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**U.S. DEPARTMENT OF COMMERCE
BUREAU OF FISHERIES**

**FISHERY INDUSTRIES
OF THE UNITED STATES
1932**

By R. H. FIEDLER

U.S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, *Secretary*

BUREAU OF FISHERIES

FRANK T. BELL, *Commissioner*

FISHERY INDUSTRIES OF THE UNITED STATES

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FISHERY INDUSTRIES OF THE UNITED STATES, 1932¹

By R. H. FIEDLER

Chief, Division of Fishery Industries

CONTENTS

Page	Page		
Foreword.....	149	Part 2. Fishery Statistics, 1931—Contd.	
Part 1. Operations of the Division			
Collection of statistics.....	150	Fisheries of the Middle Atlantic States—Con.	
Statistical areas.....	151	Pennsylvania.....	240
Technological investigations.....	152	Delaware.....	241
Research associate.....	152	Fisheries of the Chesapeake Bay States.....	245
Laboratories.....	152	Maryland.....	249
Nutritive value of marine products.....	153	Virginia.....	256
Salmon-liver oil.....	153	Fisheries of the South Atlantic and Gulf States.....	
Antianemic properties of oysters.....	153	North Carolina.....	265
Kelp-meal experiments.....	154	South Carolina.....	275
Preservation of fishery products for food.....	154	Georgia.....	284
Improved methods for handling fresh and frozen fish.....	154	Florida.....	286
Improved methods for smoking fish.....	155	Alabama.....	290
Bacteriological studies.....	155	Mississippi.....	306
Preservation of fishery byproducts.....	155	Louisiana.....	308
Improved methods for manufacturing fish meal from nonoily fish waste.....	155	Texas.....	311
Development of fish flour.....	156	Fisheries of the Pacific Coast States.....	
Haddock-liver oil.....	156	Washington.....	315
Net preservation.....	157	Oregon.....	326
Measurement of mesh size of fishing nets.....	158	California.....	331
Red snapper fishery and industry.....	158	Lake fisheries.....	349
Market and industrial surveys.....	158	Fisheries of the Mississippi River and tributaries.....	
Aquatic shell industries.....	158	Alabama.....	376
Establishing marketing grades for fish.....	159	Arkansas.....	392
Fishery byproducts industries of Maine.....	159	Illinois.....	393
Publications of the Division.....	160	Indiana.....	400
Documents, reports, and circulars.....	161	Iowa.....	405
Special articles.....	161	Kansas.....	409
Statistical bulletins.....	162	Kentucky.....	412
Part 2. Fishery Statistics, 1931			
General review.....	163	Louisiana.....	413
Manufactured fishery products.....	176	Minnesota.....	415
Fisheries of the New England States.....	180	Mississippi.....	423
Maine.....	190	Missouri.....	427
New Hampshire.....	195	Nebraska.....	430
Massachusetts.....	196	Ohio.....	434
Rhode Island.....	203	Oklahoma.....	436
Connecticut.....	208	South Dakota.....	438
Fisheries of the Middle Atlantic States.....	213	Tennessee.....	439
New York.....	220	Texas.....	442
New Jersey.....	231	Wisconsin.....	444
		Lake Pepin.....	447
		Lake Keokuk.....	448
		Mississippi River between Lake Pepin and Lake Keokuk.....	448
		Statistical survey procedure.....	449

FOREWORD

This report constitutes a summary of the activities of the Division of Fishery Industries as well as an annual review on fishery statistics of the United States. As its name indicates, this Division of the Bureau is concerned with the activities and welfare of the fishery industries, including the commercial fisheries, the trade in fishery products, and the fish canning and preserving industries. Its functions include the collection and publication of fishery statistics, the conducting of market surveys, the prosecution of research designed

¹ Appendix III to the Report of the U.S. Commissioner of Fisheries, 1933. Approved for publication May 8, 1933.

to solve the technical problems of the industry, and the dissemination of authoritative and practical information to the fishery industries and the public. Results of technological investigations and marketing studies are published in separate documents as each project is completed. The information obtained from statistical surveys is published in part 2 of this report, which includes detailed statistical information for the year 1931 that has become available since the issuance of the previous report,² together with such summarized statements and interpretations of the statistics as are deemed significant and useful. In the preparation of this report, members of the Division's staff have taken part and their assistance is appreciatively acknowledged.

Part 1. OPERATIONS OF THE DIVISION

COLLECTION OF STATISTICS

The statistical work of the Division in 1932, as in former years, included the collection and dissemination of statistics on the catch of fishery products and the gear employed in making the catch and statistics of related fishery industries. In the former group are statistics that are intended for the use of the fishery biologist upon which to base conservation measures. They are also valuable for economic purposes. This is especially true of statistics of the landings of fish at principal fishing ports, which are published monthly. In the second group are statistics that are of use mainly for economic or trade purposes. These include statistics of the manufactured fishery products and byproducts of the United States, cold-storage holdings of fish and amounts of fish frozen in the United States, marine-animal oil production, and similar statistics.

Continuing with the plan of making annual general statistical surveys of the fisheries of various geographical sections, the Division in 1932 under the direction of F. F. Johnson canvassed the fisheries prosecuted in our entire coastal, lake, and Mississippi River sections, obtaining catch figures for 1931. Continuous annual catch figures are now available for the Great Lakes from 1913; Pacific Coast States from 1922, South Atlantic and Gulf States from 1927, New England States from 1928, and the Middle Atlantic and Chesapeake Bay States from 1929. The survey made of the fisheries of the Mississippi River and tributaries for 1931 was the first complete canvass made since 1922.

In addition to the general catch statistics, the collection and (or) publication of statistics on special subjects for the year 1932, was continued during the year, as follows: The landings of fish by American fishing vessels at the ports of Boston and Gloucester, Mass., Portland, Maine, and Seattle, Wash. (published monthly); landings of halibut at North Pacific coast ports (published monthly); catch of mackerel in the North Atlantic fishery; cold-storage holdings of frozen and cured fish and amount of fish frozen, which are furnished by the Bureau of Agricultural Economics (published monthly); production, consumption, and holdings of marine-animal oils of the United States and Alaska (published quarterly by the Bureau of the Census); production of manufactured fishery products and by-products of the United States and Alaska during 1932; the catch of

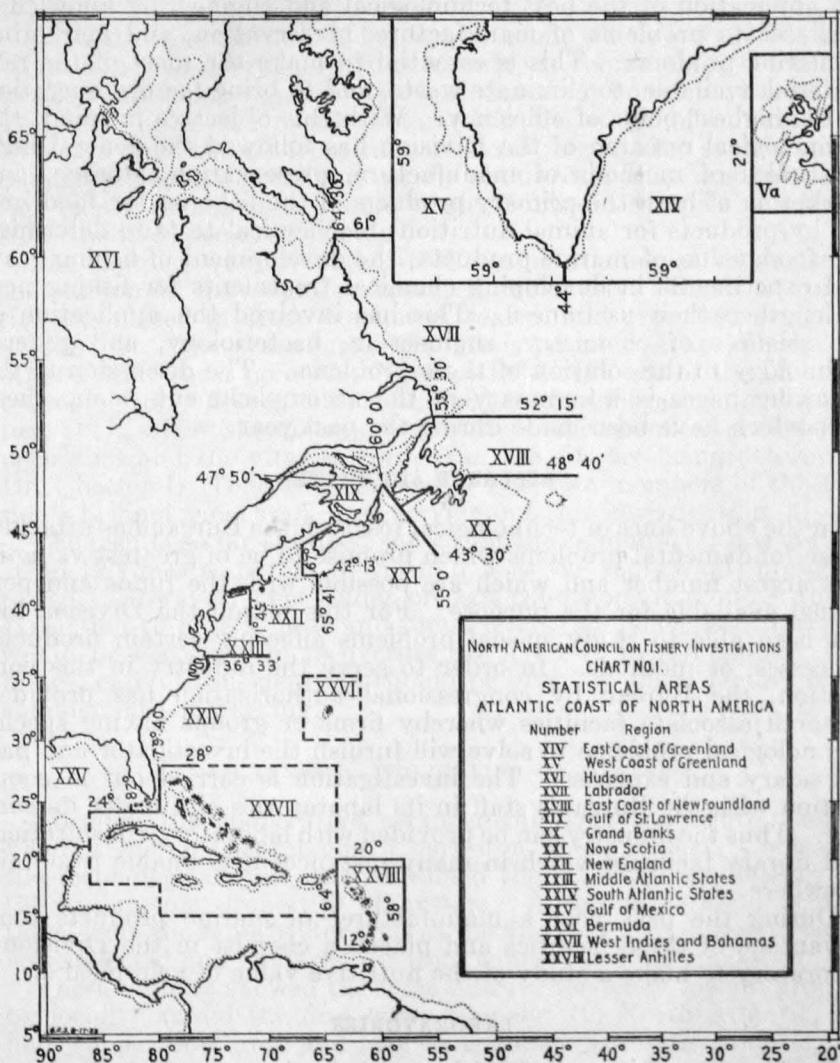
² Fishery Industries of the United States, 1931. By R. H. Fiedler, Appendix II to the Report of the U.S. Commissioner of Fisheries for 1932, pp. 97-440.

shad in the Potomac and Hudson Rivers, and the catch of alewives in the Potomac River during 1932; transactions on the sponge exchange at Tarpon Springs, Fla., during 1932; volume of fishery products handled at the municipal fish wharf and market, Washington, D.C., during 1932, and the volume of United States imports and exports of fishery products during 1932, furnished by the Bureau of Foreign and Domestic Commerce.

In the above surveys the division continued to receive cooperation from many of the State fishery agencies, which aided materially in the work.

STATISTICAL AREAS

At the nineteenth meeting held at Washington, D.C., on October 20 and 21, 1932, of the North American Council on Fishery Investiga-



tions, consisting of representatives from Canada, Newfoundland, France, and the United States, there were adopted uniform statistical

areas to facilitate the clear presentation of statistics of the western Atlantic and Gulf fisheries. These areas, which are shown together with their designating numbers in the accompanying chart, are indicated in the various sections of this report.

TECHNOLOGICAL INVESTIGATIONS

Never before in the history of the fishery industry of this country has there been greater need for economy in production methods and for the fullest utilization of valuable products from the material at hand. Under present conditions of depressed business, losses or leakages in factory operation, which in more prosperous times seemed relatively unimportant, now represent very frequently the margin between profit and loss. For this reason there is greater need for the application of the best technological and engineering knowledge available to problems of manufacture, preservation, and marketing of marine products. This is essential to make the most of the raw material available, to eliminate waste, and to bring factory operation to the highest point of efficiency. With this objective in mind, the technological research of the Division has followed the general lines of studies of methods of manufacture, preservation, storage, and marketing of both the primary products of the fisheries for food and the by-products for animal nutrition; biochemical tests to determine the food value of marine products; the development of fishing gear; and experiments in developing chemical treatments for fishing nets to lengthen their usefulness. This has involved the application of the sciences of chemistry, engineering, bacteriology, and general technology to the solution of these problems. The discussion in the following pages is a summary of the accomplishments along these lines which have been made during the past year.

RESEARCH ASSOCIATE

In the above lines of technological research the Bureau has attacked those fundamental problems which promise to be of greatest value to the largest number and which are possible with the funds and personnel available for the purpose. For this reason the Division has not been able to study special problems affecting certain products, processes, or methods. In order to serve the industry in this connection, the Bureau by congressional authorization has provided research associate facilities whereby firms or groups having special technological problems to solve will furnish the investigator and pay his salary and expenses. The investigation is carried out in cooperation with the Bureau's staff in its laboratories and under its control. Thus the industry can be provided with laboratory, consultation, and library facilities which in many instances it is unable to obtain elsewhere.

During the past year a manufacturer of marine products took advantage of these facilities and placed a chemist in the Division's laboratory to make a study of the nutritive value of kelp meal.

LABORATORIES

During the past year the Division carried on its technological research work under the direction of John Ruel Manning at laboratories in

Washington, D.C., and Gloucester, Mass., and has provided equipment for a laboratory in the Bureau's new building in Seattle, Wash. In addition, work was conducted in other laboratories as conditions warranted. For instance, certain cooperative biochemical studies were conducted at the laboratories of the South Carolina Food Research Commission, Charleston, S.C.; the experimental farm of the Department of Agriculture, Beltsville, Md.; the Ohio Agricultural Experiment Station, Wooster, Ohio; the New York State College of Agriculture, Cornell, Ithaca, N.Y.; and the North Carolina State College of Agriculture, Raleigh, N.C.

NUTRITIVE VALUE OF MARINE PRODUCTS

SALMON-LIVER OIL

With the introduction of halibut-liver oil, which is very potent in vitamin A, the Bureau received numerous requests for some other source of oil which would compare in vitamin A potency with halibut-liver oil. From the results obtained in the study of salmon oil, it appeared that the oil from salmon livers might offer such a source, especially since salmon livers can be obtained in large amounts. For this reason arrangements were made to obtain samples of material from the five species of salmon.

The samples were prepared in the same manner as those used in the salmon-oil investigation reported previously. Fresh raw material was placed in cans, evacuated, sealed, and processed for 1 hour at 228° F. These samples were prepared at Seattle, Wash., and other Pacific coast points by Norman D. Jarvis, one of the Division's technologists. The cans were shipped to the laboratory in Washington, D.C., where the oil was rendered and the chemical and physical properties and the vitamin content of the oils are being determined. Dr. Chester D. Tolle and Charles F. Lee, two members of the Division's technological staff, are carrying out this investigation.

The results so far obtained show that the salmon-liver oils are from 10 to 12 times as potent in vitamin A as the salmon oils previously tested. However, since under present conditions it requires solvent extraction to obtain oil from salmon livers, and since added expense would be necessary in recovering the livers from the cannery trimmings, careful consideration should be given to these factors in any commercial undertaking.

ANTIANEMIC PROPERTIES OF OYSTERS

Through the cooperative arrangement with the South Carolina Food Research Commission, Charleston, S.C., E. Jack Coulson, of the technological staff, has continued the investigation dealing with the antianemic properties of oysters. A second series of samples taken from the same oyster beds as the first, but at a different season, was collected and analyzed for iron, copper, and manganese content.

These samples showed the same relative tendency toward grouping by locality as did the first series, namely: (1) North Atlantic, with high copper, low iron, and low manganese; (2) South Atlantic, with

high iron, low copper, and low manganese; and (3) Gulf, with high iron, low copper, and high manganese. These oysters from different localities were fed to anemic animals and all induced regeneration of hemoglobin, thus giving further evidence of the importance of oysters as a source of iron in addition to their other food factors.

KELP MEAL EXPERIMENTS

Cooperative work with a producer of kelp meal was continued by Dr. H. P. Morris, research associate of our technological staff, in the Washington laboratory to determine the nutritive value of kelp meal. The work completed with laboratory animals to which diets composed of plant substances, with and without the addition of kelp meal were fed, indicates that kelp meal has a beneficial effect on growth. With some diets the addition of kelp meal definitely stimulated appetite. However, with the diet in which linseed oil meal supplied the protein this was not the case. The greater growth of the rats in this experiment can probably be ascribed to the mineral content of the kelp meal. The increased growth was not due to sodium or potassium chloride, as the control diets were corrected for these salts.

At the conclusion of the experiments with laboratory animals arrangements were made with the Poultry Office, Bureau of Animal Industry, United States Department of Agriculture, for a cooperative study to determine the value of kelp meal when fed to poultry. However, due to the withdrawal of financial support by the kelp-meal producer, this work was discontinued December 31, 1932, before enough data had been accumulated to draw definite conclusions.

PRESERVATION OF FISHERY PRODUCTS FOR FOOD

IMPROVED METHODS FOR HANDLING FRESH AND FROZEN FISH

Studies dealing with the relative freshness of fish were continued during the year at the Gloucester technological laboratory under the direction of James M. Lemon with the assistance of Maurice E. Stansby. Several methods for packing fresh fish were studied and the rate of spoilage under each was determined. It is expected that final results of this research will indicate methods for packing which are the least injurious to fish and which will yield the highest grade of product.

Efforts also were made to determine the temperature at which frozen fish suffer the least deterioration during storage. It is known that certain of the enzymes found in the flesh of fish continue to function even at low temperatures. The study of this problem deals with these changes, and efforts are being made to effect a method which will retard this enzymic action.

The technique of freezing and storing several varieties of shellfish is being given consideration for the reason that more efficient methods for this would be of great aid to the oyster, crab, and shrimp industries. Thus far very little is known of the effects of freezing and long storage upon these products. These studies are aimed to determine the proper temperature for freezing, the most efficient temperature for storage, the effect of defrosting and refreezing, and the rate of spoilage after defrosting.

IMPROVED METHODS FOR SMOKING FISH

The control of temperature, humidity, and smoke in smoking fish has been applied to the preparation of finnan haddie on a semicommercial scale. It has been found possible to reduce the loss of moisture to a considerable extent by employing a comparatively low temperature and a relatively high humidity in the smokehouse. At a temperature of 100° F. and a relative humidity of approximately 60 percent, it has been shown that finnan haddie can be produced containing an average of 72 percent moisture. This moisture content is 5 to 10 percent higher than the average commercial product, and means considerable saving to the smoking firm in that it reduces their losses.

BACTERIOLOGICAL STUDIES

During the past year Francis P. Griffiths, bacteriologist of the Division, continued studies at the Gloucester laboratory of the relation of bacteria to the preservation of fish. As a result of his studies it has been found that formaldehyde contained in the smoke has but very slight preservative effect upon light smoked finnan haddie for the reason that the concentration is so low. While brining the fish before smoking adds to the flavor, it has been found that its preservative effect also is practically negligible. This may actually become a source of infection, depending upon the type of salt employed in the preparation of the brine.

The effect of the rate of freezing and temperature of storage upon the survival and growth of bacteria usually found on haddock fillets has been investigated by Mr. Griffiths, and work is being extended to include several pathogenic bacteria in the tests. In conjunction with the research cited previously dealing with the relative freshness of fish, Mr. Griffiths also made numerous tests to correlate a chemical test for freshness with the bacterial count of the fish flesh with very encouraging results.

PRESERVATION OF FISHERY BYPRODUCTS

During the past year the research in connection with the preservation of fishery byproducts carried on at the Gloucester technological laboratory has been a continuation of the projects outlined in the report of the Division for 1931. This was carried on by Roger W. Harrison, with the assistance of Andrew W. Anderson and S. R. Pottinger.

IMPROVED METHODS FOR MANUFACTURING FISH MEAL FROM NONOILY FISH WASTE

The utilization of waste from the preparation of packaged fishery products, especially ground fish, has an important bearing upon both the fishing and agricultural industries, for the conversion of this waste into a useful product such as fish meal brings added revenue to the fishing industry and brings to agriculture one of the most highly nutritive protein concentrates obtainable. As a service to these industries, it is pertinent that the fundamental factors of manufacture as related to the preservation of nutritional value be fully understood and, further, it is also of primary importance to obtain information as to the most economical means of obtaining this end. The studies, therefore, have been carried on with these aims in mind.

Test materials were prepared under carefully controlled conditions in a manner so that each factor of manufacture could be measured. The test materials were then submitted to the Ohio Agricultural Experiment Station and Cornell University Agricultural Experiment Station, where tests for general nutritive value, digestibility, and vitamin G potency were made. Portions of the same samples were tested chemically in the Gloucester laboratory for the possible destruction of several essential amino acids which are present in fish protein in limiting amounts. Further, exhaustive engineering studies were carried on to determine the economies of various methods of manufacture. At the present writing the various studies are practically completed, but final conclusions can not be drawn until all phases can be considered collectively. Preliminary data indicate that digestibility, vitamin value, and general nutritive value are affected by drying time, temperature of drying, and method of applying heat, while the essential amino acid, cystine, is affected more by temperature.

DEVELOPMENT OF FISH FLOUR

Much of the material now converted into fish meal is suitable for human consumption. This material consists essentially of the backbones, with adhering flesh, which is accumulated in the preparation of fish fillets. In view of recent studies in nutrition, showing the importance of minerals in the human diet, this material should form the basis of a valuable food product. Further, there is a need for dessicated foods, for special feeding purposes, which could replace the amount of raw foods used, providing the dried product retained essentially the vital factors of the fresh product. Evidence being obtained from the studies on fish-meal manufacture indicate the conditions prevailing in what is known as spray or flash drying should yield a product approaching the properties desired for the uses stated above. Studies to date have been concerned with methods of reducing fish waste to a consistency which will permit atomization and the development of a suitable apparatus to cause atomization.

HADDOCK-LIVER OIL

Fishing companies operating trawlers, catching largely haddock, have been concerned with a problem which indicated possible difficulty in the marketing of oil for therapeutic use prepared from the livers of the catch. This was due to the fact that the iodine number of haddock-liver oil might be sufficiently high to bring a quantity of oil, running largely haddock, above the maximum iodine number limit of 180 prescribed by the United States Pharmacopoeia. During the past year oils prepared from haddock livers obtained from numerous fishing grounds, at varying intervals, have been tested for their physical and chemical constants. In only one of the 30 to 40 samples tested did the iodine number of the crude oil exceed the maximum limit of 180. However, considering the increase of iodine number caused by the removal of the more saturated glycerides during cold pressing, a larger number exceeding the upper United States Pharmacopoeia limit would have been recorded had facilities been available for satisfactory cold pressing small samples of oil. The significance of this is somewhat confused by the relatively low vitamin values

shown by the haddock-liver oils when tested both biologically and colorimetrically.

Tests with the colorimetric method of determining vitamin A, when compared to biological results on the same oils indicate that this rapid method offers a valuable aid to liver oil manufacturers for keeping a rough control on the vitamin A value of the various lots of oil prepared.

NET PRESERVATION

The testing of preservatives for heavy nets was continued during 1932 by W. T. Conn, technologist of the Division, to twines used in lake and river waters in addition to those used in salt and brackish waters. From tests extending over a period of three years a principle of preservation has been established which has proved efficacious for this type of net even when subjected to exposure in water for long periods. In its simplified form this principle consists of giving the twine a series of treatments which in some way apparently effect a chemical change in its composition and then giving it a cover treatment. The first series of treatments consists of degumming or cleansing the twine from natural resins and from oil added to it in the mill, then a chemical treatment which subjects the degummed twine to a toxic dyeing, followed by a fixing treatment and then thorough washing in clean water. For the final, or cover, treatment, the twine is coated with tar. In this connection no tar has been found which is superior to the specification tar previously recommended by this Bureau, although a high acid tar has been found beneficial.

Twines prepared as above have shown great resistance to depreciation in every locality where exposures were made during the past 3 years.

Research on net preservation also has shown that mercury, in organic combination, mixed with the tar is highly efficacious in killing marine weeds as well as acting as a preservative agent.

The beneficial use of antioxidants in connection with preservatives for twine has been confirmed. A very powerful antioxidant has been found which when mixed in very small proportions in tar acts as a preservative for both the tar and the twine.

It is apparent that the preservation of most seines and light nets is dependent upon proper cleansing and storage. In line with this, the Bureau has advocated the washing of gill nets with lime water. Where this recommendation was followed in 1932 it was observed that the life of the nets was trebled, especially when they were washed immediately after the fish were removed. Further study of the drying and storage of fishing nets in the shade has confirmed previous recommendations for this practice.

In cooperation with the Bureau of Construction and Repair, Navy Department, an extensive investigation of the preservation of manila rope has been carried on through the year and will extend into 1933. As a result of this work it is expected that formulae will be developed for the preservation of ropes under all conditions.

In the course of this investigation principles of preservation have been developed that may be of considerable value when applied to other textile material such as sails, awnings, thread, etc.

MEASUREMENT OF MESH SIZE OF FISHING NETS

For many years there has been a controversy over the proper method for determining the mesh size of nets fished in the Great Lakes region. This has led to confusion among fishermen, State authorities, and net manufacturers. At the request of law-enforcement authorities in this region the Bureau of Fisheries and the Bureau of Standards cooperated in an extensive laboratory and field investigation of this problem in an effort to correct this condition. As a result of this work a principle for determining legal mesh measurements by a spring steel gage was developed and has been generally accepted by the State authorities.

RED SNAPPER FISHERY AND INDUSTRY

During the past year a study was made by Norman D. Jarvis, of the technological staff of the Division, on methods of production used in the red snapper and grouper fishery at Pensacola to determine the possibility of introducing more efficient types of gear for catching these fishes. Experiments were conducted especially to determine the efficiency of small fish traps or pots and trawl lines. In this work it was found that a slightly modified type of the West Indian fish pot could catch red snapper in considerable numbers, the catch for a single pot running from 7 to 93 fish, with an average around 20 fish, in a 2-hour period. However, it was determined that trawl lines could not be fished successfully on most of the red-snapper fishing grounds even when modified to meet local conditions, but they might be used to advantage in certain areas for catching grouper.

A series of experimental cures of smoked red snapper were made in an effort to learn whether these fish would be suitable for marketing as a cured fish. As a result it was found that a smoked product of the finnan haddie type could be prepared. This product has an excellent flavor and keeps in good condition over a considerable period of time after preservation. The industry has adopted the method developed and is now marketing smoked red snapper on a small scale.

Mr. Jarvis also was detailed to aid the State of Florida in conducting experiments in preserving various locally caught fishery products for home use. This work was received with enthusiasm, for it has shown the fishery industry in the State the possibilities for expanding the market for local fish.

MARKET AND INDUSTRIAL SURVEYS

Market and industrial surveys are made to supply the trade with useful market information regarding the distribution and consumption of fishery products and to supply descriptive and economic data on our fisheries and fishery industries.

AQUATIC SHELL INDUSTRIES

During 1932 a survey was made of our oyster, marine-clam, freshwater mussel and marine-pearl shell industries by F. F. Johnson. The value of the products of these industries in 1932 was valued at nearly \$8,000,000.

The high percentage of calcium carbonate content in oyster, marine-clam, and fresh-water mussel shells make the crushed product from them a valuable digestible feed for laying hens and growing chicks as well as an important agricultural liming material.

The production of crushed oyster shells for poultry feed in the past 12 years exceeded the 1932 production only in 1929 and 1930, although the value of the 1932 production was exceeded in each of the preceding 11 years. The production in the North and Middle Atlantic areas, while small, has remained fairly constant throughout the 12-year period for which annual statistics are available; the Chesapeake region has declined in production from a peak of nearly 120,000 tons in 1922 to less than 45,000 tons in 1932; the South Atlantic, not including Florida, reached a peak of 16,200 tons in 1927 and decreased to 10,400 tons in 1932; and the position of the Gulf States, including the Florida east coast, in oyster shell manufacture has increased rapidly in the past 12 years with exploitation of the vast supplies of reef shells. The production in Louisiana from 1927 to 1930, inclusive, has annually exceeded 100,000 tons, with some recession during the past 2 years, while the production in Florida in 1932 reached a peak of 61,000 tons. On the Pacific coast interest is being evidenced in exploiting the shells of the Japanese oyster which will supplement the west coast manufacture of products from currently accumulated oyster and clam shells, and reef and fossil deposits.

ESTABLISHING MARKETING GRADES FOR FISH

The Bureau, at the request of the State of Virginia, cooperated with the Virginia Bureau of Markets in a survey to determine the advisability and practicability of establishing marketing grades for fish and fishery products to assist the fishery industries in the more orderly marketing of their products. This was made by N. W. Broome, representing the State of Virginia, and J. R. Manning, representing the Bureau. Such agricultural products as potatoes, apples, watermelons, peanuts, tobacco, and others are now graded as to quality, and this has promoted efficiency in marketing these commodities. In these cases marketing grades or standards have been adopted which are of benefit to producers, dealers, and consumers. With agricultural products, grades are based largely on quality and size. It was believed that a similar grading system would be of value to the fishery industry, since considerable disorder and confusion exist in the marketing of fish.

In the conduct of the survey persons operating wholesale fish houses, hotels, and restaurants in Washington, D.C., and dealers and fishermen in the State of Virginia were interviewed as to their opinion on this matter. As a consequence it was found feasible to establish marketing grades and that a majority of the dealers and fishermen favored such a procedure. Accordingly, tentative grades for fresh fish and for salt-cured herring were devised and a grading system based on them was put into operation. Copies of the grades may be obtained from the Bureau of Markets, Richmond, Va.

FISHERY BYPRODUCTS INDUSTRIES OF MAINE

During the past year a technical and market survey was made of the fishery byproducts industries of Maine by Andrew W. Anderson and Roger W. Harrison.

As a result of this study it was found that in 1930 Maine byproducts industries prepared manufactured and semimanufactured products valued at \$238,071. These consisted of herring (sardine) meal, herring oil, white-fish meal, cod and cod-liver oil, clam meal, fish glue, fish scale essence, and a quantity of salted ground fish skins. In addition, waste sold by canners to byproducts plants and pearl buttons cut from imported shells were reported as bringing various concerns a total of \$123,374.

Raw materials from which byproducts can be manufactured are accumulated from the canning and smoking of herring; the evisceration and canning, smoking, salting, freezing, or packaging of cod, haddock, hake, pollock, flounders, and cusk; the shucking and canning of clams; the shucking of scallops; the picking of crabs and lobsters; the smoking and salting of alewives and mackerel; and trash fish.

The available waste material during 1930 from the various fishery industries amounted to over 44,500,000 pounds. Of this approximately 32,000,000 pounds were utilized by the 14 fish reduction, 16 oil rendering, and 1 pearl essence plants operating. Two additional fish reduction plants were capable of operation, but did not operate.

The greatest portion of the waste results from the canning and smoking of herring and is accumulated in Washington County. The second important source of waste, that from ground fish, is accumulated largely in Cumberland County along with considerable herring waste. Shellfish waste is accumulated largely in Knox and Washington Counties.

Maine byproducts plants are equipped for the manufacture of exceptionally high quality fish meals, and facilities are adequate for increased utilization of waste without additional investment.

In general it was found that herring oil and in many cases cod and cod-liver oil production methods need improvement and that clam waste and fish scale waste could be used to a much greater extent. In addition, cod-liver meal could be produced from "chum" from oil rendering operations.

A considerable quantity of scallop waste is available. This no doubt can be converted into a useful product. Also, a small production of crab scrap and lobster scrap is possible and an additional market for ground fish skins from fresh waste could be had by salting skins.

It was further determined that small accumulations of ground fish waste could be air-dried and that Maine fish meals due to their inherent value as a feed stuff should command a good market.

PUBLICATIONS OF THE DIVISION

During the calendar year 1932 the following publications were prepared by members of the Division. These do not include the monthly statistical bulletins of the landings of fishery products at Boston and Gloucester, Mass., Portland, Maine, and Seattle, Wash., nor the monthly reports on cold-storage holdings of frozen fish and quantities of fish frozen. The report entitled, "Studies in Crab Canning" was a contribution to the Bureau by Kokichi Oshima, of Japan. The fishery documents, reports, and circulars may be purchased at the prices shown from the Superintendent of Documents, Government Printing Office, Washington, D.C. The statistical bulle-

tins and special or S-memoranda are distributed free of charge upon request to the Bureau. The special articles may be obtained from the sources of publication.

Those wishing to receive current copies of this report and statistical bulletins issued by the Bureau should request that their names be placed on the Bureau's mailing lists no. 128 for the Annual Statistical Report, 128a for general statistical bulletins, and 128b for monthly cold-storage reports. Those desiring historical statistical data on the domestic fisheries for the period 1880 to 1929 should consult the report entitled "Fishery Industries of the United States, 1930," by R. H. Fiedler, Appendix II to the Report of the United States Commissioner of Fisheries for the fiscal year 1931. Figures for 1930 may be found in the report entitled "Fishery Industries of the United States, 1931," by R. H. Fiedler, Appendix II to Report of Commissioner of Fisheries for the fiscal year 1932.

DOCUMENTS, REPORTS, AND CIRCULARS

FIEDLER, R. H.

Fishery industries of the United States, 1931. Appendix II, Report of Commissioner, 1932. 8°, 343 pp. 20 cents.

FIEDLER, R. H., and NORMAN D. JARVIS.

Fisheries of the Virgin Islands of the United States. 8°, 32 pp., 10 figs. Investigational Report No. 14. 5 cents.

JARVIS, NORMAN D.

The fisheries of Puerto Rico. 8°, 41 pp., 8 figs. Investigational Report No. 13. 5 cents.

JOHNSON, F. F.

Some unusual markets for fish and shellfish. 8°, 13 pp., 3 figs. Fishery Circular No. 11. 10 cents.

LEMON, J. M.

Reducing the shrinkage of frozen fish in cold-storage. 8°, 12 pp., 2 figs. Investigational Report No. 9. 5 cents.

Developments in refrigeration of fish in the United States (with bibliography). 8°, 33 pp., 3 figs. Investigational Report No. 16. 5 cents.

OSHIMA, KOKICHI.

Studies in crab canning. 8°, 8 pp., 2 figs. Investigational Report No. 8. 5 cents.

TOLLE, CHESTER D., E. M. NELSON, and GEORGE S. JAMIESON.

Chemical and physical properties of burbot-liver oil and its vitamin content. 8°, 6 pp., 2 figs. Investigational Report No. 12. 5 cents.

SPECIAL ARTICLES

CONN, W. T.

Reduce the cost of Maryland fish nets. Maryland Fisheries, March 1932. Baltimore.

Net preservative research, 1931, with recommendations. Bureau of Fisheries Memorandum S-326, June 9, 1932. (Revision of Bureau of Fisheries Special Memorandum 696-D, entitled "Principles of net preservation, 1931"). Washington.

COULSON, E. J., H. LEVINE, and R. E. REMINGTON.

Oysters and anemia. Address before the Food and Nutrition Section, American Public Health Association, Washington, D.C., October 25, 1932. Published in American Journal of Public Health and the Nation's Health, November 1932. New York. Bureau of Fisheries Special Memorandum 2502. Washington.

FIEDLER, R. H.

Fisheries of Louisiana. Louisiana Conservation Review, January 1932. New Orleans.

Fisheries of North Carolina. Address before a meeting of fishermen, Morehead City, N.C., February 16, 1932. Published in Fishing (New York), March 1932, as "Green Pastures" and in the United States Daily (Washington), April 4, 1932, as "Plan for stimulating fisheries in North Carolina."

FIEDLER, R. H.—Continued

Fisheries statistical research. West Coast Fisheries, De Luxe Reference Number, 1931-32. San Pedro, Calif.

High food value of flour made from fish bones. United States Daily, November 1, 1932. Washington.

Absorbing surplus oyster stocks. Fishing, December 1932. New York.

Problems in marketing fishery products in the United States. Address before the National Association of Marketing Officials. Washington, D.C., December 13, 1932. Published as Bureau of Fisheries Special Memorandum No. 2450-D. Washington.

JOHNSON, F. F.

The hot fish shops of St. Louis, Missouri. Fishing Gazette, July 1932. New York. United States Daily, November 4, 1932. Washington.

Canned oysters for inland sections. Fishing, August 1932. New York.

Galveston County leads in State (Texas) in fish production. The Galveston Daily News, October 1, 1932. Texas.

Typical New England clam bake. United States Daily, November 10, 1932. Washington.

Market for oysters, roasted or steamed. United States Daily, December 19, 1932. Washington.

LEMON, J. M.

Controlled smoking. Fishing Gazette, July 1932. New York.

Ancient and modern refrigeration. United States Daily, October 27, 1932. Washington.

MANNING, JOHN RUEL.

Value of shrimp meal. Flour and Feed, April 1932. Milwaukee. Bureau of Fisheries Memorandum S-328. Washington.

Opportunities afforded by fish and fish products in Florida. Address delivered at University of Florida, Gainesville, Fla., during Farmers' Week, August 10, 1932. Published as Bureau of Fisheries Special Memorandum 2494. Washington.

MORRIS, H. P.

Studies on the nutritive value of kelp meal for animal feeding. November 1932. Bureau of Fisheries Technological Report No. 5. Washington.

STATISTICAL BULLETINS

Fisheries of the New England States, 1930. Statistical Bulletin No. 971.

Fisheries of the Middle Atlantic States, 1930. Statistical Bulletin No. 966.

Fisheries of the Chesapeake Bay States, 1930. Statistical Bulletin No. 967.

Fisheries of the South Atlantic and Gulf States, 1930. Statistical Bulletin No. 976.

Fisheries of the Pacific Coast States, 1930. Statistical Bulletin No. 974.

Lake fisheries, 1930. Statistical Bulletin No. 972.

Fisheries of the United States and Alaska, 1930. Statistical Bulletin No. 980.

Production of cured fishery products in the marine and lake sections of the United States and Alaska, 1930. Statistical Bulletin No. 981.

Fishery products frozen and cold storage holdings of frozen and cured fishery products in the United States and Alaska, 1931. Statistical Bulletin No. 973.

Production of fresh, frozen, and smoked packaged fishery products in the United States, 1931. Statistical Bulletin No. 975.

Canned fishery products and by-products of the United States and Alaska, 1931. Statistical Bulletin No. 977.

Lake fisheries, 1931. Statistical Bulletin No. 1008.

Fisheries of the Mississippi River and tributaries, 1931. Statistical Bulletin No. 994.

Fisheries of Alaska, 1931. Statistical Bulletin No. 978.

Landings by fishing vessels at principal New England ports, 1931—By months. Statistical Bulletin No. 962.

Landings by fishing vessels at the three principal New England ports, 1931—By fishing grounds. Statistical Bulletin No. 979.

Fishery products landed by United States fishing vessels at Seattle, Wash., 1931. Statistical Bulletin No. 965.

Part 2. FISHERY STATISTICS, 1931**GENERAL REVIEW**

The catch of fishery products in the United States and Alaska during 1931 decreased sharply from that in the previous year, the decrease in quantity amounting to 19 percent and in value 29 percent. The value of the production of canned fishery products decreased 24 percent as compared with that in the previous year; and by-products decreased sharply. There were also decreases in the production of packaged, frozen, and cured fishery products. There was a decrease of 15 percent in the value of imports and 33 percent in the value of exports as compared with 1930.

During 1931 the domestic fisheries employed about 123,000 persons as fishermen, 4,200 on transporting craft, and about 78,000 were engaged in the wholesale and manufacturing industries, a total of about 200,000 persons, exclusive of duplication. The catch amounted to 2,657,317,000 pounds, valued at \$77,344,000. This value, together with an estimated revenue of \$3,136,000 received by persons on transporting craft and \$45,483,000 received as salaries and wages by persons in wholesale and manufacturing establishments, makes a total of \$125,963,000 as the income of primary handlers of fishery products.

In 1931, in the United States and Alaska, the production of canned fishery products amounted to 506,702,000 pounds, valued at \$62,940,000, and the output by by-products was valued at \$18,538,000. The production of fresh and frozen packaged fishery products amounted to 139,283,000 pounds, valued at \$23,076,000. The production of cured fishery products amounted to 98,969,000 pounds, valued at \$12,364,000. The pack of frozen fishery products in the entire United States and Alaska amounted to 112,257,000 pounds, estimated to be valued at \$11,000,000, making the total value of all manufactured products in the entire United States and Alaska in 1931, about \$128,000,000. It is estimated that about 600,000,000 pounds of fishery products valued at \$47,000,000 were marketed fresh, making a total marketed value to primary handlers of all fishery products in 1931 of about \$175,000,000.

Fishery products imported for consumption were valued at \$43,033,000, while domestic exports were valued at \$11,574,000.

New England States.—The 1931 statistics for the catch of these States show a decrease both in the volume and in the value of the catch as compared with any year for which there are records since 1924. The landings of fish by vessels at Boston and Gloucester, Mass., and Portland, Maine, also decreased appreciably under 1930, as did also the output of packaged fish. The production of frozen fish decreased about one fifth and the production of sardines in Maine declined sharply.

Middle Atlantic States.—The catch of fishery products of the Middle Atlantic States in 1931 was less in volume than in any preceding year for which data are available and the value of the catch was less than in any year since 1908. The landings of fish at New York, N.Y., and Groton, Conn., decreased somewhat under the 1930 landings. There was a considerable increase in the production of

packaged fish, but a small decrease in the production of frozen fish. The catch of shad in the Hudson River increased appreciably in 1931 over 1930.

Chesapeake Bay States.—In 1931 the catch of fishery products in the Chesapeake Bay States was somewhat less than that in 1930, but exceeded the production in 1929; however, the value of the 1931 catch was less than that for any year for which there are records since 1897. There was a large increase in the catch of shad and alewives in the Potomac River as compared with 1930. The value of menhaden products was but little more than one half that of the preceding year.

South Atlantic and Gulf States.—The catch of fishery products in the South Atlantic and Gulf States in 1931 was less than in any year for which data are available since 1908 and the value is less than any year since 1902. There were decreases in the production of packaged fish, canned oysters, and menhaden products, although there was a small increase in the output of canned shrimp.

Pacific Coast States.—The catch statistics for the Pacific Coast States in 1931 show the smallest catch since 1926 and a value less than in any year since 1922. There was an increase in the pack of canned salmon, as the biennial heavy run of humpback or pink salmon occurred in 1931. There were large decreases in the packs of canned sardines, canned tuna, packaged fish, and frozen fish.

Lake States.—The United States fisheries prosecuted in the Great Lakes and the international lakes of northern Minnesota in 1931 decreased somewhat under the previous year. Beginning in 1929 a revised statistical procedure was used, including certain products not canvassed in some of the preceding surveys, and there was a change in the methods of collecting statistics in some of the States.

Mississippi River and tributaries.—The first survey for statistics of the catch of the Mississippi River and tributaries since 1922 was made for the year 1931. A considerable decrease in the catch is noted between these years, which is reflected principally in a smaller catch of fresh-water mussels, which are used primarily in pearl button manufacture.

Alaska.—The catch of fishery products in Alaska in 1931 was less in both volume and value than that in 1930; however, the pack of canned salmon in 1931 exceeded that of the previous year. There were decreases in the packs of frozen fish, cured fish, and in by-products.

Fisheries of the United States and Alaska, 1931

SUMMARY OF CATCH: BY SECTIONS

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Product	New England, area XXII		Middle Atlan- tic, area XXIII		Chesapeake, area XXIII		South Atlantic and Gulf, areas XXIV and XXV		Pacific	
	Quan- tity	Value	Quan- tity	Value	Quan- tity	Value	Quan- tity	Value	Quan- tity	Value
Fish-----	496,088	13,817	113,401	2,950	186,412	2,872	166,810	3,393	584,437	12,203
Shellfish, etc.-----	44,210	6,324	51,498	6,261	106,859	4,556	122,499	4,683	12,869	1,309
Total-----	540,298	20,141	164,899	9,211	293,271	7,428	289,309	8,082	597,306	13,512

NOTE.—The Roman numerals appearing under the names of the sections are the numbers given these areas by the North American Council on Fishery Investigations. It should be explained that there are included under these areas craft owned under the respective areas but at times fishing elsewhere.

