeur D'Alene River. SSR 1

Cumberland River, near Nashville,
Tennessee. SSR 11

Dickinson Salt Works, Malden, West
Virginia; studies of effluents from.
SSR 9

doctoral dissertations on. SSR-F 31, 87

effects on fish. PFC 20 A

fecal streptococci, studies of. FL 201

in the Gulf of Mexico. FB 89

industrial and organic. SSR 13

its nature and evaluation. PFC v.16, no.2 B

legislation proposed for the abatement of.
PFC 20 B

Lower Columbia Basin. SSR-F 30

mine-waste. SSR 12

Mississippi, stream pollution studies. SSR 3

Mississippi River. Doc 1028; SSR 30

oil, effect on marine life. Doc 910, 995;
SSR-F 1

problems in relation to Shasta Dam.
SSR 10, 26

pulp mill effluents. FL 174; IR 37; SSR 7

research projects. Cir 21, 26

Shenandoah River. PFC v.11, no.4 D

stream, detection and measurement of.
FB 22

stream, from use of organic insecticides.
PFC v.13, no.4 C

Willamette Valley Project. SSR 33;
SSR-F 30, 41

Pond fishes (See also Fish culture):

culture. FL 311

propagation. Doc 1056

species of. FL 311; PFC v.9, no.2 C

toxaphene as a fish toxin. PFC v.16, no.1 H

toxicity and effect of some insecticides on.
PFC v.12, no.3 E

Pond snails, description. FL 323

Pond-scrubbers (See Fish ponds).

Pools, circular (See Rearing ponds),

Population, fish (See Fish population).

Portugal, codfish industry. FL 367

Potomac River, oyster bars. SSR 32

Potomac snails, description. FL 323

Pots (See Fishing equipment and methods;
crab, eel, lobster).

Poultry feed (See also Fish meal):

crab scrap as poultry feed. FL 29

Preservation (See also Canning; Frozen fish):

corning. FL 18

crab meat, pasteurization of. FL 415

drying. FL 18; RR 18, 26

pickling. FL 18, 60; RR 18

salting. FL 18, 26, 38, 45, 51, 60, 136,
196; RR 18, 26

smoking. FL 18, 60, 122, 196, 270, 312;
RR 18, 26

temporary preservation while fishing.
FL 18, 62

Preservation of nets (See Nets).

Prices (See Industries, fish prices).

Processing (See Fish processing).

Producers (See also Cannery; Dealers; and
Manufacturers):
of packaged fish. SL 161

Subjects

Production (See also Landings, statistics on; and Fisheries, management):

and value of the fisheries. FL 108, 393; Sep 51, 369

calculation of, in rearing ponds. PFC v.14, no.1 E

of war foods, optimum program for. Sep 13

trout, time study. PFC v.14, no.3 A

Progress in Biological Inquiries (See Biological Inquiries).

Propagation and distribution of food fishes (See Fish culture; Food fishes).

Propagation of relocated fish:

artificial and natural. SSR 55

Protection of undersized fish (See Fishes - protection).

Protein of fish (See Fish as food).

Protozoa (See Parasites, protozoan).

Puerto Rico:

fisheries. IR 13

oyster culture, possibilities. SSR-F 9

Puffer (See Swellfish).

Pumps (See Fish pumps).

Purse seines (See Fishing equipment and methods).

Pyridylmercuric acetate (See Diseases).

Pyroxilin picking tube (See also Fish culture). PFC 46 F

Q

Quahog (See Ocean quahog).

Quality:

crabs and crab meat. FL 415; IR 8;
Sep 384

fishery products. FL 94, 274; Sep 221,
306, 318, 324, 384, 387

freshness tests. FL 94, 274; RR 1; Sep 134,
177, 213, 221, 240, 290, 295, 302, 306,
318, 324, 384

fresh-water fish. Sep 377

mackerel, fresh. RR 1

organoleptic tests. FL 94; Sep 302, 372,
373

oysters, shucked. Sep 177, 213, 240, 290,
295

shrimp, keeping quality of brine-frozen.
Sep 373

R

Raceways (See Fish culture).

Ragfish, description. Sep 81.

Rainbow trout (See Trout, rainbow).

Rains of fishes, toads, and frogs. FL 130.

Rainy River (See Minnesota).

Rajafish:

marketing, in New England. Sep 57

nutritive value. Sep 63

Rajidae (See Rajafish).

Ramie (See also Fibers):

description. FL 111; Sep 54

Ramshorn snails, description. FL 323.

Rancidity. RR 1, 6; SSR 15; Sep 107, 245

Rat control (See Fish culture).

Ratfish:

analysis of livers. Sep 116

Razor clams:

canning. FL 84; RR 7

fishery near Cordova, Alaska. IR 29

fishery of Washington. EC 64

growth and age at maturity. Doc 984

growth and mortality. Doc 1099

life history. FL 223; Doc 984, 1099

Rearing ponds, pools, or tanks (See also Fish culture; Fish hatcheries):

concrete and dirt-bottomed, comparison.
PFC 42 E

construction. PFC 21 A; v.10, no. 4 G

food content, natural; method of measuring.
PFC, v.13, no. 3 E

perforated aluminum screens for. PFC,
v.12, no. 3 I

shad. PFC, v.14, no. 1 I

Receiving ships:

tuna, suggestions for operators. FL 301,
414

Recipes (See Cookery).

Reconstruction Finance Corporation:

exploration in Bering Sea with vessel
Alaska. FL 330

exploration in Hawaiian Islands with vessels
Oregon and Alaska. Sep 231

exploration in Western Pacific with vessels
Oregon and Alaska. Sep 225

loans to the West Coast tuna fisheries.
SSR-F 104

Pacific Explorer, factory ship. FL 301, 316,
326, 361, 414; Sep 161

Red drum (See Drum).

Red salmon (See Salmon, red or sockeye).

Red Sea:

production of edible fish. FL 310

Red snapper (See Snapper, red).

Red tide:

in the Gulf of Mexico. FB 89

mortality of fish, investigations on.
FL 420; SSR 46

phosphorus content of waters along west
coast of Florida. SSR-F 122

Redeye bass, description. FL 76.

Redfish (See Drum).

Reduction equipment manufacturers:

partial list of. FL 359

Redwing (See Vessels, fishing and research).

Refrigerated locker plants (See Locker plants).

Refrigeration (See Frozen fish).

Religious dietary regulations (See Kosher food).

Reproduction in fishes. FL 182.

Research vessels (See Vessels, fishing and
research).

Researcher, laboratory motor vessel (See
Vessels, fishing and research).

Respiration of fishes. FL 55.

Restoration, fish (See also Dingell-Johnson
program):

general information. RA 34

Retailing fish (See Marketing).

Rhode Island (See Landings).

Rhodophyceae (See Agar).

Riboflavin (See Vitamins).

River development projects, effect on fish.
PFC, v.9, no. 1 B.

River herring (See Alewives).

Roccus saxatilis (See Striped bass).

Rock crab, description. FL 71.

Rockfish (See also Striped bass):

fillets, cold-storage life. Sep 233, 329

Pacific, eggs and larvae. SSR-F 80, 102
123.

Pacific, palatability. FL 264; Sep 151

Pacific, recipes. FL 194

Roe (See Fish roe).

Roosevelt Lake surveys in relation to game
fish. SSR-F 5.

Rosefish (See Ocean perch).

Rotenone (See also Fisheries, management;
Fish ponds):

chemical treatment apparatus, new. PFC,
v.13, no. 4 G

improving the collection of fish with. PFC,
v.13, no. 3 J

sampling of fish populations by spot
poisoning. PFC, v.15, no. 1 A

use as fish poison. FL 350; PFC 38 B

use in pond reclamation. PFC, v.13, no. 3
H; v.14, no. 1 H

Rough fish (See also Trash fish):

utilization as food. Sep 8

Ryukyu Islands:

aquatic resources. FL 333

S

S. F. Baird, research vessel, (See Vessels, fishing and research).

Sablefish:

E value ratios data for liver oils. Sep 226, 237

Sagami Maru, research vessel (See Vessels, fishing and research).

St. Mary River, Virginia (See Stocking).

Salmo (See Trout).

Salmo clarkii (See Trout, cutthroat).

Salmo gairdneri (See Trout, rainbow and Trout, steelhead).

Salmo levenensis (See Trout, Loch Leven).

Salmo nelsoni (See Trout, Mexican).

Salmo salar (See Salmon, Atlantic).

Salmo trutta (See Trout, brown; Trout, sea).

Salmoides (See Black bass, largemouth).

