

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*

1955

1955

1955

1955



UNITED STATES GOVERNMENT PRINTING OFFICE • WASHINGTON • 1955

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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

AR	Administrative
CR	Circulars
CB	Conservation
CRS	Current Reports
DC	Documents
FB	Fishery Bulletin
FC	Fishery Circular
FD	Fishery Digest
FL	Fishery List
IR	Investigative Reports
MDL	Market Data Leaflets
PFC	Publications of the Fisheries Commission
RA	Regulations
RR	Research Reports
SP	Special Publications
SSR	Special Scientific Reports

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.

Series

- 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.
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- *EC 42. Parasites of fresh-water fishes, comprising some general considerations, by H. S. Pratt. Rev. Feb. 1929. 10 p., illus.
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- *EC 49. Habits of the mud-puppy *Necturus*, an enemy of food fishes, by A. S. Pearse. May 1921. 8 p., illus.
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- 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.
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- *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.
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- *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.
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- *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.

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- 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.
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- *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.
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- ✓ *FL 143. Preparation of fish for storage in refrigerated lockers, by Leo Young. Sept. 1945. 13 p., illus. Reprinted from Locker Operator, Aug. 1945.
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- FL 148. Improved fish trap for taking spawners, prepared in the Division of Game-fish and Hatcheries. Feb. 1946. 2 p., illus.
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- ✓ FL 156. The commercial importance of seaweed gums in the United States, by Victor B. Scheffer. Nov. 1945. 5 p. Supersedes Sep 23.
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- *FL 163. Culture and care of minnows, shiners, and bait fish, prepared in the Division of Fishery Biology. Mar. 1946. 4 p.
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- 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.
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- *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.

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- *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.
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- 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.
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- ✓ FL 232. Fishery technology abstract card system, by M. E. Stansby and K. L. Osterhaug. Rev. Oct. 1950. 20 p.
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- ✓ 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.
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- MDL 11. New Hampshire refrigerated locker plants. Rev. Nov. 1950. 2 p.
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- MDL 14. California refrigerated locker plants. Rev. Oct. 1950. 13 p.
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- 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.
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- 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.
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- MDL 30. North Carolina refrigerated locker plants. Rev. Oct. 1950. 3 p.
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- 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. Cobekid 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.

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*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.

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*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.

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*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 ricer 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.

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PFC v.10, no1, 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 Crowell 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 Crowell Henderson. 217-230 p., illus.
- E. Pond record of bass and bluegill production, by Hubert C. Topel. 231-243 p., illus.

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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.
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- 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.
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- 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.

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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. Pon-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.
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- 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.
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- 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.

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- 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.

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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.

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

- A. A century of American fish culture, 1853-1953, by Edward M. Wood. 147-162 p.
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- 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.

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- E. Stream sediment removal by controlled reservoir releases, by A. B. Eustis and R. H. Hillen. 30-35 p., illus.
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- 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.

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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. §

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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.
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- RR 9. Determination of water quality, by M. M. Ellis, B. A. Westfall and Marion D. Ellis. 1946. 122 p., illus.
- RR 10. §
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- *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.
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- *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.
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