Fisheries of the United States and Alaska, 1931—Continued

SUMMARY OF CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Product	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Fish	90,068	5,990	44,062	2,258	595,956	9,923	2,277,234	53,406
Shellfish, etc.	1,659	39	38,320	640	2,169	120	380,083	23,938
Total	91,727	6,029	82,382	2,898	598,125	10,043	2,657,317	77,344

OPERATING UNITS: BY SECTIONS

Item	New Eng-land	Middle Atlantic	Chesa-peake	South At-lantic and Gulf ¹	Pacific
	Number	Number	Number	Number	Number
Fishermen:					
On vessels	5,880	3,925	2,106	2,895	6,454
On boats and shore	12,008	5,679	18,583	20,827	12,781
Total	17,888	9,604	20,689	23,722	19,235
Vessels:					
Steam	48	3	19	1	4
Net tonnage	7,658	326	2,104	65	103
Motor	654	457	104	529	932
Net tonnage	18,427	6,991	1,774	8,486	24,403
Sail	4	65	197	73	4
Net tonnage	31	1,636	2,230	936	1,628
Total vessels	706	525	320	603	940
Total net tonnage	26,116	8,953	6,108	9,487	26,134
Boats:					
Motor	5,026	1,875	8,483	5,854	5,383
Other	3,848	2,007	5,616	8,583	1,366
Accessory boats	1,250	198	76	175	
Apparatus:					
Haul seines	160	382	316	988	186
Purse seines	184	27	42	51	423
Lampara nets					209
Otter trawls (including all types and sizes)	566	164	27	2,255	
Beam trawls					55
Paranzella nets					20
Gill nets	12,396	2,838	17,906	14,030	4,448
Trammel nets					440
Pound nets, trap nets, and weirs	478	806	2,929	2,284	470
Stop nets		119	3	8	
Fyke nets	402	3,532	2,573	1,162	1,505
Bag nets and pocket nets	205				50
Other nets ³	417	451	2,523	2,265	390
Hooks, baits or snoods	4,036,404	716,608	1,515,456	413,789	1,131,155
Fish wheels					32
Eel pots and traps	5,901	9,175	11,339		
Lobster pots	357,704	48,301		1,321	
Crab and crawfish pots, traps, drags, etc.	2,681	61		3,526	16,689
Clam dredges	99	68		1	
Crab dredges		44	112	115	
Mussel dredges		4			
Oyster dredges	336	631	724	591	3
Scallop dredges and drags	3,878	1,069	1,216	201	
Crab scrapes			1,486		
Tongs, rakes, hoes, forks, grabs, etc.	4,618	3,109	11,957	3,397	3,732
Abalone diving outfits					18
Sponge diving outfit				55	
Other apparatus ⁴	3,378	255		4,880	7,400

¹ Includes the operating units used in the fisheries of Lake Okeechobee, Fla.² Includes dip nets, cast nets, scap nets, reef nets, push nets, and other minor nets.³ Includes fish pots, harpoons, spears, gaffs, crab, sponge and crawfish hooks, periwinkle and cockle pots, picks, coquina scoops, and other apparatus not included in "Other nets."

Fisheries of the United States and Alaska, 1931—Continued

SUMMARY OF CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Item	Lakes	Mississippi River and tributaries	Alaska	Total
	Number	Number	Number	Number
Fishermen:				
On vessels.....	1,697	15,884	2,8,914	31,871
On boats and shore.....	5,142			90,904
Total.....	6,839	15,884	8,914	122,775
Vessels:				
Steam.....	111			186
Net tonnage.....	2,393			12,649
Motor.....	394		582	3,652
Net tonnage.....	4,192		8,416	72,689
Sail.....				343
Net tonnage.....				6,461
Total vessels.....	505		582	4,181
Total net tonnage.....	6,585		8,416	91,799
Boats:				
Motor.....	1,756	4,426	1,318	34,121
Other.....	1,480	10,120	3,642	36,662
Accessory boats.....				1,699
Apparatus:				
Haul seines.....	316	1,013	143	3,504
Purse seines.....			468	1,195
Lampara nets.....				209
Otter trawls (including all types and sizes).....				3,012
Beam trawls.....			10	65
Paranzella nets.....				20
Gill nets.....	104,101	101	4,596	160,416
Trammel nets.....	216	518		1,225
Pound nets, trap nets, and weirs.....	8,661	374	493	16,495
Stop nets.....				130
Fyke nets.....	2,437	32,541		44,152
Bag nets and pocket nets.....				255
Other nets ³	852,871	191	(4)	6,238
Hooks, baits or snoods.....		2,459,179		11,125,462
Fish wheels.....			259	315
Eel pots and traps.....				27,736
Lobster pots.....				406,005
Shrimp nets and traps.....		438		438
Crab and crawfish pots, traps, drags, etc.....	3,680	18	450	27,105
Clam dredges.....				168
Crab dredges.....				271
Mussel dredges.....		440		444
Oyster dredges.....				2,285
Scallop dredges and drags.....				6,364
Crab scrapes.....				1,486
Tongs, rakes, hoes, forks, grabs, etc.....	196	3,994		31,003
Crowfoot bars (pairs).....	416	4,480		4,896
Abalone diving outfits.....				18
Sponge diving outfits.....				55
Other apparatus ⁴	1	3,781		19,695

² Includes persons in boat and shore fisheries.³ Includes dip nets, cast nets, scap nets, reef nets, push nets, and other minor nets.⁴ Number not determined.⁵ Includes fish pots, haapoons, graffs, crab, sponge and crawfish hooks, periwinkle and cockle pots, picks, coquina scoops, and other apparatus not included in "Other nets."

*Fisheries of the United States and Alaska, 1931—Continued*CATCH: BY SECTIONS⁶

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf ⁷		Pacific	
	Quantity	Value ^(\\$)	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH										
Albacore	2	41								
Alewives	5,162		3,656	29	25,065	207	8,314	82		
Amberjack							6	^(\\$)		
Anchovies										308
Barracuda							19	1	4,176	362
Black bass					19	2	482	45		
Bluefish	720	65	3,277	230	816	56	1,943	84		
Blue runner or hardtail							223	7		
Bonito	157	11	727	34	107	5	1	^(\\$)		
Bowfin							10	^(\\$)		
Buffalofish							54	^(\\$)		
Butterfish							304	6		
Cabio or crab eater	1,505	92	6,536	311	6,076	182				
Cabrilla					(\\$)	(\\$)	10	^(\\$)		
Carp	24	2	389	43	349	22	260	15	158	6
Catfish and bullheads	79	1	88	8	1,016	42	4,297	181	371	48
Cero			2	^(\\$)			7	1		
Cigarfish							36	1		
Cod	92,525	2,378	7,737	200	41	1			10,813	129
Corbina									2	^(\\$)
Crappie							490	18		
Crevalle							81	2		
Croaker	499	15	1,875	66	13,299	263	4,511	63		
Cunner	453	19								
Cusk	6,509	111		4	^(\\$)					
Dolphin										^(\\$)
Drum:										
Black	1	^(\\$)					198	4	1,361	39
Red or redfish	1	^(\\$)	5	^(\\$)			33	1	2,535	115
Eels	1,047	75	1,150	118			398	24	117	7
Flounders	41,838	1,423	10,612	416	1,283	60	1,312	95	11,423	553
Flyingfish									46	2
Frigate mackerel	1	^(\\$)	4	^(\\$)						
Garfish										
Gizzard shad							64	2	34	^(\\$)
Goosefish	13	^(\\$)	5	^(\\$)						
Grayfish	44	^(\\$)	5	^(\\$)						
Groupers									2,794	73
Grunts			2	^(\\$)					21	1
Haddock	181,140	5,400	1,421	30	^(\\$)	^(\\$)				
Hake	16,671	269	242	4	25	1				13
Halibut	2,926	393	1	^(\\$)						1,079
Hardhead										1,151
Harvestfish or "starfish"							1	^(\\$)	48	1
Herring:										
Round			57	4						
Sea	63,907	356	448	4						1,652
Hickory shad							67	2	237	8
Hogfish	11	^(\\$)	2	^(\\$)			2	^(\\$)		
Horse mackerel										562
Jewfish										17
Kingfish (California)										414
Kingfish or "king mackerel"	(\\$)	(\\$)	59	3					3,420	164
King whiting or "kingfish"	4	(\\$)	149	11			37	1	525	16
Ladyfish									3	^(\\$)
Launce	241	2								
"Lingcod"										1,836
Mackerel	46,734	1,834	558	26	100	5				65
Marlin										14,253
Menhaden	5	^(\\$)	40,567	181	112,920	368	76,906	118		158
Minnows	24	10								24
Mojarro										1
Mullet	(\\$)	(\\$)	656	43	61	3	26,865	538		2
Mummichog	1	^(\\$)	111	9						
Buttonfish									36	1
Paddlefish									2	^(\\$)
Permit									5	^(\\$)
Pigfish							56	2	86	1
Pike or pickerel	1	^(\\$)	1	^(\\$)	15	2			6	1
Pilchard										300,204
Pilotfish										1,185
Pinfish									67	2

⁶ Salt fish have been converted to the basis of round weight.⁷ Includes the catch of fish taken in Lake Okeechobee, Fla.⁸ Less than 500 pounds or dollars.

Fisheries of the United States and Alaska, 1931—Continued

CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf		Pacific	
	Quantity 10,695	Value 139	Quantity 55	Value 2	Quantity (*)	Value (*)	Quantity 573	Value 104	Quantity 6	Value 3
FISH—continued										
Pollock										
Pompano										
Porgies										
Rock bass										
Rockfishes										
Rosefish	237	3								
Rudderfish										
Sablefish										
Salmon:										
Atlantic	70	19								
Blueback, red, or sockeye										
Chinook or king										
Chum or keta										
Humpback or pink										
Silver or coho										
Sculpin										
Scup	3,196	116	8,599	177	454	17				
Sea bass	1,012	32	3,994	160	222	9	411	17	500	22
Sea bass, white (California)									1,398	116
Sea robin	130	2	103	1	1	(*)				
Shad	401	25	660	93	8,487	989	1,788	287	2,505	59
Sharks	140	2	30	1			970	3		
Sheepshead							1,062	26	198	6
Silversides			120	8						
Skates	867	8	84	1	4	(*)			175	4
Smelts	591	95	1	(*)					3,371	98
Snapper:										
Mangrove							114	3		
Red					3	(*)	6,207	425		
Snook							298	7		
Spadefish							1	(*)		
Spanish mackerel			234	34	14	1	4,998	208	24	3
Splittail									9	1
Spot	(*)	(*)	472	17	738	26	1,871	29		
Squawfish									3	(*)
Squeteagues or "sea trout":										
Gray	230	14	13,553	489	12,438	366	3,433	114		
Spotted	3	(*)			59	5	5,881	392		
Steelhead trout									3,564	173
Striped bass	90	14	135	24	1,116	159	327	35	995	96
Sturgeon	7	1	16	3	6	1	60	8	120	4
Suckers	160	10	126	12			9	(*)	1	(*)
Sunfish			2	(*)	1	(*)	599	18		
Surf fishes									305	14
Swordfish	3,211	391	106	23					358	49
Tai									1	(*)
Tautog	486	23	200	8	(*)	(*)	119	3		
Tenpounder										
Thimble-eyed mackerel			106	3	69	3				
Tilefish	1,637	65	1,022	30						
Tomcod	107	12	62	2	(*)	(*)			4	(*)
Tripletail							8	(*)		
Tuna and tunalike fishes:										
Albacore									37	3
Bluefin or horse mackerel	301	21	20	1					3,534	169
Bonito									3,080	49
Skipjack or striped									16,507	504
Yellowfin									36,580	1,979
Turbot							(*)	(*)		
Whitebait			23	2					156	7
Whitefish									220	12
White perch	11	1	442	54	531	27	328	13		
Whiting	8,071	81	2,735	27	1	(*)				
Wolfish	2,177	44								
Yellow perch	13	2	152	8	222	14	83	4		
Yellowtail							104	7	2,526	84
Miscellaneous fish									84	2
Total	496,088	13,817	113,401	2,950	186,412	2,872	166,810	3,393	584,437	12,203

* Less than 500 pounds or dollars.

Fisheries of the United States and Alaska, 1931—Continued

CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf		Pacific	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
SHELLFISH, ETC.										
Abalone										
Clams:										
Cockle	136	13							22	5
Coquina										
Hard	4,811	699	2,646	738	743	254	6	(8)	460	22
Pismo							67		26	10
Razor	469	21	1	(8)					818	151
Soft	10,769	612	1,549	135					49	10
Surf	70	5	497	28						
Mixed									8	2
Conchs			55	2			4	(8)		
Crabs:										
Hard	934	56	274	15	58,894	805	7,709	94	4,294	334
King			5,105	11						
Soft	2	1	59	16	5,623	388	437	93		
Stone							143	9		
Crawfish									123	12
Lobsters:										
Common	11,312	2,719	1,149	292	(8)	(8)	456	42	1,340	223
Spiny									(8)	(8)
Mussels, sea	117	7	174	8					124	7
Octopus							5	1		
Oysters:										
Eastern, market, public	53	7	457	63	22,331	1,903	10,097	483	172	55
Eastern, market, private	4,013	814	21,090	2,702	9,980	881	4,778	311		
Eastern, seed, public	1,055	102	12,823	1,812	7,604	232				
Eastern, seed, private	4,563	549	735	78	45	1				
Western, market									205	162
Japanese, market									1,035	144
Periwinkles	118	8								
Scallops:										
Bay	1,698	428	1,042	107	1,226	79	508	51	6	2
Sea	1,081	135	1,252	101						
Shrimp	1	1	340	49			96,451	2,730	1,757	30
Squid	2,811	56	2,194	49	411	12			1,744	14
Terrapin			(8)	(8)	2	1	38	11	1	(8)
Turtles			4	(8)			74	3	7	1
Frogs							104	13		
Irish moss	89	5					561	781		
Sponges										
Bloodworms	55	50	21	25						
Sandworms	53	36	31	30						
Total	44,210	6,324	51,498	6,261	106,859	4,556	122,499	4,689	12,869	1,309
Grand total	540,298	20,141	164,899	9,211	293,271	7,428	289,309	8,082	597,306	13,512

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH								
Albacore							2	(8)
Alewives							42,197	359
Amberjack							6	(8)
Anchovies							308	6
Baracuda							4,195	363
Black bass			14	2			515	49
Bluefish							6,756	435
Blue pike	12,679	539					12,679	539
Blue runner or hardtail							223	7
Bonito							992	50
Bowfin	7	(8)	428	9			445	9
Buffalofish	1	(8)	15,772	687			15,827	687
Butterfish							14,421	591
Burbot	464	6					464	6
Cabio or crab eater							10	(8)

⁽⁸⁾ Less than 500 pounds or dollars.

Fisheries of the United States and Alaska, 1931—Continued

CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH—continued								
Cabrilla.							228	9
Carp.	4,180	119	11,892	455			17,252	662
Catfish and bullheads.	718	47	10,267	878			16,836	1,205
Cero.							9	1
Chubs.	4,624	322					4,624	322
Cigarfish.							36	1
Cisco.	347	38					347	38
Cod.					1,187	7	112,303	2,715
Corbina.							2	(*)
Crappie.	3	1	41	3			534	22
Crevalle.							81	2
Croaker.							20,184	407
Cunner.							453	19
Cusk.							6,513	111
Dolly Varden trout.					71	6	71	6
Dolphin.							(*)	(*)
Drum:								
Black.							1,560	43
Red or redfish.							2,574	116
Eels.	45	2	7	1			2,764	227
Flounders.					282	7	66,750	2,554
Flyingfish.							46	2
Frigate mackerel.							5	(*)
Garfish.			73	1			74	1
Gizzard shad.							98	2
Goldfish.	80	2					80	2
Goosefish.							18	(*)
Grayfish.							1,423	11
Groupers.							2,816	74
Grunts.							23	1
Haddock.							182,561	5,430
Hake.							16,951	274
Halibut.					22,695	1,353	41,701	2,897
Hardheads.							46	6
Harvestfish or "starfish".							49	1
Herring:								
Lake.	17,412	430					17,412	430
Round.							57	4
Sea.					103,567	777	169,574	1,153
Hickory shad.							304	10
Hogfish.							15	(*)
Horse mackerel.							562	17
Jewfish.							18	1
Kingfish (California).							414	10
Kingfish or "king mackerel".							3,479	167
King whiting or "kingfish".							715	28
Ladyfish.							3	(*)
Lake trout.	10,617	1,365					10,617	1,365
Launce.							241	2
"Lingcod."					1	(*)	1,837	65
Mackerel.							61,645	2,023
Marlin.							24	1
Menhaden.							230,398	667
Minnows.			1	(*)			25	10
Mojarro.	27	(*)	3	(*)			72	2
Mooneye.							30	(*)
Mullet.							27,606	586
Mummichog.							112	9
Muttonfish.							36	1
Paddlefish.			951	43			953	43
Permit.							5	(*)
Pigfish.							142	3
Pike or pickerel.			5	1			28	4
Pike (jacks).	390	20					390	20
Pilchard.							300,204	1,185
Pilotfish.							(*)	(*)
Pinfish.							67	2
Pollock.							10,750	141
Pompano.							579	107
Porgies.							47	1
Quillback.			269	11			269	11
Rock bass.	24	1					570	32
Rockfishes.					35	1	7,771	261
Rosefish.							237	3

⁸ Less than 500 pounds or dollars.

Fisheries of the United States and Alaska, 1931—Continued

CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH—continued								
Rudderfish					411	13	41	3
Sablefish							2,784	89
Salmon:								
Atlantic							70	19
Blueback, red, or sockeye					162,052	3,996	169,368	4,601
Chinook or king					13,606	345	53,240	2,872
Chum or keta					59,331	457	70,725	572
Humpback or pink					215,331	2,619	271,266	3,318
Silver or coho					17,345	340	36,426	1,024
Sauger	2,442	107	2	1			2,444	108
Sculpin							.92	8
Scup							12,249	310
Sea bass							6,139	240
Sea bass, white (California)							1,398	116
Sea robin							234	3
Shad							13,841	1,453
Sharks							1,140	6
Sheepshead:								
Fresh-water	1,633	42	3,905	143			5,538	185
Salt-water							1,261	32
Silversides							120	8
Skates							1,130	13
Smelts	86	4			2	(§)	4,051	197
Snapper:								
Mangrove							114	3
Red							6,210	425
Snook							298	7
Spadefish							1	(§)
Spanish mackerel							5,270	246
Splittail							9	1
Spot							3,081	72
Squawfish							3	(§)
Squeteagues or "sea trout":								
Gray							29,654	983
Spotted							5,943	397
Steelhead trout	1	(§)			40	2	3,605	175
Striped bass							2,663	328
Sturgeon	26	9					235	26
Sturgeon, shovelnose			87	8			87	8
Suckers	6,504	199	315	13			7,115	234
Sunfish	13	(§)	22	1			637	19
Surf fishes							305	14
Swordfish							3,675	663
Tai							1	(§)
Tautog							686	31
Tenpounder							119	3
Thimble-eyed mackerel							175	6
Tilefish							2,659	95
Tomcod							173	14
Tripletail							8	(§)
Tullibee	435	4					435	4
Tuna and tunalike fishes:								
Albacore							37	3
Bluefin or horse mackerel							3,855	191
Bonito							3,080	49
Skipjack or striped							16,507	504
Yellowfin							36,580	1,979
Turbot							(§)	(§)
White bass	418	17	3	(§)			421	17
Whitebait							179	9
Whitefish	10,761	1,646					10,981	1,658
Whitefish, Menominee	214	14					214	14
White perch							1,312	95
Whiting							10,807	108
Wolffish							2,177	44
Yellow perch	11,248	484					11,718	512
Yellow pike	4,669	572	5	1			4,674	573
Yellowtail							2,630	91
Miscellaneous fish							84	2
Total	90,068	5,990	44,062	2,258	595,956	9,923	2,277,234	53,406

* Less than 500 pounds or dollars.

Fisheries of the United States and Alaska, 1931—Continued

CATCH: BY SECTIONS—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
SHELLFISH, ETC.								
Abalone							678	125
Clams:								
Cockle							158	18
Coquina							6	(⁸)
Hard					61	2	9,849	1,782
Pismo							26	10
Razor					1,047	61	2,335	233
Soft							12,367	757
Surf							567	33
Mixed							8	2
Conchs							59	2
Crabs:								
Hard					227	21	72,332	1,325
King							5,105	11
Soft							6,121	498
Stone							143	9
Crawfish	75	5	29	(⁸)			227	17
Lobsters:								
Common							12,461	3,011
Spiny							1,796	265
Mussels, sea							291	15
Mussel shells	1,584	31	37,254	422			38,838	453
Octopus							129	8
Oysters:								
Eastern, market, public							33,110	2,511
Eastern, market, private							39,861	4,708
Eastern, seed, public							21,482	2,146
Eastern, seed, private							5,343	628
Western, market							205	162
Japanese, market							1,035	144
Periwinkles							118	8
Scallops:								
Bay							4,480	667
Sea							2,333	236
Shrimp			49	4	834	36	99,432	2,850
Squid			19	(⁸)			7,160	131
Terrapin			94	3			60	12
Turtles			875	131			179	7
Frogs							979	144
Irish moss							89	5
Sponges							561	781
Bloodworms							76	75
Sandworms							84	66
Pearls and slugs		3		80				83
Total	1,659	39	38,320	640	2,169	120	380,083	23,938
Grand total	91,727	6,029	82,382	2,898	598,125	10,043	2,657,317	77,344

CATCH: BY STATES

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

States	Marine and coastal rivers		Mississippi River and tributaries		Lakes *		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	6,168	223	1,822	33			7,990	256
Arkansas			15,733	412			15,733	412
California	430,997	7,108					430,997	7,108
Connecticut	45,770	2,016					45,770	2,016
Delaware	20,983	378					20,983	378
Florida	82,075	3,490			1,979	104	84,054	3,594
Georgia	7,350	251					7,350	251
Illinois			14,262	367	717	57	14,979	424
Indiana			7,718	157	799	49	8,517	206
Iowa			7,778	303			7,778	303

* Less than 500 pounds or dollars.

Includes Lake Ontario, Lake Erie, Lake Huron, Lake Michigan, Lake Superior, Rainy Lake, Nama-kan Lake, Lake of the Woods, Lake Okeechobee, and several mussel-bearing streams tributary to Lakes Huron and Michigan.

Fisheries of the United States and Alaska, 1931—Continued

CATCH: BY STATES—Continued

[Expressed in thousands of pounds and thousands of dollars; that is, 000 omitted]

States	Marine and coastal rivers		Mississippi River and tributaries		Lakes		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Kansas			455	17			455	17
Kentucky			1,622	61			1,622	61
Louisiana	45,704	1,331	19,213	994			64,917	2,325
Maine	116,235	3,443					116,235	3,443
Maryland	66,634	2,706					66,634	2,706
Massachusetts	355,833	12,951					355,833	12,951
Michigan					32,313	2,938	32,313	2,938
Minnesota			3,498	138	8,362	294	11,860	432
Mississippi	22,985	595	2,650	123			25,635	718
Missouri			928	77			928	77
Nebraska			145	16			145	16
New Hampshire	775	67					775	67
New Jersey	92,846	5,854					92,846	5,854
New York	50,994	2,974			1,889	137	52,883	3,111
North Carolina	98,161	1,088					98,161	1,088
Ohio			185	7	26,719	1,213	26,904	1,220
Oklahoma			40	4			40	4
Oregon	25,819	1,282					25,819	1,282
Pennsylvania	76	5			5,058	316	5,134	321
Rhode Island	21,683	1,663					21,683	1,663
South Carolina	5,837	211					5,837	211
South Dakota			114	11			114	11
Tennessee			3,435	104			3,435	104
Texas	19,051	790	139	6			19,190	796
Virginia	226,637	4,722					226,637	4,722
Washington	140,491	5,122					140,491	5,122
Wisconsin			2,645	68	15,870	1,025	18,515	1,093
Alaska	598,125	10,043					598,125	10,043
Total	2,481,229	68,313	82,382	2,898	93,706	6,133	2,657,317	77,344

Yield of the fisheries of the United States, 1931: By gear

Gear	New England		Middle Atlantic		Chesapeake	
	Pounds	Value	Pounds	Value	Pounds	Value
Purse seines	61,629,804	\$1,630,272	43,176,649	\$280,131	112,011,991	\$416,026
Haul seines	1,829,187	68,404	3,966,162	147,259	2,498,935	130,360
Gill nets	20,280,597	633,360	3,560,142	253,010	2,543,367	253,124
Lines	113,066,678	3,384,059	10,923,000	382,808	50,716,000	704,019
Pound nets	12,994,597	265,971	36,703,495	1,145,181	67,024,148	1,960,020
Floating traps	10,780,044	303,788	370,511	14,910		
Weirs	33,067,730	149,022	1,539,999	3,548		
Stop nets			168,440	20,719	26,200	2,208
Fyke nets	293,338	17,457	1,599,869	71,397	925,372	47,453
Dip nets	6,960,694	81,632	84,947	17,534	2,750,984	168,964
Cast nets			3,270	399	16,376	1,476
Scap nets			158,684	9,923		
Bag nets	174,300	19,870				
Drag nets			99,790	21,522		
Push nets	122,265	31,213	14,750	1,475		
Pocket nets	1,600	240				
Otter trawls	233,693,841	6,668,552	16,451,487	553,144	1,235,420	48,868
Traps	105,300	1,886				
Pots	12,994,510	2,829,580	3,173,550	406,067	282,179	16,968
Harpoons	3,338,793	599,549	106,132	22,717		
Spears	182,294	15,945	208,354	22,898		
Scrapes, crab					4,095,027	227,556
Dredges	12,660,927	2,019,153	36,381,386	4,686,028	14,120,023	677,141
Tongs	2,554,000	422,730	3,369,731	680,031	34,031,680	2,646,801
Rakes	1,723,106	237,986	1,143,331	267,489	568,175	65,182
Forks	3,008,833	371,010	289,608	86,966		
Hoes	8,619,770	373,230	1,217,900	95,781		
Picks					76,872	27,900
Gaffs			845	156		
By hand	215,712	15,379	186,705	20,087	347,997	33,894
Total	540,297,920	20,140,288	164,898,737	9,211,180	293,270,746	7,427,960

Yield of the fisheries of the United States, 1931: By gear—Continued

Gear	South Atlantic and Gulf		Pacific		Lakes	
	Pounds	Value	Pounds	Value	Pounds	Value
Purse seines	76,211,828	\$123,442	187,788,389	\$1,999,642		
Haul seines	21,440,656	663,094	5,654,582	317,736	4,696,700	\$146,785
Gill nets	36,112,584	1,169,156	33,558,680	1,672,136	36,666,681	2,632,408
Trammel nets	4,693,894	224,153	674,069	65,408	119,977	3,039
Lines	23,329,896	938,141	117,489,156	5,386,909	2,312,722	299,795
Pound nets	10,422,145	307,856	35,337,624	1,080,290	15,379,128	1,053,263
Weirs	3,000	30	758,920	9,518		
Wheels	135,000	1,350	263,040	17,411		
Stop nets	646,849	11,935				
Fyke nets	566,851	27,789	364,161	44,998	3,725,931	206,951
Dip nets	476,296	30,673	2,573,757	78,389	290	11
Cast nets	90,820	4,125				
Bag nets			948,680	14,230		
Drag nets			149,689	5,386		
Reef nets			132,859	3,008		
Lampara nets			188,565,521	944,121		
Paranzella nets			11,970,869	528,194		
Otter trawls	96,293,848	2,724,819				
Beam trawls			1,180,210	26,388		
Traps	50,000	750	6,040,412	582,469	27,166,681	1,647,174
Pots	987,834	65,480			75,130	4,508
Harpoons			383,605	49,938		
Spears	193,597	17,343			82	5
Dredges	6,339,018	300,867				
Tongs	6,794,829	480,175	² 2,794,709	² 561,634	24,622	312
Crowfoot bars					1,142,349	25,307
Rakes	499,093	46,260				
Forks	² 220,588	² 10,115				
Grabs	2,471,740	58,331				
Picks					310,255	7,150
Hooks	281,770	242,035				
Diving apparatus, abalone, or sponge	283,151	539,285	677,580	124,404		
By hand	755,214	94,730			106,297	2,539
Total	289,309,501	8,081,934	597,306,512	13,512,209	91,726,845	6,029,247

Gear	Mississippi River and tributaries		Total	
	Pounds	Value	Pounds	Value
Purse seines			480,818,661	\$4,449,513
Haul seines	13,739,657	\$574,541	53,825,879	2,048,179
Gill nets	166,598	6,547	132,888,649	6,619,741
Trammel nets	1,134,206	75,615	6,622,146	368,215
Lines	10,140,037	772,245	327,977,489	11,867,976
Pound nets	224,275	9,541	178,085,412	5,822,122
Floating traps			11,150,555	318,698
Weirs			35,369,649	162,118
Wheels			398,040	18,761
Stop nets			841,489	34,862
Fyke nets	18,507,204	797,130	25,982,726	1,213,175
Dip nets	30,045	3,307	12,877,013	380,510
Cast nets			110,466	6,000
Scap nets			158,684	9,923
Bag nets			1,122,980	34,100
Drag nets			249,479	26,908
Push nets			137,015	32,688
Pocket nets			1,600	240
Reef nets			132,859	3,008
Lampara nets			188,565,521	944,121
Paranzella nets			11,970,869	528,194
Otter trawls			347,674,596	9,995,383
Beam trawls			1,180,210	26,388
Traps	77,751	4,215	33,440,144	2,230,494
Pots	1 232,704	¹ 22,062	17,745,907	3,344,665
Harpoons			3,828,530	672,204
Spears	2,250	270	586,577	56,461
Scrapes, crab			4,095,027	227,556
Dredges	3,699,100	40,958	73,200,454	7,724,147
Tongs	1,601,876	21,091	51,171,447	4,812,774
Crowfoot bars	20,893,550	265,443	22,035,899	290,750
Rakes	370,130	4,029	4,303,835	620,946
Forks	4,812,737	76,214	8,340,766	544,305
Hoes			9,837,670	469,011
Grabs	873,099	130,621	3,344,839	188,952
Picks			387,127	35,050
Gaffs			845	156
Hooks			281,770	242,035
Diving apparatus, abalone, or sponge	5,877,304	93,528	960,731	663,689
By hand			7,489,229	260,157
Total	82,382,523	2,897,357	2,059,192,784	67,300,175

¹ Includes baskets.² Includes shovels, rakes, and dredges.³ Includes coquina scoops.

Industries related to the fisheries of the United States and Alaska, 1931

Item	New Eng-land	Middle Atlantic	Chesapeake	South At-lantic and Gulf	Pacific
Transporting:					
Persons engaged:					
On vessels	307	77	857	354	274
On boats	16	167		389	
Total	323	244	857	743	274
Vessels:					
Steam	1	1			
Net tonnage	26	36			
Motor	117	28	415	152	106
Net tonnage	1,857	419	5,231	1,440	2,335
Sail			9	30	
Net tonnage			267	279	
Total vessels	118	29	424	182	106
Total net tonnage	1,883	455	5,498	1,719	2,335
Boats	8	134		251	
Wholesale and manufacturing:					
Establishments	436	418	564	585	316
Persons engaged:					
Proprietors	302	393	910	700	396
Salaried employees	966	963	389	352	777
Wage earners:					
Average for season	9,005	3,633	11,034	12,583	10,478
Average for year	4,307	2,795	4,713	4,581	3,958
Salaries and wages paid	\$7,113,463	\$7,042,586	\$2,802,420	\$2,821,543	\$6,750,607
Manufactured products ⁴	\$18,616,951	\$12,451,810	\$7,905,626	\$8,374,588	\$28,488,079
Fishermen's manufactured products:					
Persons engaged	3,012	672	76	1,379	149
Products	\$830,915	\$311,704	\$5,987	\$258,805	\$164,434

Item	Lakes	Mississippi River and tributaries	Alaska	Total
Transporting:				
Persons engaged:				
On vessels	19	29	1,668	3,585
On boats			(1)	572
Total	19	29	1,668	4,157
Vessels:				
Steam			17	19
Net tonnage			30,560	30,622
Motor	9	8	382	1,217
Net tonnage	120	104	12,616	24,122
Sail				39
Net tonnage				546
Total vessels	9	8	399	1,275
Total net tonnage	120	104	43,176	55,290
Boats			2,836	1,229
Wholesale and manufacturing:				
Establishments	230	217	226	2,992
Persons engaged:				
Proprietors	225	204		
Salaried employees	471	355	11,995	(3)
Wage earners:				
Average for season	1,506	4,275		
Average for year	1,034	3,483	(3)	(3)
Salaries and wages paid	\$2,610,439	\$3,080,430	(3)	(3)
Manufactured products ⁴	\$1,659,217	\$6,357,622	\$31,682,519	\$115,536,412
Fishermen's manufactured products:				
Persons engaged	106	216	(6)	(6)
Products	\$63,844	\$8,751	(6)	(6)

¹ Included on vessels.² Includes scows, houseboats, pile drivers, etc.³ Detailed statistics not available.⁴ The production of manufactured products in 1931 and 1930 is not comparable with that shown in previous bulletins since fresh and frozen packaged fishery products are now included.⁵ Data not available.

NOTE.—Of the total number of persons engaged in the preparation of fishermen's manufactured products 4,159 have also been included as fishermen and 395 of the persons shown on transporting craft have also been included as fishermen. This should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

MANUFACTURED FISHERY PRODUCTS

Statistics on the products of the various manufactured fishery enterprises have been collected more completely for the years 1930 and 1931 than for any previous years. In addition to statistics on the production of cured fishery products, canned fishery products and byproducts, data were also collected and are presented herewith which indicate the output of all packaged fishery products, including shucked oysters, crab meat, and the like.

It should be explained that the statistics for 1931 which are presented herewith include the entire production for the United States and Alaska, whereas those for 1930 omitted the production in the Mississippi River and tributaries.

Manufactured fishery products of the United States and Alaska, 1931¹

Item		Quantity	Value
Alewives:			
Salted:			
Round in brine	pounds	1, 251, 233	\$31, 475
Corned	do	4, 150, 637	69, 579
Tight-pack cut	do	5, 685, 190	157, 685
Tight-pack roe	do	241, 150	11, 529
Pickled and spiced	do	2, 471, 635	78, 129
Smoked	do	569, 464	21, 661
Canned	standard cases	34, 620	78, 973
Roe, canned	do	32, 749	132, 678
Dry scrap	tons	665	22, 863
Oil	gallons	17, 696	2, 778
Barracuda, fresh fillets	pounds	290, 000	53, 500
Blue pike:			
Fresh fillets	do	1, 213, 129	236, 773
Frozen fillets	do	445, 386	87, 644
Buffalofish, smoked	do	697, 245	234, 436
Butterfish, smoked	do	739, 618	189, 209
Cabrilla, fresh fillets	do	35, 000	5, 500
Carp, smoked	do	98, 382	34, 700
Cisco, chubs, and tullibee, smoked	do	6, 331, 125	1, 741, 380
Cod:			
Fresh sticks	do	219, 130	41, 384
Fresh fillets	do	6, 572, 157	840, 784
Frozen fillets	do	1, 929, 508	235, 505
Salted:			
Dry	do	1, 864, 066	115, 219
Boneless	do	12, 204, 671	1, 047, 295
Pickled	do	145, 398	4, 471
Stockfish	do	119, 300	11, 930
Smoked	do	38, 000	5, 010
Smoked fillets	do	642, 352	96, 117
Oil, cod and cod-liver	gallons	97, 651	63, 045
Croaker, fresh pandressed	pounds	40, 900	4, 229
Cusk:			
Fresh sticks	do	180, 250	32, 725
Fresh fillets	do	444, 304	57, 544
Frozen fillets	do	10, 025	1, 085
Salted, boneless	do	111, 440	3, 539
Smoked fillets	do	857, 212	134, 864
Eels:			
Salted	do	71, 300	4, 602
Smoked	do	106, 463	33, 910
Flounders:			
Fresh, pandressed	do	30, 900	4, 653
Fresh fillets	do	5, 825, 669	946, 671
Frozen fillets	do	49, 076	7, 982
Groupers:			
Fresh and frozen steaks	do	136, 000	19, 320
Frozen fillets	do	18, 000	2, 880

¹ The figures in the above table do not check in all instances with figures on certain manufactured products shown in the report for 1931. This is due to the fact that the above figures were obtained as the result of a more detailed survey, and several firms' production is included which is not shown in the previous report. The figures herewith include the production of every primary firm in the United States and Alaska manufacturing fishery products or by-products as shown above which operated in 1931 to the knowledge of the Bureau. Data on the production of green-salted ground fish also are not included in this tabulation, since these products are intermediate to other products which are included, and also complete statistics on the green-salted fish are not available.

NOTE.—Some of the above products may have been manufactured from products imported from another country; therefore, they cannot be correlated directly with the catch within the United States and Alaska.

Manufactured fishery products of the United States and Alaska, 1931—Continued

Item		Quantity	Value
Haddock:			
Fresh and frozen pandressed.	pounds.	219,198	\$27,570
Fresh sticks.	do.	77,800	14,920
Fresh fillets.	do.	30,137,035	4,535,659
Frozen fillets.	do.	11,876,821	1,573,469
Salted, boneless.	do.	383,450	26,421
Smoked.	do.	61,500	11,245
Smoked fillets.	do.	506,637	89,761
Flinnan haddie.	do.	2,282,179	279,924
Hake:			
Fresh sticks.*	do.	219,500	31,115
Fresh fillets.	do.	3,336,676	385,891
Frozen fillets.	do.	131,664	12,231
Salted, boneless.	do.	488,530	15,786
Smoked fillets.	do.	11,500	1,445
Hallibut:			
Fresh and frozen pandressed.	do.	382,680	65,348
Fresh fillets.	do.	60,000	18,000
Frozen fillets.	do.	103,110	14,313
Smoked.	do.	36,860	8,691
Herring, lake:			
Salted.	do.	4,252,250	102,925
Smoked.	do.	650,748	61,081
Herring, sea:			
Salted.	do.	242,130	11,813
Roused.	do.	92,400	4,266
Spiced.	do.	35,795	5,517
Scotch-cure.	do.	8,011,050	473,807
Norwegian-cure.	do.	160,500	10,811
Miscellaneous, pickled.	do.	2,798,100	50,992
Smoked:			
Boneless.	do.	1,480,569	124,964
Bloaters.	do.	2,258,617	133,932
Lengthwise.	do.	98,108	5,318
Medium-scale.	do.	205,015	11,570
Kippered.	do.	274,653	50,355
Miscellaneous.	do.	490,650	67,897
Canned, "sardines"	standard cases.	885,408	2,647,187
Meal.	tons.	9,498	310,082
Oil.	gallons.	2,242,109	388,671
Scales.	pounds.	184,696	5,588
Lake trout, smoked.	do.	376,834	96,357
Mackerel:			
Fresh fillets.	do.	39,049	7,726
Salted:			
Fillets.	do.	1,058,300	133,697
Split.	do.	1,202,311	100,861
Smoked.	do.	278,007	49,162
Canned.	standard cases.	102,392	246,848
Menhaden:			
Acid scrap.	tons.	4,943	86,393
Dry scrap.	do.	19,044	620,014
Meal.	do.	1,710	66,643
Oil.	gallons.	1,948,040	298,198
Mullet:			
Frozen fillets.	pounds.	19,000	2,800
Salted.	do.	1,191,362	48,102
Roe, salted.	do.	74,704	17,350
Paddlefish roe, salted.	do.	1,595	812
Pilchard:			
Canned, "sardines"	standard cases.	1,713,407	4,715,089
Meal.	tons.	16,319	610,462
Oil.	gallons.	3,916,336	807,647
Pollock:			
Fresh fillets.	pounds.	314,604	28,271
Frozen fillets.	do.	131,319	15,151
Salted:			
Dry.	do.	222,100	4,779
Boneless.	do.	226,740	6,998
Rockfishes, fresh fillets.	do.	1,350,000	219,500
Sablefish:			
Salted.	do.	96,535	4,626
Smoked.	do.	57,320	17,684
Kippered.	do.	768,445	88,166
Salmon:			
Fresh and frozen fillets.	do.	357,317	49,550
Salted, dry or hard.	do.	1,660,187	35,889
Dried.	do.	1,240,000	74,600
Mild-cured*.	do.	10,159,650	1,550,048
Salted bellies and pickled.	do.	1,287,763	146,898

* These are intermediate products and in the case of mild-cured salmon are used largely in the production of smoked and kippered salmon and in the case of button blanks are used in the manufacture of buttons.