Salmon:

air-dried. RR 18

ameba parasitic. Doc 987

Atlantic (Salmo salar). FL 176

Atlantic, diet experiments in Maine. PFC, v.12, no. 3 K

blueback, gonadotrophins, reactions to injected. PFC, v.16, no. 3 A

blueback, status of Columbia River runs (See also Salmon, red or sockeye). SSR-F 74

blueback, tests of hatchery foods for (See also Salmon, fingerlings, feeding; cannery waste). SSR-F 59, 60, 63, 86, 124

canned, inspection of. FL 80; RR 7

canned, naturally occurring fluorine in. IR 44

canned, penetrometer for measurement of texture changes in. Sep 305

canned, refractive index of free oil in. Sep 307

canners. SL 101, 108

cannery, conversion to clam packing. Sep 140

cannery waste, composition. Sep 258, 310; IR 36, 40

cannery waste, utilization of. FL 93, 370, 405; Sep 258, 262, 298, 320, SSR-F 59, 60, 63, 86, 109

canning, commercial methods. Doc 902, 1092; EC 69; FB 32; FL 80; RR 7; Sep 279, 364

canning, home methods. Doc 902, 1092; CB 28; FL 180; IR 34

caviar. RR 7, 18

changes during spawning migration. IR 33 (See also Salmon, migration and spawning; Salmon, spawning observations)

changes in color. FL 332; SSR 15

changes in texture. Sep 305

chinook, tests of hatchery foods for (See also Salmon, fingerlings, feeding and care). SSR-F 86, 124

chinook or king (See also Chinook salmon) Cir 24, 25; Doc 902, 1047, 1092; FL 14, 80; RR 7; SSR-F 56

chum or keta. Cir 24, 25; Doc 902, 1092; ED 48; FL 14, 80; RR 7

chum, leech-infestation study. PFC, v.16, no. 3 D

chum, pituitary study. PFC, v.16, no. 3 A

coho (See Salmon, silver or coho).

color changes. FL 332, SSR 15

Columbia River, life histories. SSR 51

Columbia River; spawning nests, characteristics. FB 61

Columbia River, transplanting from Grand Coulee Dam obstruction. PFC 47 C; SSR 55

Columbia River, vitamin content of oils from cannery trimmings of. IR 36, 40

Columbia River fishery. FB 32, 37; SSR-F 74

composition of cannery waste. Doc 1000; IR 36, 40; Sep 258, 310

conversion of salmon cannery to clam packing. Sep 140

Salmon (Continued).

counting weir. PFC 56 F

culture (See also Salmon, hatcheries). Cir 24, 25; Doc 902, 1092; PFC 26 A, 48 C; SSR 55

curing (See Salmon, air-dried, dry-salted, eggs for bait, mild-cured, pickled, smoked, spiced)

Deer Creek, California, research, program. SSR-F 67

Denil-type fish ladder. SSR-F 99

description of species (See Salmon, Atlantic; Salmon, Pacific).

deterioration of frozen salmon in cold storage. Sep 279

diet of young salmonoides (See Salmon, fingerling, feeding and care).

diseases and treatment. Cir 24; FB 76; PFC 51 D; v.14, no. 3 C; v.15, no. 4 G; SSR-F 84, 138

dog (See Salmon, chum or keta).

drum seining. Sep 365

dry salted. FL 60

eggs, composition of (See Salmon, roe, composition of).

eggs, effect of salt on storage life. Sep 367

eggs, fertilization, transportation, and care. FB 50; PFC, v.11, no. 3 H

eggs, method of planting. PFC, v.16, no. 3 I

eggs, possible cause of heavy losses. PFC 53 H

eggs, spawning knife for taking. PFC 55 I

eggs for bait. FL 87, RR 7, 18

eggs for bait, canners of. SL 108

eggs for production of cholesterol, lipide, and protein. Sep 262

electric screen used with adult salmon migrating upstream. SSR 53

epizootics. SSR-F 138

explorations for. Sep 338, 349, 371, 381

fall (See Salmon, chum or keta).

fingerlings, feeding and care. Cir 24, 25; PFC 18 B, 27 B, 44 B, 47 G, 47 H, 53 F; v.12, no. 3 K; v.13, no. 2 A; v.15, no. 2 F; SSR-F 59, 60, 63, 86, 124

fingerlings, mortality of. FB 92; PFC, v.14, no. 3 C; v.15, no. 4 G

fish-passage devices. SSR-F 99

fisheries, Alaska (See Alaska, fishery and fur-seal industries).

fisheries, Atlantic. FL 176

fisheries, Columbia River. FB 32, 37; SSR-F 74

fisheries, Japan. FL 230; Sep 143 338, 349

fisheries, Pacific. Cir 24, 25; Doc 902, 1092; FL 14, 80; RR 7

fisheries, Sacramento River. SSR 10, 26

fisheries, Siberia. Doc 902, 1092

fisheries, Swiftsure Bank, Puget Sound, and the Fraser River. FB 27

fisheries, Yukon River. Doc 909, 928

fishery resources of Trinity River, California; biological study. SSR-F 12

fishing, developing in lakes. PFC 41 A

fishing seasons, Pacific coast. FL 80, RR 7

fluctuations in abundance. FB 39, 51

fluorine, naturally occurring. IR 44

freezing. Doc 902, 1092; FL 332; Sep 82, 279, 350; SSR 15

frozen, storage tests on. FL 332; SSR 15; Sep 82, 279

furunculosis. SSR-F 84

gear and methods. Doc 902, 1092; EC 69; FB 32; FL 80, 386, 387; RR 7; Sep 365, 381, 383

geographic distribution. FB 26; PFC 30 B

gill net, drift. FL 386

Grand Coulee fish-salvage program. SSR 27, 55

hard salted (See Salmon, pickled).

hatcheries (See also Salmon, culture). Cir 24, 25; PFC 18 B, 52 G; SSR 55

Salmon (Continued)

hatchery foods (See Salmon, fingerling, feeding and care)

history of the fisheries. FB 32; Doc 902, 1092

homing instinct and age at maturity. Cir 24; FB 15

humpback (See Salmon, pink).

Indian fishing. FB 32

inspection of canned. FL 80; RR 7

intermountain region, identification of species in. Doc 1062

intertidal spawning. FB 95

Japanese industry. FL 230; Sep 143

Japanese North Pacific fishing expedition. Sep 338, 349, 381

kelp meal in diets. PFC 27 B

keta (See Salmon, chum).

king (See Salmon, chinook or king).

laboratory, research. PFC v.15, no. 2 F

leather from skins. FL 370

Leavenworth hatchery. PFC 52 G

life history. Cir 24, 25; Doc 902, 1021, 1092; EC 69; FB 61; FL 14, 176; SSR 51; SSR-F 89

maintenance problems in relation to Willamette Valley project. SSR 33

migration and spawning. FB 25, 39, 50, 95; IR 33; PFC 56 F; SSR 55; SSR-F 12, 56, 67, 99

mild curing. Doc 902, 983, 1092; EC 69; FB 32; FL 60 RR 18

mink feed (See also Salmon, cannery waste, utilization of). FL 405

nutritive qualities. Doc 902, 1000, 1092

oil. IR 36, 40; Sep 99, 301, 307

Pacific (See also following). Doc 902, 1092; FL 14
 chinook or king (Oncorhynchus tshawtscha)
 chum or keta (Oncorhynchus keta)
 pink (Oncorhynchus gorbuscha)
 red or sockeye (Oncorhynchus nerka)
 silver or coho (Oncorhynchus kisutch)

parasite. Doc 987

penetrometer for measurement of texture changes in canned. Sep 305

pickled. Doc 902, 1092; FL 18, 60, RR 18

pink. Cir 24, 25; Doc 902, 1092; EC 48; FB 95; FL 14, 80; RR 7

pink, composition of cannery trimmings from. Sep 258, 310

pink, effectiveness of spermatozoa. FB 50

pink, leech-infestation study. PFC, v.16, no. 3 D

pink, physical and chemical changes during spawning migration. IR 33

pink, statistical review of trap fishery in Southeastern Alaska. SSR 17

planting in lakes and streams (See also Salmon, transplanting operations). PFC 41 A, 52 A

propagation, artificial (See also Salmon, culture; Salmon, hatcheries). PFC 25 B, 26 A

recipes. EC 48; FL 18, 202; TKS 4

red, fluctuations in abundance of. FB 39

red, runs to the Karluk River, Alaska. Doc 1021; FB 39

red, status of Columbia River runs. SSR-F 74

red or sockeye. Cir 24, 25; Doc 902, 1092; FL 14, 80; RR 7

refractive index values of oils. IR 40; Sep 307

research laboratory. PFC, v.15, no. 2 F

roe. FL 87, RR 7, 18

roe, composition of. SSR-F 109; Sep 262, 346

runs, building new. PFC 52 A

runs of Columbia River. FB 37, SSR-F 74

Sacramento River fishery. SSR 10, 26

salmonoid fishes, membranes, ovaries, and oviducts of. Doc 901

salt content of salmon canned from brine-frozen fish. Sep 364

salvage problems in relation to Shasta Dam. SSR 10, 26

Salmon (Continued)

- Sandy River, Oregon, survey. SSR 14
- Schizamoeba salmonis, a new parasitic ameba. Doc 987
- seasons, fishing. FL 80; RR 7
- silver, leech-infestation study. PFC, v.16, no. 3 D
- silver or coho. Cir 24, 25; Doc 902, 1092
- smoked. Doc 902, 1092; FL 18, 60; RR 7, 18
- sockeye (See Salmon, red or sockeye).
- spawning, effects of injected pituitary material on. PFC, v.14, no. 3 E
- spawning nests. FB 61
- spawning observations. Doc 1021; FB 39, 50, 61, 95; IR 33; SSR 26; SSR-F 12, 56, 67, 74
- spermatozoa, effectiveness at varying distances from point of dispersal. FB 50
- spiced. RR 18
- spring (See Salmon, chinook or king).
- statistics. Doc 1021, 1041, 1102; FB 7, 13; SSR 17 (See also Statistical Digest series and Current Fishery Statistics series)
- steelhead (See steelhead trout).
- storage studies. FL 332; SSR 15; Sep 82
- structure and development. Doc 901
- tagging experiments. Doc 943, 991, 1005, 1022, 1047, 1057, 1084, 1102; FB 11; Sep 349
- texture changes in canned. Sep 305
- transplanting operations. PFC 30 B, 47 C, 52 A; SSR 55; SSR-F 67
- trolling, commercial. FL 387
- tyee (See Salmon, chinook or king).
- vitamin content of oils. IR 36, 40
- waste, cannery (See Salmon, cannery waste).
- Yukon River fishery. Doc 909, 928
- Salting (See also Curing):
- cod, brine-salting. Doc 1014, FL 45; RR 18