Manufactured fishery products of the United States and Alaska, 1931—Continued

Item		Quantity	Value
Salmon—Continued.			
Kippered	pounds	1,966,333	\$246,653
Smoked	do	7,787,560	2,270,374
Canned	standard cases	6,740,045	38,083,176
Meal	tons	2,435	108,682
Oil	gallons	250,871	41,129
Eggs:			
For food, canned	standard cases	3,360	30,486
For bait, canned	do	5,246	149,186
Saucher, fresh and frozen fillets	pounds	18,880	3,495
Sea bass (Pacific coast):			
Black, fresh fillets	do	85,000	10,500
White, fresh fillets	do	350,000	75,000
Totuava, fresh fillets	do	200,000	40,000
Shad:			
Smoked	do	147,219	31,776
Canned	standard cases	747	2,091
Roe, canned	do	2,100	63,066
Sharks, hides or skins	pounds	31,800	3,360
Sheepshead, smoked	do	617	77
Snapper, red:			
Fresh and frozen steaks	do	80,193	14,161
Fresh and frozen fillets	do	66,500	14,375
Spanish mackerel, frozen fillets	do	15,500	3,140
Spot, salted	do	63,500	2,601
Squeteagues:			
Frozen pandressed	do	214,300	17,154
Fresh fillets	do	384,200	41,104
Frozen fillets	do	22,500	6,950
Sun-dried	do	33,148	6,166
Sturgeon, smoked	do	1,707,676	1,180,445
Sturgeon roe:			
Salted	do	1,399	1,440
Caviar, canned	standard cases	4,630	609,502
Tuna and tunalike fishes:			
Fresh fillets	pounds	50,000	9,000
Canned	standard cases	1,216,976	7,279,392
Meal	tons	5,078	169,505
Oil	gallons	15,939	3,296
Whitefish:			
Fresh fillets	pounds	15,310	3,240
Smoked	do	1,179,431	265,004
Caviar, canned	standard cases	474	12,879
Whiting, smoked	pounds	600	30
Wolfish, fresh fillets	do	42,929	5,468
Yellow perch:			
Fresh fillets	do	1,036,323	178,751
Frozen fillets	do	160,672	30,767
Crabs, blue:			
Meat, packaged, fresh-cooked	do	6,779,990	1,749,952
Canned	standard cases	778	14,921
Crabs, blue and king, dry scrap	tons	3,150	58,806
Lobsters, meat, packaged, fresh-cooked	pounds	124,052	136,542
Shrimp:			
Fresh-packaged	do	1,874,000	262,960
Frozen-packaged	do	213,354	32,034
Sun-dried	do	1,422,387	318,306
Cooked and peeled	do	1,671,455	322,688
Canned	standard cases	821,375	3,982,247
Meal or bran	tons	1,289	25,090
Spiny lobster, whole, fresh-cooked	pounds	1,111,500	259,330
Ahalone, steaks	do	578,683	185,178
Clams, hard:			
Fresh-shucked	gallons	95,926	230,200
Canned:			
Whole	standard cases	23,671	135,025
Chowder	do	231,350	848,928
Minced	do	8,388	55,971
Broth	do	4,216	23,037
Juice	do	6,034	25,817
Cocktail	do	700	11,274
Clams, razor:			
Fresh-shucked	gallons	47,046	19,132
Canned:			
Whole	standard cases	4,063	39,890
Minced	do	73,078	634,547
Juice	do	364	1,120

Manufactured fishery products of the United States and Alaska, 1931—Continued

Item		Quantity	Value
Clams, soft:			
Fresh-shucked	gallons	256,495	\$314,122
Canned:			
Whole	standard cases	98,465	341,963
Chowder	do	46,003	112,677
Juice or bouillon	do	14,100	33,569
Clams, surf or skimmer, fresh-shucked	gallons	1,000	2,000
Marine-shell products:			
Buttons	gross	4,399,512	2,995,500
Novelties			664,754
Mussels, fresh-water, shell products:			
Blanks ²	gross	12,835,671	2,232,520
Buttons	do	14,598,234	4,041,080
Novelties			93,892
Lime	tons	2,574	2,825
Poultry feed	do	11,932	94,246
Miscellaneous products	do	23,813	98,190
Oysters:			
Eastern:			
Fresh-shucked	gallons	5,323,036	8,045,179
Canned	standard cases	298,348	922,720
Japanese:			
Fresh-shucked	gallons	94,188	171,145
Canned	standard cases	7,930	40,805
Native, Pacific, fresh-shucked	gallons	21,209	155,821
Shell products:			
Poultry feed	tons	263,145	1,840,333
Lime	do	41,762	138,527
Lime, "burned"	do	11,207	85,884
Scallops, bay, fresh-shucked	gallons	467,922	777,073
Scallops, sea, fresh-shucked	do	241,379	271,522
Alligator hides	pounds	88,356	7,363
Unclassified products:			
Pandressed, fresh and frozen ³	do	175,095	26,604
Steaks, fresh and frozen ⁴	do	60,000	14,440
Fillets, fresh and frozen ⁵	do	202,015	30,634
Miscellaneous, packaged, fresh and frozen ⁶	do	250,265	37,622
Salted ⁷	do	942,766	34,072
Spiced ⁸	do	8,590	1,585
Smoked ⁹	do	102,795	20,344
Canned:			
Fish for cat and dog food	standard cases	52,509	143,345
Fish cakes, balls, etc.	do	103,704	779,411
Fish flakes	do	28,486	514,553
Other ¹⁰	do	24,943	228,117
Dry scrap	tons	941	25,830
Meal ¹¹	do	14,272	782,618
Oil ¹²	gallons	45,040	11,623
Glue	do	432,480	1,042,190
Other by-products ¹³		124,493	688,381
Total, fresh and frozen packaged products	pounds	139,282,621	23,076,370
Total, cured products	do	98,968,945	12,364,364
Total, canned	do	506,702,116	62,939,879
Total, by-products			18,538,008
Grand total			116,918,621

² See footnote on p. 177.³ Includes butterfish, cod, pinfish, pompano, salmon, sea bass (Atlantic coast), sheepshead, Mangrove napper, spot, and wolfish.⁴ Includes cabio, red drum, halibut, salmon, snook, and tripletail.⁵ Includes amberjack, bluefish, croaker, red drum, jewfish, lake herring, lake trout, mackerel, sea bass (Atlantic coast), snook and yellow pike.⁶ Includes fresh alewife roe; frozen mullet roe, smelt, and scallops; barracuda fish cakes; sablefish sausage, fresh-shucked conchs; and steamed soft clams.⁷ Includes anchovies, barracuda, bluefish, corbina, cusk, haddock, hake, lake trout, mackerel, pilchard, jack sea bass, Spanish mackerel, and tuna; pickled Dolly Varden trout; and mild-cured shad.⁸ Includes pilchard and salmon.⁹ Includes cusk, flounders, hake, sea herring (Bismark), paddlefish, pilchard, suckers, and certain imported species.¹⁰ Includes pickled eels, haddock fillets, haddock chowder, finnan haddie, smoked salmon, shrimp umbo soup, abalone, pickled mussels, squid, terrapin meat and soup, turtle meat and soup, miscellaneous fish eggs for food, and miscellaneous canned fish.¹¹ Includes meal from mackerel, salmon fry, clams, and mixed species.¹² Includes mackerel and shark oil, tanner's oil and oil from mixed species.¹³ Includes agar agar, green fish scrap, fish flour, fish paste, herring pomace, kelp by-products, ground clam shells, and marine-shell blanks.

FISHERIES OF THE NEW ENGLAND STATES

(Area XXII)³

The yield of the fisheries of the New England States (Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut) during 1931 amounted to 540,297,920 pounds, valued at \$20,140,288. This is a decrease of 23 percent in the volume of the catch and 27 percent in its value as compared with the catch and its value in the preceding year. Of the total catch in 1931, 496,088,445 pounds valued at \$13,817,156 were fish and 44,209,475 pounds valued at \$6,323,132 were shellfish and miscellaneous products. These fisheries gave employment to 17,888 fishermen, which is an increase of 5 percent as compared with the number of fishermen in 1930. Of the total number of fishermen, 5,880 regular fishermen were employed on vessels and 8,021 regular and 3,987 casual fishermen were employed in the boat and shore fisheries.

Fisheries of the New England States, 1931

SUMMARY OF CATCH

Product	Maine		New Hampshire		Massachusetts	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	100,560,305	\$1,454,083	631,929	\$16,725	342,300,784	\$10,811,520
Shellfish, etc.....	15,675,119	1,989,271	143,289	50,151	13,533,639	2,139,488
Total.....	116,235,424	3,443,354	775,218	66,876	355,833,823	12,951,008

Product	Rhode Island		Connecticut		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	14,438,070	\$511,678	38,157,357	\$1,023,150	498,088,445	\$13,817,156
Shellfish, etc.....	7,244,936	1,151,170	7,613,062	993,052	44,209,475	6,323,132
Total.....	21,683,006	1,662,848	45,770,449	2,016,202	540,297,920	20,140,288

OPERATING UNITS: BY STATES

Item	Maine	New Hampshire	Massachusetts	Rhode Island	Connecticut	Total
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....	454	-----	4,403	233	790	5,880
On boats and shore:						
Regular.....	3,862	60	2,945	822	332	8,021
Casual.....	1,082	36	1,832	416	621	3,987
Total.....	5,398	96	9,180	1,471	1,743	17,888
Vessels:						
Steam.....			21	3	24	48
Net tonnage.....			3,133	126	4,399	7,658
Motor.....	78	-----	396	77	103	654
Net tonnage.....	937	-----	15,224	793	1,473	18,427
Sail.....			1	-----	3	4
Net tonnage.....			6	-----	25	31
Total vessels.....	78	-----	418	80	130	706
Total net tonnage.....	937	-----	18,363	919	5,897	26,116

³ This is the number given this area by the North American Council on Fishery Investigations. It should be explained that there are included under this area craft owned in the area but at times fishing elsewhere. Notable examples are the ground fish fishery in area XXI and the mackerel and southern trawl fisheries in areas XXIII and XXIV.

Fisheries of the New England States, 1931—Continued

OPERATING UNITS: BY STATES—Continued

Item	Maine	New Hampshire	Massachusetts	Rhode Island	Connecticut	Total
	Number	Number	Number	Number	Number	Number
Boats:						
Motor	2,418	57	1,706	513	332	5,026
Other	1,292	1	1,619	573	363	3,848
Accessory boats	190		947	42	71	1,250
Apparatus:						
Purse seines:						
Mackerel	6		106	2	6	120
Length, yards	1,880		50,318	320	642	53,160
Other	62		1		1	64
Length, yards	14,050		150		400	14,600
Haul seines	56	1	19	16	68	160
Length, yards	5,920	100	3,055	2,075	3,646	14,796
Gill nets:						
Anchor	1,505		1,373			2,878
Square yards	446,172		487,803			933,975
Drift	4		9,316	126	51	9,497
Square yards	1,200		3,097,864	44,640	125,023	3,268,727
Runaround				11		11
Square yards				13,100		13,100
Stake					10	10
Square yards					4,360	4,360
Lines:						
Hand	4,630	144	533	373	318	5,998
Hooks	4,833	144	759	539	381	6,656
Trawl	29,932	620	47,936	1,562	912	80,962
Hooks	1,496,890	31,000	2,383,422	75,380	43,056	4,029,748
Pound nets	1		132	54	18	205
Floating traps	24		20	63		107
Weirs	160		6			166
Fyke nets	71		49	154	128	402
Dip nets	88		94	28	45	255
Bag nets	201					201
Push nets			156	6		162
Pocket nets	4					4
Otter trawls	33		322	81	130	566
Yards at mouth	856		9,760	2,230	3,413	16,259
Box traps	5		3			8
Pots:						
Crab	1,049		1,620		12	2,681
Eel	402		1,963	1,839	1,689	5,893
Lobster	220,140	3,825	72,914	40,777	20,048	357,704
Periwinkle and cockle			1,015	1,690		2,705
Harpoons	61	2	130	62	19	274
Spears	31		273	33	62	399
Dredges:						
Oyster			20	32	284	336
Yards at mouth			21	47	276	344
Scallop	77		3,228	573		3,878
Yards at mouth	136		2,602	442		3,180
Clam			88	11		99
Yards at mouth			44	5		49
Tongs			218	489	185	892
Rakes			762	86	41	889
Forks			864	30	10	904
Hoes	1,472		440	13	8	1,933

Fisheries of the New England States, 1931—Continued

CATCH: BY STATES

Species	Maine		New Hampshire		Massachusetts		Rhode Island		Connecticut		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH												
Albacore												
Alewives	2,795,895	\$17,877			2,212,109	\$22,102	126,728	1,082	27,484	\$640	5,162,126	41,701
Bluefish	540	16			191,039	19,810	121,091	12,052	407,528	33,230	720,198	65,108
Bonito	104,158	7,542			30,735	2,333	21,485	1,262	371	19	156,749	11,156
Butterfish					733,013	51,298	752,700	39,115	19,526	1,473	1,505,239	91,886
Carp					855	43			23,596	2,662	24,451	2,705
Catfish and bullheads	26,344	276			37,000	370			15,236	325	78,580	971
Cod	12,652,470	297,996	60,000	\$1,540	73,277,923	1,915,290	905,012	33,704	5,629,166	129,906	92,524,571	2,378,436
Croaker	612	15			498,493	15,480					499,105	15,495
Cunners					349,751	15,595	103,000	3,490	100	20	452,851	19,105
Cusk	1,387,671	23,373	16,860	169	5,066,900	88,403			38,031	799	6,509,462	112,744
Drum:												
Black					880	10					880	10
Red					433	7			189	2	622	9
Eels	194,451	12,578			378,194	23,769	302,663	22,407	171,689	16,707	1,046,997	75,461
Flounders	1,328,019	40,388	7,480	222	25,720,071	1,041,654	6,084,490	145,296	8,697,637	195,912	41,837,697	1,423,472
Frigate mackerel							1,200	20			1,200	20
Goosefish					150	2			12,400	62	12,550	64
Grayfish					44,330	454					44,330	454
Haddock	11,694,221	360,065	240,730	9,629	150,431,171	4,556,612	352,339	13,273	18,421,485	461,256	181,139,946	5,400,835
Hake	5,643,587	63,009	252,860	3,324	10,161,150	191,571	43,095	779	370,305	10,584	16,670,997	269,267
Halibut	93,704	12,995			2,776,886	371,225			55,638	8,952	2,926,228	393,172
Herring sea	55,784,870	255,863	8,000	120	7,879,169	95,807	235,155	4,167			63,907,194	355,957
Hogfish					10,749	216					10,749	216
Kingfish or "king mackerel"					199	5					199	5
King whiting or "kingfish"	515	20			3,074	101			912	29	4,501	150
Launce					241,200	2,474					241,200	2,474
Mackerel	5,421,838	148,728			39,458,476	1,630,402	1,423,150	43,981	430,687	12,019	46,734,151	1,835,130
Menhaden							3,477	43	1,700	17	5,177	60
Minnows					1,250	375			23,085	9,795	24,335	10,170
Mullet					223	13					223	13
Mummichog									1,300	351	1,300	351
Pike or pickerel									400	42	400	42
Pollock	1,879,508	15,193	34,100	341	7,920,445	113,318	82,531	1,306	778,080	9,626	10,694,664	139,784
Rosefish	9,755	101			223,412	2,889			4,090	72	237,257	3,062
Salmon	70,190	18,824			38	8					70,228	18,832
Scup or porgy					1,952,867	58,462	1,177,400	57,236	65,505	1,387	3,195,772	117,085
Sea bass					771,149	22,353	41,938	2,619	199,000	6,760	1,012,087	31,732
Sea robin					150	4	101,200	1,256	28,670	296	130,020	1,556
Shad	157,763	3,592			150,478	7,136	17,970	1,093	75,114	13,307	401,325	25,128
Sharks	73,925	1,085			62,748	559	3,000	30	245	5	139,918	1,679
Skates					53,090	468	614,271	5,570	199,196	1,525	866,557	7,563

Smelt	567,422	90,587	6,000	1,200	4,780	929	10,840	2,168	2,150	443	591,192	95,327
Spot					40	1					40	1
Squeteagues or "sea trout":												
Gray	45	2			149,967	6,342	52,150	4,636	28,123	2,546	230,285	13,526
Spotted					2,737	281					2,737	281
Striped bass					47,600	8,316	39,026	5,663	3,741	497	90,367	14,476
Sturgeon	1,061	176			5,394	718	200	22	31	9	6,686	925
Suckers	53,675	3,875							106,575	5,704	160,250	9,579
Swordfish	343,038	70,812			2,157,820	421,866	456,158	74,439	253,738	24,882	3,210,754	591,999
Tautog					186,801	8,454	248,650	11,573	50,106	2,649	485,557	22,676
Tilefish									1,636,943	65,044	1,636,943	65,044
Tomcod	68,650	604			31,900	319	4,200	69	2,000	200	106,750	1,192
Tuna or "horse mackerel":	124,044	7,584	2,000	140	65,454	4,300	100,925	8,155	8,800	380	301,223	20,559
White perch					8,525	1,181	2,376	119	100	5	11,001	1,305
Whiting	6,200	62			6,930,399	64,529	1,004,950	14,713	129,100	2,322	8,070,649	81,626
Wolfish	76,096	841	3,899	40	2,060,067	42,011			36,885	664	2,176,949	43,556
Yellow perch	38	4			9,580	1,655	2,800	302	700	25	13,128	1,986
Total	100,560,305	1,454,083	631,929	16,725	342,300,784	10,811,520	14,438,070	511,678	38,157,357	1,023,150	496,088,445	13,817,156
SHELLFISH, ETC.												
Crabs:												
Hard	553,012	18,300			209,156	28,750	154,667	7,490	17,167	1,671	934,002	56,211
Soft									2,240	792	2,240	792
Lobsters	7,166,310	1,633,684	143,289	50,151	2,245,753	627,198	1,259,173	269,231	497,494	138,168	11,312,019	2,718,432
Shrimp					1,000	925					1,000	925
Squid	50,789	469			1,256,121	25,609	1,496,700	29,338	7,508	119	2,811,118	55,535
Clams:												
Cockle					38,862	6,939	97,218	6,066			136,080	13,005
Hard, public ¹	198,000	18,000			2,630,081	345,761	1,451,091	229,324	118,750	37,798	4,397,922	630,883
Hard, private ¹					297,825	44,975	114,224	22,568	1,100	350	413,149	67,893
Razor					468,992	21,382					468,992	21,382
Soft, public ²	7,022,138	238,642			3,669,442	362,762	19,748	3,205	57,200	6,986	10,768,528	611,595
Surf or skimmer					69,700	5,150					69,700	5,150
Mussels, sea	90,000	2,250			26,851	4,914					116,851	7,164

¹ Statistics on hard clams used in this table are based on yields of 11 pounds of meats per bushel in Maine, Massachusetts, and Rhode Island and 8 pounds in Connecticut.

² Statistics on soft clams used in this table are based on yields of 15 pounds of meats per bushel in Maine, Massachusetts, and Rhode Island and 20 pounds in Connecticut.

Fisheries of the New England States, 1931—Continued

CATCH: BY STATES

Species	Maine		New Hampshire		Massachusetts		Rhode Island		Connecticut		Total			
	FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	
Albacore						1,900	\$38			1,900	\$38			
Alewives	2,795,895	\$17,877		2,212,019	\$22,102	126,728	1,082	27,484	\$640	5,162,126	41,701			
Bluefish	540	16		191,039	19,810	121,091	12,052	407,528	33,230	720,198	65,108			
Bonito	104,158	7,542		30,735	2,333	21,485	1,262	371	19	156,749	11,156			
Butterfish				733,013	51,298	752,700	39,115	19,526	1,473	1,505,239	91,886			
Carp				855	43			23,596	2,662	24,451	2,705			
Catfish and bullheads	26,344	276		37,000	370			15,236	325	78,580	971			
Cod	12,652,470	297,996	60,000	\$1,540	73,277,923	1,915,290	905,012	33,704	5,629,166	129,906	92,524,571	2,378,436		
Croaker	612	15			498,493	15,480					499,105	15,495		
Cunners				349,751	15,595	103,000	3,490	100	20	452,851	19,105			
Cusk	1,387,671	23,373	16,860	169	5,066,900	88,403		38,031	799	6,509,462	112,744			
Drum:														
Black				880	10					880	10			
Red				433	7			189	2	622	9			
Eels	194,451	12,578			378,194	23,769	302,663	22,407	171,689	16,707	1,046,997	75,461		
Flounders	1,328,019	40,388	7,480	222	25,720,071	1,041,654	6,084,490	145,296	8,697,637	195,912	41,837,697	1,423,472		
Frigate mackerel						1,200	20			1,200	20			
Goosefish								12,400	62	12,550	64			
Grayfish										44,330	454			
Haddock	11,694,221	360,065	240,730	9,629	150,431,171	4,556,612	352,339	13,273	18,421,485	461,256	181,139,946	5,400,835		
Hake	5,643,587	63,009	252,860	3,324	10,161,150	191,571	43,095	779	570,305	10,584	16,670,997	269,267		
Halibut	93,704	12,995			2,776,886	371,225			55,638	8,952	2,926,228	393,172		
Herring, sea	55,784,870	255,863	8,000	120	7,879,169	95,807	235,155	4,167			63,907,194	355,957		
Hogfish					10,749	216					10,749	216		
Kingfish or "king mackerel"					199	5					199	5		
King whiting or "kingfish"	515	20			3,074	101					4,501	150		
Launce					241,200	2,474					241,200	2,474		
Mackerel	5,421,838	148,728			39,458,476	1,630,402	1,423,150	43,981	430,687	12,019	46,734,151	1,835,130		
Menhaden						3,477	43	1,700	17			5,177	60	
Minnows					1,250	375			23,085	9,795			24,335	10,170
Mullet					223	13							223	13
Mummichog									1,300	351			1,300	351
Pike or pickerel									400	42			400	42
Pollock	1,879,508	15,193	34,100	341	7,920,445	113,318	82,531	1,306	778,080	9,626	10,694,664	139,784		
Rosefish	9,755	101			223,412	2,889			4,090	72	237,257	3,062		
Salmon	70,190	18,824			38	8					70,228	18,832		
Scup or porgy					1,952,867	58,462	1,177,400	57,236	65,505	1,387	3,195,772	117,085		
Sea bass					771,149	22,353	41,938	2,619	199,000	6,760	1,012,087	31,732		
Sea robin					150	4	101,200	1,256	28,670	296	130,020	1,556		
Shad	157,763	3,592			150,478	7,136	17,970	1,093	75,114	13,307	401,325	25,128		
Sharks	73,925	1,085			62,748	559	3,000	30	245	5	139,918	1,679		
Skates					53,090	468	614,271	5,570	199,196	1,525	866,557	7,563		

Smelt	567,422	90,587	6,000	1,200	4,780	929	10,840	2,168	2,150	443	591,192	95,327
Spot					40	1					40	1
Squeteagues or "sea trout":					149,967	6,342	52,150	4,636	28,123	2,546	230,285	13,526
Gray	45	2			2,737	281					2,737	281
Spotted					47,600	8,316	39,026	5,663	3,741	497	90,367	14,476
Striped bass	1,061	176			5,394	718	200	22	31		6,686	925
Sturgeon	53,675	3,875									160,250	9,579
Suckers					2,157,820	421,866	456,158	74,439	253,738	24,882	3,210,754	591,999
Swordfish	343,038	70,812			186,801	8,454	248,650	11,573	50,106	2,649	485,557	22,676
Tautog											1,636,943	65,044
Tilefish											1,636,943	65,044
Tomcod	68,650	604			31,900	319	4,200	69	2,000	200	106,750	1,192
Tuna or "horse mackerel"	124,044	7,584	2,000	140	65,454	4,300	100,925	8,155	8,800	380	301,223	20,559
White perch					8,525	1,181	2,376	119	100	5	11,001	1,305
Whiting	6,200	62			6,930,399	64,529	1,004,950	14,713	129,100	2,322	8,070,649	81,626
Wolfish	76,096	841	3,899	40	2,060,067	42,011	1,655	2,800	36,885	664	2,176,949	43,556
Yellow perch	38	4			9,590			302	700	25	13,128	1,986
Total	100,560,305	1,454,083	631,929	16,725	342,300,784	10,811,520	14,438,070	511,678	38,157,357	1,023,150	496,088,445	13,817,156
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SHELLFISH, ETC.												
Crabs:												
Hard	553,012	18,300			209,156	28,750	154,667	7,490	17,167	1,671	934,002	56,211
Soft									2,240	792	2,240	792
Lobsters	7,166,310	1,633,684	143,289	50,151	2,245,753	627,198	1,259,173	269,231	497,494	138,168	11,312,019	2,718,432
Shrimp					1,000	925					1,000	925
Squid	50,789	469			1,256,121	25,609	1,496,700	29,338	7,508	119	2,811,118	55,535
Clams:												
Cockle					38,862	6,939	97,218	6,066			136,080	13,005
Hard, public ¹	198,000	18,000			2,630,081	345,761	1,451,091	229,324	118,750	37,798	4,397,922	630,883
Hard, private ¹					297,825	44,975	114,224	22,568	1,100	350	413,149	67,893
Razor					468,992	21,382					468,992	21,382
Soft, public ²	7,022,138	238,642			3,669,442	362,762	19,748	3,205	57,200	6,986	10,768,528	611,595
Surf or skimmer					69,700	5,150					69,700	5,150
Mussels, sea	90,000	2,250			26,851	4,914					116,851	7,164

¹ Statistics on hard clams used in this table are based on yields of 11 pounds of meats per bushel in Maine, Massachusetts, and Rhode Island and 8 pounds in Connecticut.

² Statistics on soft clams used in this table are based on yields of 15 pounds of meats per bushel in Maine, Massachusetts, and Rhode Island and 20 pounds in Connecticut.

Fisheries of the New England States, 1931—Continued

CATCH: BY STATES—Continued

Species	Maine		New Hampshire		Massachusetts		Rhode Island		Connecticut		Total	
	Pounds	Value	Pounds	Value	Pounds	\$400	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.—contd.												
Oysters:												
Market, public, spring ³												
Market, public, fall ³												
Market, private, spring ³					132,899	60,102	1,076,624	232,967	555,560	60,634	1,765,083	353,703
Market, private, fall ³					134,556	59,086	1,337,291	306,495	776,103	94,727	2,247,950	460,308
Seed, public, spring ⁴							2,322	172	337,531	36,717	339,853	36,889
Seed, public, fall ⁴							40,420	3,593	674,975	61,849	715,395	65,442
Seed, private, spring ⁴					52,500	2,400			3,650,156	420,767	3,702,656	423,167
Seed, private, fall ⁴									860,046	126,154	860,046	126,154
Periwinkles	8,000	\$560			17,100	2,400	86,400	5,250	6,120	170	117,620	8,380
Scallops:												
Bay												
Sea	586,870	77,366			1,589,791	392,851	107,708	35,271			1,697,499	428,122
Irish moss					493,663	57,435			423	49	1,080,956	134,850
Bloodworms					89,250	4,969					89,250	4,969
Sandworms					55,321	49,790			51	225	55,372	50,015
Total	15,675,119	\$1,989,271	143,289	\$50,151	13,533,039	2,139,488	7,244,936	1,151,170	7,613,092	933,052	44,209,475	6,323,132
Grand total	116,235,424	3,433,354	775,218	66,876	355,833,823	12,951,008	21,683,006	1,662,848	45,770,449	2,016,202	540,297,920	20,140,288

³ Statistics on market oysters used in this table are based on yields of 6.56 pounds of meats per bushel in Massachusetts, 6.75 pounds in Rhode Island, and 7.35 pounds in Connecticut.

⁴ Statistics on seed oysters used in this table are based on yields of 6.56 pounds of meats per bushel in Massachusetts, 6.75 pounds in Rhode Island, and 6.26 pounds in Connecticut.

NOTE.—Of the total catch in Maine, 11,676 pounds of fishery products, valued at \$486, were taken in the southern winter trawl fishery off Maryland, Virginia, and North Carolina. Of the total catch in Massachusetts, 3,754,688 pounds of fishery products, valued at \$108,555, were taken in the same fishery, while of the total catch in Connecticut, 154,023 pounds of fishery products, valued at \$5,026, were taken in the same fishery. These products consisted principally of scup or porgy, sea bass, flounders, croaker, and gray squeteague.

PRODUCTION OF CERTAIN SHELLFISH IN NUMBER AND BUSHELS

Product	Maine		Massachu-		Rhode		Connecticut		Total	
	Quan-	Value	Quan-	Value	Quan-	Value	Quan-	Value	Quan-	Value
Crabs:										
Hard.....number	1,659,036	\$18,300	627,468	\$28,750	464,001	\$7,490	51,501	\$1,671	2,802,006	\$56,211
Soft.....do							6,720	792	6,720	792
Clams:										
Cockle.....bushels			2,159	6,939	5,401	6,066			7,560	13,005
Hard, public.....do	18,000	18,000	239,098	345,761	131,917	229,324	14,844	37,798	403,859	630,883
Hard, private.....do			27,075	44,975	10,384	22,568	138	350	37,597	67,893
Razor.....do			14,656	21,382					14,656	21,382
Soft, public.....do	468,143	238,642	244,629	362,762	1,317	3,205	2,860	6,986	716,949	611,595
Surf or skimmer.....do			4,647	5,150					4,647	5,150
Mussels.....do	9,000	2,250	4,215	4,914					13,215	7,164
Oysters:										
Market, public, spring bushels.....			200	400			3,250	2,755	3,450	3,155
Market, public, fall bushels.....					200	200	3,644	3,121	3,844	3,321
Market, private, spring.....bushels			20,259	60,102	159,500	232,967	75,586	60,634	255,345	353,703
Market, private, fall bushels.....			20,512	59,086	198,117	306,495	105,592	94,727	324,221	460,308
Seed, public, spring bushels.....					344	172	53,919	36,717	54,263	36,889
Seed, public, fall bushels.....					5,988	3,593	107,823	61,849	113,811	65,442
Seed, private, spring bushels.....			8,003	2,400			583,092	420,767	591,095	423,167
Seed, private, fall bushels.....							137,388	126,154	137,388	126,154
Periwinkles.....do	444	560	950	2,400	4,800	5,250	340	170	6,534	8,380
Scallops:										
Bay.....do			256,832	392,851	17,428	35,271			274,260	428,122
Sea.....do	65,208	77,366	73,135	57,435			71	49	138,414	134,850

Industries related to the fisheries of the New England States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	Maine and New Hampshire	Massachu-	Rhode	Connect-	Total
	Number	Number	Number	Number	* Number
Transporting:					
Persons engaged:					
On vessels.....	179	66	29	33	307
On boats.....	8			8	16
Total.....	187	66	29	41	323
Vessels:					
Steam.....	1				1
Net tonnage.....	26				26
Motor.....	87	16	9	5	117
Net tonnage.....	944	562	117	234	1,857
Total vessels.....	88	16	9	5	118
Total net tonnage.....	970	562	117	234	1,883
Boats.....	4				8
Wholesale and manufacturing:					
Establishments.....	157	204	40	35	436
Persons engaged:					
Proprietors.....	165	82	26	29	302
Salaried employees.....	153	697	48	68	966
Wage earners:					
Average for season.....	5,254	2,610	390	751	9,005
Average for year.....	1,349	2,148	270	540	4,307
Paid to salaried employees.....	\$378,316	\$1,794,357	\$110,346	\$222,158	\$2,505,177
Paid to wage earners.....	988,080	2,787,368	274,057	558,781	4,608,286
Total salaries and wages.....	1,366,396	4,581,725	384,403	780,939	7,113,463
Fishermen manufacturing.....	239	2,410	339	24	3,012

Industries related to the fisheries of the New England States, 1931—Continued

PRODUCTS MANUFACTURED

Item	Maine and New Hampshire		Massachusetts		Rhode Island		Connecticut	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
By manufacturing establishments:								
Alewives:								
Salted.....	1,168,733	\$26,525	88,148	\$2,573				
Smoked.....	(1)	(1)						
Cod:								
Fresh sticks.....	do 219,130	41,384						
Fresh fillets.....	do 144,696	14,719	3,876,701	458,051				
Frozen fillets.....	do (1)	(1)	1,154,832	123,205				
Salted:								
Green.....	do 1,658,415	83,540						
Dry.....	do		885,418	52,908				
Boneless.....	do (1)	(1)	9,763,995	700,826				
Smoked fillets.....	do (1)	(1)	638,352	95,547				
Oil, cod and cod-liver.....	gallons 13,559	5,339	54,095	38,208				
Cusk:								
Fresh sticks.....	pounds 189,250	32,725						
Fresh fillets.....	do 15,275	1,462	429,029	56,082				
Frozen fillets.....	do (1)	(1)	9,125	933				
Salted:								
Green.....	do 27,177	848						
Dry.....	do		(1)	(1)				
Boneless.....	do		111,440	3,539				
Smoked fillets.....	do		853,612	134,354				
Flounders, fresh fillets.....	do (1)	(1)	884,929	182,775				
Haddock:								
Fresh pandressed.....	do		159,849	20,897				
Fresh sticks.....	do 77,800	14,920						
Fresh fillets.....	do 160,314	22,741	25,556,764	3,886,925				
Frozen fillets.....	do 87,675	10,917	7,543,568	944,542				
Salted:								
Green.....	do 55,438	2,403						
Dry.....	do		(1)	(1)				
Boneless.....	do		383,450	26,421				
Smoked fillets.....	do 125,650	25,229	263,541	45,216				
Finnan haddie.....	do 54,000	5,600	1,977,779	201,285				
Hake:								
Fresh sticks.....	do 219,500	31,115						
Fresh fillets.....	do 70,860	6,722	1,834,198	211,427				
Frozen fillets.....	do (1)	(1)	129,859	11,913				

Salted:								
Green	do.	355,782	9,348	(1)	(1)			
Dry	do.			488,530	15,786			
Boneless	do.			36,860	8,691			
Halibut, smoked	do.							
Herring, sea:								
Smoked:								
Boneless	do.	1,480,569	124,964					
Bloaters	do.	1,174,388	26,302	927,229	86,980			
Lengthwise	do.	98,108	5,318					
Medium-scaled	do.	205,015	11,570					
Kippered	do.			162,979	28,442			
Canned, "sardines"	standard cases	885,408	2,647,187					
Meal	tons	1,587	37,257					
Oil	gallons	89,403	12,089					
Scales	pounds	184,696	5,588					
Mackerel:								
Fresh fillets	do.			39,049	7,726			
Salted:								
Fillets	do.			1,058,300	133,697			
Split	do.	131,756	7,159	1,102,070	91,255			
Smoked	do.				73,786	14,436		
Pollock:								
Fresh fillets	do.			304,518	26,985			(1)
Frozen fillets	do.			60,455	4,836		(1)	(1)
Salted:								
Green	do.	160,061	5,955					
Dry	do.			222,100	4,779			
Boneless	do.			226,740	6,998			
Salmon, smoked	do.			181,005	67,230			(1)
Shad, smoked	do.				14,197	2,960		
Whitefish, smoked	do.			184,903	60,668			(1)
Wolfish, fresh fillets	do.				40,500	5,158		(1)
Crabmeat, packaged, fresh-cooked	do.	(1)	(1)	157,489	86,222			
Lobster meat, packaged, fresh-cooked	do.			124,052	136,542			
Clams:								
Hard, fresh-shucked	gallons			(1)	(1)	7,650	\$16,800	(1)
Soft:								
Fresh-shucked	do.			78,475	111,350	14,370	16,463	
Canned:								
Whole	standard cases	96,187	337,464	(1)	(1)			
Chowder	do.	43,570	103,078	(1)	(1)			
Juice and bouillon	do.	14,100	33,569					
Marine-shell products:								
Buttons	gross	(1)	(1)	(1)	(1)			
Novelties		(1)	(1)	(1)	(1)			
Oysters, fresh-shucked	gallons			2,185	6,323	307,233	18,067	1,140,835
							(1)	\$838,257
							201,400	(1)
							715,542	404,470

¹ This item has been included under unclassified products.

Industries related to the fisheries of the New England States, 1931—Continued

PRODUCTS MANUFACTURED—Continued

Maine and New Hampshire		Massachusetts		Rhode Island		Connecticut	
	Quantity	Value	Quantity	Value	Quantity	Value	
By manufacturing establishments—Continued							
Unclassified products:							
Pandressed, fresh and frozen	pounds		² 555,554	² \$89,045			
Fillets, fresh and frozen	do	³ 10,735	³ \$1,290	⁴ 132,147	⁴ 28,194		
Salted	do			⁶ 778,785	⁶ 18,795		
Smoked	do	7 195,600	7 5,240	⁸ 50,076	⁸ 10,893	(5)	
Canned:					(5)	(5)	
Fish cakes, balls, etc.	standard cases	7,950	49,430	93,596	715,876		
Fish flakes	do	(1)	(1)	11,882	108,623		
Other	do	⁹ 16,911	⁹ 409,593	¹⁰ 21,057	¹⁰ 83,128		
Fish meal	tons	534	29,200	9,068	541,208	(1)	
Glue	gallons			398,325	939,725	(1)	
Miscellaneous			11 190,974		¹² 106,716	¹³ \$244,731	
Total			4,378,764		10,746,894	1,011,603	
By fishermen:							
Alewives:							
Salted	pounds			82,500	4,950		
Pickled	do			460,000	12,075		
Smoked	do	252,116	11,808	10,000	500		
Cod, salted, green	do	30,733	1,229	831,804	29,541		
Cusk, salted, green	do	755	20	4,425	86		
Flounders, fresh fillets	do					2,600	
Haddock, salted, green	do			675	10	1,029	
Hake, salted, green	do	1,865	37	3,880	.54		
Herring, sea, salted	do	6,555	256				
Mackerel, salted, split	do	800	32	57,685	2,415		
Pollock, salted, green	do			430	11		
Crab meat	do	19,814	10,000	4,500	2,025		
Clams:							
Razor, fresh-shucked	gallons			47,046	19,132		
Soft:							
Fresh-shucked	do	21,004	15,352	114,755	132,450	1,326	
Steamed	do	11,118	11,777			1,658	
Surf or skimmer, fresh-shucked	do			1,000	2,000		
Oysters, fresh-shucked	do					2,434	
						4,953	

Scallops:								
Bay, fresh-shucked	do							
Sea, fresh-shucked	do	62,364	73,100	171,379 63,667	393,342 65,748	11,968	35,271	47
Total			123,611		664,339		35,271	7,694
Grand total			4,502,375		11,411,233		1,046,874	2,487,384

² Includes fresh pandressed cod, flounders, halibut, salmon, and wolffish; and frozen pandressed cod, haddock, halibut, salmon, and wolffish.

³ Includes fresh fillets of flounders; and frozen fillets of cod, cusk, flounders, and hake.

⁴ Includes fresh fillets of salmon, frozen fillets of flounders and mackerel, and steaks of halibut and salmon.

⁵ This item has been included under miscellaneous.

⁶ Includes salted sea herring; dry-salted cusk, haddock, and hake; and pickled sea herring.

⁷ Includes smoked alewives, cod, cod fillets, cusk fillets, and hake fillets.

⁸ Includes smoked butterfish, carp, cod, cusk, flounders, hake, hake fillets, lake trout, spiced salmon, and sturgeon.

⁹ Includes canned finnan haddie, fish flakes, and haddock fillets.

¹⁰ Includes finnan haddie; haddock chowder; mackerel; fish hash; fish eggs for food; soft clams, whole and chowder; dog food; and rat bait.

¹¹ Includes salted herring and boneless cod, crab meat, steamed soft clams, dry scrap, clam meal, tanners' oil and marine and fresh-water mussel shell products.

¹² Includes shucked hard clams, green and dry scrap, fish oil, mussel-shell buttons, and marine-shell buttons and novelties.

¹³ Includes finnan haddie, canned hard-clam chowder, and oyster-shell products.

¹⁴ Includes fresh fillets of cod, flounders, haddock, hake, pollock, and wolffish; frozen fillets of cod, flounders, haddock, hake, halibut, pollock, and salmon; packaged frozen smelts; smoked butterfish, carp, haddock fillets, salmon, sturgeon, and whitefish; packaged frozen shrimp and scallops; fresh-shucked hard clams; fish meal; cod-liver oil; and marine-shell novelties.

NOTE.—The total value of products for the New England States was as follows: By manufacturing establishments, \$18,616,951; and by fishermen, \$830,915. Some of the above products may have been manufactured from products imported from another State or country; therefore, they cannot be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 2,254 have also been included as fishermen and 4 of the persons shown on transporting craft have also been included as fishermen. This should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

MAINE

Fisheries of Maine, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets		Lines		Pound nets
	Mack- erel	Other		Anchor	Drift	Hand	Trawl	
Fishermen:								
On vessels.....	Number 23	Number 186	Number 2	Number 52	Number -----	Number 23	Number 204	Number -----
On boats and shore:								
Regular.....	6	90	108	153	-----	299	687	-----
Casual.....			2	80	5	867	-----	1
Total.....	29	276	112	285	5	1,189	891	1
Vessels:								
Motor.....	4	33	1	10	-----	6	23	-----
Net tonnage.....	34	371	9	93	-----	55	431	-----
Boats:								
Motor.....	2	29	55	73	-----	275	502	-----
Other.....	2	29	54	60	4	6	9	1
Apparatus:								
Number.....	6	62	56	1,505	4	4,630	29,932	1
Length, yards.....	1,880	14,050	5,920	446,172	1,200	4,833	1,496,890	-----
Square yards.....								
Hooks, baits, or snoods.....								

Item	Float- ing traps	Weirs	Fyke nets	Dip nets	Bag nets	Pocket nets	Otter trawls	Box traps
Fishermen:								
On vessels.....	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore:								
Regular.....	28	165	-----	8	40	-----	42	-----
Casual.....	6	55	13	80	63	4	-----	5
Total.....	34	220	13	88	103	4	87	5
Vessels:								
Motor.....							11	-----
Net tonnage.....							90	-----
Boats:								
Motor.....	17	50	2	-----	-----	1	23	-----
Other.....	3	128	11	-----	23	3	-----	-----
Apparatus:								
Number.....	24	160	71	88	201	4	33	5
Yards at mouth.....							856	-----

Item	Pots			Har- poons	Spears	Dredges, scallop	Hoes	By hand	Total, exclu- sive of dupli- cation
	Crab	Eel	Lob- ster						
Fishermen:									
On vessels.....	Number	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore:									
Regular.....	32	14	2,384	90	6	73	1,482	28	3,862
Casual.....		12	4	-----	25	-----	-----	-----	1,082
Total.....	32	26	2,392	261	31	93	1,482	28	5,398
Vessels:									
Motor.....				2	16	6	-----	-----	78
Net tonnage.....				10	366	54	-----	-----	937
Boats:									
Motor.....	17	-----	2,033	45	-----	67	167	-----	2,418
Other.....	15	26	331	-----	31	-----	801	-----	1,292
Accessory boats.....									190
Apparatus:									
Number.....	1,049	402	220,140	61	31	77	1,472	-----	-----
Yards at mouth.....						136	-----	-----	-----

Fisheries of Maine, 1931—Continued

CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets			
	Mackerel		Other				Anchor		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			36,280	\$615			63,000	\$85	6,000	\$120
Bluefish			540	16						
Butterfish			15,163	1,070						
Cod			410	9			4,498,838	131,167		
Cusk									16,386	284
Flounders									51,069	1,453
Haddock							1,360,733	31,103		
Hake							376,076	4,837		
Halibut									107	16
Herring, sea	264,600	\$2,646	24,137,837	140,432	258,370	\$1,848	13,060	158		
Mackerel	478,569	11,069	3,062,429	87,032	5,000	200	561,086	17,432		
Pollock			51,740	568			859,616	6,806		
Salmon			6	1			17,106	4,603		
Shad	22,235	335	125,936	2,706			3,199	100	1,602	320
Sharks			8,657	105			59,362	910		
Smelt					144,833	18,558	50,086	10,034		
Sturgeon			45	7					833	124
Tomcod					3,050	56				
Wolfish							1,127	10		
Lobsters							177	46		
Total	765,404	14,050	27,439,043	232,561	411,253	20,660	7,931,979	209,976	7,602	440

Species	Lines				Pound nets		Floating traps		Weirs	
	Hand		Trawl							
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives										
Butterfish							88,843	\$6,463		
Catfish and bullheads			26,344	\$276						
Cod	2,156,057	\$32,798	5,551,151	122,386						
Cusk	6,168	65	1,331,587	22,419						
Eels			12,860	1,157						
Flounders	120	1	20,778	550						
Haddock	730,197	17,711	8,508,290	277,559						
Hake	647,264	6,020	4,229,077	47,210						
Halibut	11,740	1,701	81,460	11,217						
Herring, sea							233,988	2,138	30,871,015	108,583
Mackerel							1,173,554	30,525	141,200	2,470
Pollock	418,758	3,384	549,394	4,435						
Rosefish			1,103	13						
Salmon							10,434	2,396	40,644	11,224
Shad							4,791	131		
Sharks	2,576	29	3,330	41						
Smelt	232,253	37,959			200	\$40	2,100	415	8,210	1,620
Whiting	89	1	73,323	816			6,200	62		
Wolfish							50,600	466		
Squid										
Total	4,205,222	99,669	20,388,697	488,079	200	40	1,570,510	42,596	32,067,053	131,746

Fisheries of Maine, 1931—Continued

CATCH: BY GEAR—Continued

Species	Fyke nets		Dip nets		Bag nets		Pocket nets		Otter trawls	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			1,684,631	\$8,408						
Butterfish									34	\$1
Cod									446,014	11,636
Croaker									612	15
Cusk									33,530	605
Eels	2,920	\$280								
Flounders									1,256,052	38,384
Haddock									1,095,001	33,692
Hake									391,170	4,942
Halibut									397	61
Herring, sea			6,000	60						
King whiting or "king-fish"									515	20
Rosefish									8,652	88
Salmon			2,000	600						
Smelt			17,840	2,351	110,300	\$19,370	1,600	\$240		
Squeteagues or "sea trout", gray									45	2
Sturgeon									183	45
Suckers	53,675	3,875								
Tomcod	1,600	48			64,000	500				
Wolfish									1,557	14
Yellow perch	38	4							189	3
Squid										
Total	58,233	4,207	1,710,471	11,419	174,300	19,870	1,600	240	3,233,951	89,508

Species	Box traps		Pots						Harpoons	
			Crab		Eel		Lobster			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels	15,300	\$1,436			123,691	\$6,446				
Swordfish									343,038	\$70,812
Tuna or "horse mackerel"									124,044	7,584
Crabs, hard			368,746	\$11,721			184,266	\$6,579		
Lobsters			22,152	5,909			7,143,981	1,627,729		
Total	15,300	1,436	390,898	17,630	123,691	6,446	7,328,247	1,634,308	467,082	78,396

Species	Spears		Dredges, scallop		Hoes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels	39,680	\$3,259						
Clams:								
Hard, public					198,000	\$18,000		
Soft, public					7,022,138	238,642		
Mussels								
Periwinkles							90,000	\$2,250
Scallops, sea			586,870	\$77,366			8,000	560
Total	39,680	3,259	586,870	77,366	7,220,138	256,642	98,000	2,810

Fisheries of Maine, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Cum- ber- land	Han- cock	Ken- nebec	Knox	Lin- coln	Pe- nob- scot	Sag- ada- hoc	Wal- do	Wash- ington	York
	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber
Fishermen:										
On vessels	288	18		78	54				12	4
On boats and shore:										
Regular	664	830		619	401		166	40	865	277
Casual	15	377	3	90	274	15	196	49	57	6
Total	967	1,225	3	787	729	15	362	89	934	287
Vessels:										
Motor	38	6		20	10				3	1
Net tonnage	602	38		164	82				43	8
Boats:										
Motor	380	521	1	475	274	2	85	12	475	193
Other	224	273	2	131	127	13	95	49	292	86
Accessory boats	156	1		17	10				3	3
Apparatus:										
Purse seines:										
Mackerel				3	3					
Length, yards				1,150	730					
Other	21	2		10	20				7	1
Length, yards	5,570	250		1,370	4,650		160		1,750	300
Haul seines	27	9		14	3					3
Length, yards	2,880	900		1,540	300					300
Gill nets:										
Anchor	426	193		103	170	80	2	24	198	309
Square yards	212,040	39,900		28,292	85,200	5,343	360	1,653	23,604	49,780
Drift					4					
Square yards					1,200					
Lines:										
Hand	96	2,031		335	1,179		886		100	3
Hooks	121	2,134		370	1,195		892		115	6
Trawl	10,980	5,238		4,740	1,360		1,440	60	3,814	2,300
Hooks	549,000	261,975		237,000	68,000		72,000	3,000	189,915	116,000
Pound nets									1	
Floating traps	8				3		8	3	2	
Weirs		62		14	2		4	19	59	
Fyke nets			26		12		33			
Dip nets		7		12	15		3	15	22	14
Bag nets		38				2	2	54	105	
Pocket nets						4				
Otter trawls	10	20		2	1					
Yards at mouth	268	505		50	33					
Box traps				3	1				1	
Pots:										
Crab	759			25	265					
Eel	75			28	40	30	89			140
Lobster	26,471	51,091		53,636	24,782		4,948	260	45,518	13,434
Harpoons	43		2	12	4		6			8
Spears							9			4
Dredges, scallop	12	48		17						
Yards at mouth	16	80		40						
Hoes	322	306		102	153		95	28	377	89

Fisheries of Maine, 1931—Continued

CATCH: BY COUNTIES

Species	Cumberland		Hancock		Kennebec	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	16,980	\$253	948,083	\$7,093		
Bluefish.....	540	16				
Butterfish.....	42,076	3,164				
Catfish and bullheads.....	20,382	215				
Cod.....	4,687,776	145,671	2,599,965	40,946		
Croaker.....	612	15				
Cusk.....	1,005,220	17,805	23,907	211		
Eels.....	12,846	1,156	8,800	440	2,860	\$275
Flounders.....	387,391	11,879	695,010	19,656		
Haddock.....	4,350,038	154,686	2,189,177	55,862		
Hake.....	2,937,606	39,402	583,107	3,784		
Halibut.....	32,011	4,080	16,787	2,511		
Herring, sea.....	6,537,147	44,605	4,711,320	20,942		
King whiting or "kingfish".....	515	20				
Mackerel.....	1,704,797	51,877	12,500	500		
Pollock.....	1,088,469	9,053	141,685	1,240		
Rosefish.....	9,630	99				
Salmon.....	998	204	24,044	6,483		
Shad.....	73,342	1,886				
Sharks.....	63,580	936				
Smelt.....	96,253	11,123	109,449	20,418		
Squeteagues or "sea trout," gray.....	45	2				
Sturgeon.....	850	147				
Suckers.....					30,775	2,463
Swordfish.....	343,038	70,812				
Tomcod.....	3,050	56				
Tuna or "horse mackerel".....	78,359	4,707				
Whiting.....	6,200	62				
Wolfish.....	49,829	528				
Crabs, hard.....	419,615	14,298				
Lobsters.....	1,032,870	252,764	1,669,995	365,385		
Squid.....	26,789	269				
Clams:						
Hard, public.....	198,000	18,000				
Soft, public.....	1,124,145	52,567	1,143,000	31,791		
Mussels.....	90,000	2,250				
Scallops, sea.....	15,300	3,400	149,110	26,842		
Total.....	26,456,299	918,007	15,025,939	604,104	33,635	2,738

Species	Knox		Lincoln		Penobscot	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	456,298	\$2,871	675,833	\$4,593		
Butterfish.....			31,000	2,300		
Cod.....	2,031,482	38,583	1,271,426	23,994		
Cusk.....	101,828	1,127	44,668	630		
Eels.....	29,280	2,641	22,400	2,040	43,400	\$884
Flounders.....	214,425	7,797	19,332	733		
Haddock.....	2,363,151	71,126	721,245	16,050		
Hake.....	707,165	5,358	311,825	2,713		
Halibut.....	15,844	2,205	3,914	562		
Herring, sea.....	14,961,060	69,571	6,231,970	50,446		
Mackerel.....	413,943	8,841	2,319,555	61,045		
Pollock.....	168,142	1,103	108,358	1,048		
Salmon.....			3,500	700	10,403	2,870
Shad.....	10,705	176	69,102	1,398		
Sharks.....	2,845	31				
Smelt.....	61,540	8,106	67,434	10,715	7,500	1,200
Sturgeon.....			131	17		
Suckers.....			6,000	360		
Tuna or "horse mackerel".....			14,720	883		
Wolfish.....	75	1	588	6		
Crabs, hard.....	11,227	337	122,170	3,665		
Lobsters.....	1,775,370	398,881	848,915	196,062		
Squid.....			24,000	200		
Clams: Soft, public.....	573,778	18,316	625,590	19,515		
Scallops, sea.....	422,460	47,124				
Total.....	24,320,618	684,195	13,543,676	399,675	61,303	4,954

Fisheries of Maine, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Sagadahoc		Waldo		Washington		York	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	64,000	\$740						
Butterfish.....	30,964	2,070						
Catfish and bullheads.....	5,962	61						
Cod.....	360,687	10,824	39,740	\$1,387	919,534	14,538	741,860	22,053
Cusk.....	62,931	1,155			33,758	183	115,359	2,262
Eels.....	34,460	1,431			2,500	300	37,905	3,411
Flounders.....	2,376	66			1,900	39	7,585	218
Haddock.....	387,610	14,839	8,610	512	895,573	17,851	778,817	29,139
Hake.....	370,301	4,296	500	10	293,601	2,339	439,482	5,107
Halibut.....	2,670	326			18,447	2,751	4,031	560
Herring, sea.....	796,790	4,684	560,000	2,400	21,919,783	62,551	66,800	664
Mackerel.....	425,281	11,641	7,000	200	121,700	1,770	417,062	12,854
Pollock.....	15,881	174			322,692	2,218	34,281	357
Rosefish.....	125	2						
Salmon.....	1,160	234	23,565	6,629	6,500	1,700	20	4
Shad.....	2,394	65					2,220	67
Sharks.....							7,500	118
Smelt.....	57,750	8,664	93,776	15,957	64,120	13,124	9,600	1,280
Sturgeon.....							80	12
Suckers.....	16,900	1,052						
Tomcod.....	1,600	48	8,000	100	56,000	400		
Tuna or "horse mackerel".....	17,465	1,049					13,500	945
Wolfish.....	11,377	117					14,227	189
Yellow perch.....	38	4						
Lobsters.....	222,976	53,909	9,204	2,557	1,090,831	240,000	516,149	124,126
Clams: Soft, public.....	821,950	32,718	32,640	2,098	2,453,985	68,855	247,050	12,782
Periwinkles.....					8,000	560		
Total.....	3,713,648	150,169	783,035	31,850	28,843,625	431,506	3,453,646	216,156

NEW HAMPSHIRE

Fisheries of New Hampshire, 1931¹

OPERATING UNITS: BY GEAR

Item	Haul seines	Lines		Pots, lobster	Harpoons	Total, exclusive of duplication
		Hand	Trawl			
Fishermen:						
On boats and shore:						
Regular.....	Number 3	Number	Number 17	Number 52	Number 4	Number 60
Casual.....		36				36
Total.....	3	36	17	52	4	96
Boats:						
Motor.....	1		14	52	2	57
Other.....	1					1
Apparatus:						
Number.....	1	144	620	3,825	2	
Length, yards.....	100		144	31,000		
Hooks.....						

CATCH: BY GEAR

Species	Haul seines	Lines				Pots, lobster	Harpoons		
		Hand		Trawl					
		Pounds	Value	Pounds	Value				
Cod.....		36,400	\$732	23,600	\$808				
Cusk.....		3,500	35	13,360	134				
Flounders.....		7,280	218	200	4				
Haddock.....		145,600	5,824	95,130	3,805				
Hake.....		159,160	2,387	93,700	937				
Herring, sea.....	8,000	\$120							
Pollock.....		32,760	328	1,340	13				
Smelt.....		6,000	1,200						
Tuna or "horse mackerel".....		3,469	36	430	4				
Wolfish.....						2,000	\$140		
Lobsters.....						143,289	\$50,151		
Total.....	8,000	120	394,169	10,760	227,760	5,705	143,289		
						50,151	2,000		
							140		

¹ The fisheries of New Hampshire are confined to Rockingham County.

MASSACHUSETTS

Fisheries of Massachusetts, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets		Lines		Pound nets	Float- ing traps	Weirs
	Mack- erel	Other		Anchor	Drift	Hand	Trawl			
Fishermen:										
On vessels.....	No. 1,067	No.	No.	No. 204	No. 670	No. 207	No. 1,218	No.	No.	No.
On boats and shore:										
Regular.....	57	2	45	26	183	205	577	184	36	8
Casual.....			18	2		14	5			
Total.....	1,124	2	63	232	853	426	1,800	184	36	8
Vessels:										
Motor.....	94			23	73	19	71			
Net tonnage.....	3,106			416	1,709	557	3,686			
Sail.....						1				
Net tonnage.....						6				
Total vessels.....	94			23	73	20	71			
Total net tonnage.....	3,106			416	1,709	563	3,686			
Boats:										
Motor.....	12	1	9	16	87	122	212	58	14	2
Other.....	12	1	24	9	83	47	60	95	22	4
Accessory boats.....	78			7	98	14	556			
Apparatus:										
Number.....	106	1	19	1,373	9,316	533	47,936	132	20	6
Length, yards.....	50,318	150	3,055							
Square yards.....				487,803	3,097,864					
Hooks, baits, or snoods.....						759	2,383,422			

Item	Fyke nets	Dip nets	Push nets	Otter trawls	Box traps	Pots				Har- poons
						Crab	Eel	Lob- ster	Peri- winkle and cockle	
Fishermen:										
On vessels.....	No.	No.	No.	No. 2,430	No.	No.	No.	No. 9	No.	No. 948
On boats and shore:										
Regular.....	19	149	34	161	3	22	53	604	21	112
Casual.....	11	30	122				11	346		
Total.....	30	179	156	2,591	3	22	64	959	21	1,060
Vessels:										
Steam.....				21						
Net tonnage.....				3,133						
Motor.....				232				5		86
Net tonnage.....				9,491				30		3,160
Total vessels.....				253				5		86
Total net tonnage.....				12,624				30		3,160
Boats:										
Motor.....		25		69		22	39	728	12	44
Other.....	21	5	84				28	210	7	58
Accessory boats.....										193
Apparatus:										
Number.....	49	94	156	322	3	1,620	1,963	72,914	1,015	130
Yards at mouth.....				9,760						

Fisheries of Massachusetts, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Spears	Dredges			Tongs	Rakes	Forks	Hoes	By hand	Total, exclusive of duplication
		Clam	Oyster	Scallop						
Fishermen:	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
On vessels	37	11	66	4						4,403
On boats and shore:										
Regular	136	139	14	452	169	470	464	294	27	2,945
Casual	137			586	49	289	400	146	13	1,832
Total	273	176	25	1,104	218	763	864	440	40	9,180
Steam										21
Net tonnage										3,133
Motor	12	4	14			2				396
Net tonnage	103	45	176			11				15,224
Sail										1
Net tonnage										6
Total vessels	12	4	14		2					418
Total net tonnage	103	45	176		11					18,363
Boats:										
Motor	76	6	610	61	129	39	15			1,706
Other	134		2	173	601	212	174			1,619
Accessory boats	1									947
Apparatus:										
Number	273	88	20	3,228	218	762	864	440		
Yards at mouth	44	21	21	2,602						

CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets			
	Mackerel		Other				Anchor	Drift		
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	266,570	\$3,018			876,700	\$9,498			820	\$19
Bluefish	45	2			3,500	525	1,000	\$300	19,330	2,508
Butterfish	30,507	2,496					4,785	287	3,806	373
Cod							2,922,052	112,817	6,242	206
Cunner							349,151	15,581		
Cusk							5,899	88	302	4
Eels					32,000	800				
Flounders							1,870	77		
Haddock							2,835,370	75,894	3,960	180
Hake							507,736	9,070	3,690	46
Herring, sea	234,100	2,483			4,500	45			4,500	90
Mackerel	32,263,244	1,357,165			16,000	715	4,575	264	3,665,722	159,857
Pollock							1,674,515	20,575	550	5
Sand launce			1,200	\$24	240,000	2,450				
Shad	11,760	474			6,000	600	115,093	5,147	30	1
Sharks							12,010	113		
Striped bass					27,000	4,650				
White perch					7,000	910			1,500	270
Wolfish							176	2		
Yellow perch					8,840	1,623				
Total	32,806,226	1,365,638	1,200	24	1,221,540	21,816	8,434,232	240,215	3,710,452	163,559

Fisheries of Massachusetts, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines				Pound nets		Floating traps	
	Hand		Trawl					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives					185, 279	\$1, 648	17, 850	\$215
Bluefish	142, 400	\$13, 667			10, 392	957	323	80
Bonito					27, 035	2, 050		
Butterfish			703	\$193	497, 564	32, 423	72, 647	6, 452
Catfish and bullheads			37, 000	370				
Cod	1, 633, 126	43, 808	32, 367, 017	819, 980	91, 204	2, 490	18, 204	477
Cusk	63, 252	1, 059	4, 176, 435	71, 293				
Eels	13, 600	988			7, 550	396		
Flounders	24, 730	1, 255	733, 610	35, 528	32, 005	1, 399	25, 750	1, 038
Grayfish					42, 830	431		
Haddock	409, 370	14, 551	33, 920, 771	1, 164, 515				
Hake	93, 259	1, 245	4, 563, 917	81, 154				
Halibut	49, 838	6, 852	2, 097, 118	275, 348				
Herring, sea					2, 593, 999	33, 524	950, 170	12, 424
Mackerel	29, 500	1, 770			2, 489, 295	78, 552	556, 602	20, 540
Pollock	107, 592	1, 516	1, 388, 467	19, 148	9, 790	140	9, 542	92
Rosefish			26, 100	423				
Salmon							38	8
Scup or porgy	521, 000	21, 348			97, 332	4, 405		
Sea bass	93, 900	4, 835			6, 600	869		
Shad					10, 500	631	100	5
Sharks	360	7	2, 076	20	38, 774	277		
Skates			13, 700	162	2, 100	22		
Smelt	4, 100	895						
Squeteagues or "sea trout"								
Gray					400	32		
Spotted					2, 737	281		
Striped bass	5, 000	1, 000			1, 400	140		
Sturgeon			270	27				
Swordfish			691	170				
Tautog	159, 100	7, 059						
Tomcod					25, 261	1, 279	315	10
Tuna or "horse mackerel"					31, 900	319		
Whiting			79, 300	1, 563	63, 037	4, 108	670	47
Woffish	10, 725	393	414, 072	10, 724	4, 613, 530	40, 396	1, 433, 950	13, 033
Yellow perch			400	4				
Squid					350	28		
Total	3, 360, 852	122, 248	79, 821, 647	2, 480, 622	11, 964, 059	228, 644	3, 157, 261	56, 357

Species	Weirs		Fyke nets		Dip nets		Push nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives					774, 800	\$7, 254		
Bluefish	13, 000	\$1, 690						
Bonito	3, 700	283						
Butterfish	12, 680	958						
Cod	15, 042	410						
Eels			58, 000	\$4, 160				
Grayfish	1, 500	23						
Herring, sea	41, 200	824			4, 045, 000	46, 275		
Mackerel	124, 575	4, 047			286, 000	6, 540		
Minnows					1, 250	375		
Striped bass	2, 200	396			12, 000	2, 130		
Tautog	2, 125	106						
Tuna or "horse mackerel"	1, 500	120						
Whiting	701, 960	7, 020						
Shrimp					1, 000	925		
Squid	81, 195	1, 399					121, 950	\$31, 125
Scallops, bay								
Total	1, 000, 677	17, 276	58, 000	4, 160	5, 120, 050	63, 499	121, 950	31, 125

Fisheries of Massachusetts, 1931—Continued

CATCH: BY GEAR—Continued

Species	Otter trawls		Box traps		Pots			
					Crab		Eel	
	Pounds	Value	Pounds 90,000	Value \$450	Pounds	Value	Pounds	Value
Alewives.....								
Bluefish.....	1,049	\$81						
Butterfish.....	110,321	8,116						
Carp.....	855	43						
Cod.....	36,225,036	935,102						
Croaker.....	498,493	15,480						
Cunner.....	600	14						
Cusk.....	821,012	15,959						
Drum:								
Black.....	880	10						
Red.....	433	7						
Eels.....	10,094	130					189,500	\$12,591
Flounders.....	24,902,106	1,002,357						
Goosefish.....	150	2						
Haddock.....	113,261,700	3,301,472						
Hake.....	4,992,548	100,056						
Halibut.....	629,930	89,025						
Herring, sea.....	5,700	142						
Hogfish.....	10,749	216						
Kingfish or "king mackerel".....	199	5						
King whiting or "king-fish".....	3,074	101						
Mackerel.....	22,963	952						
Mullet.....	223	13						
Pollock.....	4,729,989	71,842						
Rosefish.....	197,312	2,466						
Scup or porgy.....	1,334,535	32,709						
Sea bass.....	670,649	16,649						
Sea robin.....	150	4						
Shad.....	6,995	278						
Sharks.....	6,588	91						
Skates.....	37,290	284						
Smelt.....	680	34						
Spot.....	40	1						
Squeteagues or "sea trout", gray.....	149,567	6,310						
Sturgeon.....	5,124	691						
Swordfish.....	254	55						
Tuna or "horse mackerel".....	247	25						
White perch.....	25	1						
Whiting.....	101,659	2,517						
Wolfish.....	1,635,094	30,892						
Crabs, hard.....					168,560	\$21,699		
Lobsters.....	4	1						
Squid.....	20,631	427						
Scallops, sea.....	1,060	112						
Total.....	190,396,008	5,634,672	90,000	450	168,560	21,699	189,500	12,591

Species	Pots—Continued				Harpoons		Spears	
	Lobster		Periwinkle and cockle					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds 67,450	Value \$4,704
Eels.....								
Sharks.....					2,940	\$51		
Swordfish.....					2,156,875	421,641		
Crabs, hard.....	40,596	\$7,051						
Lobsters.....	2,245,749	627,197						
Clams: Cockle.....			38,862	\$6,939				
Periwinkles.....			14,400	1,950				
Total.....	2,286,345	634,248	53,262	8,889	2,159,815	421,692	67,450	4,704

Fisheries of Massachusetts, 1931—Continued

CATCH: BY GEAR—Continued

Species	Dredges						Tongs	
	Clam		Oyster		Scallop			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:								
Hard, public	1,013,088	\$122,354					362,274	\$49,651
Hard, private							66,825	15,225
Mussels	26,851	4,914						
Oysters:								
Market, public, spring							1,312	400
Market, private, spring			64,654	\$28,747			68,245	31,355
Market, private, fall			48,112	20,296			86,444	38,790
Seed, private, spring							52,500	2,400
Scallops:								
Bay					1,451,641	\$357,586		
Sea					492,603	57,323		
Total	1,039,939	127,268	112,766	49,043	1,944,244	414,909	637,600	137,821

Species	Rakes		Forks		Hoes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:								
Hard, public	1,205,572	\$169,348	49,147	\$4,408				
Hard, private	231,000	29,750						
Razor			32,000	1,500	436,992	\$19,882		
Soft			2,731,550	269,362	937,892	93,400		
Surf or skimmers			35,700	3,150			34,000	\$2,000
Periwinkles							2,700	450
Scallops, bay							16,200	4,140
Irish moss	89,250	4,969						
Bloodworms			55,321	49,790				
Sandworms			52,864	35,690				
Total	1,525,822	204,067	2,956,582	363,900	1,374,884	113,282	52,900	6,590

OPERATING UNITS: BY COUNTIES

Item	Barnstable	Bristol	Dukes	Essex	Nantucket	Norfolk	Plymouth	Suffolk
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels	141	196	35	1,968	102		3	1,958
On boats and shore:								
Regular	854	295	184	651	72	69	253	567
Casual	496	131	117	381	104	118	371	114
Total	1,491	622	336	3,000	278	187	627	2,639
Vessels:					1			
Steam					184			20
Net tonnage								2,949
Motor	27	28	7	155	26		1	152
Net tonnage	350	709	96	6,765	289		10	7,005
Sail	1							
Net tonnage	6							
Total vessels	28	28	7	156	26		1	172
Total net tonnage	356	709	96	6,949	289		10	9,954
Boats:								
Motor	463	225	166	303	89	35	270	155
Other	563	185	137	388	59	30	207	50
Accessory boats	30	9	16	593	4			295
Apparatus:								
Purse seines:								
Mackerel	3	5		68				30
Length, yards	1,400	638		33,280				15,000
Other	1							
Length, yards	150							
Haul seines	7	1	4	5			2	
Length, yards	1,535	120	990	360			50	

Fisheries of Massachusetts, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Barnstable	Bristol	Dukes	Essex	Nantucket	Norfolk	Plymouth	Suffolk
Apparatus—Continued								
Gill nets:	<i>Number</i>	Number	Number	Number	Number	Number	Number	Number
Anchor	14			1,305				54
Square yards	6,560			480,203				1,040
Drift	1,494	230	265	5,002	16	7	27	2,275
Square yards	434,860	66,000	85,860	1,742,140	5,184	1,680	9,240	752,900
Lines:								
Hand	68	176	24	175		15	13	62
Hooks	80	348	24	214		15	13	65
Trawl	3,864		240	22,896	60		480	20,396
Hooks	193,200		7,800	1,154,124	2,100		17,280	1,008,918
Pound nets	91	18	14		4		5	
Floating traps	7			13				
Weirs	6							
Fyke nets	36	7	6					
Dip nets	16			49		2	12	15
Push nets	140				16			
Otter trawls	48	30	19	72	25			128
Yards at mouth	1,445	1,005	495	2,225	710			3,880
Box traps							3	
Pots:								
Crab						60	35	1,525
Eel							15	
Lobster	790	170	418	50	520			
Periwinkle and cockle	9,420	16,203	8,826	18,996	1,383	2,639	12,991	2,456
Harpoons	705			150			160	
Spears	16	25	16	59	2			12
Dredges:								
Clam	101	37	4	15		40	76	
Yards at mouth	34	22	7		18		5	2
Oyster	17	9	3		9		2	4
Yards at mouth	18						2	
Scallop	18						3	
Yards at mouth	862	501	613		496		756	
Tongs	683	447	513		337		622	
Rakes	375	88	117		20		48	
Forks	42	5		480		140	12	185
Hoes	126			192		20	102	

CATCH: BY COUNTIES

Fisheries of Massachusetts, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Barnstable		Bristol		Dukes		Essex	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Sand launce	1,200	\$24					240,000	\$2,450
Scup or porgy	41,170	2,122	547,692	\$21,340	84,562	\$3,885	845,207	22,204
Sea bass	8,100	1,004	173,558	8,271	1,900	168	399,919	8,957
Shad	7,300	407					139,603	6,489
Sharks	2,160	37	34,454	145			16,854	188
Skates	100	2	2,000	20			100	1
Smelt							1,600	520
Spot							40	1
Squeteagues or "sea trout":							94,075	4,084
Gray	400	32	7,143	469				
Spotted	237	23	2,000	200	500	58		
Striped bass	33,600	5,886			2,000	300	12,000	2,130
Sturgeon			585	47			2,736	462
Swordfish	286,825	42,915	133,140	22,190	183,510	19,293	1,366,046	299,408
Tautog	38,700	2,018	128,308	5,348	9,478	478	315	10
Tomcod			31,900	319				
Tuna or "horse mackerel"	62,962	4,118			1,575	110	917	72
White perch	1,500	270			7,000	910	25	1
Whiting	5,720,168	53,132	360	4	3,900	39	657,600	5,295
Wolfish	59,548	1,008	40,952	726			429,605	9,343
Yellow perch			350	28	8,840	1,623	400	4
Crabs, hard							29,680	4,911
Lobsters	272,992	78,718	288,840	75,952	283,103	68,109	668,007	194,864
Shrimp	1,000	925						
Squid	1,113,080	23,082	24,050	255	61,230	1,016	39,345	873
Clams:								
Cockle	16,758	3,063					5,184	1,056
Hard, public	1,124,304	145,216	614,900	86,813	255,122	36,058	49,147	4,408
Hard, private	66,825	15,225	231,000	29,750				
Razor	347,392	16,522					32,000	1,500
Soft	102,200	12,400	4,250	560			2,440,692	240,352
Surf or skimmers							35,700	3,150
Oysters:								
Market, private, spring	124,315	58,140						
Market, private, fall	122,586	56,475	4,375	875				
Periwinkles	11,700	1,950						
Scallops:								
Bay	819,460	209,422	180,500	34,555	258,750	64,760		
Sea	87,000	11,925	391,833	43,568	900	100		
Bloodworms							6,811	6,130
Sandworms							13,622	9,200
Total	30,741,923	1,296,541	18,527,367	917,605	3,640,569	274,859	116,631,375	4,429,807

Species	Nantucket		Norfolk		Plymouth		Suffolk	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives								
Bluefish	3,000	\$300						
Bonito	8,100	648						
Butterfish	1,685	114			22,600	1,356	81,527	6,239
Carp							520	30
Cod	1,040,615	30,587	13,200	360	139,590	3,807	40,705,452	1,054,258
Croaker	12,994	491					148,929	4,238
Cunner							600	14
Cusk							2,853,393	51,845
Drum:								
Black							124	2
Red							213	3
Eels	66,000	4,290	16,000	1,120	19,700	1,379	9,844	109
Flounders	3,541,542	152,795	3,500	125	6,000	300	8,900,493	380,506
Grayfish	7,000	72						
Haddock	1,274,900	37,992			14,630	665	94,424,177	2,842,283
Hake	18,377	308					6,253,765	125,775
Halibut	5,060	711					669,427	95,746
Herring, sea					892,755	6,695	3,000,000	37,500
Hogfish							4,382	79
Kingfish or "king mackerel"							169	4
King whiting or "kingfish"							985	30
Mackerel	43,200	1,470	2,500	125	35,370	1,645	10,269,908	421,651
Pollock	11,000	150			1,320	24	4,360,340	64,643
Rosefish							175,350	2,517
Scup or porgy	10,784	432					423,452	8,479
Sea bass	3,199	161					184,473	3,792
Sea robin							150	4
Shad	3,200	224					375	16

Fisheries of Massachusetts, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Nantucket		Norfolk		Plymouth		Suffolk	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Sharks.....	2,160	\$95					7,120	\$94
Skates.....			2,500	\$375			50,890	445
Smelt.....							680	34
Squeteagues or "sea trout", gray.....	6,815	258					41,534	1,499
Sturgeon.....							2,073	209
Swordfish.....	30,240	4,896					158,059	33,164
Tautog.....					10,000	\$600		
Whiting.....	1,500	30			367,162	1,987	179,709	4,042
Wolfish.....							1,529,962	30,934
Crabs, hard.....			8,320	1,560	7,416	1,525	163,740	20,754
Lobsters.....	32,073	8,858	110,136	30,382	501,843	143,315	88,759	27,000
Squid.....	8,815	174			100	3	9,501	206
Clams:								
Cockle.....					16,920	2,820		
Hard, public.....	451,308	54,816			135,300	18,450		
Razor.....					89,600	3,360		
Soft.....			331,500	32,500	210,800	18,450	580,000	58,500
Surf or skimmers.....					34,000	2,000		
Mussels.....							26,851	4,914
Oysters:								
Market, public, spring.....					1,312	400		
Market, private, spring.....					8,584	1,962		
Market, private, fall.....					7,595	1,736		
Seed, private, spring.....					52,500	2,400		
Periwinkles.....					5,400	450		
Scallops:								
Bay.....	223,956	56,244			107,125	27,870		
Sea.....	11,070	1,380			2,700	450	160	12
Irish moss.....					89,250	4,969		
Bloodworms.....			37,777	34,000			10,733	9,660
Sandworms.....			17,777	12,000			21,465	14,490
Total.....	6,818,593	357,496	558,210	112,697	3,524,372	255,522	175,391,414	5,306,481

RHODE ISLAND

Fisheries of Rhode Island, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines, mackerel	Haul seines	Gill nets		Lines		Pound nets	Floating traps
			Drift	Run- around	Hand	Trawl		
Fishermen:								
On vessels.....	Number 4	Number	Number 8	Number	Number 38	Number 25	Number	Number
On boats and shore:								
Regular.....	3	19	2	24	167	30	40	175
Casual.....		30			20		2	
Total.....	7	49	10	24	225	55	42	175
Vessels:								
Motor.....	1		3		17	10		
Net tonnage.....	7		30		125	71		
Boats:								
Motor.....	1	7	1	4	118	17	13	25
Other.....	1	13	1	11	45		33	63
Accessory boats.....			4			7		
Apparatus:								
Number.....	2	16	126	11	373	1,562	54	63
Length, yards.....	320	2,075						
Square yards.....			44,640	13,100				
Hooks, baits, or snoods.....					539	75,380		

Fisheries of Rhode Island, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Fyke nets	Dip nets	Push nets	Otter trawls	Pots			Har- poons	Spears
					Eel	Lob- ster	Peri- winkle and cockle		
Fishermen:	Number	Number	Number	Number	117	Number	Number	Number	Number
On vessels						42		89	
On boats and shore:									
Regular	18	28	2	53	29	308	25	51	27
Casual			4	2	8	76	2		6
Total	18	28	6	172	37	426	27	140	33
Vessels:									
Motor					46		18		31
Net tonnage					406		127		252
Boats:									
Motor	11	14		35	23	257	22	31	6
Other	7		6		15	71		31	17
Accessory boats:									
Apparatus:									
Number	154	28	6	81	1,839	40,777	1,690	62	33
Yards at mouth				2,230					

Item	Dredges			Tongs	Rakes	Forks	Hoes	By hand	Total, exclusive of dupli- cation
	Clam	Oyster	Scallop						
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels	19	69							233
On boats and shore:									
Regular	7		110	277	76	10	5	13	822
Casual	6		88	212	10	20	8	18	416
Total	32	69	198	489	86	30	13	31	1,471
Vessels:									
Steam		3							3
Net tonnage		126							126
Motor	6	13							77
Net tonnage	68	237							793
Total vessels	6	16							80
Total net tonnage	68	363							919
Boats:									
Motor	4		110	140	19				513
Other				353	46		13		573
Accessory boats:									42
Apparatus:									
Number	11	32	573	489	86	30	13		
Yards at mouth	5	47	442						

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets			
	Pounds	Value	Pounds	Value	Drift	Run-around	Pounds	Value
Bluefish								
Butterfish								
Eels			60,210	5,197				
Flounders			300	18				
Mackerel	157,500	\$5,561			86,000	2,435		
Smelt			9,500	1,900				
Squeteague or "sea trout," gray			6,500	780	1,000	120	800	96
Striped bass			2,000	400				
Tautog			2,000	120				
Tomcod			1,200	24				
Total	157,500	5,561	93,710	9,519	96,000	3,455	35,000	4,176

Fisheries of Rhode Island, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines				Pound nets		Floating traps	
	Hand		Trawl		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
Albacore					85,196	\$658	1,900	\$38
Alewives	3,700	\$338			1,600	113	41,532	424
Bluefish							62,591	5,741
Bonito							21,485	1,262
Butterfish					158,100	8,053	592,600	30,864
Cod	581,427	22,823	135,387	\$5,488	143	4	149,380	4,053
Cunner					1,000	40		
Eels	13,411	1,240			59,950	3,911	1,093	75
Flounders			1,400	70	36,450	2,028	263,898	12,701
Frigate mackerel							1,200	20
Haddock	16,910	601	295,076	11,234			6,633	241
Hake	9,330	194	2,950	70			9,565	160
Herring, sea					160,900	3,058	74,255	1,109
Mackerel	4,500	225			172,900	4,620	1,002,250	31,140
Menhaden					1,900	27	1,577	16
Pollock	35,697	581	2,820	42			44,014	683
Scup or porgy					11,400	426	1,166,000	56,810
Sea bass							41,938	2,619
Sea robin					5,600	86	95,600	1,170
Shad					10,440	592	7,530	501
Skates	4,500	90	5,000	50	5,000	50	2,981	30
Smelt					1,340	268		
Squeteague or "sea trout", gray	400	40			15,950	1,242	27,500	2,358
Striped bass	550	110			850	173	35,626	4,980
Sturgeon							200	22
Tautog	134,000	6,784			51,050	2,158	40,700	1,673
Tomcod					3,000	45		
Tuna or "horse mackerel"	29,700	2,458					71,225	5,697
White perch					2,376	119		
Whiting					49,100	538	895,200	13,062
Yellow perch					2,800	302		
Squid					102,900	1,950	1,393,800	27,388
Total	834,125	35,484	442,633	16,954	939,945	30,461	6,052,273	204,835

Species	Fyke nets		Dip nets		Push nets		Otter trawls	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod							38,675	\$1,336
Cunner			102,000	\$3,450				
Eels	13,200	\$792						
Flounders	41,500	1,573						
Haddock							5,740,942	128,906
Hake							33,720	1,197
Sharks							21,250	355
Skates							3,000	30
Tautog	20,900	838					596,790	5,350
Whiting								
Scallops, bay					315	\$88	60,650	1,113
Total	75,600	3,203	102,000	3,450	315	88	6,495,027	138,287

Species	Pots						Harpoons			
	Eel		Lobster		Periwinkle and cockle					
	Pounds	Value	Pounds	Value	Pounds	Value				
Eels	128,076	\$8,823								
Swordfish			154,667	\$7,490			456,158	\$74,439		
Crabs, hard			1,259,173	269,231						
Lobsters			15,300	850	81,918	\$5,216				
Clams: Cockle			16,200	900	70,200	4,350				
Periwinkles										
Total	128,076	8,823	1,445,340	278,471	152,118	9,566	456,158	74,439		

Fisheries of Rhode Island, 1931—Continued

CATCH: BY GEAR—Continued

Species	Spears		Dredges							
			Clam		Oyster		Scallop			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels	26,723	\$2,369								
Clams:										
Hard, public			28,615	\$6,398						
Hard, private			114,224	22,568						
Oysters:										
Market, private, spring			322	60	1,076,302	\$232,907				
Market, private, fall					1,335,104	306,057				
Market, public, fall			1,350	200						
Scallops, bay									107,393	\$35,183
Total	26,723	2,369	144,511	29,226	2,411,406	538,964	107,393	35,183		

Species	Tongs		Rakes		Forks		Hoes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:										
Hard, public	1,268,531	\$198,134	153,945	\$24,792						
Soft, public					9,000	\$1,800	10,748	\$1,405		
Oysters:										
Market, private, fall	2,187	438								
Seed, public, spring									2,322	\$172
Seed, public, fall									40,420	3,593
Total	1,270,718	198,572	153,945	24,792	9,000	1,800	10,748	1,405	42,742	3,765

OPERATING UNITS: BY COUNTIES

	Item		Bristol	Kent	Newport	Provi-dence	Washing-ton
	Number	Number	Number	Number	Number	Number	Number
Fishermen:							
On vessels	35	12					
On boats and ashore:							
Regular	94	190					
Casual	67	119	354	23			
Total	196	321	561	132			
Vessels:							
Steam						3	
Net tonnage						126	
Motor	10	3	50	4			
Net tonnage	134	34	445	96			
Total vessels	10	3	50	7			
Total net tonnage	134	34	445	222			
Boats:							
Motor	50	137	189	24			
Other	74	190	165	57			
Accessory boats			38	1			
Apparatus:							
Purse seines, mackerel			2				
Length, yards			320				
Haul seines	1	2	1	8			
Length, yards	100	150	100	605			
Gill nets:							
Drift		2	124				
Square yards		2,400	42,240				
Runaround			10				
Square yards			2,100				
Lines:							
Hand	7	4	266	11			
Hooks	14	2	353	2			
Trawl			1,442				
Hooks			69,380				
Pound nets	1		34	1			
Floating traps			46				
Fyke nets	8	41	100				
Dip nets	6		28				
Push nets	1		55				
Otter trawls	25	30	1,540				
Yards at mouth				24			
				6,000			
				18			
				17			
				5			

Fisheries of Rhode Island, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Bristol	Kent	Newport	Providence	Washington
	Number	Number	Number	Number	Number
Apparatus—Continued					
Pots:					
Eel	220	455	232	177	755
Lobster	3,512	1,925	23,380	350	11,610
Periwinkle and cockle	540	—	775	—	375
Harpoons	—	—	54	2	6
Spears	1	11	—	11	10
Dredges:					
Clam	1	7	3	—	—
Yards at mouth	1	3	1	—	—
Oyster	16	2	—	10	4
Yards at mouth	23	3	—	15	6
Scallop	52	319	74	8	120
Yards at mouth	43	246	54	6	93
Tongs	97	226	39	63	64
Rakes	—	40	31	—	15
Forks	—	—	—	—	30
Hoes	7	—	—	6	—