- cod, dry-salting. Doc 1014; RR 18
- commercial methods. Doc 902, 903, 919, 983, 1014, 1092; FL 38, 45, 51, 136, 240; RR 18, 26; Sep 24
- drum, red (channel bass), dry-salting. FL 136; RR 18
- herring, brine-salting. FL 38; RR 18
- herring, dry-salting. RR 18
- home methods. FL 18
- kench-cure. RR 18, 26
- kingfish, dry-salting. FL 136; RR 18
- mackerel. RR 18
- mullet, brine-salting. FL 51; Sep 24
- mullet, dry-salting. FL 136; RR 18, 26
- Philippine fish. RR 26
- principles involved. Doc 919; RR 18
- research on retarding rancidity in salt-cured fish. Sep 134
- river herring. Doc 903; FL 26
- salmon. Doc 902, 983, 1092; FL 60, 230; RR 18
- sources of information on. FL 362
- tuna. FL 188; RR 18
- Venezuela salt-fish industries. FL 240
- Samoa, tuna fishing at American. Sep 382
- Sampler (See Nets).
- Sand:
- carbonized sand mixed with oil, effect on aquatic animals. SSR-F 1
- Sanitation (See also Pollution). FL 201; RR 27; Sep 114, 160, 176, 187, 215, 221
- Sao Paulo, fishing industry. FL 267
- Saprolegnia parasitica (See Fungus).
- Sarda orientalis (See Mackerel).
- Sardines (See also Pilchard):
- Atlantic fishery (sea herring). FL 5, 81; RR 7
- canners, California. SL 102A
- canners, Maine. SL 102

Sardines (Continued)

canning methods. Doc 1020; FL 81; RR 7; Sep 175

description of species. FL 5, 81, 129; RR 7

eggs and larvae. SSR-F 80, 93, 102, 123

location of schools by super-sonic-echo ranging. Sep 159

Norwegian industry. Sep 175

Pacific fishery (pilchard). FL 5, 81, 129; RR 7; Sep 370

population, method of estimating. FB 94

"sardine", proper use of term. FL 5

smoking, electrostatic. FL 270; Sep 164

statistics (See Statistical Digest series and Current Fishery Statistics series).

Sardinops caerulea (See Pilchard; Sardines).

Sauces for seafoods. FL 53

Sauger, egg production. PFC 54 E

Scale method in life-history studies. Doc 1053

Scales (See Fish scales).

Scaling machine. FL 54

Scallops:

bay, natural history. Doc 1043, 1100

gear used in sea fishery. FL 225, Sep 157

New England fishery. CB 33; FL 225; Sep 157, 348

North Carolina fishery. Doc 1043

Schizamoeba salmonis (See Parasites).

School Lunch Program:

Louisiana schools use more fish. Sep 340

New England, use of fish increased by demonstrations. Sep 339

School of Fisheries. PFC v.14, no.4 D

Sciaenidae (See Drum).

Sciaenops Ocellata (See Drum, red).

Scomber scombrus (See Mackerel, Atlantic).

Scomberomorus sierra (See Mackerel, sierra).

Scombridae (See Tuna and tuna-like fishes).

Scotch lake trout (See Trout, Loch Leven).

Screens (See Fisheries, screening).

Sea cucumbers:

description and trade in Japan. FL 273

Sea lampreys (See Lampreys).

Sea lions. RA 4; SSR 28

Sea mussels (See Mussels).

Sea nettles (See Jellyfish).

Sea scallops (See Scallops).

Sea urchins. FL 231

Seals:

Alaska fur-seal industry. 1921, Doc 933; 1922, Doc 951; 1923, Doc 973; 1924, Doc 992; 1925, Doc 1008; 1926, Doc 1023; 1927, Doc 1040; 1928, Doc 1064; 1929, Doc 1086; 1930, AR 2; 1931, AR 7; 1932, AR 11; 1933, AR 16; 1934, AR 19; 1935, AR 23; 1936, AR 28; 1937, AR 31; 1938, AR 36; 1939, AR 40; 1940, SD 2; 1941, SD 5; 1942, SD 8; 1943, SD 10; 1944, SD 13; 1945, SD 15; 1946, SD 17; 1947, SD 20; 1948, SD 23; 1949, SD 26; 1950, SD 29; 1951, SD 31; 1952, SD 33

byproducts of fur-seal industry. FL 380; SSR-F 32; Sep 190, 228

Guano Islands, Union of South Africa, industry. FL 305

harbor, habits and depredations of. SSR 28

history of Pribilof Islands (Alaska) fur-seal industry. EC 71; FL 77

liver oil, vitamin A content. SSR-F 32; Sep 190, 228

management of fur-seal herd. FL 77

meal, analysis and use of. FL 380

oil, carcass and blubber. FL 380; Sep 190

skins, preparation of. FL 77

Seattle, Wash., wholesale receipts of fishery products. Sep 40, 85, 105, 136, 169, 197, 232

Seaweed (See Algae; Marine plant products).

Sebastes marinus (See Ocean perch).

Seines (See Fishing equipment and methods).

Selective Service classifications (See Employment).

Senses of fishes. FL 132

Settsu Maru, Japanese tuna mothership, (See Vessels, fishing and research).

Shad:

adult, transfer of. PFC v.13, no.1 H;
SSR-F 114

age determination from scales. FB 85

biological investigations. SSR-F 56

boning operation. IR 38

canners. SL 106

canning, commercial. FL 83; RR 7

canning, home. CB 28; FL 180; IR 34

Connecticut River, fluctuations in abundance of. FB 88

distribution and abundance. FB 88;
SSR-F 56

egg production. RR 33

fingerling, transporting. PFC v.12, no.3 H

fishery on Atlantic coast. CB 38; IR 38

fishway, Bonneville. SSR-F 94

fishway, Lawrence. SSR-F 65

Hudson River, fecundity. RR 33

life history. FL 179; IR 38

Maine, streams survey. SSR-F 66

marketing, on Atlantic coast. IR 38

Mississippi threadfin. PFC v.16, no.4 H

propagation, artificial. Doc 981; FL 179;
PFC v.14, no.1 I

roe, canners. SL 106

transportation and release of live. PFC
v.12, no.3 H; v.13, no.1 H; SSR-F 114

water quality studies. SSR 38

Sharks and dogfish:

Alaskan sleeper, handling. Sep 46

E value ratios data for liver oils.
Sep 237

fishery, Caribbean. FL 135

fishery, Cuban. FL 250

fishery, Gulf of California. FL 121;
Sep 68

fishery, Gulf of Mexico, explorations.
Sep 277

fishery, potentialities of Philippine seas.
RR 15

fishing methods. FL 135, 158

hides, fins and teeth. FL 135; RR 15

identification of commercially important
species. FL 121, 135; Sep 68

life history. FL 123

liver oils (See also Fish oils; Vitamins).
FL 135; RR 15, 23

meal and fertilizer, manufacture of.
FL 135; RR 15

Oregon's fishery explorations in the Gulf
of Mexico. Sep 277

recipes. FL 30

tiger, biology of. RR 16

vitamin A analyses (See Vitamins).

Shasta Dam:

fish-salvage problems. SSR 10, 26

game fish populations, resulting change
in. SSR-F 34

Sheefish:

description and proximate composition.
Sep 312

"Shellbugs" (See Fish ponds).

Shellfish (See also individual species):

and fish of New England. CB 33

and fish of the Middle Atlantic coast.
CB 38

and fish of the South Atlantic and Gulf
coasts. CB 37

canning. CB 28; FL 84; RR 7

culture, lobster. FL 74; SSR 64; SSR-F 6

Shellfish (Continued)

- culture, oyster. Doc 890, 960; EC 61; FC 21; SSR-F 9
- doctoral dissertations on. SSR-F 31, 87
- explorations in certain southeastern Alaskan waters. Sep 278, 311, 343, 368
- food value. FL 36
- harvester, Brown. Sep 216
- in the Gulf of Mexico. FB 89
- oyster dredge. Sep 216
- Philippine, bacteriological studies. RR 27
- preferences of household consumers. FL 407, 408, 409, 410
- production in Lynnhaven Bay, Virginia, and possibilities of improving by increasing tidal flow. SSR 61
- production of oysters and other shellfish in the United States, increasing. FL 22
- resources of the northwest coast of the United States. Doc 920
- sales patterns for fresh and frozen. FL 365
- specialties, canners. SL 107
- unusual markets for. FC 11
- Shiners:
 - culture and care of. FL 163
 - disease, ulcer. PFC v.16, no.2 H
- Shiokara. Sep 259
- Shipworms:
 - damage caused by. FL 3
 - life history. FL 3
- Shiratori Maru, Japanese tuna long-liner, (See Vessels, fishing and research).
- Shocking the fish. PFC 31 D
- Shrimp:
 - Alaska's industry. Sep 344
 - canners. SL 112
 - canning, commercial. FL 85; RR 7
 - canning, home. CB 28; FL 180; IR 34

- chill tanks. Sep 383
- commercial species, identification of. FL 366; Sep 242
- curing, methods of. FL 312; RR 18; Sep 109
- explorations in southeastern Alaska waters. Sep 278, 311, 343, 368
- exploratory shrimp fishing in the Gulf of Mexico. FL 406; Sep 277, 380
- fishery, Gulf of Mexico. Sep 219, 289
- fishery in southern Florida - for grooved shrimp. Sep 247
- fishery in Maine. Sep 304
- fishery, southeast Alaska. Doc 1052
- fishery of the southern United States. FL 319, 368; IR 21; Sep 121, 207
- fishing along New England coast. FL 318
- freezing. Sep 189, 373
- fresh-cooked and peeled, studies on icing. Sep 83
- freshwater, Gammarus; feeding to rainbow trout. PFC 20 C
- grooved. FL 366; Sep 247
- of the Gulf of Mexico. FB 89
- industry of South Atlantic coast and Gulf of Mexico. FL 319, 368; IR 21; Sep 121, 207
- John N. Cobb's shellfish explorations in Alaskan waters. Sep 278, 311
- keeping live shrimp for bait. FL 337
- life history. FB 14, 30
- meal, comparative value on protein basis. IR 2
- Mexico, imports from. Sep 219
- North Bering Sea fishing expedition, 1949. FL 369
- Oregon's fishery explorations in the Gulf of Mexico. FL 406; Sep 277, 380
- packed in glass. FL 85; RR 7
- processing and market procedures in Alaska. Sep 344
- river. PFC v.9, no.4 B

Shrimp (Continued)

- sea-bob. FL 366
- seasons, sources, and sizes of Gulf.
Sep 10
- smoking. FL 312; RR 18; Sep 109
- species, common. FL 366
- species of major importance in Alaska.
Sep 344
- spectographic analysis. IR 5
- trawl designs. FL 394; Sep 316
- waste, utilization. Doc 1078

Siberia, fisheries. Doc 1006

Siliqua patula (See Razor clams, Pacific).