CATCH: BY COUNTIES

Species	Bristol		Kent		Newport		Providence		Washington	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore	—	—	—	—	1,900	\$38	—	—	—	—
Alewives	22,176	\$56	—	—	69,432	608	1,620	\$20	33,500	\$398
Bluefish	—	—	7,000	\$700	85,491	8,805	—	—	28,600	2,547
Bonito	—	—	—	—	20,885	1,226	—	—	600	36
Butterfish	—	—	2,000	200	650,850	33,805	—	—	99,850	5,110
Cod	2,576	126	—	—	793,971	28,450	—	—	108,465	5,128
Cunner	—	—	—	—	103,000	3,490	—	—	—	—
Eels	9,359	907	47,031	3,729	80,450	4,961	82,873	7,540	82,950	5,270
Flounders	42,712	1,310	36,430	1,627	4,454	548	97,240	—	1,550,800	45,119
Frigate mackerel	—	—	—	—	—	—	—	—	1,200	20
Haddock	—	—	—	—	351,239	13,223	—	—	1,100	50
Hake	—	—	—	—	22,395	434	—	—	20,700	345
Herring, sea	—	—	—	—	216,155	3,894	—	—	19,000	273
Mackerel	—	—	—	—	1,296,650	40,496	—	—	126,500	3,485
Menhaden	—	—	—	—	1,977	20	—	—	1,500	23
Pollock	—	—	—	—	50,411	813	—	—	32,120	493
Scup or porgy	—	—	—	—	1,117,300	54,832	—	—	60,100	2,404
Sea bass	—	—	—	—	41,838	2,612	—	—	100	7
Sea robin	—	—	—	—	82,900	1,048	—	—	18,300	208
Shad	5,040	322	—	—	7,230	465	5,400	270	300	36
Sharks	—	—	—	—	3,000	30	—	—	—	—
Skates	—	—	—	—	238,781	2,703	—	—	375,490	2,867
Smelt	—	—	—	—	340	68	—	—	10,500	2,100
Squetague or "sea trout", gray	—	—	1,400	160	16,950	1,415	—	—	33,800	3,061
Striped bass	—	—	—	—	34,676	4,853	—	—	4,350	810
Sturgeon	—	—	—	—	200	22	—	—	—	—
Swordfish	—	—	—	—	425,718	69,696	6,200	651	24,240	4,092
Tautog	10,300	602	20,800	832	131,700	6,085	1,000	58	84,850	3,996
Tomcod	—	—	—	—	3,000	45	—	—	1,200	24
Tuna or "horse mackerel"	—	—	—	—	100,925	8,155	—	—	—	—
White perch	2,376	119	—	—	—	—	—	—	—	—
Whiting	—	—	—	—	829,950	12,238	—	—	175,000	2,475
Yellow perch	—	—	—	—	2,800	302	—	—	—	—
Crabs, hard	124,667	3,740	—	—	30,000	3,750	—	—	—	—
Lobsters	41,811	14,735	28,948	7,554	937,036	192,738	4,644	1,297	246,734	52,907
Squid	—	—	—	—	990,700	19,734	—	—	506,000	9,604
Clams:	—	—	—	—	—	—	—	—	—	—
Cockle	—	—	—	—	61,020	4,053	—	—	36,198	2,013
Hard, public	204,512	27,887	925,892	149,197	100,665	15,990	69,322	9,625	150,700	26,625
Hard, private	66,000	13,050	48,224	9,518	—	—	—	—	—	—
Soft, public	5,148	617	—	—	—	—	5,600	788	9,000	1,800
Oysters:	—	—	—	—	—	—	—	—	—	—
Market, private, spring	520,858	84,754	81,633	15,118	—	—	212,728	64,828	261,405	68,267
Market, private, fall	607,824	100,151	48,074	8,903	—	—	425,456	132,656	255,937	64,785
Market, public, fall	—	—	1,350	200	—	—	—	—	—	—
Seed, public, spring	2,322	172	—	—	—	—	—	—	—	—
Seed, public, fall	40,420	3,593	—	—	—	—	—	—	—	—
Periwinkles	54,000	3,000	—	—	32,400	2,250	—	—	—	—
Scallops, bay	11,079	2,210	49,253	16,345	22,950	8,638	576	128	23,850	7,950
Total	1,773,180	257,351	1,298,035	214,083	13,411,433	649,225	815,419	217,861	4,384,939	324,328

CONNECTICUT

Fisheries of Connecticut, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets		Lines	
	Mack- erel	Other		Drift	Stake	Hand	Trawl
	Number	Number		Number	Number	Number	Number
Fishermen:							
On vessels	13	15				31	45
On boats and shore:							
Regular	6		11	8	2	70	4
Casual	10		151	94	3	51	8
Total	29	15	162	102	5	152	57
Vessels:							
Motor	4	1				9	3
Boats: Net tonnage	35	47				116	122
Motor	111		3	44	1	72	6
Other			44	7	2	5	
Accessory boats		6				3	26
Apparatus:							
Number	6	1	68	51	10	318	912
Length, yards	642	400	3,646				
Square yards				125,023	4,360		
Hooks, baits, or snoods						381	43,056
Item	Pound nets	Fyke nets	Dip nets	Otter trawls	Pots		
	Number	Number	Number	Number	Crab	Eel	Lobster
				494			
Fishermen:							
On vessels							
On boats and shore:							
Regular	16	7	3	82		22	133
Casual	6	28	42	35	1	46	134
Total	22	35	45	611	1	68	276
Vessels:							
Steam				17			
Net tonnage				3,282			
Motor				47			
Net tonnage				620			
Total vessels				64			
Total net tonnage				3,902			
Boats:							
Motor	2	2	1	66			
Other	10	25	23		1	56	
Accessory boats	5	1					
Apparatus:							
Number	18	128	45	130	12	1,689	20,048
Yards at mouth				3,413			
Item	Spears	Dredges, oyster	Tongs	Rakes	Forks	Hoes	By hand
	Number	Number	Number	Number	Number	Number	Number
		246	2				
Fishermen:							
On vessels							
On boats and shore:							
Regular	15	24	112	19	7	2	8
Casual	47	8	71	22	3	6	2
Total	62	278	185	41	10	8	10
Vessels:							
Steam			7				
Net tonnage		1,117					
Motor		50	1				
Net tonnage		708	6				
Sail		3					
Net tonnage		25					
Total vessels		60	1				
Total net tonnage		1,850	6				
Boats:							
Motor	7	19	9		1		
Other	50		171	39	6	8	1
Accessory boats							
Apparatus:							
Number	62	284	185	41	10	8	
Yards at mouth		276					

Fisheries of Connecticut, 1931—Continued

CATCH: BY GEAR

Species	Purse seines						Gill nets			
	Mackerel		Other				Haul seines		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives					3,000	\$77				
Carp					6,350	756				
Mackerel	407,850	\$11,507								
Minnows					21,895	9,055	240	\$240		
Mummichog					1,300	351				
Scup or porgy			52,258	\$916						
Shad					21,239	3,263	53,159	9,956		
Smelt					2,150	443				
Squeteague or "sea trout," gray			323	15						
Suckers					36,750	2,144				
Tomecod					2,000	200				
Total	407,850	11,507	52,581	931	94,684	16,289	53,399	10,196	11,933	1,343

Species	Lines				Pound nets		Fyke nets		Dip nets	
	Hand		Trawl							
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives					2,916	\$44				
Bluefish	399,164	\$32,447			8,364	783				
Bonito	371	19								
Butterfish					12,295	1,011				
Carp							250	36		
Catfish and bullheads							5,313	563		
Cod	76,237	1,322	423,779	\$6,560			400	20		
Cunner	100	20								
Eels			24,238	833	3,711	431	11,144	1,342		
Flounders					16,943	1,319				
Haddock			437,500	7,000						
Hake			132,613	2,152						
King whiting or "king-fish"						15	2			
Mackerel						2,275	74			
Menhaden						1,700	17			
Minnows									950	500
Pike or pickerel							400	42		
Pollock	7,500	28	62,500	1,000						
Scup or porgy	4,200	188			660	24				
Sea bass	130,000	5,010			98	15				
Sea robin					1,300	13				
Shad									716	88
Skates			4,226	50	1,200	6				
Squeteagues or "sea trout", gray	71	8			24,000	2,375	125	18		
Striped bass	1,900	228			1,841	269				
Suckers							69,825	3,560		
Tautog	41,431	2,239			7,475	362				
Tilefish			1,636,943	65,044						
Tuna or "horse mackerel"	8,800	380								
White perch							100	5		
Yellow perch							700	25		
Crabs:										
Hard									16,667	1,656
Soft									2,240	792
Squid					5,600	81				
Total	669,774	41,899	2,721,799	\$2,639	90,393	6,826	101,505	5,887	28,173	3,264

Fisheries of Connecticut, 1931—Continued

CATCH: BY GEAR—Continued

Species	Otter trawls		Pots							
			Crab		Eel		Lobster			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	720	\$15								
Butterfish.....	6,981	426								
Catfish and bullheads.....	14,836	305								
Cod.....	5,129,150	122,024								
Cusk.....	38,031	799								
Druir red.....	189	2								
Eels.....	3,055	71					81,100	\$8,417		
Flounders.....	8,680,694	194,593								
Goosefish.....	12,400	62								
Haddock.....	17,983,985	454,256								
Hake.....	437,692	8,432								
Halibut.....	55,638	8,952								
King whiting or "kingfish".....	897	27								
Mackerel.....	20,562	438								
Pollock.....	708,080	8,588								
Rosefish.....	4,090	72								
Scup or porgy.....	8,387	259								
Sea bass.....	68,902	1,735								
Sea robin.....	27,370	283								
Sharks.....	245	5								
Skates.....	193,770	1,469								
Squteagues or "sea trout", gray.....	3,604	130								
Sturgeon.....	31	9								
Taufog.....	1,200	48								
Whiting.....	129,100	2,322								
Wolfish.....	36,885	664								
Crabs, hard.....			500	\$15						
Lobsters.....	30	12							497,464	\$138,156
Squid.....	1,908	38								
Periwinkles.....									6,120	170
Scallops, sea.....	423	49								
Total.....	33,568,855	806,085	500	15	81,100	8,417	503,584	138,326		

Species	Harpoons		Spears		Dredges, oyster		Tongs	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....								
Swordfish.....	253,738	\$24,882	48,441	\$5,613				
Clams:								
Hard, public.....								
Hard, private.....							97,649	\$31,079
Oysters:							1,100	350
Market, public, spring.....					417	\$31	22,380	2,544
Market, public, fall.....					924	68	23,702	2,613
Market, private, spring.....					547,491	57,937	8,069	2,697
Market, private, fall.....					771,501	93,392	4,602	1,335
Seed, public, spring.....					270,908	30,068	59,560	5,919
Seed, public, fall.....					324,403	29,969	316,572	28,608
Seed, private, spring.....					3,565,257	412,175	84,899	8,592
Seed, private, fall.....					832,897	123,554	27,149	2,600
Total.....	253,738	24,882	48,441	5,613	6,313,798	747,194	645,682	86,337

Species	Rakes		Forks		Hoes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:								
Hard, public.....	21,101	\$6,719						
Soft, public.....			43,200	\$5,085	14,000	\$1,901		
Oysters:								
Market, public, spring.....	178	25					910	\$155
Market, public, fall.....	1,247	250					910	190
Seed, public, spring.....	3,938	383					3,125	347
Seed, public, fall.....	16,875	1,750	51	225			17,125	1,522
Bloodworms.....								
Total.....	43,339	9,127	43,251	5,310	14,000	1,901	22,070	2,214

Fisheries of Connecticut, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Fairfield	Hartford	Middlesex	New Haven	New London
	Number	Number	Number	Number	Number
Fishermen:					
On vessels	151			156	483
On boats and shore:					
Regular	142	2	31	40	117
Casual	43	136	129	123	190
Total	336	138	160	319	790
Vessels:					
Steam	4			4	16
Net tonnage	298			1,027	3,074
Motor	35			30	38
Net tonnage	474			457	542
Sail	3				
Net tonnage	25				
Total vessels	42			34	54
Total net tonnage	797			1,484	3,616
Boats:					
Motor	50	2	73	60	147
Other	137	40	45	69	72
Accessory boats				1	1
Apparatus:					
Purse seines:					
Mackerel					6
Length, yards					642
Other					1
Length, yards					400
Haul seines	1	39	9	11	8
Length, yards	85	2,229	958	125	249
Gill nets:					
Drift		1	42		8
Square yards		2,100	105,017		17,906
Stake			10		
Square yards			4,360		
Lines:					
Hand	16		73	41	188
Hooks	32		76	43	230
Trawl					912
Hooks					43,056
Pound nets				1	16
Fyke nets		92	10	5	21
Dip nets		19	1		25
Otter trawls	13		16	14	87
Yards at mouth	287		286	307	2,533
Pots:					
Crab			12		
Eel	150	22	382	83	1,052
Lobster	4,410	50	1,500	3,540	10,548
Harpoons	1		1	1	16
Spears	11		2	19	30
Dredges, oyster	201			83	
Yards at mouth	178			98	
Tongs	125		15	39	6
Rakes	38				3
Forks				7	1
Hoes			3		5

CATCH: BY COUNTIES

Species	Fairfield		Hartford		Middlesex		New Haven		New London	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	720	\$15	20,848	\$504	2,000	\$45			3,916	\$76
Bluefish					53,864	5,809	24,124	\$2,982	329,540	24,439
Bonito									371	19
Butterfish	836	32			200	14	1,750	141	16,740	1,286
Carp			6,138	801	16,783	1,834	175	12	500	15
Catfish and bullheads					400	20	10,255	216	4,581	89
Cod	3,289	230					194,960	6,277	5,430,917	123,399
Cunner							100	20		

Fisheries of Connecticut, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Fairfield		Hartford		Middlesex		New Haven		New London	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds 8,975	Value \$263	Pounds 29,056	Value \$536
Cusk										
Drum, red	189	\$2								
Eels	22,429	3,001	8,111	\$920	40,792	\$4,387	11,034	1,200	89,323	7,199
Flounders	337,389	17,705			147,722	3,402	676,425	16,435	7,536,101	158,370
Goosefish									12,400	62
Haddock							778,970	26,497	17,642,515	434,759
Hake	19,603	339					109,400	3,408	441,302	6,837
Halibut							4,547	1,032	51,091	7,920
King whiting or “kingfish”	897	27							15	2
Mackerel							6,500	49	424,187	11,970
Menhaden									1,700	17
Minnows			10,585	6,145	6,400	1,000	6,100	2,650		
Mummichog							200	200	1,100	151
Pike or pickerel			300	39					100	3
Pollock							18,600	343	759,480	9,283
Rosefish							4,090	72		
Scup or porgy	1,587	59							63,918	1,328
Sea bass	67,302	2,037					4,000	160	127,698	4,563
Sea robin	370	3							28,300	293
Shad			21,631	3,344	45,035	8,053			8,448	1,910
Sharks									245	5
Skates	10,036	100					4,450	18	184,710	1,407
Smelt	500	200							1,650	243
Sqeueagues or “sea trout”, gray	3,604	130			71	8	2,625	178	21,823	2,230
Striped bass									3,741	497
Sturgeon									31	9
Suckers			66,600	3,706	36,000	1,880	175	12	3,800	106
Swordfish	20,846	2,500			2,360	319	1,500	90	229,032	21,973
Tautog	2,024	203			12,769	755	1,860	208	33,453	1,483
Tilefish									1,636,943	65,044
Tomcod	2,000	200								
Tuna or “horse mackerel”									8,800	380
White perch									100	5
Whiting							11,300	363	117,800	1,959
Wolfish									36,885	664
Yellow perch					200	10			500	15
Crabs:										
Hard					540	24			16,627	1,647
Soft									2,240	792
Lobsters	96,650	33,773	300	90	53,426	14,995	91,706	27,878	255,412	61,432
Squid	1,908	38							5,600	81
Clams:										
Hard, public	99,132	31,543					18,338	5,925	1,280	330
Hard, private	1,100	350								
Soft, public					38,700	4,023	11,000	1,775	7,500	1,188
Oysters:										
Market, public, spring							9,404	1,157	13,769	1,473
Market, public, fall							7,939	986	17,062	1,785
Market, private, spring			70,943	14,607					477,017	43,691
Market, private, fall			153,617	29,413					7,600	2,336
Seed, public, spring			322,934	34,892					618,486	64,046
Seed, public, fall			657,716	59,859					12,737	1,593
Seed, private, spring			1,096,449	113,591		540	60	2,553,167	307,116	
Seed, private, fall			67,865	6,032		810	90	791,371	120,032	
Periwinkles									6,120	170
Scallops, sea										423
Bloodworms										51
Total	3,061,935	350,881	134,513	15,549	475,955	48,871	6,509,847	640,255	35,588,199	960,646

FISHERIES OF THE MIDDLE ATLANTIC STATES

(Area XXIII)⁴

The yield of fishery products in the Middle Atlantic States (New York, New Jersey, Pennsylvania, and Delaware) during 1931 amounted to 164,898,737 pounds, valued at \$9,211,180. This is a decrease of 15 percent in the amount of the catch and 29 percent in the value of the catch as compared with the quantity and its value for 1930. Of the total catch in 1931, 113,401,316 pounds, valued at \$2,949,625, were fish; and 51,497,421 pounds, valued at \$6,261,555, were shellfish and miscellaneous products. These fisheries gave employment to 9,604 fishermen, or 5 percent less than in 1930. Of the total number of fishermen employed during 1931, 3,925 regular fishermen were engaged on vessels and 2,913 regular and 2,766 casual fishermen were employed in the shore and boat fisheries.

Fisheries of the Middle Atlantic States, 1931

SUMMARY OF CATCH

Product	New York		New Jersey		Pennsylvania	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish-----	37,261,331	\$967,369	57,143,403	\$1,725,803	76,080	\$4,648
Shellfish, etc-----	13,732,402	2,006,753	35,702,130	4,128,439	-----	-----
Total-----	50,993,733	2,974,122	92,845,533	5,854,242	76,080	4,648

Product	Delaware		Total	
	Pounds	Value	Pounds	Value
Fish-----	18,920,502	\$251,805	113,401,316	\$2,949,625
Shellfish, etc-----	2,062,889	126,363	51,497,421	6,261,555
Total-----	20,983,391	378,168	164,898,737	9,211,180

OPERATING UNITS: BY STATES

Item	New York	New Jersey	Pennsyl-vania	Delaware	Total
	Number	Number	Number	Number	Number
Fishermen:					
On vessels-----	700	3,021	-----	204	3,925
On boats and shore:					
Regular-----	1,345	1,389	-----	179	2,913
Casual-----	1,071	1,266	75	354	2,766
Total-----	3,116	5,676	75	737	9,604
Vessels:					
Steam-----	1	-----	-----	2	3
Net tonnage-----	96	-----	-----	230	326
Motor-----	167	274	-----	16	457
Net tonnage-----	2,408	4,257	-----	326	6,991
Sail-----	1	61	-----	3	65
Net tonnage-----	6	1,591	-----	39	1,636
Total vessels-----	169	335	-----	21	525
Total net tonnage-----	2,510	5,848	-----	595	8,953

⁴ This is the number given to this area by the North American Council on Fishery Investigations. It should be explained that there are included under this area craft owned in the area but at times fishing elsewhere. A notable example is the southern trawl fishery which extends into area XXIV.

Fisheries of the Middle Atlantic States, 1931—Continued

OPERATING UNITS: BY STATES—Continued

Item	New York	New Jersey	Pennsyl-vania	Delaware	Total
	Number	Number	Number	Number	Number
Boats:					
Motor	619	1,178	5	73	1,875
Other	1,132	673	17	185	2,007
Accessory boats	65	101		32	198
Apparatus:					
Purse seines:					
Menhaden	5	2		3	10
Length, yards	1,680	806		1,200	3,686
Other	1	16			17
Length, yards	400	6,100			6,500
Haul seines	174	114	16	78	382
Length, yards	16,269	12,166	1,995	22,175	52,605
Gill nets:					
Anchor	99	1			100
Square yards	63,552	900			64,452
Drift	252	1,076	7	75	1,410
Square yards	358,690	719,060	15,530	195,285	1,288,565
Runaround	24	87		48	159
Square yards	59,714	254,195		44,100	358,009
Stake	60	942		167	1,189
Square yards	22,699	118,010		15,760	156,469
Lines:					
Hand	176	928		32	1,136
Hooks	278	1,185		64	1,527
Trawl	236	836		26	1,098
Hooks	184,400	504,550		18,900	707,850
Troll	16				16
Hooks	16				16
Trot with baits or snoods	4	3		1	8
Baits or snoods	2,800	625		50	3,475
Trot with hooks	26				26
Hooks	3,740				3,740
Pound nets	446	186		59	691
Floating traps	6				6
Weirs		109			109
Stop nets:					
Square yards	8,398	69,300		9,584	87,282
Fyke nets	1,845	1,324	30	333	3,532
Dip nets	53	50		34	137
Cast nets		4		4	8
Scap nets	252				252
Drag nets	22	16			38
Yards at mouth	64	37			101
Push nets	16				16
Otter trawls	106	58			164
Yards at mouth	2,580	1,332			3,912
Wire baskets		4			
Pots:					
Crab	36	25			61
Eel	4,680	3,690		805	9,175
Lobster	17,463	30,678		160	48,301
Harpoons	18				18
Spears	135	84		6	225
Dredges:					
Clam	16	32		20	68
Yards at mouth	16	31		17	64
Conch	2				2
Yards at mouth	7				7
Crab	6	38			44
Yards at mouth	5	50			55
Mussel	4				4
Yards at mouth	5				5
Oyster	102	495		34	631
Yards at mouth	142	583		42	767
Scallop	1,065	4			1,069
Yards at mouth	752	11			763
Tongs	577	847		87	1,511
Rakes	468	573			1,041
Forks	320	45			365
Hoes		192			192
Gaffs		5		1	6

Fisheries of the Middle Atlantic States, 1931—Continued

CATCH: BY STATES

Species	New York		New Jersey		Pennsylvania		Delaware		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH										
Alewives	790,040	\$9,832	390,150	\$7,699	42,000	\$550	2,434,186	\$10,720	3,656,376	\$28,801
Bluefish	671,202	50,807	2,534,911	176,882			70,818	3,677	3,276,931	231,366
Bonito	446,983	20,219	279,642	14,083					726,625	34,302
Butterfish	2,215,871	105,784	4,320,505	205,143					6,536,376	310,927
Carp	169,981	16,565	143,540	18,567	1,505	201	74,170	7,679	389,196	43,012
Catfish and bullheads	15,867	2,605	43,205	2,522	1,000	110	27,523	2,628	87,595	7,865
Cero			2,000	80					2,000	80
Cod	1,465,519	38,147	6,221,247	160,055			50,628	1,775	7,737,394	199,977
Croaker	42,384	975	1,530,675	55,376			302,073	10,098	1,875,132	66,449
Cusk			4,400	132					4,400	132
Drum, red or redfish			4,860	64					4,860	64
Eels	497,878	52,723	565,522	55,419			86,163	10,308	1,149,563	118,450
Flounders	7,194,910	275,414	3,344,221	135,790			72,699	4,930	10,611,830	416,134
Frigate mackerel	4,365	86							4,365	86
Goosefish	822	8	4,200	53					5,022	61
Grayfish	1,196	36	3,600	54					4,796	90
Haddock	1,410,585	30,135	10,208	173					1,420,793	30,308
Hake	59,402	1,374	182,907	2,732					242,309	4,106
Halibut	1,640	220							1,640	220
Herring, sea	46,891	729	456,306	7,854			1,314	4	504,511	8,587
Kingfish or "king mackerel"	13,963	928	45,000	1,350					58,963	2,278
King whiting or "kingfish"	87,473	6,147	59,848	4,806			1,890	78	149,211	11,031
Mackerel	322,578	14,536	235,942	11,101					558,520	25,637
Menahaden	16,184,664	39,207	10,101,263	49,098			14,280,600	93,299	40,566,527	181,604
Mullet	20,295	1,203	52,704	1,707			582,517	39,827	655,516	42,737
Mummichog	101,740	8,041	9,457	874					111,197	8,915
Pigfish			3,635	95					3,635	95
Pike or pickerel	650	88							650	88
Pilotfish			115	1					115	1
Pollock	53,855	1,055	1,397	65					55,252	1,120
Scup or porgy	1,336,982	30,631	7,249,470	145,446			12,600	906	8,599,052	176,983
Sea bass	285,704	16,105	3,697,957	142,645			9,600	679	3,993,261	159,429
Sea robin	33,379	593	70,018	640					103,397	1,233
Shad	357,038	42,872	256,963	41,318	7,300	1,425	38,810	7,000	660,111	92,615
Sharks	1,022	21	29,780	594					30,802	615
Silversides	114,610	7,359	5,604	672					120,214	8,031
Skates	14,947	138	69,524	433					84,471	571
Smelts	769	216			3,500	320			769	216
Snapper, red					234,604	34,016			3,500	320
Spanish mackerel					6,663		200,495	7,122	234,604	34,016
Spot	66,779	3,183	204,535						471,809	16,968

Fisheries of the Middle Atlantic States, 1931—Continued

CATCH: BY STATES—Continued

Species	New York		New Jersey		Pennsylvania		Delaware		Total	
FISH—Continued										
Squeteague or "sea trout," gray	Pounds 1,466,816	Value \$108,762	Pounds 11,685,436	Value \$364,788	Pounds 400,027	Value \$15,114	Pounds 13,552,279	Value \$488,664		
Striped bass	64,321	8,314	18,379	3,938	52,274	11,697	134,974	23,949		
Sturgeon	2,036	519	9,099	1,367	4,670	934	15,805	2,820		
Suckers	35,617	3,490	66,095	5,651	24,275	\$2,362			125,987	11,503
Sunfish	2,252	208							2,252	208
Swordfish	106,132	22,717							106,132	22,717
Tautog	65,872	3,714	75,282	2,005			58,500	1,755	199,654	7,474
Thimble-eyed mackerel			106,452	2,929					106,452	2,929
Tilefish	1,021,120	30,362							1,021,120	30,362
Tomcod	62,193	1,963	45	2					62,238	1,965
Tuna or "horse mackerel"	18,320	733	1,830	100					20,150	833
Whitebait	23,090	1,510							23,090	1,510
White perch	31,925	3,006	278,732	32,290			131,416	18,878	442,073	54,174
Whiting	326,365	3,656	2,407,513	23,337					2,733,878	26,993
Yellow perch	3,288	433	121,125	4,874			27,529	2,697	151,942	8,004
Total	37,261,331	967,369	57,143,403	1,725,803	76,080	4,648	18,920,502	251,805	113,401,316	2,949,625
SHELLFISH, ETC.										
Crabs:										
Hard	104,521	5,028	169,268	10,000					273,789	15,028
King			4,420,715	9,833			683,832	1,026	5,104,547	10,859
Soft	5,127	1,217	19,952	6,617			33,600	7,660	58,679	15,494
Lobsters	483,846	121,887	653,634	167,687			11,250	2,814	1,148,730	292,388
Shrimp	159,350	41,791	180,560	6,655					339,910	48,446
Squid	1,371,426	25,771	822,096	23,260					2,193,522	49,031
Clams:										
Hard, public ¹	1,108,932	355,661	1,319,263	318,327			25,453	4,548	2,453,648	678,536
Hard, private ¹	155,848	50,850	36,616	8,035					192,464	58,885
Razor		1,200	240						1,200	240
Soft, public ²	323,715	38,628	1,218,900	95,856					1,542,615	134,484
Soft, private ²	6,300	840							6,300	840
Surf or skimmers	315,984	17,878	181,250	10,100					497,234	27,978
Conchs	55,170	2,498							55,170	2,498
Mussels	169,600	8,153	4,100	281					173,700	8,434

Oysters: ³									
Market, public, spring	45,486	6,512	69,607	10,771				115,093	17,283
Market, public, fall	143,223	23,341	92,224	12,172			106,260	10,540	341,707
Market, private, spring	2,855,515	441,963	408,965	84,381					46,053
Market, private, fall	3,629,706	553,672	13,831,121	1,579,044			364,294	42,517	526,344
Seed, public, spring	274,246	28,660	11,505,848	1,709,325			812,250	55,550	2,175,233
Seed, public, fall	126,133	11,086	80,660	5,582			24,300	1,620	1,793,535
Seed, private, spring	203,586	29,448	441,888	39,351					18,288
Seed, private, fall	12,238	2,529	77,423	7,067					645,474
Scallops:									68,799
Bay	1,041,856	106,845	676	75					89,661
Sea	1,097,868	87,619	154,364	13,546					9,596
Terrapin, diamond-back			173	61					
Turtles:									
Loggerhead			235	3				235	3
Snapper			2,535	330			1,650	88	4,185
Bloodworms	17,982	22,553	2,621	2,405					418
Sandworms	23,544	22,083	7,436	7,675					20,603
Total	13,732,402	2,006,753	35,702,130	4,128,439			2,062,889	126,363	24,958
Grand total	50,993,733	2,974,122	92,845,533	5,854,242	76,080	4,648	20,983,391	378,168	30,980
									61

¹ Statistics on hard clams used in this table are based on yields of 8 pounds of meats to the bushel in New York and 9.36 pounds in New Jersey.

² Statistics on soft clams used in this table are based on yields of 15 pounds of meats to the bushel in New York and 20 pounds in New Jersey.

³ Statistics on oysters used in this table are based on yields of 7 pounds of meats to the bushel for market oysters in New York, 9.89 pounds for market oysters in New Jersey and 6.6 pounds for market oysters in Delaware; and 7 pounds for seed oysters in New York, and 4.5 pounds for seed oysters in New Jersey and Delaware.

NOTE.—Of the total catch in New Jersey all of the cero were taken off the coast of Florida. In addition, 175,000 pounds of shrimp, valued at \$3,875; 6,000 pounds of bluefish, valued at \$250; 63,000 pounds of sea bass, valued at \$2,640; 1,500 pounds of red snapper, valued at \$120; and 11,000 pounds of Spanish mackerel, valued at \$475 were taken off the coast of Florida. Of the total catch in New York, 414,097 pounds of fishery products, valued at \$10,797 were taken in the southern winter trawl fishery off Maryland, Virginia, and North Carolina. Of the total catch in New Jersey, 2,474,121 pounds of fishery products, valued at \$83,156 were taken in the same fishery. These products consisted principally of croaker, flounders, scup, sea bass, and gray squeteague.

Fisheries of the Middle Atlantic States, 1931—Continued

PRODUCTION OF CERTAIN SHELLFISH IN NUMBER AND BUSHELS

Product	New York		New Jersey		Delaware		Total	
	Quan-	Value	Quan-	Value	Quan-	Value	Quan-	Value
Crabs:								
Hard.....number.....	313, 563	\$5, 028	507, 804	\$10, 000	186, 330	\$1, 026	1, 390, 884	\$15, 028
King.....do.....			1, 204, 554	9, 833			1, 390, 884	10, 859
Soft.....do.....	20, 508	1, 217	59, 856	6, 617	100, 800	7, 660	181, 164	15, 494
Clams:								
Hard, public.....bushels.....	138, 616	355, 661	140, 947	318, 327	2, 545	4, 548	282, 108	678, 536
Hard, private.....do.....	19, 481	50, 850	3, 912	8, 035				23, 393
Razor.....do.....		38	240					38
Soft, public.....do.....	21, 581	38, 628	60, 945	95, 856				82, 526
Soft, private.....do.....		420	840					420
Surf or skimmers.....do.....	26, 332	17, 878	14, 500	10, 100				40, 832
Conchs.....do.....		3, 065	2, 498					3, 065
Mussels.....do.....		16, 960	8, 153	410	281			17, 370
Oysters:								
Market, public, spring.....do.....	6, 498	6, 512	7, 038	10, 771				13, 536
Market, public, fall.....do.....	20, 460	23, 341	9, 325	12, 172	16, 100	10, 540		45, 885
Market, private, spring.....do.....	407, 931	441, 963	41, 351	84, 381				449, 282
Market, private, fall.....do.....	518, 529	553, 672	1, 398, 495	1, 579, 044	55, 196	42, 517	1, 972, 220	2, 175, 233
Seed, public, spring.....do.....	39, 178	28, 660	2, 556, 855	1, 709, 325	180, 500	55, 550	2, 776, 533	1, 793, 535
Seed, public, fall.....do.....	18, 019	11, 086	17, 924	5, 582	5, 400	1, 620	41, 343	18, 288
Seed, private, spring.....do.....	29, 084	29, 448	98, 197	39, 351				127, 281
Seed, private, fall.....do.....	1, 748	2, 529	17, 205	7, 067				18, 953
Scallops:								
Bay.....do.....	208, 371	106, 845	150	75				208, 521
Sea.....do.....	182, 978	87, 619	25, 727	13, 546				208, 705
								106, 920
								101, 165

Industries related to the fisheries of the Middle Atlantic States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	New York	New Jersey	Pennsyl-vania	Delaware	Total
Transporting:					
Persons engaged:					
On vessels.....	55	22			77
On boats.....		167			167
Total.....	55	189			244
Vessels:					
Steam.....	1				1
Net tonnage.....	36				36
Motor.....	23	5			28
Net tonnage.....	295	124			419
Total vessels.....	24	5			29
Total net tonnage.....	331	124			455
Boats.....		134			134
Wholesale and manufacturing:					
Establishments.....	238	109	54	17	418
Persons engaged:					
Proprietors.....	195	121	59	18	393
Salaried employees.....	712	124	112	15	963
Wage earners:					
Average for season.....	1, 804	1, 113	476	240	3, 633
Average for year.....	1, 604	731	346	114	2, 795
Paid to salaried employees.....	\$2, 447, 009	\$300, 854	\$309, 600	\$14, 000	\$3, 071, 463
Paid to wage earners.....	2, 688, 021	790, 223	409, 304	83, 575	3, 971, 123
Total salaries and wages.....	5, 135, 030	1, 091, 077	718, 904	97, 575	7, 042, 586
Fishermen manufacturing.....	535	128		9	672

Industries related to the fisheries of the Middle Atlantic States, 1931—Continued

PRODUCTS MANUFACTURED

Item	New York		New Jersey		Pennsylvania		Delaware	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
By manufacturing establishments:								
Buffalofish, smoked pounds	657,545	\$230,331						
Butterfish, smoked do	549,787	143,867	45,485	\$12,091	(1)	(1)		
Chubs, cisco, and tullibees, smoked pounds	2,992,171	960,139	(1)	(1)	(1)	(1)		
Cod, fresh fillets do	2,221,346	326,023						
Eels, smoked do	19,659	7,154	(1)	(1)				
Flounders, fresh fillets pounds	511,080	90,670						
Haddock:								
Fresh fillets do	2,798,689	414,999						
Finnan haddie do	736,400	69,259						
Hake, fresh fillets do	1,425,293	166,936						
Herring, sea:								
Smoked:								
Bloater do	47,000	8,200						
Kippered do	101,674	20,113						
Miscellaneous pounds								
Lake trout, smoked do	66,609	22,502	(1)	(1)	236,520	\$26,017		
Mackerel, smoked do	133,981	23,386	7,205	1,516	9,000	1,713		
Salmon:								
Smoked do	5,238,792	1,543,823	(1)	(1)	(1)	(1)		
Caviar, canned standard cases	652	13,586						
Shad, smoked pounds	49,405	8,441	(1)	(1)	77,950	19,138		
Sturgeon:								
Smoked do	1,394,067	1,008,728	129,978	86,108	(1)	(1)		
Caviar, canned standard cases	4,630	609,502						
Whitefish:								
Smoked pounds	257,934	64,335	(1)	(1)	108,900	27,365		
Caviar, canned standard cases	267	9,429						
Clams, hard:								
Fresh-shucked gallons					78,927	197,318	(1)	(1)
Cocktail, canned standard cases	700	11,274						
Juice and broth, canned standard cases	1,278	11,910						
Clams, soft, fresh-shucked gallons			20,565	30,849				
Marine-shell products:								
Buttons gross	428,764	310,295	1,145,475	890,240	(1)	(1)		
Novelties		40,546		315,146	(1)	(1)		
Oysters, fresh-shucked gallons	295,550	697,287	448,724	795,169	158,612	396,232	77,750	\$132,488
Oyster-shell products:								
Poultry feed tons			6,546	67,221	4,009	42,884	(1)	(1)
Lime do			1,648	6,752	1,248	6,259	(1)	(1)
Unclassified products:								
Smoked pounds	(2)	(2)	³ 680,646	³ 206,168	⁴ 837,100	⁴ 273,276		
Canned standard cases	⁵ 5,248	⁵ 90,093	(2)	(2)				
Miscellaneous		⁶ 423,435		⁷ 693,151		⁸ 560,347		⁹ 338,099
Total		7,326,263		3,104,411		1,550,549		470,587

¹ The production of this item is included under unclassified products.² This has been included under miscellaneous.³ Includes smoked carp, chubs, cisco, eels, haddock, lake trout, salmon, sea herring, shad, tullibee, and whitefish.⁴ Includes smoked alewives, butterfish, carp, Russian catfish, chubs, haddock, haddock fillets, lake herring, lake trout, salmon, sturgeon, and tullibee.⁵ Includes canned smoked eels and salmon, pickled eels and mussels, imported miscellaneous roe, fish paste, whole hard clams and clam chowder, turtle meat and soup, and terrapin meat and stew.⁶ Includes smoked fillets of cod and haddock, fresh-shucked bay scallops, buttons and lime from freshwater mussel shells, and fish meal.⁷ Includes pickled salmon, canned hard clam chowder, frozen fillets of cod and flounders, menhaden products, and miscellaneous fish scrap and oil.⁸ Includes salted sea herring, marine-shell buttons and novelties, and fish meal.⁹ Includes fresh-shucked hard clams, sturgeon caviar, button blanks from marine shells, menhaden, and oyster-shell products.

NOTE.—The total value of products for the Middle Atlantic States was as follows: By manufacturing establishments, \$12,451,810; and by fishermen, \$311,704. Some of the above products may have been manufactured from fishery products imported from another State or a foreign country; therefore, they cannot be correlated directly with the catch within the State. Of the total number of persons engaged on transporting vessels none has been included as fishermen, and among the total persons engaged in the preparation of fishermen's prepared products, 463 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

Industries related to the fisheries of the Middle Atlantic States, 1931—Continued

PRODUCTS MANUFACTURED—Continued

Item	New York		New Jersey		Pennsylvania		Delaware	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
By fishermen:								
Eels, smoked..... pounds	9,800	\$3,920						
Whiting, smoked..... do.	600	30						
Clams, soft, fresh-shucked..... gallons	6,000	6,000						
Scallops, bay, fresh-shucked..... gallons	98,310	\$152,003	62	125				
Scallops, sea, fresh-shucked..... gallons	100,409	114,015	14,892	18,605				
King crab:								
Scrap, dry..... tons		506		14,298			44	\$508
Meal..... do.							88	2,200
Total.....	266,018		42,978					2,708
Grand total.....	7,592,281		3,147,389		1,550,549			473,295

NEW YORK

Fisheries of New York, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets				
	Menha- den	Other		Number	Number	Number	Number	
				Number	Number	11	Stake	
Fishermen:								
On vessels.....	88	11	3					
On boats and shore:								
Regular.....			210	53	22		37	24
Casual.....			173	13	185			46
Total.....	88	11	386	66	218	52		70
Vessels:								
Motor.....	5	1	1		2		5	
Net tonnage.....	114	29	12		31		50	
Boats:								
Motor.....			25	18	21		19	2
Other.....			134	38	89		2	51
Accessory boats.....	14	2			5		1	
Apparatus:								
Number.....	5	1	174	99	252	24		60
Length, yards.....	1,680	400	16,269		63,552	358,690	59,714	22,699

Item	Lines					Pound nets	Float- ing traps	Stop nets
	Hand	Trawl	Troll	Trot with baits or snoods	Trot with hooks			
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	31	81				7		
On boats and shore:								
Regular.....	47	83	8	5	2	156	10	5
Casual.....	8	7			24	9		21
Total.....	86	171	8	5	26	172	10	26
Vessels:								
Motor.....	4	13				3		
Net tonnage.....	99	253				20		
Boats:								
Motor.....	40	41	4	1		48		
Other.....	2	14		3	26	135	6	17
Accessory boats.....		43						
Apparatus:								
Number.....	176	236	16	4	26	446	6	19
Square yards.....								8,398
Hooks, baits, or snoods.....	278	184,400	16	2,800	3,740			

Fisheries of New York, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Fyke	Dip	Scap	Drag	Push	Otter	Pots		
	nets	nets	nets	nets	nets	trawls	Crab	Eel	Lobster
Fishermen:									
On vessels	Number 2	Number	Number	Number	Number	Number 152	Number	Number 4	Number 6
On boats and shore:									
Regular	76	26	4	23	16	77	4	120	175
Casual	49	28	248	3		11		34	17
Total	127	54	252	26	16	240	4	158	198
Vessels:									
Motor	1								
Net tonnage	10						47		
Boats:									
Motor	23	1		14			614		
Other	89	50	176	3	14		2	56	117
Apparatus:									
Number	1,845	53	252	22	16		106	36	4,680
Yards at mouth				64			2,580		17,463

Item	Har-	Spears	Dredges						
			Clam	Conch	Crab	Mussel	Oyster	Scallop	
Fishermen:									
On vessels	Number 27	Number	Number 14	Number 2	Number 2	Number 7	Number 217	Number	116
On boats and shore:									
Regular	23	77	10					8	215
Casual	2	61	2						95
Total	52	138	26	2	2	7	225		426
Vessels:									
Steam								1	
Net tonnage								96	
Motor	6		7	1	1	2		47	30
Net tonnage	130		55	7	6	25		935	326
Total vessels	6		7	1	1	2		48	30
Total net tonnage	130		55	7	6	25		1,031	326
Boats:									
Motor	12		8					3	69
Other		100							133
Apparatus:									
Number	18	135	16	2	6	4	102		1,065
Yards at mouth			16	7	5	5	142		752

Item	Tongs	Rakes	Forks	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	
Fishermen:					
On vessels	68	2			
On boats and shore:					
Regular	434	353	193	13	1,345
Casual	77	113	112	10	1,071
Total	579	468	305	23	3,116
Vessels:					
Steam					1
Net tonnage					96
Motor	30	2			
Net tonnage	191	12			167
Sail	1				
Net tonnage	6				1
Total vessels	31	2			169
Total net tonnage	197	12			2,510

Fisheries of New York, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Tongs	Rakes	Forks	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number
Boats:					
Motor.....	185	199	3		619
Other.....	250	217	77	1	1,132
Accessory boats.....					65
Apparatus:					
Number.....	577	468	320		

CATCH: BY GEAR

Species	Purse seines				Haul seines	
	Menhaden		Other			
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....						
Bluefish.....					4,480	404
Carp.....					64,271	6,264
Catfish and bullheads.....					4,656	802
Eels.....					12,035	1,257
Flounders.....					15,325	377
Menhaden.....	16,160,000	\$39,000				
Mullet.....					6,400	482
Mummichog.....					65,900	5,362
Scup.....			414,800	\$6,227		
Shad.....					36,952	3,753
Silversides.....					114,540	7,352
Squeteague or "sea trout", gray.....			265,200	13,260	25,465	2,190
Striped bass.....					28,330	5,036
Suckers.....					10,907	1,072
Sunfish.....					107	9
Tomcod.....					600	30
Whitebait.....					23,090	1,510
White perch.....					18,825	1,470
Yellow perch.....					640	91
Shrimp.....					84,800	22,325
Total.....	16,160,000	39,000	680,000	19,487	761,006	62,396

NOTE.—A recheck of the pound-net fisheries of Suffolk County, New York, shows that changes should be made from the data previously published for this fishery for the years 1929 and 1930. Additions in 1929 should be albacore, 51,625 pounds, valued at \$1,032; bonito, 1,259 pounds, valued at \$76; butterfish, 545,444 pounds, valued at \$47,454; cod, 23,315 pounds, valued at \$933; eels, 1,587 pounds, valued at \$206; flounders, 30,159 pounds, valued at \$1,116; frigate mackerel, 15,395 pounds, valued at \$462; sea herring, 12,729 pounds, valued at \$280; king whiting, 557 pounds, valued at \$78; mackerel, 243,105 pounds, valued at \$10,454; pollock, 1,130 pounds, valued at \$31; scup or porgy, 84,116 pounds, valued at \$4,626; sea bass, 30,549 pounds, valued at \$3,360; shad, 3,839 pounds, valued at \$790; sharks, 1,505 pounds, valued at \$30; spot, 822 pounds, valued at \$66; gray squeteague or "sea trout", 60,420 pounds, valued at \$5,438; striped bass, 694 pounds, valued at \$128; tautog, 3,960 pounds, valued at \$217; tuna or "horse mackerel", 4,399 pounds, valued at \$527; whiting, 186,229 pounds, valued at \$4,655; and squid, 165,752 pounds, valued at \$7,624; and deletions in 1929 should be bluefish, 65,429 pounds, valued at \$6,543; and menhaden, 26,145 pounds, valued at \$131. Additions in 1930 should be bluefish 58,751 pounds, valued at \$5,875; bonito, 54,445 pounds, valued at \$3,974; butterfish, 365,164 pounds, valued at \$28,483; cod, 22,743 pounds, valued at \$910; flounders, 32,645 pounds, valued at \$1,077; king whiting, 2,192 pounds, valued at \$282; mackerel, 109,700 pounds, valued at \$5,485; mullet, 140 pounds, valued at \$7; pollock, 661 pounds, valued at \$18; scup or porgy, 128,740 pounds, valued at \$6,437; sea bass, 74,309 pounds, valued at \$7,431; sea robin, 1,330 pounds, valued at \$27; shad, 1,901 pounds, valued at \$380; spot, 140 pounds, valued at \$11; gray squeteague or "sea trout", 10,725 pounds, valued at \$912; tuna or "horse mackerel", 4,138 pounds, valued at \$484; and squid, 214,162 pounds, valued at \$8,566; and deletions in 1930 should be albacore, 9,871 pounds, valued at \$335; sea herring, 5,150 pounds, valued at \$103; menhaden, 80,202 pounds, valued at \$320; and striped bass, 4,600 pounds, valued at \$718.

Fisheries of New York, 1931—Continued

CATCH: BY GEAR—Continued

Species	Gill nets								
	Anchor		Drift		Runaround		Stake		
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	
Alewives									
Bluefish	44,825	\$4,657	18,877	\$381	104,415	\$10,275	1,125	\$60	
Butterfish					28,400	1,950	2,265	294	
Carp	6,380	723	1,866	187			300	45	
Catfish and bullheads			22	3					
Eels	50	5	300	9			300	45	
Flounders									
King whiting or "kingfish"	1,050	88	64,365	4,440	4,200	333	350	28	
Mackerel									
Menhaden					1,600	25			
Mullet	2,000	160	400	40					
Pike or pickerel									
Shad			303,563	36,546			3,231	1,065	
Smelt	500	175							
Spot									
Squeteague or "sea trout," gray	62,094	5,573	200	14	62,770	5,066	16,285	1,456	
Striped bass	255	56	50	8	2,000	440	3,114	634	
Sturgeon	900	215	890	220			100	22	
Suckers	222	32	1,810	182			90	4	
White perch	5,581	820	1,108	111			1,565	118	
Total	123,857	12,504	393,451	42,141	203,385	18,089	28,725	3,771	

Species	Lines									
	Hand		Trawl		Trot with baits or snoods		Trot with hooks		Troll	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	320,184	\$19,192							8,500	\$680
Carp							1,795	\$212		
Catfish and bullheads							213	40		
Cod	81,660	.1,801	904,420	\$23,853						
Eels			350	35	2,000	\$240	7,326	997		
Flounders	24,700	382	400	24						
Grayfish			100	3						
Haddock	8,250	210	23,400	647						
Hake			21,710	705						
Mackerel	4,320	130								
Pollock	42,010	840	300	15						
Scup	18,315	422								
Sea bass	110,090	6,004								
Shad			100	10						
Skates			6,200	61						
Squeteague or "sea trout," gray	100	8	15,250	1,220						
Suckers							300	36		
Tautog	17,200	895	1,021,120	30,362						
Tilefish							100	15		
White perch										
Crabs:										
Hard					25,585	1,210				
Soft					1,012	202				
Total	626,829	29,884	1,993,350	56,935	28,597	1,652	9,734	1,300	8,500	680

FISH AND WILDLIFE SERVICE - BUREAU OF COMMERCIAL FISHERIES

ERRATA - New York for 1929 (in Fishery Industries of the United States, 1930)

As per note on page 222, Fishery Industries of the United States, 1932. The revised totals for the following species, subtotals, and grand total for New York should read:

	Pounds	Value		Pounds	Value
Albacore	104,125	\$ 2,037	Sea bass	308,829	\$ 25,786
Bluefish	773,405	75,117	Shad	168,403	27,842
Bonito	151,018	9,209	Sharks	2,505	50
Butterfish	1,150,216	100,263	Spot	3,522	282
Cod	2,883,332	110,203	Squeteague or sea trout, grey	709,022	63,031
Cods	625,582	85,248			
Flounders	7,079,990	277,510	Striped bass	156,861	29,752
Frigate mackerel	15,395	462	Tautog	76,692	5,568
Herring, sea	27,369	607	Tuna	5,209	624
King whiting	4,715	672	Whiting	636,729	16,045
Mackerel	940,605	46,148	Squid	591,582	27,494
Menhaden	4,738,855	27,232	Subtotal, fish	32,946,246	1,398,948
Pollock	67,287	1,818	Subtotal, shellfish	15,689,934	3,745,576
Scup	1,222,514	41,784	Grand total	48,636,180	5,144,524

The above revisions will also change the data in the tables on pages 133, 135-140, 141, 142-143, 144, 268, 270-271, 278, 284, and 307-309.

November 1959.

64629 - 59

Fisheries of New York, 1931—Continued

CATCH: BY GEAR—Continued

Species	Pound nets		Floating traps		Stop nets		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	298, 200	\$2, 450						
Bluefish	185, 303	15, 264						
Bonito	446, 915	20, 217	68	\$2				
Butterfish	2, 113, 642	101, 167	63, 759	1, 907				
Carp					37, 079	3, 404	7, 450	639
Catfish and bullheads					470	72	7, 786	1, 333
Cod	15, 634	414	565	12				
Eels	189, 412	19, 051			5	1	5, 200	632
Flounders	474, 095	28, 484	168, 450	8, 928			634, 997	11, 083
Frigate mackerel	4, 365	86						
Goosefish	822	8						
Grayfish	1, 096	33						
Hake			577	9				
Herring, sea	43, 556	722	3, 335	7				
Kingfish or "king mackerel"	13, 314	894	145	9				
King whiting or "kingfish"	79, 313	5, 543						
Mackerel	253, 893	9, 966						
Menhaden	23, 064	182						
Mullet	11, 662	555						
Mummichog							17, 850	150
Pike or pickerel							145	31
Pollack	5, 126	93	5, 024	84				
Scup	614, 812	17, 963	51, 821	622				
Sea bass	73, 303	5, 385	42, 844	2, 871				
Sea robin	29, 296	587	4, 083	6				
Shad	13, 060	1, 490	127	7				
Sharks	1, 022	21						
Skates	672	9	8, 075	68				
Spot	66, 779	3, 183						
Sqeuteague or "sea trout," gray	1, 016, 287	79, 866	392	33				
Striped bass	10, 182	1, 778			270	61	231	50
Sturgeon	46	12			100	50		
Suckers					830	60	10, 724	1, 098
Sunfish					123	7	1, 692	162
Tautog	47, 654	2, 766	683	37			300	15
Tomcod							61, 593	1, 933
Tuna or "horse mackerel"	18, 320	733						
White perch	100	23			200	20	3, 403	306
Whiting	326, 235	3, 653	75	1				
Yellow perch	4, 896	408					2, 368	302
Crabs, hard							24, 300	810
Squid	1, 338, 274	25, 258	20, 488	307				
Total	7, 720, 350	348, 264	370, 511	14, 910	39, 777	3, 697	913, 208	19, 649

Species	Dip nets		Scap nets		Drag nets		Push nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			92, 286	\$3, 204				
Carp			50, 840	5, 091				
Catfish and bullheads			2, 670	350				
Eels			310	48				
Flounders			6	1				
Mummichog					60	\$6		
Pike or pickerel			105	17				
Shad			5	1				
Silversides					70	7		
Smelt			269	41				
Striped bass			6	1				
Suckers			10, 734	1, 006				
Sunfish			330	30				
White perch			1, 043	123				
Yellow perch			80	10				
Crabs:								
Hard	17, 140	\$1, 267			22, 500	738		
Soft	4, 115	1, 015						
Shrimp	2, 950	1, 475			71, 600	17, 991		
Scallops, bay							14, 750	\$1, 475
Total	24, 205	3, 757	158, 684	9, 923	94, 230	18, 742	14, 750	1, 475

Fisheries of New York, 1931—Continued

CATCH: BY GEAR—Continued

Species	Otter trawls		Pots					
			Crab		Eel		Lobster	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	1,230	\$41						
Butterfish	10,070	760						
Catfish and bullheads					50	\$5		
Cod	463,240	12,067						
Croaker	42,384	975						
Eels	231	10			234,605	25,217		
Flounders	5,876,637	226,126						
Haddock	1,378,935	29,278						
Hake	37,115	660						
Halibut	1,640	220						
Kingfish or "king mackerel"	504	25						
King whiting or "kingfish"	2,560	155						
Mullet	233	6						
Mummichog					17,930	2,523		
Pollock	1,395	23						
Scup	237,234	5,397						
Sea bass	17,050	853						
Squteague or "sea trout," gray	2,773	76						
Striped bass	19,883	250						
Tautog	35	1						
Whiting	55	2						
Yellow perch					200	30		
Crabs, hard			4,200	\$420			3,700	131
Lobsters	8,866	2,217					474,980	119,670
Squid	12,664	206						
Clams, surf or skimmer	240	13						
Conchs	3,600	150						
Total	8,118,574	279,511	4,200	420	252,785	27,775	516,097	120,693

Species	Harpoons		Spears		Dredges			
					Clam		Conch	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels			46,034	\$5,185				
Sea bass			5,000	100				
Swordfish	106,132	\$22,717						
Clams, surf or skimmers					296,160	\$15,417		
Conchs							6,570	\$548
Total	106,132	22,717	51,054	5,285	296,160	15,417	6,570	548

Species	Dredges—Continued							
	Crab		Mussel		Oyster		Scallop	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard	2,200	\$44						
Clams, hard, private					800	\$225		
Conchs							45,000	\$1,800
Mussels			160,000	\$7,900				
Oysters:								
Market, public, fall					1,400	250		
Market, private, spring					2,815,279	433,691		
Market, private, fall					3,579,304	545,315		
Seed, private, spring					203,586	29,448		
Seed, private, fall					12,238	2,529		
Scallops:								
Bay							1,026,106	105,270
Sea							1,097,868	87,619
Total	2,200	44	160,000	7,900	6,612,607	1,011,458	2,168,974	194,689

Fisheries of New York, 1931—Continued

CATCH: BY GEAR—Continued

Species	Tongs		Rakes		Forks		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:								
Hard, public.....	709,000	\$235,971	370,712	\$113,496	28,380	\$5,932		
Hard, private.....	154,048	50,425			1,000	200		
Razor.....					1,200	240		
Soft, public.....			123,570	13,665	200,145	24,963		
Soft, private.....					6,300	840		
Surf or skimmers.....	19,584	2,448						
Mussels.....	1,600	53					8,000	200
Oysters:								
Market, public, spring.....	45,430	6,504					56	8
Market, public, fall.....	141,718	23,076	105	15				
Market, private, spring.....	40,236	8,272						
Market, private, fall.....	50,402	8,357						
Seed, public, spring.....	269,822	28,176	2,324	259			2,100	225
Seed, public, fall.....	119,035	10,285	1,652	179			5,446	622
Scallops, bay.....			1,000	100				
Bloodworms.....					17,982	22,553		
Sandworms.....					23,544	22,083		
Total.....	1,550,875	373,567	499,363	127,714	278,551	76,811	16,442	1,317

OPERATING UNITS: BY COUNTIES

Item	Albany	Bronx	Columbia	Dutchess	Greene	Kings	Nassau	New York	Orange
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....									
On boats and shore:									
Regular.....		1	2	5	3	165	212		2
Casual.....	11	1	63	135	32	70	112		31
Total.....	11	2	65	140	35	375	375	142	33
Vessels:									
Motor.....						31	14	17	
Net tonnage.....						399	193	457	
Boats:									
Motor.....					7	82	33		2
Other.....	10	2	46	69	26	7	205		23
Accessory boats.....						21	1	35	
Apparatus:									
Purse seines:									
Menhaden.....								2	
Length, yards.....								700	
Other.....						1			
Length, yards.....						400			
Haul seines:									
Length, yards.....		10	5	6	5	5	16		4
Length, yards.....		1,303	656	527	75	1,223			499
Gill nets:									
Drift.....		3	31	3			5	140	7
Square yards.....		9,556	95,458	2,628			8,615	25,203	21,927
Runaround.....							16		
Square yards.....							32,864		
Lines:									
Hand.....						46		18	
Hooks.....						82		24	
Trawl.....						97	16	25	
Hooks.....					5	92,400	31,200	16,150	
Trot with hooks.....			5				4		6
Hooks.....				1,090			200		750
Troll.....						16			
Hooks.....						16			
Pound nets.....							4		
Stop nets.....			2		6				1
Square yards.....			615		3,906				4'0
Fyke nets.....	16		35	39	15				15
Dip nets.....							29		
Scap nets.....	9		34	75	20				14
Drag nets.....							5		
Yards at mouth.....							7		
Otter trawls.....						28	5	5	
Yards at mouth.....						544	121	138	

Fisheries of New York, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Albany	Bronx	Colum- bia	Dutch- ess	Greene	Kings	Nassau	New York	Orange
Apparatus—Continued	Number	Number	Number	Number	Number	Number	Number	Number	Number
Pots:									
Crab						36			
Eel			2	3		120	453		16
Lobster						7,350	3,180		
Harpoons						1		1	
Spears						15	65		
Dredges:									
Clam						15			
Yards at mouth						15			
Mussel							2		
Yards at mouth							2		
Oyster							16	14	
Yards at mouth							19	21	
Scallop						30	8	2	
Yards at mouth						81	21	5	
Tongs								155	
Rakes		2						60	
Forks							62	124	

Item	Put- nam	Queens	Rens- selaer	Rich- mond	Rock- land	Suf- folk	Ulster	West- chester
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels		2		2		358		5
On boats and shore:								
Regular				8	3	928	8	8
Casual	2	2	18	6	42	320	182	44
Total	2	4	18	16	45	1,606	190	57
Vessels:								
Steam						1		
Net tonnage						96		
Motor		1		1		101		2
Net tonnage		16		7		1,313		23
Sail						1		
Net tonnage						6		
Total vessels	1		1			103		2
Total net tonnage	16		7			1,415		23
Boats:								
Motor				9		477	6	3
Other	2	1	15		28	550	119	29
Accessory boats						8		
Apparatus:								
Purse seines:								
Menhaden						3		
Length, yards						980		
Haul seines	1	4	1	4		105	7	6
Length, yards	133	498	5	691		9,090	869	700
Gill nets:								
Anchor						89	5	5
Square yards						61,970	1,085	497
Drift					5		49	9
Square yards					18,028		149,587	27,691
Runaround						8		
Square yards						26,850		
Stake					12	39		9
Square yards					4,456	9,480		8,763
Lines:								
Hand						112		
Hooks						172		
Trawl						98		
Hooks						44,650		
Trot with baits or snoods						4		
Baits or snoods						2,800		
Trot with hooks					6		4	1
Hooks					800		600	300

Fisheries of New York, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Putnam	Queens	Rensselaer	Richmond	Rockland	Suffolk	Ulster	Westchester
	Number	Number	Number	Number	Number	Number	Number	Number
Apparatus—Continued.								
Pound nets					442			
Floating traps					6			
Stop nets	1				1		7	1
Square yards	99		4		66		3,062	250
Fyke nets					3	1,613	71	34
Dip nets						24		
Scap nets	1		9		1		87	2
Drag nets						17		
Yards at mouth						57		
Push nets						16		
Otter trawls		1		1			65	
Yards at mouth		30		17			1,705	1
Pots:								
Eel	3				93	3,946	13	31
Lobster				1,300		5,633		
Harpoons							15	
Spears							54	1
Dredges:								
Clam				1				
Yards at mouth				1				
Conch				2				
Yards at mouth				7				
Crab						6		
Yards at mouth						5		
Mussel						2		
Yards at mouth						3		
Oyster						72		
Yards at mouth						102		
Scallop						1,025		
Yards at mouth						645		
Tongs							419	3
Rakes							405	
Forks				4			130	1

CATCH: BY COUNTIES

Species	Albany		Bronx		Columbia		Dutchess		Greene	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	2,100	\$67			45,135	\$1,275	34,186	\$1,075	20,750	\$449
Carp	2,970	216			16,523	1,558	14,948	1,538	31,206	2,654
Catfish and bullheads	405	38			2,855	555	2,445	422	1,360	193
Eels	20	2			545	109	1,298	138	120	11
Flounders							6	1		
Pike or pickerel	34	7					25	3		
Shad					5,630	581	97,720	12,039	1,031	128
Striped bass							155	30		
Sturgeon							800	200		
Suckers	3,370	300			4,067	366	2,649	273	1,825	156
Sunfish					114	9	879	77	50	3
Tomecod							21	2	600	30
White perch	15	3			50	5	508	54	30	3
Yellow perch	15	1			833	143	829	79	41	4
Clams: Hard, public			1,200	\$450						
Total	8,929	634	1,200	450	75,752	4,601	156,469	15,931	57,013	3,631

Fisheries of New York, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Kings		Nassau		New York		Orange	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives								
Bluefish	145,000	\$9,257	52,190	\$5,077	165,000	\$9,000	2,755	\$134
Butterfish	20	1	13,400	750	170	14		
Carp							11,693	1,243
Catfish and bullheads							895	152
Cod	562,035	14,354	184,530	4,482	336,860	9,579		
Croaker	42,160	969						
Eels	10,581	1,045	50,749	5,565	350	35	1,085	213
Flounders	730,991	23,026	240,250	10,960	376,935	14,283		
Haddock	68,650	1,712			1,079,535	23,380		
Hake	28,815	550			10,300	150		
Halibut					1,640	220		
King whiting or "kingfish"			4,800	375				
Mackerel			17,860	714	46,505	3,726		
Menhaden					7,200,000	18,000		
Mullet	180	4	1,000	50				
Mummichog	29,400	3,224	17,190	2,445				
Pollock					1,395	23		
Scup	593,579	10,406	5,800	116	30,060	600		
Sea bass	52,100	1,535	35,275	747	1,250	70		
Shad							17,016	2,672
Silversides	1,100	90	16,960	1,741				
Squeteagues or "sea trout", gray	267,920	13,334	32,260	2,449				
Striped bass	19,883	250	4,530	946				
Suckers							7,340	775
Swordfish	28,128	7,882			33,981	8,494		
Tautog	16,535	826			700	70		
Tilefish	259,870	8,425			761,250	21,937		
Tomcod							50	18
White perch							500	75
Whiting	55	2						
Crabs:								
Hard	4,200	420	4,030	179				
Soft			2,075	581				
Lobsters	259,750	56,483	79,820	23,780				
Shrimp				1,900	566			
Squid	1,357	26						
Clams:								
Hard, public			198,740	69,880				
Hard, private			1,000	200				
Razor			1,200	240				
Soft, public	18,000	1,200	59,625	9,060				
Soft, private			6,300	840				
Surf or skimmers	268,320	13,909	19,584	2,448				
Conchs	48,600	1,950						
Mussels	8,000	200	100,000	5,500				
Oysters:								
Market, private, spring			220,493	49,130	461,251	69,764		
Market, private, fall			243,357	48,024	473,480	72,746		
Seed, public, spring			2,324	259				
Seed, public, fall			1,162	125				
Scallops:								
Bay	456	28						
Sea	522,054	43,355	285,864	23,827	59,700	4,875		
Bloodworms	7,245	7,245	10,647	15,214				
Sandworms	9,700	9,700	1,743	1,736				
Total	4,004,684	231,408	1,916,658	288,006	11,040,362	256,966	41,334	5,282

Species	Putnam		Queens		Rensselaer		Richmond	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	600	\$15			11,734	\$207		
Carp	515	55	300	\$30	14,266	1,306		
Catfish and bullheads					3,902	658		
Eels	125	13			7	1		
Flounders			186,623	7,465			33,423	\$1,170
Mummichog							1,000	200
Pike or pickerel								
Sea bass			1,150	80				
Shad					95	19		
Suckers	50	5			1,154	82		
White perch	200	20			400	40		
Yellow perch					17	3		
Crabs: Hard							3,700	131
Lobsters			150	38			23,600	5,900
Clams: Surf or skimmers							28,080	1,521
Conchs							6,575	548
Sandworms							250	250
Total	1,490	108	188,223	7,613	31,581	2,317	96,623	9,720

Fisheries of New York, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Rockland		Suffolk		Ulster		Westchester	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	925	\$45	644, 295	\$5, 330	27, 125	\$1, 203	435	\$32
Bluefish.....			309, 012	27, 473				
Bonito.....			446, 983	20, 219				
Butterfish.....			2, 202, 281	105, 019				
Carp.....	6, 600	605	9, 600	995	48, 893	5, 095	12, 467	1, 270
Catfish and bullheads.....	293	50			2, 335	350	1, 377	187
Cod.....			382, 094	9, 732				
Croaker.....			224	6				
Eels.....	22, 061	1, 362	401, 530	43, 069	1, 467	241	7, 940	919
Flounders.....			5, 562, 182	216, 697			64, 500	1, 812
Frigate mackerel.....			4, 365	86				
Goosefish.....			822	8				
Grayfish.....			1, 196	36				
Haddock.....			262, 400	5, 043				
Hake.....			20, 287	674				
Herring, sea.....			46, 891	729				
Kingfish or "king mackerel".....			13, 963	928				
King whiting or "kingfish".....			82, 673	5, 772				
Mackerel.....			258, 213	10, 096				
Menhaden.....			8, 984, 664	21, 207				
Mullet.....			19, 115	1, 149				
Mummichog.....			54, 150	2, 172				
Pike or pickerel.....					40	6	545	71
Pollock.....			52, 460	1, 032				
Scup.....			707, 543	19, 509				
Sea bass.....			195, 929	13, 673				
Sea robin.....			33, 379	593				
Shad.....	12, 226	2, 399	14, 337	2, 032	158, 433	17, 275	50, 550	5, 727
Sharks.....			1, 022	21				
Silversides.....			96, 550	5, 528				
Skates.....			14, 947	138				
Smelt.....			500	175	269	41		
Spot.....			66, 779	3, 183				
Squeteagues or "sea trout", gray.....			1, 166, 636	92, 979				
Striped bass.....	3, 134	649	34, 732	6, 043	100	25	1, 787	371
Sturgeon.....	100	22	646	162	240	55	250	80
Suckers.....	1, 166	109			8, 478	841	5, 518	583
Sunfish.....					1, 209	119		
Swordfish.....			37, 411	5, 191			6, 612	1, 150
Tautog.....			48, 637	2, 818				
Tomcod.....			61, 258	1, 902	264	11		
Tuna or "horse mackerel".....			18, 320	733				
Whitebait.....			23, 090	1, 510				
White perch.....	1, 065	82	22, 425	2, 125	1, 762	175	4, 970	424
Whiting.....			326, 310	3, 654				
Yellow perch.....	770	111			783	92		
Crabs:								
Hard.....			92, 591	4, 298				
Soft.....			3, 052	636				
Lobsters.....			120, 526	35, 686				
Shrimp.....			157, 450	41, 225				
Squid.....			1, 370, 069	25, 745				
Clams:								
Hard, public.....			901, 992	283, 141			7, 000	2, 190
Hard, private.....			154, 848	50, 650				
Soft, public.....			246, 090	28, 368				
Mussels.....			61, 600	2, 453				
Oysters:								
Market, public, spring.....			45, 486	6, 512				
Market, public, fall.....			143, 223	23, 341				
Market, private, spring.....			2, 173, 771	323, 069				
Market, private, fall.....			2, 912, 869	432, 902				
Seed, public, spring.....			271, 922	28, 401				
Seed, public, fall.....			124, 971	10, 961				
Seed, private, spring.....			203, 586	29, 448				
Seed, private, fall.....			12, 238	2, 529				
Scallops:								
Bay.....			1, 041, 400	106, 817				
Sea.....			230, 250	15, 562				
Bloodworms.....			90	94				
Sandworms.....			11, 851	10, 397				
Total.....	48, 340	5, 434	32, 909, 726	2, 101, 676	251, 398	25, 529	163, 951	14, 816

NEW JERSEY

Fisheries of New Jersey, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets				Lines	
	Men- haden	Other		Anchor	Drift	Run- around	Stake	Hand	Trawl
Fishermen:									
On vessels	Number 27	Number 143	Number	Number	Number 11	Number	Number	Number 65	Number 63
On boats and shore:									
Regular			87	1	115	108	51	262	298
Casual			185	1	187	13	50	97	65
Total	27	143	272	2	313	121	101	424	426
Vessels:									
Motor	2	16			2			12	12
Net tonnage	99	246			27			172	170
Boats:									
Motor			12	1	127	58	40	222	264
Other			94		42		18	8	
Accessory boats	2	17	8	7	2			24	15
Apparatus:									
Number	2	16	114	1	1,076	87	942	928	836
Length, yards	806	6,100	12,166						
Square yards				900	719,060	254,195	118,010		
Hooks, baits, or snoods								1,185	504,550

Fisheries of New Jersey, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Wire bas- kets	Pots			Spears	Dredges				
		Crab	Eel	Lob- ster		Clam	Crab	Oyster	Scallop	
						Number	Number	Number	Number	
Fishermen:					48					
On vessels						14		2,399	8	
On boats and shore:										
Regular		3	80	244	42	6		35		
Casual		1	28	11	42	5		1		
Total		1	3	108	255	84	59	14	2,435	
Vessels:										
Motor						11	6	166	2	
Net tonnage						119	54	2,873	16	
Sail								61		
Net tonnage								1,591		
Total vessels						11	6	227	2	
Total net tonnage						119	54	4,464	16	
Boats:										
Motor		1	46	143	14	6		22		
Other			33		66					
Accessory boats						1				
Apparatus:										
Number	4	25	3,690	30,678	84	32	38	495	4	
Yards at mouth						31	50	583	11	

Item	Tongs	Rakes	Forks	Hoes	Gaffs	By hand	Total, ex- clusive of duplication	
							Number	Number
Fishermen:								
On vessels								3,021
On boats and shore:								
Regular	418	305		12	104	3	44	1,389
Casual	429	268		33	88	2	63	1,266
Total	847	573		45	192	5	107	5,676
Vessels:								
Motor								274
Net tonnage								4,257
Sail								61
Net tonnage								1,591
Total vessels								335
Total net tonnage								5,848
Boats:								
Motor	454	324			30			1,178
Other	336	211		1	62	3	10	673
Accessory boats	21	4						101
Apparatus:								
Number	847	573		45	192	5		

Fisheries of New Jersey, 1931—Continued

CATCH: BY GEAR

Species	Purse seines				Haul seines	
	Menhaden		Other			
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives					109,900	\$2,143
Bluefish			296,969	\$15,113	4,800	507
Bonito			2,077	87		
Butterfish			72,755	2,018		
Carp					50,640	6,246
Catfish and bullheads					29,653	1,603
Cod			13,500	150		
Croaker			88,060	1,249	7,050	270
Eels					48,957	4,764
Flounders			2,695	79	27,110	1,841
Hake			65	1		
Herring, sea					1,000	20
King whiting or "kingfish"					1,710	172
Menhaden	3,506,300	\$11,699	2,997,101	8,974	200	6
Mullet			10,200	281	41,004	1,380
Mummichog					5,857	460
Pilotfish			115	1		
Scup or porgy			1,255,531	14,841		
Sea bass			18,489	354		
Shad					17,216	4,403
Silversides					5,604	672
Skates			800	7		
Spot					7,100	614
Squeteagues or "sea trout", gray			3,758,007	73,094	45,804	4,218
Striped bass					12,760	2,808
Suckers					66,095	5,651
Thimble-eyed mackerel					8,000	240
Tomcod					20	1
White perch					29,865	2,881
Yellow perch					9,000	720
Squid			33,385	397		
Total	3,506,300	11,699	8,549,749	116,646	529,345	41,620

Species	Gill nets								Lines—Hand	
	Anchor		Drift		Run-around		Stake			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives										
Bluefish	900	\$72	31,020	\$2,129	231,640	\$19,695	30,447	2,464	1,375,368	\$96,346
Bonito			9,225	368					65,018	3,251
Butterfish			16,975	708						
Catfish and bullheads									300	30
Cero									2,000	80
Cod									42,800	856
Croaker			13,000	390			1,450	60	11,578	595
Eels			27,000	2,700					5,960	512
Flounders					113	8	1,000	60	57,428	4,140
Herring, sea					270	8				
Kingfish or "king mackerel"									45,000	1,350
King whiting or "kingfish"							500	75	500	50
Mackerel			180,357	7,717						
Menhaden	100	2			1,720	37			24,040	481
Scup or porgy									543,545	23,727
Sea bass										
Shad			107,560	17,260			73,203	9,132		
Snapper, red									3,500	320
Spanish mackerel									11,000	475
Spot			22,600	916	6,450	258	2,000	120		
Squeteagues or "sea trout", gray	100	6	138,097	5,521	176,488	9,825	25,308	1,725	49,068	3,387
Striped bass							745	140		
Tautog									31,500	780
White perch							44,570	5,501	200	16
Yellow perch									200	16
Crabs, hard							360	41		
Total	1,100	80	545,834	37,709	416,681	29,831	265,933	21,060	2,269,005	136,412

Fisheries of New Jersey, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines—Continued				Pound nets		Weirs	
	Trawl		Trot with baits or snoods		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
Bluefish.....					558, 894	\$40, 256		
Bonito.....					203, 322	10, 377		
Butterfish.....					4, 216, 672	201, 762		
Cod.....	5, 737, 453	\$144, 936			248, 309	9, 159		
Croaker.....					142, 896	5, 592		
Cusk.....					4, 400	132		
Drum, red or redfish.....					4, 300	43		
Eels.....	148	2	1, 200	\$132	6, 400	549		
Flounders.....	9, 450	761			444, 052	26, 257		
Goosefish.....					4, 200	53		
Grayfish.....					3, 600	54		
Hake.....	16, 750	188			126, 671	1, 840		
Herring:								
Round.....					56, 910	4, 268		
Sea.....					395, 186	3, 499		
King whiting or "kingfish".....					50, 122	4, 089		
Mackerel.....					55, 475	3, 377		
Menahden.....					3, 595, 842	28, 380		
Mullet.....					1, 500	46		
Pollock.....					1, 088	53		
Scup or porgy.....					3, 628, 469	70, 650		
Sea bass.....					593, 469	20, 172		
Sea robin.....					70, 018	640		
Shad.....					56, 228	9, 602		
Sharks.....					29, 780	594		
Skates.....	130	1			68, 020	414		
Spanish mackerel.....					223, 604	33, 541		
Spot.....					147, 803	4, 370		
Squeteagues or "sea trout", gray.....					7, 149, 354	256, 691		
Striped bass.....					789	159		
Sturgeon.....					920	115		
Tautog.....	23	2			17, 871	476		
Thimble-eyed mackerel.....					98, 452	2, 689		
Tuna or horse mackerel.....					1, 830	100		
White perch.....					1, 230	49		
Whiting.....					2, 404, 403	23, 275		
Yellow perch.....					63, 658	637		
Crabs:								
Hard.....			4, 160	280				
King.....					2, 880, 716	6, 285	1, 539, 999	\$3, 548
Soft.....			752	282				
Squid.....					774, 299	22, 536		
Turtles, loggerhead.....					225	2		
Total.....	5, 763, 954	145, 890	6, 112	694	28, 330, 977	792, 783	1, 539, 999	3, 548

Species	Stop nets		Fyke nets		Dip nets		Cast nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....								
Carp.....	90, 150	\$12, 006	193, 900	\$3, 814			2, 750	\$315
Catfish and bullheads.....	50	4	13, 202	885				
Eels.....			48, 856	5, 074				
Flounders.....			72, 138	3, 783				
Shad.....	2, 493	807						
Spot.....			50	2				
Squeteagues or "sea trout", gray.....			2, 275	177				
Striped bass.....			4, 085	831				
Tomcod.....			25	1				
White perch.....			198, 403	23, 717				
Yellow perch.....			48, 267	3, 501				
Crabs:								
Hard.....					11, 542	\$1, 132		
Soft.....					15, 600	4, 985		
Turtles, snapper.....			1, 800	180				
Total.....	92, 693	12, 817	583, 001	41, 965	27, 142	6, 117	2, 750	315

Fisheries of New Jersey, 1931—Continued

CATCH: BY GEAR—Continued

Species	Drag nets		Otter trawls		Wire baskets		Pots			
							Crab		Eel	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish			4,873	\$300						
Butterfish			14,103	655						
Cod			179,185	4,954						
Croaker			1,266,641	47,220						
Drum, red or redfish			560	21						
Eels			1,075	87					270,726	\$24,154
Flounders			2,722,735	98,111					7,500	750
Haddock			10,208	173						
Hake			39,421	703						
Herring, sea			2,940	59						
King whiting or "king-fish"			7,016	420						
Mackerel			110	7					3,600	414
Mummichog										
Pigfish			3,635	95						
Pollock			309	12						
Scup or porgy			2,431,430	59,474						
Sea bass			1,163,104	44,286						
Shad			263	114						
Skates			574	11						
Spot			18,532	383						
Squteagues or "sea trout", gray			340,935	10,144						
Sturgeon			8,179	1,252						
Tautog			6,928	142						
White perch			4,464	126						
Whiting			3,110	62						
Crabs:							34	\$2	10,000	\$500
Hard										
Soft									3,600	1,350
Lobsters			3,171	620						
Shrimp	5,560	\$2,780	175,000	3,875						
Squid			14,412	327						
Total	5,560	2,780	8,332,913	273,633			34	2	13,600	1,850
									281,826	25,318

Species	Pots—Lobster		Spears		Dredges			
					Clam		Crab	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels			155,200	\$17,445				
Sea bass	1,379,350	\$54,106						
Tautog	18,960	605						
Crabs, hard	1,445	91						
Lobsters	650,463	167,067						
Clams:								
Hard, public							32,324	\$7,126
Hard, private							17,610	2,915
Surf or skimmers							181,250	10,100
Total	2,050,218	221,869	155,200	17,445	231,184	20,141	125,727	6,744

Species	Dredges—Continued				Tongs		Rakes	
	Oyster		Scallop					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard								
Clams:								
Hard, public								
Hard, private	7,560	\$1,858						
Mussels								
Oysters:								
Market, public, spring								
Market, public, fall								
Market, private, spring	297,834	59,027						
Market, private, fall	13,682,072	1,544,276						
Seed, public, spring	11,286,925	1,693,560						
Seed, public, fall	410,215	36,880						
Seed, private spring	52,727	5,135						
Scallops:								
Bay								
Sea								
Total	25,737,333	3,340,736	154,364	13,546	1,372,566	266,494	643,968	139,775

Fisheries of New Jersey, 1931—Continued

CATCH: BY GEAR—Continued

Species	Forks		Hoes		Gaffs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds 64,064	Value \$15,830
Clams:								
Hard, public	1,000	\$75	1,217,900	\$95,781				
Soft, public							4,000	280
Mussels								
Oysters:								
Market, public, spring							340	86
Market, public, fall							1,907	457
Market, private, fall							8,689	1,800
Seed, public, spring							1,478	110
Scallops, bay							112	12
Terrapin, diamond-back							173	61
Turtles:								
Loggerhead					10	\$1		
Snapper					735	150		
Bloodworms	2,621	2,405						
Sandworms	7,436	7,675						
Total	11,057	10,155	1,217,900	95,781	745	151	80,763	18,636

OPERATING UNITS: BY COUNTIES

Item	Atlantic	Bergen	Burling-ton	Cape May	Cumber-land	Glouces-ter
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels	83			353	2,359	7
On boats and shore:						
Regular	258	5	53	239	32	2
Casual	167	21	73	281	201	24
Total	508	26	126	873	2,592	33
Vessels:						
Motor	18			58	157	1
Net tonnage	241			893	2,796	10
Sail					60	
Net tonnage					1,574	
Total vessels	18			58	217	1
Total net tonnage	241			893	4,370	10
Boats:						
Motor	196	3	62	238	51	8
Other	114	9	24	155	141	7
Accessory boats		23		46	12	2
Apparatus:						
Purse seines:						
Menhaden	1			1		
Length, yards	350			456		
Other	3			12		
Length, yards	1,090			4,610		
Haul seines	27		20	15	9	2
Length, yards	2,379		1,905	874	900	200
Gill nets:						
Drift	155		17	429	78	6
Square yards	44,780		26,420	192,308	69,212	5,560
Runaround				5		
Square yards				3,300		
Stake	61	4		5	45	
Square yards	7,956	7,000		800	5,247	
Lines:						
Hand	59			474	24	
Hooks	88			622	42	
Trawl	175			358	8	
Hooks	95,200			255,500	4,800	
Trot with baits or snoods					1	
Baits or snoods					325	
Pound nets	2			101		
Weirs				83	26	
Stop nets:			6		12	
Square yards			5,550		9,400	31,200
Fyke nets	20		135	34	135	
Dip nets	27			4	3	
Otter trawls	23			33	1	
Yards at mouth	560			674	28	
Wire baskets				4		
Pots:						
Eel				169	20	
Lobster		172		448		
Spears		12		3		

Fisheries of New Jersey, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Atlantic	Bergen	Burling-ton	Cape May	Cumber-land	Glouces-ter
Apparatus—Continued						
Dredges:	Number	Number	Number	Number	Number	Number
Clam	2			5	5	
Yards at mouth	2			4	5	
Oyster	13		13		432	2
Yards at mouth	15		13		517	2
Tongs	294		54	139	130	
Rakes	219		18	126		
Hoes	2					
Gaffs				1	4	
Fishermen:						
On vessels	Number	Number	Number	Number	Number	Number
On boats and shore:						
Regular			15	464	303	18
Casual	32	10	21	159	189	88
Total	32	10	39	663	658	116
Vessels:						
Motor			2	10	28	
Net tonnage			14	119	184	
Sail						1
Net tonnage						17
Total vessels			2	10	28	1
Total net tonnage			14	119	184	17
Boats:						
Motor			7	237	330	46
Other	8	6	4	133	56	16
Accessory boats	2			12	3	1
Apparatus:						
Purse seines:						
Other than menhaden				1		
Length, yards				400		
Haul seines	6	2	14	1	10	8
Length, yards	1,445	350	545	100	2,478	990
Gill nets:						
Anchor				1		
Square yards				900		
Drift				350		41
Square yards				133,200		247,580
Runaround		7		50	25	
Square yards			9,735	130,360	110,800	
Stake		5			822	
Square yards			1,200		95,807	
Lines:						
Hand			4	211	156	
Hooks			8	247	178	
Trawl				150	145	
Hooks				75,000	74,050	
Trot with baits or snoods				1		1
Baits or snoods				100		200
Pound nets				40	43	
Stop nets:						37
Square yards						23,150
Fyke nets		30		110	680	180
Dip nets				9	7	
Cast nets						4
Drag nets					16	
Yards at mouth					37	
Otter trawls				1		
Yards at mouth				70		
Pots:						
Crab						25
Eel			198	1,350	1,781	
Lobster			400	19,945	9,770	
Spears				60	9	
Dredges:						
Clam			6	14		
Yards at mouth			7	13		
Crab			8	30		
Yards at mouth			8	42		
Oyster					33	2
Yards at mouth					34	2
Scallop				4		
Yards at mouth				11		
Tongs				2	228	
Rakes				70	140	
Forks				12	33	
Hoes					190	

Fisheries of New Jersey, 1931—Continued

CATCH: BY COUNTIES

Species	Atlantic		Bergen		Burlington		Cape May	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	1,700	\$41			18,800	\$470		
Bluefish	123,940	8,045					1,098,609	\$62,162
Bonito							10,876	537
Butterfish	5,610	269						
Carp					22,080	3,314		
Catfish and bullheads	21,657	847			5,500	405		
Cero							2,000	80
Cod	1,822,757	46,535					2,947,551	63,840
Croaker	10,703	458					1,411,608	56,463
Drum, red or redfish							4,860	64
Eels	69,977	7,022	25,500	\$1,530	12,300	1,225	31,199	2,921
Flounders	1,282,342	41,716					1,599,022	64,260
Haddock							10,208	173
Hake							41,789	746
Herring, sea	12,670	190					28,818	338
Kingfish or "king mackerel"							45,000	1,350
King whiting or "kingfish"	3,420	284					20,987	1,474
Mackerel	18,357	1,080					55,240	2,589
Menhaden	6,500	33					6,526,620	20,834
Mullet							21,200	501
Mummichog	2,857	100						
Pigfish							3,635	95
Pilotfish							115	1
Pollock							309	12
Scup or porgy	169,184	1,786					4,804,175	101,901
Sea bass	438,306	13,288					1,555,894	66,337
Sea robin							8,552	25
Shad			72,000	8,941	3,593	647	3,702	352
Sharks							3,240	55
Skates	574	11					16,650	131
Snapper, red							3,500	320
Spanish mackerel							24,941	2,567
Spot	6,550	262					72,739	2,756
Squeteagues or "sea trout", gray	1,083,955	16,297					6,297,336	188,179
Striped bass	7,265	1,763						
Sturgeon							9,099	1,367
Sucker	400	12			29,695	2,589		
Tautog	1,533	46					59,448	1,374
Thimble-eyed mackerel							20,730	357
White perch	32,173	3,658					4,464	126
Whiting							73,238	933
Crabs:								
Hard	3,400	360					19,354	1,403
King							4,054,048	9,033
Lobsters	1,239	251					2,451	509
Shrimp							175,000	3,875
Squid	1,300	52					212,232	5,850
Clams:								
Hard, public	345,392	84,451			93,083	22,856	327,552	79,853
Hard, private					4,638	1,140		
Soft, public	12,000	1,800						
Surf or skimmer	75,000	3,500					63,750	3,200
Mussels							4,100	281
Oysters:								
Market, public, spring	1,275	275			8,288	1,950	3,825	676
Market, public, fall	8,075	2,100			8,288	1,950	5,561	1,110
Market, private, spring	132,397	27,869			89,004	19,692	425	100
Market, private, fall	155,840	34,268			88,986	19,688	11,239	2,400
Seed, public, spring	38,138	2,919			38,823	3,020	11,700	910
Seed, public, fall	900	70						
Seed, private, spring	60,040	5,475			27,285	2,358		
Seed, private, fall	49,240	4,640			27,283	2,357		
Scallops, bay							676	75
Turtles:								
Loggerhead							225	2
Snapper							1,335	210
Total	6,006,666	311,773	97,500	10,471	477,646	83,661	33,695,505	830,227