Silver salmon (See Salmon, silver or coho).

Silversides:

- eggs and larvae, habits and development.
Doc 918

Siphon egg picker. PFC 46 F

Sisal (See also Fibers):

- description. FL 111; Sep 54
- report on tests made in commercial
fisheries. FL 177

Skates or rays (See Sharks; Rajafish).

Skimmer, fishing vessel (See Vessels, fishing
and research).

Skipjack (See also Tuna and tuna-like fishes):

- age determination. SSR-F 21
- bait resources at Saipan. SSR-F 44
- description. FB 44; SSR-F 19, 104;
Sep 259, 260, 271
- gill net fishing in Hawaiian waters.
SSR-F 90
- gonads. SSR-F 20
- Japanese fishery. SSR-F 49, 83
- Japanese fishing methods for. Sep 260
- Japanese studies. SSR-F 51
- larval and juvenile. FB 44, 48, 63, 64;
SSR-F 19
- live-bait fishery of Hawaiian Islands.
Sep 271

oceanic, from Hawaiian waters; juvenile.
FB 48

oceanic, from the Pacific coast of
Central America; post larvae FB 63

oceanic, from the Phoenix Islands;
juvenile. FB 64

procedure for making katsuobushi from.
Sep 259

resources, report on. SSR-F 17

spawning grounds. FB 44; SSR-F 18

Tahiti. Sep 358

translations of five Japanese papers on.
SSR-F 83

the tunas and their fisheries. SSR-F 82

Smallmouth bass:

- black, gill disease. PFC 27 C
- description. FL 76
- food, artificial. PFC 32 E
- Maryland, spawn when sixteen months old
in South Africa. PFC 42 B
- production under controlled conditions.
PFC 7 A

Smelts. Doc 1015

- adult, relationships of weight and body
measurements. PFC v. 14, no. 2 B

Smoking:

- cardboard smokehouse. FL 204; Sep 141
- haddock. IR 20
- herring and lake herring. FL 122, 196
- methods, general. FL 18; RR 18
- Philippines, general methods. RR 26
- salmon. Doc 902, 1092; FL 60
- sardines, electrostatic smoking.
FL 270; Sep 164
- sardines in Norway. Sep 175
- shrimp. FL 312; Sep 109
- sources of information concerning.
FL 362
- tuna of Southern Spain. FL 188

Smoking plant:

description and illustration. FL 270;
Sep 164

Snails:

description of species. FL 323

utilization of starfish and snails. FL 39

Snappers, red:

distinguishing characters of two species of
Atlantic coast. Doc 993

experimental fishing for; Part I, use of
hoop nets. Sep 195

experimental fishing for, Part II, use of
mechanical reels. Sep 198

Gulf of Mexico, commercial. Doc 1089

Gulf of Mexico, fishery. IR 26

Oregon's fishery explorations in the
Gulf of Mexico, 1950. Sep 277

Social security (See also Unemployment
insurance):

for self-employed persons in fishery
industries. Sep 291

protection for fishermen, 1944. Sep 69

Sockeye salmon (See Salmon, red or sockeye).

Sodium arsenite:

control of weeds. FL 27

controlling vegetation in fish ponds with.
FL 10; IR 11

Soft clams:

canning. FL 84; RR 7

culture. FL 13, 73

larvae, seasonal abundance of. SSR-F 117

Sole:

North Sea resources, study. SSR-F 13

Solubles (See Fish meal).

Sonar:

fish detection by. SSR 44

Sorter (See Fish sorter).Sorting table (See Fish culture).

Sound devices:

attempts to guide small fish with.
SSR-F 111

Soupin, fishing craft (See Vessels, fishing
and research).South Africa (See Union of South Africa).South American fisheries (See also Fisheries;
Fishery products) Doc 931; FL 75,
227, 233, 240, 259, 266, 267, 329, 349;
SSR-F 26, 28.South Atlantic and Gulf fisheries (See Fish-
eries, South Atlantic).

South Carolina:

oyster canning industry in. Sep 14

processed fish for chain store companies
operating in. MDL 49

South Seas Colonization Company, Ebon Maru.
SSR-F 45

Spain:

fishing industry. FL 271

Malaga, volume and value of the catch of
fish and shellfish, 1946. FL 272

Spawning (See Fish culture).

Spearfish, description. SSR-F 82, 112

Specialty products. FL 86, 88, 93, 188, 209,
275; RR 7, 18, 24; Sep 336;
SSR-F 104

Specifications, Federal. Sep 314, 379

Speckled trout (See Trout, brook).Spectrographic analysis of marine products.
IR 5Spencer F. Baird, research vessel (See vessels,
fishing and research).Sphyrion lumpi (See ocean perch, parasite).

Spiny lobster:

description and life history. Doc 925;
FL 142

identification, world distribution, and
United States trade. Sep 229

of the Gulf of Mexico. FB 89

United States production 1921-1949, and
imports, 1920-1949. Sep 293

utilization. Doc 925

Spoilage (See also Quality):

- control by icing and freezing. Sep 274
- trimethylamine, technique for determining presence of. Sep 318
- trimethylamine content of frozen round thawed and iced fish. Sep 306

Sponges:

- classification, structure, life activities. FL 4
- Florida fishery. Doc 962
- in the Gulf of Mexico. FB 89
- industry in Libya. FL 341
- industry in Turkey. FL 238
- Japanese sponge culture. FL 273, 309
- production and international trade of U. S. FL 170

Sport fishing (See Fisheries).

Spot:

- life history. Doc 1046
- reproduction and development. FB 16

Spot-poisoning, a means of sampling fish populations. PFC, v.15, no.1 A

Spotted bass. FL 76

Spotted catfish. FL 134

Spotted squeteague. Doc 1046

Spotted trout (See Spotted squeteague).

Sprat, description. FL 5

Spring salmon (See Salmon, chinook or king).

Squalane. Sep 259

Squid:

- canners. SL 119
- canning. FL 84; RR 7

Starfish:

- chemical composition. FL 391; Sep 196
- controlling, methods of. FB 31; FL 169, 391; RR 2; Sep 6, 193
- fertilizer. FL 391; Sep 206
- life history. FL 169; FB 31
- lime, use in controlling. RR 2
- machine to protect oysters by spreading quick lime on starfish-infested bottoms. Sep 6

meal, value of. FL 391; Sep 199

technological studies. FL 391; Sep 193, 196, 199, 204, 206, 208

thiaminase in. FL 391; Sep 204

utilization of. FL 39, 391; Sep 208

State fishery agencies:

interstate cooperation and conservation. Sep 238

list of state and federal hatcheries, with addresses. PFC, v.11, no.1 D

list with addresses. FL 168

Statistics (See also Fisheries; Fishery products; Frozen fish; Landings; Vitamins; and other particular subjects):

cod fishery. Doc 1034

description of fishery. FL 197; Sep 127

development of fishery. SSR 47

mackerel, fishery, 1804-1930. IR 19

salmon fishery of Alaska. Doc 1041, 1102; FB 7, 13; SSR 17

sources of information on. FL 362

Steelhead (See Trout, steelhead).

Stocking:

as related to the management of inland waters. CB 35

bait and forage fish. FC 28

based on rate of growth. PFC 26 C

creel census as aid to. PFC 37 C

dynamiting rough fish out of lake before planting trout fingerlings. PFC 31 D

Erie. PFC 46 B

fish-planting in Olympic National Park by helicopter. PFC, v.12, no.2 D

fish ponds, policy and success in south-eastern states. PFC, v.13, no.4 A

management suggestions to increase supplies in national forests in Michigan. PFC 47 E

methods of. PFC 9 A, 41 C

new ponds. PFC 53 B

percentage of returns of marked trout in two West Virginia streams. PFC, v.12, no.1 D

planting fish by plane. PFC, v.13, no.1 E

preparations. PFC 47 A

Stocking (Continued)

program at Jefferson National Forest.
PFC 53 D

program for. FC 26

St. Mary River, Virginia. PFC 49 A

salmon eggs, method of planting. PFC,
v.16, no.3 I

sport-fishing activities, survey. Cir 21, 26

tank, fish-planting. PFC, v.12, no.4 C

trout. PFC 54 C

trout, effect on rate of catch. PFC, v.14,
no.3 F

trout on a trolley in Oregon. PFC, v.14,
no.1 J

United States interior waters. FC 8;
EC 65

various sizes, comparative costs.
PFC 11 C

Stone, Livingston. PFC 55 C

Stone catfish. FL 133

Storage, changes during (See Quality).

Storage of frozen fish (See Frozen fish).