Fisheries of New Jersey, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Cumberland		Gloucester		Hunterdon		Mercer	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	1,650	\$41			10,600	\$178	16,000	\$285
Bluefish	1,020	85						
Butterfish	300	15						
Carp	18,710	2,409	22,000	\$3,300	1,850	269	1,250	200
Catfish and bullheads	11,980	949			133	20		
Cod	19,500	750						
Croaker	18,015	710						
Eels	13,500	1,210					2,667	500
Flounders	2,000	120						
Shad	47,955	6,438	5,378	1,704	4,933	1,771	9,592	2,076
Spot	11,000	340						
Squeteagues or "sea trout", gray	53,200	2,529						
Striped bass	935	148						
Sucker							20,500	1,500
White perch	6,860	374					15,500	1,550
Crabs:								
Hard	2,300	216						
King	366,667	800						
Soft	2,000	285						
Clams:								
Hard, public	3,320	570						
Hard, private	17,610	2,915						
Surf or skimmer	37,500	3,000						
Oysters:								
Market, public, spring	26,340	2,395						
Market, public, fall	57,080	4,603						
Market, private, fall	13,374,025	1,484,442	15,000	1,665				
Seed, public, spring	11,323,940	1,689,406	44,000	6,600				
Seed, public, fall	77,060	5,272						
Seed, private, spring	48,000	7,200						
Terrapin, diamond-back	173	61						
Turtles:								
Loggerhead	10	1						
Snapper	1,200	120						
Total	25,543,850	3,217,404	86,378	13,269	38,016	3,738	45,009	4,611

Species	Middlesex		Monmouth		Ocean		Salem	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives					341,400	\$6,684		
Bluefish	34,550	\$2,766	703,704	\$59,063	573,088	44,761		
Bonito			137,760	6,385	131,006	7,161		
Butterfish			690,995	35,023	1,638,922	88,316		
Carp							77,650	\$9,075
Catfish and bullheads					1,150	72	2,785	229
Cod			729,974	24,597	701,465	24,333		
Croaker			196	14	90,153	3,731		
Cusk					4,400	132		
Eels	1,344	161	293,841	29,936	109,254	10,296	5,940	618
Flounders	113	8	206,946	14,074	253,798	15,612		
Goosefish			4,200	53				
Grayfish			3,600	54				
Hake			66,524	921	74,594	1,065		
Herring:								
Round			56,910	4,268				
Sea	1,270	28	248,622	1,989	108,016	1,041		
King whiting or "kingfish"			11,476	1,037	23,965	2,011		
Mackerel			122,255	5,028	40,090	2,404		
Menhaden	290	10	3,194,362	24,731	373,491	3,490		
Mullet	14,004	840	16,000	320	1,500	46		
Mummichog	6,200	724	400	50				
Pollock			218	9	870	44		
Scup or porgy			1,013,416	20,269	1,262,695	21,490		
Sea bass			323,251	10,631	1,380,506	52,389		
Sea robin			13,000	130	48,466	485		
Shad			23,497	4,489	30,507	5,033	55,806	9,867
Sharks			5,040	126	21,500	413		
Silversides	5,604	672						
Skates			10,600	83	41,700	208		
Spanish mackerel			209,063	31,359	600	90		
Spot	550	22	76,128	2,154	37,568	1,129		
Squeteagues or "sea trout", gray	33,800	2,028	1,634,814	70,425	2,582,331	85,330		
Striped bass	50	10			10,129	2,017		

Fisheries of New Jersey, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Middlesex		Monmouth		Ocean		Salem	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Tautog			3,091	\$218	11,210	\$367		
Thimble-eyed mackerel			13,052	392	72,670	2,180		
Tomcod	20	\$1	25	1				
Tuna or "horse mackerel"			630	28	1,200	72		
White perch					235,235	28,13		
Whiting			1,649,735	15,557	684,540	6,847		
Yellow perch					121,125	4,874		
Crabs:								
Hard	10,851	653	121,123	6,756			12,240	\$612
Soft			4,000	1,000	9,600	3,700	4,352	1,632
Lobsters	3,750	1,050	591,290	150,431	54,904	15,416		
Shrimp					5,560	2,750		
Squid			212,212	5,467	196,352	11,891		
Clams:								
Hard, public	14,650	3,296	113,855	25,814	421,411	101,487		
Hard, private			11,446	3,262	2,922	718		
Soft, public			1,206,900	94,056				
Surf or skimmer			5,000	400				
Oysters:								
Market, public, spring			8,670	1,020	21,209	4,452		
Market, public, fall					13,220	2,409		
Market, private, spring			2,040	600	185,099	36,120		
Market, private, fall			2,040	600	183,991	35,981		
Seed, public, spring					13,247	1,070	36,000	5,400
Seed, public, fall			2,700	240				
Seed, private, spring					305,563	24,318		
Seed, private, fall					900	70		
Scallops, sea			151,364	13,543				
Bloodworms	257	360	2,364	2,045				
Sandworms	771	1,080	6,665	6,595				
Total	128,074	13,709	13,907,994	675,246	12,624,122	662,700	184,773	27,433

PENNSYLVANIA

Fisheries of Pennsylvania, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets, drift	Fyke nets	Total, ex- clusive of duplication
		Number	Number	Number
Fishermen, on boats and shore, casual	62	13	1	75
Boats:				
Motor		5		5
Other	15	1	1	17
Apparatus:				
Number	16	7	30	
Length, yards	1,995			
Square yards		15,530		

CATCH: BY GEAR

Species	Haul seines		Gill nets, drift		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	40,000	\$500				
Carp	1,505	201				
Catfish and bullheads					1,000	\$110
Shad	6,110	1,286	1,190	139		
Suckers	24,275	2,362				
Total	71,890	4,349	3,190	189	1,000	110

Fisheries of Pennsylvania, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Bucks	Delaware	Philadelphia
	Number	Number	Number
Fishermen, on boats, and shore, casual	62	7	6
Boats:			
Motor		3	2
Other	15	1	1
Apparatus:			
Haul seines	16		
Length, yards	1,995		
Gill nets, drift		4	3
Square yards		10,980	4,550
Fyke nets		30	

CATCH: BY COUNTIES

Species	Bucks		Delaware		Philadelphia	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	40,000	\$500	2,000	\$50		
Carp.....	1,505	201				
Catfish and bullheads.....			1,000	110		
Shad.....	6,110	1,286	1,080	102	110	\$37
Suckers.....	24,275	2,362				
Total.....	71,890	4,349	4,080	262	110	37

DELAWARE

Fisheries of Delaware, 1931

OPERATING UNITS: BY GEAR

Fisheries of Delaware, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Pound nets	Stop nets		Fyke nets	Dip nets	Cast nets	Pots	
							Eel	Lobster
Fishermen:								
On boats and shore:								
Regular	Number	Number	Number	Number	Number	Number	Number	Number
Casual	4	6	21	17		4	14	12
Total	35	35	31	17		4	20	
Boats:								
Motor	1		3				3	3
Other	18	21	16	19			18	
Accessory boats	1		1				1	
Apparatus:								
Number	59	39	333	34	4	805		160
Square yards		9,584						

Item	Spears	Dredges		Tongs	Gaffs	By hand	Total, ex- clusive of duplication
		Clam	Oyster				
Fishermen:							
On vessels	Number	Number	Number				
On boats and shore:		30	96				
Regular		7		54			179
Casual	6	1		33	1	27	354
Total	6	38	96	87	1	27	737
Vessels:							
Steam							2
Net tonnage							230
Motor	5	14					16
Net tonnage	79	200					326
Sail		3					3
Net tonnage		39					39
Total vessels	5	17					21
Total net tonnage	79	239					595
Boats:							
Motor	2	5		4			73
Other	3			78			185
Accessory boats							32
Apparatus:							
Number	6	20	34	87	1		
Yards at mouth		17	42				

CATCH: BY GEAR

Species	Purse seines, menhaden		Haul seines		Gill nets			
					Drift		Runaround	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			2,138,189	\$7,664	26,500	\$394		
Bluefish			600		65,100	3,275	1,050	\$56
Carp			35,695	3,212				
Catfish and bullheads			14,837	1,400				
Croaker			64,350	2,202	51,450	1,835	126,612	3,876
Eels			3,411	393				
Flounders			14,550	1,140				
King whiting or "kingfish"			1,890	78				
Menhaden	14,280,600	\$93,299						
Mullet							582,500	39,825
Shad			7,400	1,200	27,131	5,152		
Spot			600	12	197,000	7,025	2,895	85
Squeteagues or "sea trout", gray			228,900	8,978	53,250	1,945	78,500	2,021
Striped bass			16,815	3,148	15,000	4,050		
Sturgeon					4,670	934		
White perch			57,452	7,516	22,900	4,536		
Yellow perch			19,221	1,915				
Total	14,280,600	\$93,299	2,603,921	38,894	463,001	29,149	791,557	45,863

Fisheries of Delaware, 1931—Continued

CATCH: BY GEAR—Continued

Species	Gill nets— Stake		Lines							
			Hand		Trawl		Trot with baits or snoods			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value		
Alewives.....	219,300	\$1,669								
Bluefish.....	1,800	107	2,268	\$203						
Catfish and bullheads.....	44	5								
Cod.....					50,628	\$1,775				
Croaker.....			59,661	2,185						
Eels.....							2,605	\$443		
Flounders.....	41,100	2,575								
Mullet.....	17	2								
Scup.....			12,600	906						
Sea bass.....				9,600	679					
Shad.....	4,279	648								
Squeteagues or "sea trout", gray.....	18,000	720	21,057	1,415						
Striped bass.....	17,614	3,824								
Tautog.....				58,500	1,755					
White perch.....	21,274	3,074								
Total.....	323,428	12,624	163,686	7,143	50,628	1,775	2,605	443		
Species		Pound nets		Stop nets		Fyke nets		Dip nets		
Alewives.....		Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	
Carp.....	31,320	\$627				18,877	\$366			
Catfish and bullheads.....	1,677	194	35,000	\$4,121		378	20			
Eels.....	9,633	975	650	52	1,759	142				
Flounders.....	2,445	284				33,562	3,796			
Herring, sea.....	1,048	62				16,001	1,153			
Squeteagues or "sea trout", gray.....	320	32				1,314	4			
Striped bass.....	1,543	415			1,299	260				
White perch.....	9,080	605			20,710	3,147				
Yellow perch.....	770	48	320	32	7,210	702				
Crabs:										
King.....	594,332	892								
Soft.....								33,600	\$7,660	
Turtles, snapper.....						1,550	83			
Total.....	652,168	4,134	35,970	4,205	102,660	9,673	33,600	7,660		
Species		Cast nets		Pots				Spears		
		Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	
Carp.....	520	\$84						900	\$48	
Catfish and bullheads.....								600	54	
Eels.....				43,540	\$5,326			600		
Lobsters.....						11,250	\$2,814			
Total.....	520	84	43,540	5,326	11,250	2,814	2,100	168		
Species	Dredges				Tongs		Gaffs		By hand	
	Clam		Oyster		Tongs		Gaffs			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value		
Crabs, king.....	23,853	\$4,388			1,600	\$160				
Clams, hard, public.....					106,260	10,540				
Oysters:					127,380	15,200				
Market, public, fall.....			236,914	\$27,317	186,750	12,450				
Market, private, fall.....			625,500	43,100	24,300	1,620				
Seed, public, spring.....							100	\$5		
Seed, public, fall.....										
Turtles, snapper.....										
Total.....	23,853	4,388	862,414	70,417	446,290	39,970	100	5	89,500	134

Fisheries of Delaware, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Kent	New Castle	Sussex
	Number	Number	Number
Fishermen:			
On vessels.....	91		113
On boats and shore:			
Regular.....	95	5	79
Casual.....	86	54	214
Total.....	272	59	406
Vessels:			
Steam.....			2
Net tonnage.....			230
Motor.....	13		3
Net tonnage.....	188		138
Sail.....	3		
Net tonnage.....	39		
Total vessels.....	16		5
Total net tonnage.....	227		368
Boats:			
Motor.....	25	16	32
Other.....	73	22	90
Accessory boats.....	14		18
Apparatus:			
Purse seines, menhaden.....			3
Length, yards.....			1,200
Haul seines.....	23	14	41
Length, yards.....	7,310	1,840	13,025
Gill nets:			
Drift.....	10	26	39
Square yards.....	21,000	135,725	38,560
Runaround.....	6		42
Square yards.....	20,000		24,100
Stake.....	36		131
Square yards.....	5,930		9,830
Lines:			
Hand.....	6		26
Hooks.....	12		52
Trawl.....	10		16
Hooks.....	6,900		12,000
Trot with baits or snoods.....		1	
Baits or snoods.....		50	
Pound nets.....	17	13	29
Stop nets.....	8	31	
Square yards.....	3,200	6,384	
Fyke nets.....	47	68	218
Dip nets.....			34
Cast nets.....	3	1	
Pots:			
Eel.....	132		673
Lobster.....			160
Spears.....			6
Dredges:			
Clam.....	18		2
Yards at mouth.....	15		2
Oyster.....	30		4
Yards at mouth.....	37		5
Tongs.....	68		19
Gaffs.....		1	

Fisheries of Delaware, 1931—Continued

CATCH: BY COUNTIES

Species	Kent		New Castle		Sussex	
	Pounds 800	Value \$16	Pounds 2,000	Value \$91	Pounds 2,431,386	Value \$10,613
Alewives					70,818	3,677
Bluefish					19,475	1,156
Carp	4,360	670	50,335	5,853	10,410	971
Catfish and bullheads	1,932	278	15,181	1,379	36,000	1,200
Cod	14,628	575			185,012	5,487
Croaker	117,061	4,611			57,341	6,925
Eels	12,007	1,376	16,815	2,007	72,699	4,930
Flounders					1,314	4
Herring, sea					900	24
King whiting or "kingfish"	990	54			14,280,600	93,299
Menhaden					582,500	39,825
Mullet	17	2			12,600	906
Scup					9,600	679
Sea bass					16,880	2,532
Shad	4,279	648	17,651	3,820	200,495	7,122
Spot					220,200	6,822
Squteagues or "sea trout", gray	179,827	8,292			19,874	4,289
Striped bass	32,140	7,356	260	52		
Sturgeon			4,670	934		
Tautog					58,500	1,755
White perch	40,628	6,175	5,400	472	85,388	12,231
Yellow perch	80	7	2,234	194	25,215	2,496
Crabs:						
King	683,832	1,026				
Soft					33,600	7,660
Lobsters					11,250	2,814
Clams, hard, public	21,523	3,758			3,930	790
Oysters:						
Market, public, fall	78,540	7,180			27,720	3,300
Market, private, fall	343,530	40,000			20,764	2,517
Seed, public, spring	751,500	51,500			60,750	4,050
Seed, public, fall	24,300	1,620				
Turtles, snapper	1,550	83	100	5		
Total	2,313,524	135,227	114,646	14,807	18,555,221	228,134

FISHERIES OF THE CHESAPEAKE BAY STATES

(Area XXIII)⁵

The yield of fishery products in the Chesapeake Bay States (Maryland and Virginia) during 1931 amounted to 293,270,746 pounds, valued at \$7,427,960. This is a decrease of 7 percent in the catch and 35 percent in the value of the catch as compared with the quantity and its value for 1930. Of the total catch in 1931, 186,412,085 pounds, valued at \$2,871,929, were fish and 106,858,661 pounds, valued at \$4,556,031, were shellfish and miscellaneous products. These fisheries gave employment to 20,689 fishermen, or 7 percent more than in 1930. Of the total number of fishermen employed during 1931, 2,106 regular fishermen were engaged on vessels and 13,286 regular and 5,297 casual fishermen were employed in the shore and boat fisheries.

⁵ This is the number given to this area by the North American Council on Fishery Investigations. It should be explained that there are included under this area craft owned in the area but at times fishing elsewhere. A notable example is the southern trawl fishery, which extends into area XXIV. Data on the operating units and catch of the fisheries of the Chesapeake Bay States have been taken largely from statistics collected by the State fishery agencies of Maryland and Virginia. Supplementary surveys, compilations, and analyses have been made by agents of this Bureau in order that the figures may be presented in a manner comparable with those of other sections.

Fisheries of the Chesapeake Bay States, 1931

SUMMARY OF CATCH

Product	Maryland		Virginia		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish	16,369,929	\$526,837	170,042,156	\$2,345,092	186,412,085	\$2,871,929
Shellfish, etc.	50,263,900	2,178,995	56,594,761	2,377,036	106,858,661	4,556,031
Total	66,633,829	2,705,832	226,636,917	4,722,128	293,270,746	7,427,960

OPERATING UNITS: BY STATES

	Item	Maryland	Virginia	Total
		Number	Number	Number
Fishermen:				
On vessels	845	1,261	2,106	
On boats and shore:				
Regular	6,727	6,559	13,286	
Casual	1,986	3,311	5,297	
Total	9,558	11,131	20,689	
Vessels:				
Steam		19	19	
Net tonnage		2,104	2,104	
Motor	3	101	104	
Net tonnage	18	1,756	1,774	
Sail	191	6	197	
Net tonnage	2,191	39	2,230	
Total vessels	194	126	320	
Total net tonnage	2,209	3,899	6,108	
Boats:				
Motor	4,263	4,220	8,483	
Other	2,342	3,274	5,616	
Accessory boats	22	54	76	
Apparatus:				
Purse seines:				
Menhaden		27	27	
Length, yards		8,020	8,020	
Other	15		15	
Length, yards	3,906		3,906	
Haul seines	185	131	316	
Length, yards	21,844	43,465	65,309	
Gill nets:				
Anchor	39		39	
Square yards	21,260		21,260	
Drift	193	540	733	
Square yards	397,015	487,555	884,570	
Stake	3,113	14,021	17,134	
Square yards	197,483	503,780	701,263	
Lines:				
Hand		18	18	
Hooks	36		36	
Trot with baits or snoods	1,560	1,094	2,654	
Baits or snoods	1,039,560	472,260	1,511,820	
Trot with hooks	12		12	
Hooks	3,600		3,600	
Pound nets	721	2,208	2,929	
Stop nets	3		3	
Square yards	5,650		5,650	
Fyke nets	1,741	832	2,573	
Dip nets	1,776	745	2,521	
Cast nets	2		2	
Otter trawls		27	27	
Yards at mouth		795	795	
Pots, eel	11,309	30	11,339	
Scrapes	1,098	388	1,486	
Yards at mouth	1,093	388	1,481	
Dredges:				
Crab		112	112	
Yards at mouth		224	224	
Oyster	560	164	724	
Yards at mouth	660	212	872	
Scallop		1,216	1,216	
Yards at mouth		811	811	
Tongs	5,887	4,411	10,298	
Rakes	85	843	928	
Picks		731	731	

Fisheries of the Chesapeake Bay States, 1931—Continued

CATCH: BY STATES

Species	Maryland		Virginia		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Alewives	7,826,879	\$57,355	17,239,070	\$150,980	25,065,949	\$208,335
Black bass	18,983	2,198			18,983	2,198
Bluefish	472,863	33,684	342,710	22,105	815,573	55,789
Bonito	4,000	200	103,199	4,327	107,199	4,527
Butterfish	1,264,343	20,604	4,812,066	161,260	6,076,409	181,864
Cabio or crab eater	300	15			300	15
Carp	180,891	14,701	168,448	7,071	349,339	21,772
Catfish and bullheads	406,035	16,426	609,644	25,451	1,015,679	41,877
Cod			41,279	850	41,279	850
Croaker	900,625	20,124	12,398,368	242,926	13,298,993	263,050
Drum:						
Black	32,000	525	165,825	3,317	197,825	3,842
Red or redfish	11,000	225	22,339	903	33,339	1,128
Eels	322,894	20,223	74,968	3,276	397,862	23,499
Flounders	97,110	5,975	1,185,781	53,651	1,282,891	59,626
Gizzard shad	4,200	86	59,900	1,249	64,100	1,335
Haddock			58	2	58	2
Hake			24,865	558	24,865	558
Harvestfish			400	16	400	16
Hickory shad	6,901	136	60,440	1,371	67,341	1,507
King whiting or "kingfish"			36,475	1,264	36,475	1,264
Mackerel	40,300	1,245	59,696	3,572	99,996	4,817
Menhaden			112,919,925	368,570	112,919,925	368,570
Mullet	17,541	856	43,000	1,904	60,541	2,760
Pigfish	2,200	110	54,986	2,274	57,186	2,384
Pike or pickerel	14,474	2,205			14,474	2,205
Pompano	350	70			350	70
Scup	50,000	2,500	403,763	14,489	453,763	16,989
Sea bass	150,000	4,500	72,302	4,118	222,302	8,618
Sea robin	1,000	10			1,000	10
Shad	1,195,705	125,665	7,291,164	864,082	8,486,869	989,747
Sheepshead	800	80			800	80
Skates	1,500	30	2,000	25	3,500	55
Spanish mackerel	300	40	13,954	1,181	14,254	1,221
Spot	100,526	3,439	637,409	22,766	737,935	26,205
Squeteagues or "sea trout":						
Gray	1,159,075	71,526	10,279,231	294,749	12,438,306	366,275
Spotted	500	50	58,500	5,310	59,000	5,360
Striped bass	634,909	96,742	481,441	61,776	1,116,350	158,518
Sturgeon	150	30	6,036	1,105	6,186	1,135
Sunfish	1,200	36			1,200	36
Tautog	200	12			200	12
Thimble-eyed mackerel			68,592	2,747	58,592	2,747
Tomcod			87	3	87	3
White perch	296,073	15,861	235,195	11,113	531,268	26,974
Whiting			1,000	60	1,000	60
Yellow perch	154,102	9,353	68,040	4,671	222,142	14,024
Total	16,369,929	526,837	170,042,156	2,345,092	186,412,085	2,871,929
SHELLFISH, ETC.						
Crabs:						
Hard	29,930,550	415,588	28,963,130	389,413	58,893,680	805,001
Soft	3,910,610	286,196	1,712,400	101,791	5,623,010	387,987
Lobsters						
Squid	30,000	750	381,212	11,398	411,212	12,148
Clams, hard	1,920	804	741,528	252,929	743,448	253,733
Oysters: ¹						
Market, public, spring	4,469,491	410,770	2,181,109	172,909	6,650,600	583,679
Market, public, fall	10,477,223	917,851	5,203,135	401,798	15,680,358	1,319,649
Market, private, spring	322,812	33,150	2,395,015	209,200	2,717,827	242,350
Market, private, fall	1,104,924	112,143	6,157,137	526,389	7,262,061	638,532
Seed, public, spring	14,870	743	2,513,110	77,372	2,527,980	78,115
Seed, public, fall			5,075,495	153,765	5,075,495	153,765
Seed, private, spring			45,000	1,080	45,000	1,080
Scallops, bay			1,226,478	78,990	1,226,478	78,990
Terrapin, diamond-back	1,500	1,000			1,500	1,000
Total	50,263,900	2,178,995	56,594,761	2,377,036	106,858,661	4,556,031
Grand total	66,633,829	2,705,832	226,636,917	4,722,128	293,270,746	7,427,960

¹ Statistics on oysters used in this table are based on yields of 7 pounds of meats to the bushel for market oysters and 5 pounds for seed oysters in both States.

Fisheries of the Chesapeake Bay States, 1931—Continued

PRODUCTION OF CERTAIN SHELLFISH IN NUMBER AND BUSHELS

Product	Maryland		Virginia		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard.....number.....	89,791,650	\$415,588	86,889,390	\$389,413	176,681,040	\$805,001
Soft.....do.....	15,446,909	286,196	6,849,600	101,791	22,296,509	387,987
Clams, hard.....bushels.....	240	804	92,691	252,929	92,931	253,733
Oysters:						
Market, public, spring.....do.....	638,499	410,770	311,587	172,909	950,086	583,679
Market, public, fall.....do.....	1,496,746	917,851	743,305	401,798	2,240,051	1,319,649
Market, private, spring.....do.....	46,116	33,150	342,145	209,200	388,261	242,350
Market, private, fall.....do.....	157,846	112,143	879,591	526,389	1,037,437	638,532
Seed, public, spring.....do.....	2,974	743	502,622	77,372	505,596	78,115
Seed, public, fall.....do.....			1,015,099	153,765	1,015,099	153,765
Seed, private, spring.....do.....			9,000	1,080	9,000	1,080
Scallops, bay.....do.....			204,413	78,990	204,413	78,990

Industries related to the fisheries of the Chesapeake Bay States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	Maryland	Virginia	Total
	Number 300	Number 557	Number 857
Transporting:			
Persons engaged.....			
Vessels:			
Motor.....	140	275	415
Net tonnage.....	2,042	3,189	5,231
Sail.....	9	-----	9
Net tonnage.....	267	-----	267
Total vessels.....	149	275	424
Total net tonnage.....	2,309	3,189	5,498
Wholesale and manufacturing:			
Establishments.....	342	222	564
Persons engaged:			
Proprietors.....	633	277	910
Salaried employees.....	267	122	389
Wage earners:			
Average for season.....	6,512	4,522	11,034
Average for year.....	2,753	1,960	4,713
Paid to salaried employees.....	\$355,712	\$165,179	\$520,891
Paid to wage earners.....	1,353,246	928,283	2,281,529
Total salaries and wages.....	1,708,958	1,093,462	2,802,420
Fishermen manufacturing.....	76	-----	76

PRODUCTS MANUFACTURED

Item		Maryland		Virginia
	Quantity	Value	Quantity	Value
By manufacturing establishments:				
Alewives:				
Salted:				
Corned.....pounds.....	65,600	\$1,546	1,530,837	\$31,838
Tight-pack cut.....do.....	437,090	12,606	4,987,720	143,067
Tight-pack roe.....do.....	46,350	2,515	12,800	1,152
Pickled.....do.....	1,698,996	54,396	252,639	6,858
Canned.....standard cases.....	17,650	41,155	16,970	37,818
Roe canned.....do.....	7,896	35,416	21,270	83,264
Dry scrap.....tons.....	(1)	(1)	515	19,113
Oil.....gallons.....	(1)	(1)	16,696	2,598
Croaker, fresh pandressed.....pounds.....			40,900	4,229
Haddock, fresh fillets.....do.....			171,660	26,210
Menhaden:				
Dry scrap.....tons.....			11,373	366,107
Oil.....gallons.....			1,122,974	169,471
Squeteague:				
Fresh pandressed.....pounds.....			212,800	16,944
Fresh fillets.....do.....			376,700	39,604

¹ Included under unclassified products.

Industries related to the fisheries of the Chesapeake Bay States, 1931—Continued

PRODUCTS MANUFACTURED—Continued

Item	Maryland		Virginia	
	Quantity	Value	Quantity	Value
By manufacturing establishments—Continued.				
Crab meat, packaged, fresh-cooked—pounds	4,364,304	\$925,179	1,429,372	\$466,689
Oysters:				
Fresh-shucked—gallons	1,858,114	2,181,131	1,226,850	1,800,639
Shell products:				
Poultry feed—tons	34,105	235,504	19,941	175,669
Lime—do	15,613	32,758	12,495	63,486
Lime "burned"—do			11,207	85,884
Scallops, bay, fresh-shucked—gallons			127,758	134,550
Unclassified products:				
Pandressed and fresh fillets—pounds			² 102,040	² 14,011
Miscellaneous—		³ 625,095		⁴ 69,124
Total—		4,147,301		3,758,325
By fishermen:				
Alewives, salted:				
Corned—pounds	6,600	220		
Tight-pack cut—do	37,280	1,165		
Eels, salted—do	71,300	4,602		
Total—	115,180	5,987		
Grant total—		4,153,288		3,758,325

² Includes pandressed butterfish, flounders, haddock, sea bass and spot; and fresh fillets of croaker, flounders, and sea bass.

³ Includes packaged alewife roe; smoked alewives, butterfish, carp, cisco, eels, sea herring, lake trout, salmon, shad, sturgeon, whitefish, etc.; canned cat and dog food; alewife dry scrap and oil; blue crab dry scrap; and marine-shell products.

⁴ Includes sturgeon caviar, fresh-shucked hard clams, canned crab meat, dry scrap from blue crabs, and miscellaneous fish; and fish meal, and oil.

NOTE.—The total value of manufactured products in the Chesapeake Bay States was as follows: By manufacturing establishments, \$7,905,626; and by fishermen, \$5,987. Some of the above products may have been manufactured from products imported from another State or a foreign country; therefore, they cannot be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft all have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, all have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

MARYLAND

Fisheries of Maryland, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines	Haul seines	Gill nets			Lines			Pound nets	Stop nets
			Anchor	Drift	Stake	Hand	Trot with baits or snoods	Trot with hooks		
Fishermen:			Number	Number	Number	Number	Number	Number	Number	Number
On vessels	75									
On boats and shore:										
Regular	28	309	27	152	148	18	1,491	12	636	6
Casual		181	52	206	98		55		89	4
Total	103	490	79	358	246	18	1,546	12	725	10
Vessels:										
Motor	1									
Net tonnage	7									
Sail	10									
Net tonnage	194									
Total vessels	11									
Total net tonnage	201									
Boats:										
Motor	9	71	32	123	95	9	1,338	4	237	2
Other	2	164	18	69	78		191	8	154	3
Accessory boats	22									
Apparatus:										
Number	15	185	39	193	3,113	18	1,560	12	721	3
Length, yards	3,906	21,844								
Square yards		21,260	397,015	197,483						
Hooks, baits, or snoods							36,1,039,560	3,600		5,650

Fisheries of Maryland, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Fyke nets	Dip nets	Cast nets	Pots, eel	Scrapes	Dredges, oyster	Tongs	Rakes	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:										
On vessels						797				845
On boats and shore:										
Regular	69	1,183	2	212	591	159	4,848	25	12	6,727
Casual	87	593		12	14	24	697	60	10	1,986
Total	156	1,776	2	224	605	980	5,551	85	22	9,558
Vessels:										
Motor						2				3
Net tonnage						11				18
Sail						186				191
Net tonnage						2,094				2,191
Total vessels						188				194
Total net tonnage						2,105				2,209
Boats:										
Motor	75	599		148		16	3,147	55		4,263
Other	76	1,055	2	29	539	78	373	25	22	2,342
Accessory boats										22
Apparatus:										
Number	1,741	1,776	2	11,309	1,098	560	5,887	85		
Yards at mouth					1,093	660				

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets			
					Anchor		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			95,370	\$853				
Black bass			15,050	1,746				
Bluefish	208,186	\$15,141	18,598	1,271	500	40	20,000	1,400
Carp			112,205	8,921				
Catfish and bullheads			200,911	7,629				
Croaker	63,183	2,264	125,530	2,807				
Eels			1,337	90				
Flounders			2,025	120				
Gizzard shad			200	6				
Hickory shad			1,000	20				
Mullet							9,800	630
Pike or pickerel			3,830	566				
Shad			1,975	255	26,596	2,991	327,967	28,154
Spot	500	20	19,500	696				
Squeteagues or "sea trout", gray	202,577	12,134	19,323	871	12,050	485	2,000	200
Striped bass	155,595	23,027	75,498	11,349	38,155	5,983	97,836	15,708
Sunfish			950	25				
White perch			89,984	4,685	3,000	103	3,390	219
Yellow perch			17,883	1,290				
Crabs, soft			87,779	9,311				
Total	630,041	52,586	888,948	52,511	87,301	9,782	474,732	46,499

Fisheries of Maryland, 1931—Continued

CATCH: BY GEAR—Continued

Species	Gill nets— Stake		Lines					
			Hand		Trot, with baits or snoods		Trot, with hooks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	13,950	\$177						
Bluefish.....	1,400	130	138,000	\$9,660				
Bonito.....			4,000	200				
Catfish and bullheads.....	25	1					7,200	\$360
Croaker.....	3,830	105	1,000	20				
Eels.....							2,600	156
Flounders.....			8,000	640				
Mullet.....	5,000	107						
Scup.....			20,000	1,000				
Sea bass.....			140,000	4,200				
Shad.....	160,576	14,049						
Spot.....	200	10						
Squeteagues or "sea trout," gray.....	14,628	783	25,000	625				
Striped bass.....	63,943	10,864						
White perch.....	18,421	1,403						
Yellow perch.....	100	5						
Crabs, hard.....					29,015,540	\$403,141		
Total.....	282,073	27,634	336,000	16,345	29,015,540	403,141	9,800	516
Species	Pound nets		Stop nets		Fyke nets		Dip nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	7,694,885	\$55,984						
Black bass.....	815	135			4,300	\$48		
Bluefish.....	86,179	6,042			3,118	317		
Butterfish.....	1,264,343	20,604						
Cabio or crab eater.....	300	15						
Carp.....	18,634	1,411	26,200	\$2,208	7,001	648		
Catfish and bullheads.....	96,032	4,153			101,227	4,270		
Croaker.....	707,082	14,928						
Drum:								
Black.....	32,000	525						
Red or redfish.....	11,000	225						
Eels.....	23,555	2,117			13,823	916		
Flounders.....	85,885	5,149			1,200	66		
Gizzard shad.....	4,000	80						
Hickory shad.....	5,901	116						
Mackerel.....	40,300	1,245						
Mullet.....	1,631	71			1,110	48		
Pigfish.....	2,200	110						
Pike or pickerel.....	4,545	615			6,099	1,024		
Pompano.....	350	70						
Scup.....	30,000	1,500						
Sea bass.....	10,000	300						
Sea robin.....	1,000	10						
Shad.....	678,541	80,211			50	5		
Sheepshead.....	800	80						
Skates.....	1,500	30						
Spanish mackerel.....	300	40						
Spot.....	79,076	2,688						
Squeteagues or "sea trout":								
Gray.....	1,883,497	56,428						
Spotted.....	500	50						
Striped bass.....	192,504	28,203			11,378	1,608		
Sturgeon.....	150	30						
Sunfish.....	250	11						
Tautog.....	200	12						
White perch.....	121,083	6,161			60,195	3,290		
Yellow perch.....	14,647	766			121,472	7,292		
Crabs:								
Hard.....							376,810	\$5,071
Soft.....							1,725,594	127,906
Squid.....	30,000	750						
Total.....	13,123,685	290,865	26,200	2,208	330,973	19,532	2,102,404	132,977

Fisheries of Maryland, 1931—Continued

CATCH: BY GEAR—Continued

Species	Cast nets		Pots, eel		Scrapes		Dredges, oyster	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Carp	16,376	\$1,476						
Eels			281,579	\$16,944				
Crabs:								
Hard					538,200	\$7,376		
Soft					2,097,237	148,979		
Oysters:								
Market, public, spring							873,995	\$83,005
Market, public, fall							1,878,290	171,303
Market, private, spring							11,900	1,275
Market, private, fall							23,100	2,475
Total	16,376	1,476	281,579	16,944	2,635,437	156,355	2,787,285	258,058

Species	Tongs		Rakes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value
Clams, hard, public	320	\$122				
Oysters:						
Market, public, spring	3,595,496	327,765				
Market, public, fall	8,598,933	746,548				
Market, private, spring	310,912	31,875				
Market, private, fall	1,081,824	109,668				
Seed, public, spring	14,870	743				
Terrapin, diamond-back					1,500	1,000
Total	13,602,355	1,216,721	1,280	560	1,820	1,122

OPERATING UNITS: BY COUNTIES

Item	Anne Arundel	Baltimore	Calvert	Caro-line	Cecil	Charles	Dor-chester	Har-ford
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels	13	77	10					
On boats and shore:								
Regular	647	20	221	6	14	149	1,108	10
Casual	225	16	217	21	136	258	33	72
Total	885	113	448	27	150	407	1,363	82
Vessels:								
Motor	3							
Net tonnage	18							
Sail		13	2				51	
Net tonnage		350	58				462	
Total vessels	3	13	2				51	
Total net tonnage	18	350	58				462	
Boats:								
Motor	442	13	186	8	56	118	685	45
Other	137	9	177	11	31	94	161	13
Accessory boats	2	10						
Apparatus:								
Purse seines:		1	5					
Length, yards	300	1,300						
Haul seines:	52	6	14	1	10	24		4
Length, yards	1,584	1,386	2,270	250	1,800	3,890		1,600
Gill nets:								
Anchor		2	2		25			
Square yards		1,200	560		7,500			
Drift	2	2		13	18	51	12	26
Square yards	600	3,600		4,205	21,600	220,335	3,600	31,200
Stake	112	23		7		706	213	600
Square yards	2,600	3,300		1,200		45,847	7,790	21,140
Lines:								
Trot with baits or snoods	129		82			38	336	
Baits or snoods	76,400		37,710			34,670	241,020	
Pound nets	46	6	26	12	26	53	190	6
Stop nets:				2	1			
Square yards				4,200	1,450			
Fyke nets	68	23		34	768	14		
Dip nets	65		140			63	150	
Pots, eel	363	490	18	55		36	1,989	565
Scrapes:							52	
Yards at mouth							52	
Dredges, oyster		22	4				126	
Yards at mouth		33	6				147	
Tongs	733		308			201	701	

Fisheries of Maryland, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Kent	Prince Georges	Queen Annes	St. Marys	Somer- set	Talbot	Wicomi- co	Worces- ter
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels	21							
On boats and shore:								
Regular	611	2	764	810	1,079	692	365	229
Casual	158	29	149	287	84	183	30	88
Total	790	31	913	1,120	1,556	961	305	317
Vessels:								
Sail	3			5	96	21		
Net tonnage	52			60	1,042	167		
Boats:								
Motor	351	3	462	347	701	524	202	120
Other	186	14	68	398	810	169	11	53
Accessory boats	6				2	2		
Apparatus:								
Purse seines	3				1	5		
Length, yards	776				260	1,270		
Haul seines	49	7	4	5	1	1		7
Length, yards	3,949	900	1,650	1,860	400	200		105
Gill nets:								
Anchor	10							
Square yards	12,000							
Drift	39	4	2		5	2	6	11
Square yards	102,400	2,635	450		1,065	480	2,700	2,145
Stake	891				403	12	144	2
Square yards	101,464				8,340	790	4,412	600
Lines:								
Hand								18
Hooks								36
Trot with baits or								
snoods	244		181	181	73	248	5	43
Baits or snoods	96,160		106,740	164,000	63,700	182,060	3,000	34,100
Trot with hooks	12							
Hooks	3,600							
Pound nets	36	10	8	85	73	91	17	36
Fyke nets	619	36	4		8	44	14	
Dip nets	50		108	412	624	164		
Cast nets	2							
Pots, eel	623	6	361	12	368	6,423		
Scrapes					1,046			
Yards at mouth					1,041			
Dredges, oyster				12	322	42		32
Yards at mouth				12	380	55		27
Tongs	540		866	984	401	658	365	130
Rakes								85

CATCH: BY COUNTIES

Species	Anne Arundel		Baltimore		Calvert		Caroline	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	732,475	\$6,630						
Black bass			17,268	\$182	581,575	\$5,412	11,758	\$80
Bluefish	55,057	3,718	28,344	2,263	25	2	100	10
Butterfish	532	29			300	30	100	10
Carp	3,982	297	2,384	170	100	8		
Catfish and bullheads	91,873	2,791	6,154	270	939	35	6,875	662
Croaker	148,335	4,952	11,271	450	4,070	143	12,031	381
Eels	21,547	1,710	9,904	731	19,780	526	1,500	30
Flounders	4,484	233	634	17	200	22	4,401	176
Hickory shad	3,090	74	811	7	840	62	100	5
Mullet							194	21
Pike or pickerel	1,342	269	250	42			99	23
Shad	69,438	8,219	529	75	44,483	5,267	3,854	490
Spot	34,975	1,356	398	8	1,100	35	500	10
Squeteagues or "sea trout", gray	183,599	9,415	89,741	5,438	3,200	178	1,500	75
Striped bass	31,423	5,478	95,831	13,828	9,233	1,669	12,620	1,841
White perch	7,864	548	7,920	439	7,850	360	14,294	488
Yellow perch	1,768	142	2,440	170	3,148	215	1,737	92
Crabs:								
Hard	3,177,000	59,865			1,145,700	14,321		
Soft	69,593	8,351			121,263	11,390		
Oysters:								
Market, public, spring	741,832	74,164	66,430	5,694	216,027	26,550		
Market, public, fall	1,485,008	127,531	132,860	11,388	390,796	48,063		
Market, private, spring					75,544	9,505		
Market, private, fall					251,811	30,534		
Total	6,865,217	315,772	473,169	41,172	2,877,984	154,327	71,663	4,394

Fisheries of Maryland, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Cecil		Charles		Dorchester		Harford	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	286,874	\$3,425	136,000	\$1,046	928,719	\$7,720	213,810	\$2,138
Black bass.....	7,805	694	4,855	759	50	5	2,000	200
Bluefish.....			300	30	26,497	1,810		
Butterfish.....					350	30		
Carp.....	35,529	3,066	56,009	3,877	3,763	160	13,700	1,096
Catfish and bullheads.....	78,312	3,741	65,901	3,003	4,043	206	5,038	201
Croaker.....			2,150	77	100,789	1,381		
Eels.....	10,054	678	6,390	365	42,861	2,507	11,200	694
Flounders.....			250	16	24,123	958		
Gizzard shad.....			4,200	86				
Hickory shad.....					500	10		
Mullet.....	636	13					350	7
Pike or pickerel.....	6,629	950	606	118	250	20	1,600	245
Shad.....	60,688	7,081	306,790	21,059	119,887	15,132	23,758	2,858
Spot.....			650	21	2,393	78		
Sqeateagues or "sea trout", gray.....			1,670	61	37,899	1,414		
Striped bass.....	42,135	6,320	35,115	5,370	41,556	6,013	16,106	2,587
Sunfish.....			800	24				
White perch.....	26,859	1,412	54,741	3,396	35,943	988	3,226	173
Yellow perch.....	34,746	2,197	7,534	564	365	19	1,560	135
Crabs:								
Hard.....			487,995	6,739	7,408,510	92,533		
Soft.....			25,670	2,426	465,545	27,932		
Oysters:								
Market, public, spring.....			25,808	3,497	560,287	50,081		
Market, public, fall.....			103,307	14,003	1,203,760	101,556		
Market, private, spring.....			20,503	2,183	15,400	1,510		
Market, private, fall.....			57,708	6,596	88,039	8,530		
Total.....	590,267	29,577	1,404,952	75,316	11,111,529	320,593	292,348	10,334