Stream improvement (See also Pollution):

applied to fisheries. PFC, v.15, no.2 C

by means of stream feeders. PFC, v.10,
no.2 G

in National Forest fishing waters.
PFC, v.12, no.3 A

in relation to Shasta Dam. SSR 10, 26

instructions for conducting survey of.
FC 26

Mississippi, stream pollution studies.
SSR 3

pollution, detection and measurement of
FB 22

sediment, removal by controlled reservoir
releases. PFC v.16, no.1 E

sport-fishing activities, survey. Cir 21, 26

suggestions. PFC 36 B

survey of the Columbia River and
tributaries. SSR 62; SSR-F 38

to promote wild trout fishing. PFC 54 C

trout. PFC, v.9, no.2 A

Streams:

check dams to maintain. PFC, v.16, no.4 E

classifying, technique. PFC, v.15, no.1 C

phosphate in natural waters, determination
of. PFC, v.16, no.4 C

Striped bass:

abundance, fluctuations in. FB 35;
FL 175

distribution and abundance, Central Valley
Project, Calif. SSR-F 56

life history and habits. FB 28, 35; FL 175

Striped mullet (See Mullet, striped).

Sturgeon and sturgeon caviar:

canning. FL 83, 87; RR 7

Sucker, white:

description and life history. Doc 1007

pectoral fin rays to determine age.
PFC, v.15, no.3 D

Suctorina (See Parasites, protozoan).

Sulfamerazine (See Diseases).

Sunfish, orange-spotted:

life-history and ecology. Doc 938

Surf clam, description. FL 13

Sweden:

fishing industry and market for fish in.
FL 327

Swellfish, nutritive value of. Sep 146

Swordfish:

livers, utilization of. IR 28

T

Tagging fish (See Fishes - tagging).

Taiyo Fishing Company. Sep 315

Tariffs and foreign trade (See Foreign trade).

Taxation of fishery cooperatives (See Cooperatives).

Taxonomy:

doctoral dissertations on. SSR-F 31, 87

Technological publications:

fiscal year 1951-1952. Sep 303

Teleostomi, new order of. SSR-F 50

Teleoste, life history of. Doc 1093; FB 24

Temperature and fishes (See Fishes - temperature).

Tenryu Maru (See Vessels, fishing and research).

Teredo navalis (See Shipworms).

Terrapin (See Turtles).

Texas (See Landings).

Texture (See Penetrometer).

Thawing of fish (See Frozen fish).

Thermocouple seal (See Containers).

Thiamine (See Vitamins).

Thiouracil:

aid in holding and transporting fish.
PFC, v.13, no.2 D

Thor, research vessel (See vessels, fishing and research).

Thymallus signifer (See Grayling).

Tilefish. FL 404

Time study, labor to produce fifty tons of trout. PFC, v.14, no.3 A

Toads, rains of. FL 130

Torquay Conference. Sep 283

Torula yeast:

trout diets. PFC, v.14, no.1 A

Tosui Maru, Japanese tuna mothership (See Vessels, fishing and research).

Tracy Pumping Plant (See Fisheries, Sacramento - San Joaquin).

Trade agreements (See Foreign trade).

Trade in fresh and frozen fishery products.
Doc 930, 939, 996, 1026, 1036, 1039;
EC 50, 52, 54, 55, 63; IR 39

Trade journals concerning commercial fisheries. FL 160

Tradewind, Hawaiian sampan for tuna fishing (See Vessels, fishing and research).

Transportation:

air conditioning fish distribution tanks.
PFC 52 D

Colorado's glass fish tank. PFC, v.10,
no.1 F

fish distribution units. PFC, v.9, no.4 D

fish for stocking. PFC 41 C

frozen fish. Doc 1016; IR 16

live fish, frozen. FL 40

live fish, in refrigerated van. PFC 53 D
mackerel. FL 83

rates for fishery products, indexes of.
Cir 23

refrigerated live-trout distribution tank.
PFC, v.10, no.2 K

salmon eggs. PFC, v.11, no.3 H

shad. PFC, v.12, no.3 H; v.13, no.1 H;
SSR-F 114

thiouracil as an aid in. PFC, v.13, no.2 C
wartime, and the fishing industry. Sep 17

Traps (See Fishing equipment and methods).

Trash fish (See also Rough fish):

development of fishery at New Bedford,
Mass. Sep 256

fishery of southern New England. Sep 286

Trawls:

balloon trawl construction, Long Island
type. FL 245

beam, for shrimp in Alaska. Sep 344

beam, for shrimp on John N. Cobb's shell-
fish explorations. Sep 311

catches, nature of variability in. FB 83

Trawls (Continued)

- deep-water trawling off the coast of Washington and Oregon. Sep 292, 359
- floating. FL 343
- Gulf of Mexico shrimp trawl designs. FL 394; Sep 316
- handling trawler-caught fish. Sep 192
- kite rigs for otter trawl gear. FL 302
- mesh size and construction as a factor in releasing small fish and shrimp from. FL 382; Sep 257
- motor trawlers with freezing and processing systems on board. FL 278
- otter, description of. FL 302, 368; Sep 21, 49
- otter, experiments on the escape of undersized haddock through. Sep 321, 335
- otter, John N. Cobb's shellfish explorations in Alaskan waters, 1950. Sep 278
- otter, modifications in gear to curtail destruction of undersized fish in. IR 24
- otter trawl explorations in Philippine waters. RR 25
- otter trawl fishery, north Pacific, brief history. Sep 292
- otter trawl net for small fishing boats. FL 49
- otter trawlers, description of Japanese. FL 389
- otter trawlers, graph of average annual production. FL 167
- otter trawlers, new rig for high opening. FL 199
- releasing small fish and shrimp from. FL 382; Sep 257
- rope cod ends. Sep 101
- shrimp, Gulf of Mexico. FL 368, 394; Sep 316
- shrimp trawling difficulties on Oregon fishing trip, 1950-1951. FL 406
- stream, fishing in the North Sea. SSR-F 13
- winter trawl fishery off the Virginia and North Carolina coasts. IR 10
- Trepang (See Sea cucumbers).
- Trimethylamine (See Spoilage).

Tripod derrick for small fishing vessels. Sep 135

Trolling (See Fishing equipment and methods).

Trolling gurdy. Sep 198

Tropical fish for aquariums (See also Aquarium):

care. FL 411

dealers, partial list of. FL 193

species. FL 165, 411

Trotlines:

construction, operation, and maintenance (Chesapeake Bay type). FL 291

Trout (See also Diseases; and under individual common names):

aeration of waters for. PFC 35 D

ameba parasitic. Doc 987

brood stock, feeding. PFC 50 C

brood stock, selecting and developing. PFC 25 A

brook, absorption and digestion of carbohydrates. PFC 51 C

brook, brown and rainbow; coefficient of condition in comparison of hatchery and native. PFC, v.13, no.4 B

brook, eastern, use of urethane anesthesia in spawning. PFC, v.16, no.4 I

brook; fats, supplemental. PFC, v.14, no.1 D

brook, metabolic rate of. PFC, v.16, no.2 C

brook; propagation, artificial. Doc 955

brook and brown, mortality rates of. PFC, v.15, no.4 B

brown, fingerlings; dietary observations. PFC, v.11, no.2 H

brown, on all-meat diet; some pathological symptoms. PFC, v.14, no.3 D

brown, should they be stocked. PFC, v.15, no. 3 H

California investigations. PFC 35 B

care. Doc 1061; IR 22, 35; RR 12

celebrated case of trout versus average angler. PFC 11 A

cod liver oil in diet. PFC, v.10, no. 2 H; v.11, no.2 C

columnaris in. PFC v.14, no.3 C; v.15, no.4 G

Trout (Continued)

- creel census, Little Pigeon River.
SSR-F 121
- culture. PFC v.16, no.4 A; RR 12
- culture, heating water for. PFC 44 D
- culture, improvement of brood stock
through selective breeding.
PFC 13 A
- cutthroat. Doc 904
- cutthroat, fingerling; effect of population
pressure on rate of growth and food
conversion. PFC v.10, no.1 B
- cutthroat, without dorsal fin. PFC v.12,
no.2 G
- dealers in trout and pond fishes. FL 46
- development of anemia when fed a syn-
thetic diet, and cure by feeding of
fresh beef liver. PFC 48 B
- diet experiments. PFC v.13, no.1 C;
v.16, no.1 C
- digestion in stomachs of. PFC 11 B
- diseases (See also Diseases). Doc 1061;
IR 22, 35; RR 12
- display tanks, neutralizing chlorine in.
PFC v.11, no.1 J
- distribution, new system in West Virginia.
PFC v.10, no.4 G
- eastern, studies. PFC 50 A
- effect of sea lampreys on the lake trout
industry. FL 384
- epizootic among rainbow trout. PFC v.15,
no.4 E
- fingerling, care. PFC 18 B
- fingerling, effect of amount of food on fin
conditions. PFC 39 C
- fingerling, feeding experiments.
PFC 45 E
- fingerling, use to compare varying
values of meals fed to fish. PFC 40 B
- fingerlings, lost. PFC 49 A
- fingerlings, meat diet supplements.
PFC 37 B
- fingerlings, planted after dynamiting
rough fish out of lake. PFC 31 D
- fingerlings, planting by boat. PFC 49 G
- fingerlings, relative survival. PFC v.16,
no.3 E
- fish-farming industries. FC 2
- fishery in Oregon. PFC v.9, no.3 C
- fishing, developing in lakes. PFC 41 A
- fishing, in Vermont. PFC 55 E
- fishing, promotion of wild. PFC 54 C
- folic acid requirements. PFC v.11,
no.3 A
- food, cheaper. PFC 9 B
- food, experiments with meat and meat
substitutes as. Doc 1079
- food, natural. PFC 10 A
- forrajes y alimentacion de la trucha.
FL 378
- fry, steelhead; effect of bactericides on.
PFC v.13, no.1 G
- gray, protection of. Doc 1019
- growth, graphical method for presenting
data on. PFC v.10, no.2 B
- growth rate and fin regeneration.
PFC v.9, no.2 E
- hatchery, and wild trout. PFC v.16,
no.3 E
- hatchery, disease prevention in. PFC 43 A
- hatchery, Great Smoky Mountains,
National Park; mortality. PFC 29 C
- hatchery, ichthyophthiriasis in. PFC 42 A
- hatchery, method of improving quality.
PFC v.10, no.1 A
- hatchery, survival in streams. PFC v.10,
no.1 A
- hatchery reared, use of cod-liver oil in
diet. PFC v.11, no.2 C
- hatchery versus wild. PFC 11 A
- in a floating raceway. PFC v.10, no.1 I

Trout (Continued)

intermountain region, United States
Forest Service. Doc 1062

kamloops rainbow. FL 235

lake. FL 15

lake, New York; breeding habits. FB 59

Lake Michigan, fishery decline. FB 60

Lake Yellowstone, creel census. SSR-F 81

Lake Yellowstone, length measurements.
SSR-F 103

Loch leven. Doc 904; FL 98

management in New Hampshire. PFC 56 A

Mexican, notes on introduction. PFC 37 A

"non-gilling" fish sorter. FL 186

nutrition. PFC 30 A

of North America. FL 355

parasite. Doc 987

phosphorous and calcium in eggs and
bodies of. PFC 17 C

pond rearing on natural foods. PFC 29 D

production; Fish Lake, Umpqua National
Forest. PFC 40 D

propagation, cooperative. EC 59

protein requirement. PFC 50 D

raceways, naturalistic for young. PFC 47 J

rainbow. Doc 904; FL 110, 235

rainbow, application of brood-stock
selection to fishery management.
PFC v.12, no.3, G

rainbow, development of a non-migratory
strain. PFC v.15, no.2 H

rainbow; diet in relation to quantity,
quality, and cost of eggs. PFC 50 C

rainbow; dry foods in diet. PFC 17 A

rainbow, epizootic among. PFC v.15, no.4 E

rainbow, experiments with marked.
PFC 20 D

rainbow, feeding freshwater shrimp,
Gammarus, to. PFC 20 C

rainbow, fingerlings; comparison of growth
in concrete and dirt-bottomed circular
pools of same size. PFC 42 E

rainbow, fingerlings, effects of antibiotics
and arsanilic acid on growth.
PFC v.16, no.1 F

rainbow, migratory tendencies of the
Manchester, Iowa, strain. PFC v.15,
no.2 B

rainbow; overfeeding results. PFC 17 A

rainbow; propagation, artificial. Doc 955

rainbow, tolerance of one strain to some
foods. PFC 51 B

rearing pools. PFC 21 A

runs involved in Grand Coulee Fish Main-
tenance Project, 1939-1947. SSR 55

Salmo in northern hemispheres, dis-
tribution of four anadromous mem-
bers. PFC v.15, no.2 A

Schizamoeba salmonis, a new parasitic
ameba. Doc 987

sea, effect of refreezing on quality. Sep 209

sea, reproduction and development of.
FB 16

season, Michigan; variation in fishing
pressure and catch. PFC v.13, no.4 F

starch digestion in. PFC 44 C

steelhead. Cir 24; FL 110; PFC 13 B

steelhead; biological study of fishery
resources of Trinity River, California.
SSR-F 12

steelhead, life history. SSR 51

stocking. PFC 49 A, 54 C

stocking, effect on rate of catch.
PFC v.14, no.3 F

stocking experiments, summary. FL 137

stream problems. PFC v.9, no.2 A;
v.16, no.1 E

Trout (Continued)

streams, check dams to maintain.
PFC v.16, no.4 E

tapeworms, treatment. PFC 50 E

time study of labor to produce fifty tons.
PFC v.14, no.3 A

trolley in Oregon. PFC v.14, no.1 J

western, studies. PFC 50 A

wild, supplementing with legal-sized
hatchery to meet fishing pressure on
controlled area. PFC v.9, no.4 C

wild and hatchery, relative survival.
PFC v.10, no.1 A

Yellowstone Lake, creel census.
SSR-F 81

young, effect of temperature changes on.
PFC 47 I

Tuna and tuna-like fishes (See also under individual common names):

albacore, age determination. SSR-F 21

albacore, description. SSR-F 104

albacore; fishery east of Cape Nojima,
oceanic conditions. SSR-F 77

albacore, fishing grounds development in
1939. SSR-F 33

albacore, stocks in Japanese waters.
SSR-F 16

albacore exploration, North Pacific.
FL 376, 402; Sep 280, 313, 357

and other fishes, establishing in ponds
and tanks. SSR-F 71

and other fishes, reaction to stimuli.
SSR-F 91

bait resources. SSR-F 44, 104, 107;
Sep 270

biology of. FB 44, 58, 62

black, fishery. SSR-F 21, 52, 78

bluefin, description. SSR-F 104

bluefin, exploratory fishing in Gulf of
Maine. Sep 309, 353, 374

byproducts. SSR-F 104

canning. FL 20, 82; RR 7

canning firms. SL 103

canning process and types of packs.
SSR-F 104

consumption. SSR-F 104

Cuban fishery, report on. Sep 337

definitions of body dimensions used in
describing. FB 47

equipment, live-bait. Sep 356, 363

Euthynnus lineatus from Pacific Coast of
Central America. FB 63

Euthynnus yaito from Philippine Seas.
FB 53, 55, 57

exploration, Gulf-of-Maine bluefin.
Sep 309, 353, 374

fishing at American Samoa. Sep 382

fishing at Tahiti. Sep 358

fishing craft; trollers, purse seiners and
clippers. SSR-F 104

fishing in Indonesian waters. SSR-F 45

fishing in Palau waters. SSR-F 42

fishing in the Caroline Islands. SSR-F 46

fishing in the Marshall Islands. SSR-F 47

gill-net fishing for skipjack. SSR-F 90

Gulf-of-Maine exploration. Sep 309, 353,
374

habitat. SSR-F 76

Hawaii, resources of. Sep 270, 376

imports of tuna and tuna-like fish.
SSR-F 104

industry, survey of domestic. SSR-F 104

industry of southern Spain. FL 188

Japan, production and export potentialities.
Sep 281

Japanese albacore fishery of the north
central Pacific. FL 388

Japanese black. SSR-F 21, 52, 78

Japanese industry. FL 273; SSR-F 16, 17,
18, 19, 20, 21, 22, 23, 24, 33, 42, 43,
44, 45, 46, 47, 48, 49, 51, 52, 76, 77,
78, 79, 82, 83, 90; Sep 259

Japanese inspection of canned. Sep 259

Japanese long-line fishery. FL 317;
Sep 249

Japanese mothership operations in the
western equatorial Pacific ocean.
SSR-F 128; Sep 284, 315

Japanese surveys in tropical waters.
SSR-F 48

Tuna (Continued)

juvenile forms. FB 53; SSR-F 19

Katsuwonus pelamis from Philippine Seas. FB 53, 55, 57

larval. FB 57, 63; SSR-F 19

Leeward Islands, resources of. Sep 270

Line Islands, resources of. Sep 270

little tuna. FL 353, 416; SSR-F 104

live-bait equipment. Sep 363

live-bait fishing for. SSR-F 107; Sep 231

liver and beef-liver meals, chemical evaluation of. Sep 265

long-line fishery. FL 317; SSR-F 98, 108, 112, 119, 128; Sep 249, 376

methods, recipes, and processing for the Philippines. RR 26

migrations. SSR-F 76

Neothunnus macropterus from Pacific Coast of Central America. FB 63

Neothunnus macropterus from Philippine Seas. FB 53, 55, 57

north Pacific albacore explorations. FL 376, 402; Sep 280, 313, 357

observations during cruise of the Oregon and the Alaska. Sep 225

Oregon live-bait fishing for. Sep 231

Oregon's fishery explorations in the Gulf of Mexico. Sep 277

Philippines, outlook for development of industry in. RR 28

production, domestic and world. SSR-F 104

purse seining in the central Pacific, experimental. Sep 347

reaction to stimuli. SSR-F 91, 130, 134

receiving ships (Pacific Explorer), suggestions for operators. FL 301, 414

resources, report on. SSR-F 17; Sep 270

Scombrids, Pacific, morphometric measurements. SSR-F 95

skipjack, Japanese. SSR-F 17, 18, 19, 20, 21, 49, 51, 83, 90

spawning, of Philippine. FB 55

spawning grounds. SSR-F 18

stocks in Japanese waters. SSR-F 16

study of. SSR-F 24

trap lift net for catching tuna bait fishes. Sep 356

trolling in the Line Islands. FL 351

the tunas and their fisheries. SSR-F 82

yellowfin, age determination. SSR-F 21

yellowfin, Central America. FB 63

yellowfin, description. SSR-F 104

yellowfin, food of. FB 81; SSR-F 23

yellowfin, spawning and description of juveniles. FB 44

yellowfin, stocks in Japanese waters. SSR-F 16

yellowfin, variability of longline catches of. SSR-F 119

yellowfin of Angola and of the Pacific coast of Central America, comparison. FB 56

yellowfin of Hawaiian waters and American west coast, comparison. FB 72

yellowtail. SSR-F 104

Turkey:

fishery resources. FL 390

sponge industry in. FL 238

Turtles:

canning. FL 86; RR 7

friends or foes of fish culture. PFC 50 B

in the home aquarium. FL 91

markets and recipes for fresh-water. FL 69

ridding ponds of. FL 161

terrapin, diamond-back, culture. Doc 1060; EC 60; FL 216

terrapin, diamond-back; natural history. Doc 917

terrapin, diamond-back; propagation. Doc 917

trapping. FL 190

TVA dams and reservoirs, fishing in. PFC v.16, no.1 A; v.16, no.3 C

Tyee salmon (See Salmon, Chinook or king).

U

Unemployment insurance (See also Social Security):

Chesapeake Bay States (Maryland, Virginia). FL 149

extension to certain fishing services. Sep 155

Great Lakes States (Minnesota, Wisconsin, Illinois, Michigan, Ohio). FL 171

Gulf States (Alabama, Louisiana, Mississippi, Texas). FL 154

Middle Atlantic States (New York, New Jersey, Pennsylvania, Delaware). FL 150

New England States (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island). FL 151

Pacific Coast States (California, Oregon, Washington). FL 153

South Atlantic States (North Carolina, South Carolina, Georgia, Florida). FL 152

Union of South Africa (See also Africa, fisheries):

bluegills from Maryland make good in. PFC 45 D

fisheries, growth. FL 347

Guano Islands. FL 305

Union of Soviet Socialist Republics:

fishery programs. Sep 168

Unions:

United States fishermen's and fish shore workers unions, list of. FL 293

United States:

fisheries, preliminary review of. FL 393

fisheries, relative productivity and value. FL 108; Sep 51, 369

fishery statistics (See Fisheries, United States).

fluctuations in fish production in. Sep 179

food supplies of Canada and Great Britain compared with. Sep 67

lists of fishery associations, cooperatives, and unions. FL 254, 292, 293

policy with regard to high seas fisheries. Sep 222

United States Department of Agriculture:

state directors, Production and Marketing Administration, 1946. MDL 50

United States Department of Labor:

aids fishing industry in many fields. Sep 79

United States Department of the Interior, Fish and Wildlife Service (See also particular Branch):

activities, Atlantic States. Sep 122

activities, ten years. PFC v.12, no.2 A

Bureau of Biological Survey, consolidation with Bureau of Fisheries. Sep 246

Bureau of Fisheries, Commissioner of Fisheries annual reports. 1921, Doc 900; 1922, Doc 913; 1923, Doc 946; 1924, Doc 966; 1925, Doc 982; 1926, Doc 1002; 1927, Doc 1017; 1928, Doc 1038; 1929, Doc 1051; 1930, Doc 1071; 1931, AR 1; 1932, AR 6

Bureau of Fisheries, conservation progress. PFC 28 A

Bureau of Fisheries, consolidation with Bureau of Biological Survey. Sep 246

Bureau of Fisheries, functions. PFC 28 A

Hoover Committee recommendations on. Sep 246

organization of. PFC 54 B

policy on commercial and sport fishing interests. PFC v.15, no.1 B

progress, ten years of. Sep 246

Service policy. PFC 53 A

Urethane (See Fishes - tagging).

Urosalpinx cinerea say (See Oyster drills).

Uruguay, fisheries of. FL 266

Utilization of new or little used species. FL 39, 93, 95, 342; Sep 9, 43, 57, 256, 286

V

Vegetation, submerged:

- alligator weed, eradication with 2, 4-D.
PFC v.11, no.2 D
- aquatic plants in pond culture. Doc 949
- butyl ester, 2,4 - dichlorophenoxy
acetic acid; effects on some emergent
aquatic plants. PFC v.9, no.2 B
- control of. FL 10, 27, 217, 344
- dichlorophenoxy acetic acid, effect on.
PFC v.9, no.2 B
- eradication, with 2, 4-d. PFC v.11, no.2 D
- fertilization in a recreational lake, and
effect on bathing, boating, and fish-
ing. PFC v.10, no.2 A
- fouling ships' bottoms. Doc 1031
- herbicides. PFC v.10, no.3 C
- nigrosine to control. PFC v.12, no.3 D;
v.15, no.3 C
- phenoxyacetic compounds to control.
PFC v.9, no.3 F
- propagation of bait and forage fish,
varieties suitable for. FC 28
- sport-fishery activities, survey. Cir 21,
26
- weed problem in fish ponds in south-
eastern states. PFC v.13, no.4 A
- weeds, effects on fish of the Gulf states.
SSR 39

Venezuela:

- fish and fisheries of. FL 259
- fishery, pearl. SSR-F 26
- fishery products, import duties for.
FL 338
- fishery regulations. FL 338
- salt-fish industries. FL 240
- United States fishery mission to. Sep 227

Vessels, fishing and research:

- Adventure. SSR-F 89
- Akita Maru, albacore fishing grounds de-
velopment, 1939. SSR-F 33

Alaska, exploratory fishing. FL 330, 342;
Sep 225

Albatross III, bottle release to study in-
fluence of wind and drag. SSR-F 10

Albatross III, cruise to survey bottoms
for effect of acid-iron waste disposal
at sea on animal populations. SSR-F 11

Albatross III, fisheries research vessel
of the United States government.
Sep 200, 255

Albatross III, freezing fish at sea - New
England (See also Delaware). Sep 306

Anna A. SSR-F 89

Antillas, shrimp trawler. Sep 316

Aomori Maru, albacore fishing grounds
development, 1939. SSR-F 33

Balanus, bottle release to study influence
of wind and drag. SSR-F 10

Balanus, cruise to survey bottoms for
effect of acid-iron waste disposal at
sea on animal populations. SSR-F 11

Black Douglas, zooplankton survey, 1952.
SSR-F 100

Calistar, tuna clipper. SSR-F 107

Caryn, bottle release to study influence of
wind and drag. SSR-F 10

Charles H. Gilbert. SSR-F 108

charter boats. SSR-F 7

Chucua, used in study of Panama pearl
fishery. SSR-F 28

Controlled Materials Plan in regard to
building. Sep 15

Crest, zooplankton survey, 1952.
SSR-F 100

Deep Sea, expedition to the northern
Bering Sea. FL 330, 369

Delaware, experimental trawler. Sep 306,
328, 345, 362, 375, 388

drum seiner in salmon fishery. Sep 365

Ebon Maru, research vessel of South
Seas Colonization Company. SSR-F 45

equipment, fishing vessel live-bait.
Sep 363

fishing, New England and New York City,
1945. FL 167

fishing boat builders, partial list of.
FL 178

Vessels, fishing and research (Continued)

Fusa Maru, albacore fishing grounds development, 1939. SSR-F 33

gear, fishing-vessel deck. Sep 383

Hakuo Maru, tuna research. SSR-F 46

Hawaiian long-line boat. Sep 244

Henry O'Malley. SSR-F 107

Horizon, zooplankton survey, 1952. SSR-F 100

Hugh M. Smith, Pacific Oceanic Fishery Investigations motor vessel. SSR-F 54, 98, 107, 118, 131, 135, 136

Iwate Maru, albacore fishing grounds development, 1939. SSR-F 33

John N. Cobb, exploratory fishing. FL 385, 402; SSR-F 90; Sep 253, 278, 280, 292, 311, 313, 341, 343, 357, 359, 361, 368, 371

John R. Manning. FL 351; SSR-F 90, 108, 118; Sep 347, 358

Kamui Maru, albacore fishing grounds development, 1939. SSR-F 33

Kiyo Maru, tuna fishing. SSR-F 42, 45

Kochi Maru, tuna fishing. SSR-F 42

Makua. SSR-F 90

Marjorie Parker, exploratory bluefin tuna fishing in Gulf of Maine. Sep 353, 374

Miyagi Maru, albacore fishing grounds development, 1939. SSR-F 33

motor, in the North Sea. SSR-F 13

Musashi Maru, albacore fishing grounds development, 1939. SSR-F 33

N. B. Scofield. SSR-F 90

North Star, mothership. Sep 382

of New England and New York City. FL 167

Oregon, exploratory fishing. FL 376, 406; SSR-F 107; Sep 225, 231, 277, 356, 373, 380

Oyasio Maru, research vessel. Sep 381

Pacific Explorer, factory ship. FL 301, 316, 326, 361, 414; Sep 161

Paolina T., zooplankton survey, 1952. SSR-F 100

Pioneer, tuna clipper. SSR-F 107

Redwing. SSR-F 89

Researcher, laboratory motor vessel used to collect clam samples. SSR-F 53

S. F. Baird, zooplankton survey, 1952. SSR-F 100

Sagami Maru, albacore fishing grounds development, 1939. SSR-F 33

Settsu Maru, Japanese tuna mothership. Sep 326; SSR-F 128

Shiratori Maru, a Japanese tuna longliner. Sep 284

Shiratori Maru, albacore fishing grounds development, 1939. SSR-F 33

Skimmer dredges for mussels. Sep 239

Soupin, Pacific Coast fishing craft, equipped with freezing and refrigeration equipment. Sep 56

Spencer F. Baird. FB 53, 57

tabulation by gear, port, and tonnage. FL 167

Tenryu Maru, Japanese tuna mothership. Sep 284, 315

Thor, exploratory research, 1908-1910. SSR-F 19

Tokei Maru, factory-mothership. Sep 386

Tosui Maru, Japanese tuna mothership. Sep 315

Tradewind, Hawaiian sampan for tuna fishing, 1953. SSR-F 107

tripod derrick for small. Sep 135

tuna; trollers, purse seiners, and clippers. SSR-F 104

Washington, expedition to the northern Bering Sea. FL 342, 369

Washington Star, mothership. Sep 382

Western Explorer, exploratory bluefin tuna fishing in Gulf of Maine (See also Margorie Parker. Sep 309

Western Flyer. SSR-F 89

Whitewater dredges for mussels. Sep 239

Yellowfin, zooplankton survey, 1952. SSR-F 100

Vessels, fishing and research (Continued)

Zuiho Maru, tuna research, 1938-1939.
SSR-F 42, 46

Virgin Islands:

fisheries. IR 14

oyster culture, possibilities. SSR-F 9

Virginia:

processed fish for chain store companies
operating in. MDL 49

shellfish production in Lynnhaven Bay.
SSR 61

Visual aids (See Motion pictures).

Vitamins (See also Fish as food):

✓ analyses, time and labor saving techniques.
FL 138; Sep 72

✓ analyses of shark livers. Sep 115

✓ analysis of fishery byproducts. Sep 163,
366

biotin and brown trout. PFC v.12, no.2 C

B12, cytological studies on Lactobacillus
leichmannii in the assay of. Sep 297

✓ content in fish livers and viscera. FL 233;
Sep 133

✓ content in grayfish livers. Sep 248

✓ content in livers of Alaska fur seals.
SSR-F 32; Sep 228

✓ content in menhaden fish oils. IR 3

✓ content of burbot-liver oil. IR 12

✓ content of fish and shellfish. FL 36, 116,
364; Sep 239

✓ content of fishery byproducts. Sep 366

✓ content of fur-seal oils. Sep 190

✓ content of haddock-liver oil. IR 27

✓ content of oils from cannery trimmings of
Columbia River salmon. IR 36

content of riboflavin in fishery products.
Sep 130, 158, 354

✓ content of shark livers. RR 15

content of thiamine and anti-thiamine
factor in fishery products. Sep 126,
158, 182, 202, 204, 354

✓ deterioration in fish livers and liver oils.
Sep 167, 170, 173

✓ distribution in fish livers. FL 290; Sep 88

✓ drill sampling device for fish livers.
FL 141; Sep 84

✓ extraction process. FL 99, 233; Sep 186,
224, 254

✓ fish liver oil industry. FL 233

✓ grayfish liver color related to fin spine
length. Sep 139

✓ loss of potency and stability of grayfish
livers. Sep 167, 170, 173

✓ methods of extraction. FL 99, 233;
Sep 186, 224, 254

✓ nomograph for determination of liver
potency. Sep 93

✓ oils, E value ratios for some commercial.
Sep 226, 237

✓ oils; source, extraction, and processing
in Japan. Sep 259

✓ potency, analysis of livers for. Sep 115

✓ potency, estimations of extinction ratios
of reduction plant oils. Sep 180

✓ potency, shark liver oil. FL 68, 121

✓ potency of fish livers, method for deter-
mining. FL 233, 237, 242; Sep 89,
93, 97, 100

✓ potency of liver oils of Bering Sea cod and
flounder. Sep 267

✓ potency of livers of grayfish. Sep 117

✓ potency of the liver oil of Pacific cod.
Sep 230

rainbow trout, effect of the lack of certain
vitamins on. PFC v.13, no.1 C

✓ relationship between body length of gray-
fish and. Sep 184

reports, statistical. CFS 62, 63, 64, 67,
71, 75, 76, 80, 86, 88, 92, 98, 106,
111, 119, 122, 127, 131, 139, 146,
150, 160, 161, 162, 174, 175, 191,
192, 194, 200, 210, 215, 223, 234,
238, 249, 253, 266, 267, 273, 282,
284, 292, 293, 298, 303, 314, 323,
324, 337, 340

Subjects

Vitamins (Continued)

riboflavin assays of fishery products.
Sep 130

riboflavin content in Alaska pollack.
Sep 354

riboflavin content in baked and simmered
oysters. Sep 158

✓ sampling fish livers. FL 141, 289;
Sep 84, 87

✓ specifications and standards. FL 233

✓ stability, a rapid test for. FL 212;
Sep 129

✓ swordfish as source. IR 28

thiamine content in Alaskan pollack.
Sep 354

thiamine content in baked and simmered
oysters. Sep 158

thiamine content in fishery products.
Sep 126, 182, 202

thiamine content in starfish. Sep 204

✓ ultraviolet absorption curves for.
Sep 183

vitaminology. PFC v.10, no. 3 B

Von Behr trout (See Trout, brown).

W

Walleye (See Pike-perches).

Walruses. RA 4

War Food Administration:

net weights and conversion factors for
fishery products. FL 139; Sep 75

Washington (See Vessels, fishing and research).

Washington, State of:

deep-water trawling survey off coast,
1951. Sep 292

fish waste for reduction, survey of
available and potential. Sep 91

fisheries, latent. FL 95

fishery byproducts, utilization. FL 370

plan for management of Pacific coast
fisheries. Sep 203

survey of the Columbia River and its
tributaries. SSR 51, 62; SSR-F 36,
37, 38, 39, 40, 57

Washington Aquarium (See Aquariums).

Washington Monument lot fish ponds. PFC v.10,
no.4 D

Waste, fish. Doc 1078; FL 29, 93, 370, 405;
IR 32; Sep 91, 99, 258, 262, 286, 298,
301, 310, 354

Water (See also pH):

aeration for trout. PFC 35 D

analysis, phosphates. PFC v.16, no.4 C

characteristics affecting gas-bubble
disease. PFC v.15, no.1 E

conditions affecting aquatic life in
Elephant Butte Reservoir. FB 34

effect of floodwaters on oysters in
Mississippi Sound, 1950. RR 31

Florida, phosphorus content of waters
along west coast of. SSR-F 122

flow, methods of measuring. FC 26;
PFC 26 B

flow in relation to fish population.
SSR-F 56

impounded, for fish culture. RR 35

increase of potential fish food supply by
the use of farm fertilizers. PFC 39 D

lake, organic content of. Doc 1012

movements in the Gulf of Panama.
SSR-F 28

physics and chemistry of Gulf. FB 89

pollution, its nature and evaluation.
PFC v.16, no.2 B

pollution, legislation proposed in the
74th Congress for the abatement of.
PFC 20 B

purity standards for fresh-water fish.
SSR 2

quality, determination of. RR 9

quality, doctoral dissertations on.
SSR-F 31, 87

quality, in relation to Willamette Valley
Project, study of. SSR 33

quality, Mississippi River, studies of.
SSR 30

quality, studies of Delaware river with
reference to shad migration. SSR 38

sampler and analysis kit. PFC v.15,
no.1 F

sea, stabilization of the phosphate ratio
by freezing. FB 79

supply, hatchery; removal of excess
nitrogen in. PFC v.10, no.2 J

temperature, salinity and pH of water in
the Gulf of Panama. SSR-F 28

temperature, South Seas. SSR-F 48

temperature as factor influencing the
orientation of migrating anadromous
fishes. FB 73

temperature of Palau waters. SSR-F 42

temperature problems at Shasta Dam
SSR 10, 26

temperature records from California's
Central Valley. SSR-F 2, 75

Water (Continued)

temperatures, on skipjack grounds.
SSR-F 83

temperatures of, at Willamette River
Basin. SSR-F 69

Water beetle:

in relation to pondfish culture. Doc 942,
953

life history. Doc 942, 953

Weakfishes:

migration in relation to conservation.
SSR-F 115

of the Atlantic and Gulf coasts, with
description of a new species. Doc 1058

reproduction and development. FB 16

Weights (See War Food Administration).

West Virginia:

electrical fish-collecting methods.
PFC v. 16, no. 1 B

Western Explorer (See Vessels, fishing and
research).

Western Flyer (See Vessels, fishing and
research).

Wetting agent (See Derris root).

Whales and whaling:

electrocution of whales. FL 348

Icelandic whaling. FL 345

Japanese whaling in the Bonin Islands.
FL 248

Japanese whaling industry. FL 371

whalemeat. FL 33

White catfish, description. FL 133

White marlin:

fishery of Ocean City, Maryland. SSR 6

White sucker (See Sucker, white).

Whitefish:

caviar. FL 87, RR 7

fishery of Lakes Huron and Michigan.
Doc 1001. 1048; FB 40

home canning. CB 28; FL 180; IR 34

of the intermountain region. Doc 1062

propagation, artificial. Doc 949

smoking. FL 122; RR 18

Whitewater, fishing vessel (See Vessels,
fishing and research).

Whiting:

description of. FB 96

reproduction and development. FB 16

Wiking einweiss (See Emulsifiers).

Willamette River:

Basin, water temperatures of. SSR-F 69

oxygen block in the mainstem. SSR-F 41

pollution in. SSR-F 30

Willamette Valley Project (See Oregon).

Wilmot, Samuel. PFC 21 C

Winter trawl fishery off the Virginia and
North Carolina Coasts. IR 10

Wisconsin:

fish investigations in lakes. PFC 39 D

fishery research in. PFC 56 C

Woods Hole:

Laboratory. Sep 246

Oceanographic Institution cooperates on
study of drift bottle releases.
SSR-F 10

Oceanographic Institution cooperates on
study of the effect of acid-iron waste
disposal on aquatic animals. SSR-F 11

sports fishery of the Middle Atlantic
bight, survey of. SSR-F 7

Workmen's compensation for seamen. Sep 149

XYZ

Xiphopenaeus kroyeri (See Shrimp, seabob).

Yeast, torula, trout diets. PFC v. 14, no. 1 A

Yeast and penicillin mat (See Fishes-food).

Yellow bullhead, description. FL 133

Yellow perch:

age, growth, and production in Lake Erie. FB 70

artificial propagation. Doc 1018

description. Doc 904

Yellowfin, research vessel (See Vessels, fishing and research).

Yellowfin tuna (See also Tuna):

age and growth, estimation of. FB 65; SSR-F 21

biology. FB 44

canning. FL 82; RR 7

description. SSR-F 104

food habits. SSR-F 21

juveniles, description. FB 44

longline catches, variability of. SSR-F 119

of Angola, and tunas of the Pacific coast of Central America, a biometric comparison. FB 56

of Hawaiian waters, and American west coast; comparison. FB 72

of the central Pacific; food of. FB 81

of the Pacific coast of Central America; post larvae. FB 63

spawning. FB 44, 77

stocks in Japanese waters. SSR-F 16

Tahiti. Sep 358

Yellowstone National Park:

fishes of. Doc 904

Yellowtail:

canned as tuna. FL 82, RR 7

description. SSR-F 104

Zoarces anguillaris (See Ocean pout).

Zooplankton (See Plankton).

Zuiho Maru, research vessel (See Vessels, fishing and research).