Species	Kent		Prince Georges		Queen Annes		St. Marys	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	219,174	\$1,415	6,100	\$61				
Black bass.....	30	3	3,700	468				
Bluefish.....	22,958	1,835			10,411	604	13,171	1,114
Butterfish.....	600	60					6,261	287
Carp.....	38,782	3,809	12,076	917	1,048	123	850	34
Catfish and bullheads.....	77,140	3,264	8,090	254			3,600	168
Croaker.....	56,912	1,276			20,250	430	51,225	1,491
Eels.....	23,100	1,507	1,400	111	4,900	387	1,050	63
Flounders.....	1,104	54			250	25	8,600	536
Hickory shad.....	1,000	20						
Mullet.....	916	27	45	3				
Pike or pickerel.....	778	156	160	37	10	1	2,500	312
Shad.....	104,413	11,227	6,660	540	280	63	102,404	11,709
Spot.....	4,500	105			1,285	56	19,800	815
Sqeateagues or "sea trout", gray.....	114,500	6,049	200	15	1,800	156	34,792	2,022
Striped bass.....	207,086	34,249	525	65	8,852	1,304	56,728	8,177
Sunfish.....			350	7				
White perch.....	73,038	4,423	13,334	682	2,750	156	13,500	752
Yellow perch.....	58,730	3,418	2,975	272	3,500	232	500	30
Crabs:								
Hard.....	2,395,400	35,931			3,540,000	53,100	1,909,645	24,318
Soft.....	39,039	4,125			50,841	4,068	172,078	15,636
Oysters:								
Market, public, spring.....	369,320	29,018			737,520	59,417	262,667	21,351
Market, public, fall.....	1,107,960	87,104			2,212,567	178,247	1,041,242	85,144
Market, private, spring.....							19,852	2,093
Market, private, fall.....					18,200	1,560	62,827	6,495
Seed, public, spring.....	14,870	743						
Total.....	4,931,350	229,818	55,615	3,432	6,620,564	299,966	4,763,843	191,360

Fisheries of Maryland, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Somerset		Talbot		Wicomico		Worcester	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	643,500	\$6,260	3,025,475	\$13,483	32,500	\$630	5,000	\$25
Black bass			418	57				
Bluefish	12,125	894	140,600	9,876	3,000	300	160,000	11,200
Bonito							4,000	200
Butterfish	3,500	270			25,000	1,500	1,228,000	18,420
Cabio or crab eater							300	15
Carp	200	9	4,404	429	350	17		
Catfish and bullheads	8,000	374	26,483	1,007	15,300	623		
Croaker	140,030	1,803	268,883	5,733	38,500	1,155	41,000	820
Drum:								
Black					2,000	75	30,000	450
Red or redfish					1,000	25	10,000	200
Eels	11,800	737	157,587	8,905	1,500	130	15,000	1,500
Flounders	10,250	422	1,975	167	4,000	240	40,500	3,240
Hickory shad	1,500	25						
Mackerel					300	45	40,000	1,200
Mullet					600	48	14,800	737
Pigfish	2,200	110						
Pike or pickerel	50	12			200	20		
Pompano					250	50	100	20
Scup							50,000	2,500
Sea bass							150,000	4,500
Sea robin							1,000	10
Shad	122,080	15,054	194,951	22,324	33,490	4,267	2,000	300
Sheepshead					800	80		
Skates							1,500	30
Spanish mackerel							300	40
Spot	7,000	269	1,175	51	2,500	150	24,250	485
Squeteagues or "sea trout":								
Gray	73,974	2,648	75,700	4,495	38,500	2,010	1,502,000	37,550
Spotted					500	50		
Striped bass	17,712	2,574	43,637	5,017	16,350	2,250		
Sturgeon					150	30		
Sunfish					50	5		
Tautog							200	12
White perch	10,000	662	19,854	928	4,900	454		
Yellow perch			30,099	1,717	5,000	150		
Crabs:								
Hard	3,220,000	43,336	6,474,700	83,519	71,600	926	100,000	1,000
Soft	2,860,055	205,720	99,326	5,972			7,200	576
Squid							30,000	750
Clams, hard, public							1,920	804
Oysters:								
Market, public, spring	627,585	62,289	728,833	67,293	133,182	11,416		
Market, public, fall	1,277,503	126,443	1,254,302	115,408	267,918	22,964		
Market, private, spring	84,898	8,008			76,405	6,549	30,800	3,300
Market, private, fall	259,931	24,626	51,373	5,509	254,835	21,843	60,200	6,450
Terrapin, diamond-back	1,500	1,000						
Total	9,394,803	503,545	12,599,775	351,890	1,030,680	78,002	3,550,070	96,334

VIRGINIA

Fisheries of Virginia, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines	Haul seines	Gill nets		Lines, trot with baits or snoods	Pound nets	Fyke nets	Dip nets	Otter trawls
			Drift	Stake					
Fishermen:									
On vessels	Number 899	Number 899							
On boats and shore:									
Regular		298	296	219	998	1,726	61	337	
Casual		203	498	292	96	600	94	408	
Total	899	501	794	511	1,094	2,326	155	745	103
Vessels:									
Steam	19								
Net tonnage	2,104								
Motor	8								27
Net tonnage	748								394
Total vessels	27								27
Total net tonnage	2,852								394
Boats:									
Motor		102	129	183	889	649	86	161	
Other		125	397	189	195	521	78	584	
Accessory boats	54								
Apparatus:									
Number	27	131	540	14,021	1,094	2,208	832	745	27
Length, yards	8,020	43,465							
Square yards			487,555	503,780					
Yards at mouth									795
Hooks, baits, or snoods					472,260				

Item	Pots, eel	Scrapes	Dredges			Tongs	Rakes	Picks	By hand	Total, exclusive of dupli- cation
			Crab	Oyster	Scallop					
Fishermen:										
On vessels	Number 161	Number 96				Number 14				Number 1,261
On boats and shore:										
Regular	1	209	18	96	624	3,466	843	731	365	6,559
Casual						1,378				3,311
Total	1	209	179	192	624	4,848	843	731	365	11,131
Vessels:										
Steam										19
Net tonnage										2,104
Motor			50	14			5			101
Net tonnage			427	191			32			1,756
Sail				6						6
Net tonnage				39						39
Total vessels			50	20			5			126
Total net tonnage			427	230			32			3,899
Boats:										
Motor	1		6	60	300	2,873	88	45	22	4,220
Other		179		62	255	615	740	648	343	3,274
Accessory boats										54
Apparatus:										
Number	30	388	112	164	1,216	4,411	843	731		27,574
Yards at mouth		388	224	212	811					

Fisheries of Virginia, 1931—Continued

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets			
					Drift		Stake	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			33,700	\$484	32,525	\$561	17,680	\$274
Bluefish			32,900	2,540	3,700	274		
Butterfish			1,600	80				
Carp			134,409	5,744				
Catfish and bullheads			303,894	12,627				
Croaker			273,040	6,934	205,200	4,786	2,000	62
Drum, red or redfish			6,180	249	900	46		
Eels			200	10				
Flounders			40,150	1,660				
Gizzard shad			27,200	544	3,200	96	3,000	64
Hickory shad			500	15	14,725	444	1,200	24
Menhaden	111,381,950	\$363,440						
Mullet			400	20	15,700	745	25,200	1,054
Pigfish			21,000	862	8,000	320		
Shad			10,930	1,236	643,461	72,166	504,610	67,073
Spanish mackerel			2,900	290	2,000	200		
Spot			232,830	8,885	94,400	3,306		
Squeteagues or "sea trout":								
Gray			190,100	8,827	4,300	215	4,800	240
Spotted			52,500	4,710				
Striped bass			108,154	15,044	45,320	7,776	64,190	9,314
White perch			125,000	6,220	2,150	109		
Whiting					1,000	60		
Yellow perch			12,400	868				
Total	111,381,950	363,440	1,609,987	77,849	1,076,581	91,104	622,680	78,105

Species	Lines, trot with baits or snoods		Pound nets		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	17,128,015	\$149,208				
Bluefish	306,043	19,287				
Bonito	103,199	4,327				
Butterfish	4,808,106	161,092				
Carp	16,850	674				
Catfish and bullheads	40,600	1,732				
Cod	39,889	797				
Croaker	11,542,648	220,879				
Drum:						
Black	165,825	3,317				
Red or redfish	15,144	604				
Eels	61,180	2,689				
Flounders	625,510	26,156				
Gizzard shad	8,600	184				
Harvestfish	400	16				
Hickory shad	42,875	863				
King whiting or "kingfish"	20,030	776				
Mackerel	59,696	3,572				
Menhaden	1,537,975	5,130				
Mullet	1,000	50				
Pigfish	23,320	1,015				
Scup or porgy	166,136	5,964				
Sea bass	19,878	1,349				
Shad	6,122,383	722,291				
Skates	2,000	25				
Spanish mackerel	9,054	691				
Spot	307,395	10,522				
Squeteagues or "sea trout":						
Gray	9,996,040	282,571				
Spotted	6,000	600				
Striped bass	218,427	25,471				
Sturgeon	4,975	899				
Thimble-eyed mackerel	68,592	2,747				
White perch	56,240	2,364				
Yellow perch						
Crabs, hard	21,354,660	\$284,017				
Squid			376,438	11,293		
Total	21,354,660	284,017	53,900,463	1,669,155	594,339	27,921

Fisheries of Virginia, 1931—Continued

CATCH: BY GEAR—Continued

Species	Dip nets		Otter trawls		Pots, eel		Scrapes	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	1,30	\$26	650	\$7				
Bluefish.....			67	4				
Butterfish.....			2,360	88				
Cod.....			1,090	41				
Croaker.....			313,380	8,475				
Drum, red or redfish.....			115	4				
Eels.....			418	13	600	\$24		
Flounders.....			512,121	25,484				
Haddock.....			58	2				
Hake.....			24,865	558				
King whiting or "kingfish".....			16,445	488				
Pigfish.....			1,566	33				
Scup or porgy.....			237,627	8,525				
Sea bass.....			52,424	2,769				
Spot.....			984	21				
Squeteagues or "sea trout", gray.....			64,291	2,011				
Sturgeon.....			1,061	206				
Tomcod.....			87	3				
White perch.....			1,025	29				
Crabs:								
Hard.....	44,000	660					350,470	\$4,711
Soft.....	603,280	35,301					1,109,120	66,490
Lobsters.....			12	2				
Squid.....			4,774	105				
Total.....	648,580	35,987	1,235,420	48,868	600	24	1,459,590	71,201

Species	Dredges						Tongs	
	Crab		Oyster		Scallop			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard.....	7,214,000	\$100,025						
Clams, hard.....							523,016	\$173,676
Oysters:								
Market, public, spring.....			21,140	\$1,812			2,057,853	165,262
Market, public, fall.....			45,920	3,936			4,952,626	386,171
Market, private, spring.....			763,238	64,806			1,490,118	135,149
Market, private, fall.....			2,061,962	169,514			3,817,107	338,685
Seed, public, spring.....							2,513,110	77,372
Seed, public, fall.....							5,075,495	153,765
Scallops, bay.....					1,226,478	\$78,990		
Total.....	7,214,000	100,025	2,892,260	240,068	1,226,478	78,990	20,429,325	1,430,080

Species	Rakes		Picks		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value
Clams, hard.....	100,768	\$36,027				
Oysters:						
Market, public, spring.....			350	20		
Market, public, fall.....			1,050	60		
Market, private, spring.....			141,659	9,245		
Market, private, fall.....			278,068	18,190		
Seed, public, fall.....			45,000	1,080		
Total.....	566,895	64,622	76,872	27,900	346,177	32,772

Fisheries of Virginia, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Acco-mac	Alex-andria	Caro-line	Charles City	Chester-field	Din-tow-die	Eliza-beth City	Essex	Fair-fax
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels	27						117		
On boats and shore:									
Regular	1,566	14		174			305	60	
Casual	62	12	4	64	25	16	8	83	52
Total	1,655	26	4	238	25	16	430	143	52
Vessels:									
Motor	1							30	
Net tonnage	6							383	
Sail	6								
Net tonnage	39								
Total vessels	7							30	
Total net tonnage	45							383	
Boats:									
Motor	605	2		16	1		106	38	26
Other	831	14	1	138	13	12	10	71	20
Apparatus:									
Haul seines	13			8	1			2	1
Length, yards	5,400		200	3,200	300			400	100
Gill nets:									
Drift	1	12		213	10		6	8	16
Square yards	2,400	29,630		135,200	6,000		5,400	5,600	43,400
Stake	67				360				1
Square yards	2,600				6,840				400
Lines:									
Trot with baits or snoods	118						19		
Baits or snoods	65,100						13,300		
Pound nets	256						300		1
Fyke nets	8	12		4	6			5	249
Dip nets	160								
Otter trawls							11		
Yards at mouth							325		
Scrapes	388								
Yards at mouth	388								
Dredges:									
Crab							30		
Yards at mouth							60		
Oyster	136						8		
Yards at mouth	169						12		
Scallop	446								
Yards at mouth	298								
Tongs	670						45	118	
Rakes	319								
Picks	360								

Item	Glou-cest-er	Hen-rico	Isle of Wight	James City	King and Queen	King George	King Wil-liam	Lan-caster	Math-ews
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels			3					211	16
On boats and shore:									
Regular	123		275	68	40	24	366	338	
Casual	395	134	94	20	62	63	64	553	387
Total	518	134	372	88	62	103	88	1,130	741
Vessels:									
Steam								2	
Net tonnage								184	
Motor			1					8	4
Net tonnage			5					329	36
Total vessels			1					10	4
Total net tonnage			5					513	36
Boats:									
Motor	335	2	180	37	2	49	24	414	339
Other	48	96	68	19	38	28	36	127	145
Accessory boats								12	

Fisheries of Virginia, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Accomac		Alexandria		Caroline		Charles City	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs:								
Hard	3,768,470	\$49,446						
Soft	1,345,120	80,700						
Squid	231,000	6,930						
Clams, hard, public	211,352	78,782						
Oysters:								
Market, public, spring	177,471	12,455						
Market, public, fall	390,439	27,953						
Market, private, spring	511,938	49,176						
Market, private, fall	1,024,562	98,414						
Seed, public, spring	198,000	7,920						
Seed, public, fall	397,000	13,233						
Scallops, bay	709,200	44,505						
Total	19,904,146	768,921	69,847	\$4,806	3,200	\$148	346,700	\$41,017

Species	Chesterfield		Dinwiddie		Elizabeth City		Essex	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	15,375	\$205	2,600	\$39	30,000	\$300	5,000	\$74
Bluefish					15,067	754		
Butterfish					601,877	12,070		
Carp	3,060	152					3,750	150
Catfish and bullheads	3,500	110					4,400	186
Cod					12,633	259		
Croaker					3,236,462	66,348		
Drum, red or redfish					95	3		
Eels	20	1			69	3	450	27
Flounders					310,774	15,058		
Gizzard shad					1,000	20		
Haddock					58	2		
Hake					9,415	189		
Hickory shad	840	25			6,000	120	75	3
King whiting or "kingfish"					8,327	226		
Mackerel					1,000	50		
Mullet					1,000	50		
Pigfish					3,989	80		
Scup or porgy					71,375	1,833		
Sea bass					22,298	1,244		
Shad	3,985	562	3,600	540	900,000	90,000	1,650	247
Spot					784	15		
Squeteagues or "sea trout", gray	400	48	2,340	351	648,634	13,476		
Striped bass							300	36
Sturgeon					2,331	459		
Tomcod					87	3		
White perch	180	8			10,555	212	4,650	258
Whiting					1,000	60		
Crabs, hard					2,952,000	36,900		
Lobsters					12	2		
Squid					2,669	60		
Clams, hard, public					102,400	35,840		
Oysters:								
Market, public, spring					8,400	480	53,067	6,064
Market, public, fall					19,600	1,080	189,194	18,192
Market, private, spring					147,000	11,800	82,320	8,232
Market, private, fall					413,000	33,400	246,960	24,696
Seed, public, spring					57,000	1,710		
Seed, public, fall					118,000	3,540		
Total	27,360	1,111	8,540	930	9,714,911	327,646	561,816	58,165

Species	Fairfax		Gloucester		Henrico		Isle of Wight	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			110,900	\$1,109	7,380	\$146	18,200	\$364
Bluefish			7,600	380				
Butterfish			4,800	192				
Carp					5,400	270	24,500	980
Catfish and bullheads	95,040	\$3,800	600	24	3,400	154	17,500	620
Cod					300	12		
Croaker			2,249,300	33,746			38,500	1,155
Eels			400	20			1,500	60
Flounders			17,400	696			7,600	304
Gizzard shad			1,500	36			17,000	340
Hickory shad							1,200	24
Mullet							5,400	162

Fisheries of Virginia, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Fairfax		Gloucester		Henrico		Isle of Wight	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Pigfish			1,100	\$44				
Shad	87,743	\$6,635	51,600	7,632	28,900	\$4,330	164,600	\$24,690
Spanish mackerel			1,100	55				
Spot			100,500	3,980				
Squeteagues or "sea trout", gray			568,700	14,235			25,500	1,275
Striped bass					12,460	1,836	26,700	3,264
White perch	10,000	500	300	15	2,000	120	14,500	580
Yellow perch	18,800	1,316	900	63				
Crabs, hard			1,104,000	16,560			188,000	2,350
Clams, hard, public			57,000	14,080				
Oysters:								
Market, public, spring			151,725	12,966			231,000	13,200
Market, public, fall			302,540	22,720			695,800	39,780
Market, private, spring			28,791	2,468			34,608	2,472
Market, private, fall			67,928	5,380			69,216	4,944
Seed, public, spring			102,500	3,075			629,865	18,896
Seed, public, fall			195,000	5,850			1,269,740	38,192
Total	211,583	12,251	5,126,184	145,326	59,840	6,868	3,480,929	153,652

Species	James City		King and Queen		King George		King William	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	11,000	\$165			154,600	\$1,590		
Carp	10,000	400						
Catfish and bullheads	14,700	512	1,200	\$48	113,000	4,730	2,400	\$96
Croaker	9,000	270					1,000	40
Eels			200	10				
Flounders	4,000	160	250	12			300	15
Gizzard shad	9,000	180	100	5			100	2
Hickory shad			12,500	375			1,200	36
Mullet			500	25			600	30
Shad	113,100	14,634	17,650	2,598	54,887	5,070	14,390	2,158
Spot							200	8
Squeteagues or "sea trout", gray	8,000	400	900	45			1,000	50
Striped bass	24,100	1,872	500	50	71,300	10,275	800	80
White perch	6,200	348	500	25	66,000	3,300	500	25
Yellow perch	1,500	60			8,600	602	600	36
Crabs, hard					210,000	2,625		
Oysters:								
Market, public, spring					9,450	1,315		
Market, public, fall					28,350	3,645		
Market, private, spring							63,000	5,400
Market, private, fall							189,000	16,200
Seed, public, spring	18,650	559						
Seed, public, fall	37,350	1,121						
Total	266,600	20,681	34,300	3,193	716,187	33,152	275,090	24,176

Species	Lancaster		Mathews		Middlesex		Nansemond	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	822,000	\$8,220	2,742,800	\$25,769	13,000	\$235		
Bluefish	14,800	888	37,360	3,048	6,000	360		
Butterfish	300,000	15,000	22,340	908				
Carp					25,000	1,000		
Catfish and bullheads							1,600	\$64
Croaker	400	12	669,400	10,062	140,900	2,942	37,400	1,122
Eels	3,750	175			200	10		
Flounders	38,900	1,584	38,500	1,552	3,000	120		
Gizzard shad							3,600	108
Menhaden	24,311,600	81,038						
Pigfish			14,820	740				
Sea bass	644,262	77,511	1,861,800	245,010	17,800	2,670	28,040	4,196
Spot	75,300	2,262	53,980	2,314	95,500	2,865		
Squeteagues or "sea trout", gray	348,000	10,469	1,124,200	33,926	25,300	1,091		
Striped bass	13,200	1,617	22,300	2,676	17,800	2,136	500	75
White perch	10,300	470	7,000	350	7,800	332	200	8
Crabs:								
Hard	1,111,500	16,672	1,182,000	14,930	784,500	9,806	70,000	1,050
Soft	70,400	5,984	17,280	1,037				
Oysters:								
Market, public, spring	144,928	12,422	67,487	6,771	213,640	24,415	81,375	4,650
Market, public, fall	434,798	37,268	189,413	17,522	640,934	57,865	389,725	22,310
Market, private, spring	390,586	33,479	83,391	8,278	135,968	15,539	93,625	5,350
Market, private, fall	1,185,758	101,636	222,950	21,722	264,929	22,827	280,875	16,050
Seed, public, spring			11,500	345	19,000	570	45,000	1,350
Seed, public, fall			34,500	1,035	38,000	1,140	142,500	4,350
Total	29,920,482	406,707	8,403,021	397,995	2,449,271	145,923	1,174,440	60,683

Fisheries of Virginia, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Accomac		Alexandria		Caroline		Charles City	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs:								
Hard	3,768,470	\$49,446						
Soft	1,345,120	80,700						
Squid	231,000	6,930						
Clams, hard, public	211,352	78,782						
Oysters:								
Market, public, spring	177,471	12,455						
Market, public, fall	390,439	27,953						
Market, private, spring	511,938	49,176						
Market, private, fall	1,024,562	98,414						
Seed, public, spring	198,000	7,920						
Seed, public, fall	397,000	13,233						
Scallops, bay	709,200	44,505						
Total	19,904,146	768,921	69,847	\$4,806	3,200	\$148	346,700	\$41,017

Species	Chesterfield		Dinwiddie		Elizabeth City		Essex	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	15,375	\$205	2,600	\$39	30,000	\$300	5,000	\$74
Bluefish					15,067	754		
Butterfish					601,877	12,070		
Carp	3,060	152					3,750	150
Catfish and bullheads	3,500	110					4,400	186
Cod					12,633	259		
Croaker					3,236,462	66,348		
Drum, red or redfish					95	3		
Eels	20	1			69	3	450	27
Flounders					310,774	15,058		
Gizzard shad					1,000	20		
Haddock					58	2		
Hake					9,415	189		
Hickory shad	840	25			6,000	120	75	3
King whiting or "kingfish"					8,327	226		
Mackerel					1,000	50		
Mullet					1,000	50		
Pigfish					3,989	80		
Scup or porgy					71,375	1,833		
Sea bass					22,298	1,244		
Shad	3,985	562	3,600	540	900,000	90,000	1,650	247
Spot					784	15		
Squeteagues or "sea trout", gray	400	48	2,340	351	648,634	13,476		
Striped bass							300	36
Sturgeon					2,331	459		
Tomcod					87	3		
White perch	180	8			10,555	212	4,650	258
Whiting					1,000	60		
Crabs, hard					2,952,000	36,900		
Lobsters					12	2		
Squid					2,669	60		
Clams, hard, public					102,400	35,840		
Oysters:								
Market, public, spring					8,400	480	53,067	6,064
Market, public, fall					19,600	1,080	159,194	18,192
Market, private, spring					147,000	11,800	82,320	8,232
Market, private, fall					413,000	33,400	246,960	24,696
Seed, public, spring					57,000	1,710		
Seed, public, fall					118,000	3,540		
Total	27,360	1,111	8,540	930	9,714,911	327,646	561,816	58,165

Species	Fairfax		Gloucester		Henrico		Isle of Wight	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			110,900	\$1,109	7,380	\$146	18,200	\$364
Bluefish			7,600	380				
Butterfish			4,800	192				
Carp					5,400	270	24,500	980
Catfish and bullheads	95,040	\$3,800	600	24	3,400	154	17,500	620
Cod					300	12		
Croaker			2,249,300	33,746			38,500	1,155
Eels			400	20			1,500	60
Flounders			17,400	696			7,600	304
Gizzard shad			1,500	36			17,000	340
Hickory shad							1,200	24
Mullet							5,400	162

Fisheries of Virginia, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Fairfax		Gloucester		Henrico		Isle of Wight	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Pigfish			1,100	\$44				
Shad	87,743	\$6,635	51,600	7,632	28,900	\$4,330	164,600	\$24,690
Spanish mackerel			1,100	55				
Spot			100,500	3,980				
Squeteagues or "sea trout", gray			568,700	14,235			25,500	1,275
Striped bass					12,460	1,836	26,700	3,264
White perch	10,000	500	300	15	2,000	120	14,500	580
Yellow perch	18,800	1,316	900	63				
Crabs, hard			1,104,000	16,560			188,000	2,350
Clams, hard, public			57,000	14,080				
Oysters:								
Market, public, spring			151,725	12,966			231,000	13,200
Market, public, fall			302,540	22,720			695,800	39,780
Market, private, spring			28,791	2,468			34,608	2,472
Market, private, fall			67,928	5,380			69,216	4,944
Seed, public, spring			102,500	3,075			629,865	18,896
Seed, public, fall			195,000	5,850			1,269,740	38,192
Total	211,583	12,251	5,126,184	145,326	59,840	6,868	3,480,929	153,652

Species	James City		King and Queen		King George		King William	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	11,000	\$165			154,600	\$1,590		
Carp	10,000	400						
Catfish and bullheads	14,700	512	1,200	\$48	113,000	4,730	2,400	\$96
Croaker	9,000	270					1,000	40
Eels			200	10				
Flounders	4,000	160	250	12			300	15
Gizzard shad	9,000	180	100	5			100	2
Hickory shad			12,500	375			1,200	36
Mullet			500	25			600	30
Shad	113,100	14,634	17,650	2,598	54,887	5,070	14,390	2,158
Spot							200	8
Squeteagues or "sea trout", gray	8,000	400	900	45			1,000	50
Striped bass	24,800	1,872	500	50	71,300	10,275	800	80
White perch	6,200	348	500	25	66,000	3,300	500	25
Yellow perch	1,500	60			8,600	602	600	36
Crabs, hard					210,000	2,625		
Oysters:								
Market, public, spring					9,450	1,315		
Market, public, fall					28,350	3,645		
Market, private, spring							63,000	5,400
Market, private, fall							189,000	16,200
Seed, public, spring	18,650	559						
Seed, public, fall	37,350	1,121						
Total	266,600	20,681	34,300	3,193	716,187	33,152	275,090	24,176

Species	Lancaster		Mathews		Middlesex		Nansemond	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	822,000	\$8,220	2,742,800	\$25,769	13,000	\$235		
Bluefish	14,800	888	37,360	3,048	6,000	360		
Butterfish	300,000	15,000	22,340	908				
Carp					25,000	1,000		
Catfish and bullheads							1,600	\$64
Croaker	400	12	669,400	10,062	140,900	2,942	37,400	1,122
Eels	3,750	175			200	10		
Flounders	38,900	1,584	38,500	1,552	3,000	120		
Gizzard shad							3,600	108
Menhaden	24,311,600	81,038						
Pigfish			14,820	740				
Sea bass	644,262	77,511	1,861,800	245,010	17,800	2,670	28,040	4,196
Spot	75,300	2,262	53,980	2,314	95,500	2,865		
Squeteagues or "sea trout", gray	348,000	10,469	1,124,200	33,926	25,300	1,091		
Striped bass	13,200	1,617	22,300	2,676	17,800	2,136	500	75
White perch	10,300	470	7,000	350	7,800	332	200	8
Crabs:								
Hard	1,111,500	16,672	1,182,000	14,930	784,500	9,806	70,000	1,050
Soft	70,400	5,984	17,280	1,037				
Oysters:								
Market, public, spring	144,928	12,422	67,487	6,771	213,640	24,415	81,375	4,650
Market, public, fall	434,798	37,268	189,413	17,522	640,934	57,865	389,725	22,310
Market, private, spring	390,586	33,479	83,391	8,278	135,968	15,539	93,625	5,350
Market, private, fall	1,185,758	101,636	222,950	21,722	264,929	22,827	280,875	16,050
Seed, public, spring			11,500	345	19,000	570	45,000	1,350
Seed, public, fall			34,500	1,035	38,000	1,140	142,500	4,350
Total	29,920,482	406,707	8,403,021	397,995	2,449,271	145,923	1,174,440	60,683

Fisheries of Virginia, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	New Kent		Norfolk		Northampton		Northumberland	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	6,500	\$130			9,025	\$90	9,979,840	\$86,113
Bluefish			11,000	\$880	56,133	2,959	14,000	840
Bonito					40,699	1,827		
Butterfish			24,500	980	1,349,734	54,489	63,500	3,140
Carp	11,600	464						
Catfish and bullheads	8,000	240						
Cod					16,889	337		
Croaker					704,786	18,758	1,444,000	26,068
Drum:								
Black					4,000	80		
Red or redfish					1,824	85		
Eels			349	10			5,600	280
Flounders			32,459	1,511	70,610	2,888	43,200	1,728
Gizzard shad	6,500	130						
Hake			2,125	42				
Harvestfish					400	16		
Hickory shad							36,600	732
King whiting or "kingfish"					5,030	251		
Mackerel					58,696	3,522		
Menhaden					1,175	8	88,607,150	287,524
Mullet					13,700	685		
Pigfish			245	5				
Scup or porgy			76,836	2,300	98,136	3,924		
Sea bass			1,521	69	16,178	1,127		
Shad	51,000	6,808	79,500	11,925	12,800	1,536	1,884,750	203,422
Spanish mackerel					6,354	508		
Spot			34,900	1,396	51,615	1,938	3,000	120
Squeteagues or "sea trout":								
Gray			39,640	1,958	3,229,534	100,537	289,600	10,160
Spotted			13,000	1,300				
Striped bass	7,240	734			5,927	780	48,800	5,200
Sturgeon			230	46				
Thimble-eyed mackerel					24,092	967		
White perch	2,200	88						
Crabs:								
Hard			1,008,000	15,120	976,960	12,146	6,500,500	79,196
Soft							279,600	14,070
Squid			875	17	145,438	4,363		
Clams, hard, public					85,256	27,044		
Oysters:								
Market, public, spring			196,000	14,000	1,750	140	92,981	8,900
Market, public, fall					3,850	300	281,757	27,021
Market, private, spring			315,000	22,500	99,743	5,960	20,069	2,103
Market, private, fall			945,000	67,500	193,886	11,620	60,613	6,343
Seed, public, spring			84,830	2,544				
Seed, public, fall			169,670	5,090				
Seed, private, spring					45,000	1,080		
Scallops, bay					517,278	34,485		
Total	93,040	8,594	3,144,885	152,185	7,856,178	294,993	109,655,560	762,960

Species	Prince George		Princess Anne		Prince William		Richmond		Spotsylvania	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	10,000	\$148			8,000	\$150	61,650	\$924	8,000	\$100
Bluefish			5,000	\$400						
Butterfish			22,000	880						
Carp	38,138	1,525					4,500	180		
Catfish and bullheads	65,404	3,259			102,400	4,096	12,300	615	37,000	1,480
Croaker			106,000	3,180			27,000	810		
Eels	600	24					1,450	58		
Flounders	400	20	10,000	400						
Hickory shad							525	20		
Shad	9,235	1,373	51,000	7,650	88,189	6,760	14,650	2,197	24,300	2,490
Spanish mackerel			200	16						
Spot			27,900	1,395			4,400	176		
Squeteagues or "sea trout":										
Gray			29,500	1,475			3,350	198		
Spotted			18,500	1,850						
Striped bass	2,124	287			30,200	5,960	2,000	300		
White perch	1,400	56			19,800	990	7,900	503	9,600	480
Yellow perch					14,600	1,022			9,000	630
Crabs, hard			594,000	11,880			7,200	108	70,000	1,050
Oysters:										
Market, public, spring							64,505	9,215		
Market, public, fall							193,515	22,116		
Market, private, spring			8,400	1,800			134,400	15,360		
Market, private, fall			19,600	4,200			403,200	46,080		
Seed, public, spring			10,000	300						
Total	127,301	6,692	902,100	35,426	263,189	18,978	942,545	98,860	157,900	6,230

Fisheries of Virginia, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Stafford		Surry		Warwick		Westmoreland		York	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	6,000	\$135	7,500	\$113	150,000	\$1,500	2,266,800	\$15,411	51,150	\$512
Bluefish							76,800	4,608	37,700	2,662
Butterfish					33,593	1,468			290	10
Carp			17,400	522			14,400	1,000		
Catfish and bullheads	30,500	1,220	21,200	636			58,000	2,848	3,000	105
Cod					33	1			424	21
Croaker			5,100	153	85,560	1,772	34,000	510	358,153	7,728
Drum, red or redfish									6,420	257
Eels									1,000	60
Flounders					162,890	8,331			211,498	9,844
Gizzard shad			10,400	208			1,200	36		
Hake					11,772	294			1,553	33
King whiting or “kingfish”					2,093	68			6,025	194
Mullet					2,000	100				
Pigfish					53	2			29,279	1,166
Scup or porgy					86,134	4,305			3,282	87
Sea bass					15,399	771			13,206	685
Shad	19,173	1,565	34,700	4,164	130,400	19,560	199,069	22,582	88,600	11,382
Spanish mackerel									4,900	490
Spot					100	3			107,000	4,114
Squeateagues or “sea trout”, gray					121,308	6,051	148,000	3,760	130,309	5,106
Striped bass	2,400	360	8,000	964	76,200	9,144	54,500	7,080	27,800	3,328
Sturgeon					241	48			1,459	197
White perch	11,200	560	4,700	188	5,407	215	20,600	1,100	63	2
Yellow perch	9,000	630					1,200	96	2,000	90
Crabs, hard					178,000	2,225	1,780,000	22,249	6,478,000	95,100
Squid					372	10			858	18
Clams, hard, public									285,520	97,183
Oysters:										
Market, public, spring					275,310	15,732	99,400	12,320	312,620	17,864
Market, public, fall					550,690	31,468	297,150	36,822	625,380	35,736
Market, private, spring					37,366	2,135			208,810	17,148
Market, private, fall					74,725	4,270	24,745	3,055	470,190	38,052
Seed, public, spring					814,300	24,429			522,465	15,674
Seed, public, fall					1,628,700	48,861			1,045,035	31,353
Total	78,273	4,470	109,000	6,948	4,443,846	182,799	5,074,664	133,441	11,033,989	396,201

FISHERIES OF THE SOUTH ATLANTIC AND GULF STATES

(South Atlantic, area XXIV; Gulf, area XXV)⁶

The yield of fishery products in the South Atlantic and Gulf States (North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas) during 1931 amounted to 289,309,501 pounds, valued at \$8,081,934. This is a decrease of 31 percent in the volume of the catch and 27 percent in its value as compared with the previous year. Of the total catch in 1931, 166,809,600 pounds, valued at \$3,393,352, were fish and 122,499,901 pounds, valued at \$4,688,582, were shellfish and miscellaneous products. These fisheries gave employment to 23,722 fishermen, or an increase of 1 percent as compared with the previous year. Of the total number of fishermen employed during 1931, 2,895 regular fishermen were engaged on vessels and 16,012 regular and 4,815 casual fishermen were employed in the boat and shore fisheries.

⁶ These are the numbers given to these areas by the North American Council on Fishery Investigations.

Fisheries of the South Atlantic and Gulf States, 1931

SUMMARY OF CATCH

Product	North Carolina		South Carolina		Georgia	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	93,332,707	\$828,700	630,924	\$57,295	1,351,042	\$55,185
Shellfish, etc.....	4,828,611	258,858	5,205,988	154,162	5,998,771	195,953
Total.....	98,161,318	1,087,558	5,836,912	211,457	7,349,813	251,138

Product	Florida		Alabama		Mississippi	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	61,264,350	\$1,902,082	2,842,702	\$127,026	1,372,865	\$49,452
Shellfish, etc.....	22,789,496	1,691,380	3,325,098	95,746	21,612,457	545,921
Total.....	84,053,846	3,593,462	6,167,800	222,772	22,985,322	595,373

Product	Louisiana		Texas		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	1,810,321	\$102,310	4,204,689	\$271,302	166,809,600	\$3,393,352
Shellfish, etc.....	43,893,320	1,228,024	14,846,160	518,538	122,499,901	4,688,582
Total.....	45,703,641	1,330,334	19,050,849	789,840	289,309,501	8,081,934

OPERATING UNITS: BY STATES

Item	North Carolina	South Carolina	Georgia	Florida	Alabama	Mississippi	Louisiana	Texas	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels	960	39	82	826	134	485	214	155	2,895
On boats and shore:									
Regular	2,863	871	428	6,375	450	1,015	2,618	1,392	16,012
Casual	1,425	806	498	1,156	71	213	254	392	4,815
Total	5,248	1,716	1,008	8,357	655	1,713	3,086	1,939	23,722
Vessels:									
Steam			1						1
Net tonnage			65						65
Motor	95	12	26	115	28	127	85	41	529
Net tonnage	1,754	170	211	3,272	322	1,683	620	454	8,486
Sail	60			4		5	4		73
Net tonnage	555			249		70	62		936
Total vessels	155	12	27	119	28	132	89	41	603
Total net tonnage	2,309	170	276	3,521	322	1,753	682	454	9,487
Boats:									
Motor	1,326	104	149	2,401	175	327	928	444	5,854
Other	1,563	989	486	3,295	188	499	1,074	489	8,583
Accessory boats	93	80		2					175
Apparatus:									
Purse seines:									
Menhaden	43		1	5					49
Length, yards	10,745		300	1,440					12,485
Other	1			1					2
Length, yards	175			300					475
Haul seines:									
Common	474	21	13	123	6	18	143	59	857
Length, yards	71,696	2,830	1,430	43,660	3,900	4,045	17,995	10,000	155,556
Long	58			73					131
Length, yards	54,800			63,400					118,200
Gill nets:									
Anchor	1,882	365	14	12					2,273
Square yards	1,018,380	131,100	3,800	9,600					1,162,880
Drift	348	502	118	115					1,083
Square yards	401,649	447,501	54,700	167,650					1,071,500
Runaround	205	7	8	2,537					2,859
Square yards	94,300	1,800	2,460	2,789,002					23,279,2,910,841
Stake	7,314		85	3	22				7,815
Square yards	674,235		46,230	1,500	3,500	65	46	61	97,172
Trammel nets:									
Square yards				187					81
Square yards				117,875	21,063	15,353	16,050	27,003	197,344

Fisheries of the South Atlantic and Gulf States, 1931—Continued

OPERATING UNITS: BY STATES—Continued

Item	North Carolina	South Carolina	Georgia	Florida	Alabama	Mississippi	Louisiana	Texas	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Apparatus—Continued									
Lines:									
Hand	76	160		1,702	141	162	156	461	2,858
Hooks	302	520		2,913	249	188	161	667	5,000
Troll	21			1,241	2			6	1,270
Hooks	21			1,649	2			6	1,678
Trot with baits or snoods	206	6	23	5	18	47	333	29	667
Baits or snoods	159,750	4,500	7,100	840	3,025	11,996	69,060	3,670	259,942
Trot with hooks	6		80	266	182		3	34	571
Hooks	1,200		5,050	117,100	18,550		300	4,970	147,170
Pound nets	2,257			25					2,282
Weirs	2								2
Wheels	24								24
Stop nets				8					8
Square yards				12,500					12,500
Fyke nets	950		40	50	122				1,162
Dip nets:									
Common	194			64					258
Drop				48		138	1,715		1,901
Cast nets			12	18		60	16		106
Otter trawls:									
Fish	4								4
Yards at mouth	74								74
Shrimp	39	60	165	383	137	335	838	294	2,251
Yards at mouth	727	1,260	3,300	7,121	1,778	4,226	10,720	4,318	33,450
Pots:									
Crab				10	1,443				1,453
Eel		1,276			45				1,321
Fish					4,240				4,240
Sea crawfish					2,073				2,073
Spears	30	6		40	27	65		168	336
Dredges:									
Clam				1					1
Crab	115								115
Yards at mouth	143								143
Oyster	210	1				314	36	30	591
Yards at mouth	213	1				315	36	29	594
Scallop	199			2					201
Yards at mouth	199			2					201
Tongs	487	6	194	449	131	308	506	253	2,334
Rakes	575		6	8					589
Forks				47					47
Grabs		407	20						427
Coquina scoops				2					2
Hooks, sponge				302					302
Diving apparatus				55					55

CATCH: BY STATES

Species	North Carolina		South Carolina		Georgia	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Alewives	7,993,550	\$80,723				
Black bass	57,872	5,786				
Bluefish	676,450	17,501	2,180	\$87		
Bowfin	9,650	96				
Butterfish	303,700	5,173				
Carp	260,200	15,351				
Catfish and bullheads	289,900	11,196			185,000	\$10,650
Cero	5,000	400				
Croaker	4,310,100	56,796			8,500	170
Drum, red or redfish	85,400	2,387	1,500	75	4,000	160
Eels	113,700	6,672				
Flounders	1,013,800	76,182	4,400	295	10,000	300
Gizzard shad	34,300	343				
Harvestfish or "starfish"	48,400	968				
Hickory shad	192,100	5,877	5,653	565	14,000	1,020
King whiting or "kingfish"	181,100	5,396	15,700	1,257	35,000	1,440
Menhaden	67,877,400	94,196			869,048	2,463
Mullet	2,123,650	43,952	240,000	12,000	76,500	4,185
Pigfish	25,300	263				
Pike or pickerel	6,450	506				
Pinfish or sailors choice	20,800	216				
Pompano	100	20				
Porgies	500	15				

Fisheries of the South Atlantic and Gulf States, 1931—Continued

CATCH: BY STATES—Continued

Species	North Carolina		South Carolina		Georgia	
FISH—continued	Pounds	Value	Pounds	Value	Pounds	Value
Sea bass	157,000	\$5,910	150,000	\$6,450	1,000	\$40
Shad	883,375	139,409	151,556	30,311	132,294	33,073
Sharks			5,000	100		
Sheepshead	3,700	160				
Snapper, red	1,500	30				
Spanish mackerel	84,250	6,332				
Spot	1,715,400	25,754	9,000	270	3,700	104
Squteagues or "sea trout":						
Gray	2,994,200	103,926	3,500	240		
Spotted	1,108,350	65,537	15,000	1,320	10,000	880
Striped bass	326,510	34,526				
Sturgeon	1,000	240	27,435	4,325	2,000	700
Suckers	9,300	186				
Sunfish	7,900	160				
White perch	327,650	13,025				
Yellow perch	83,150	3,490				
Total	93,332,707	828,700	630,924	57,295	1,351,042	55,185
SHELLFISH, ETC.						
Crabs:						
Hard ¹	1,851,829	25,211	20,000	600	209,250	3,139
Soft	310,594	46,586				
Shrimp	338,273	13,975	2,635,336	91,167	5,471,063	180,583
Clams, hard, public ²	332,344	30,775			1,200	150
Oysters: ³						
Market, public, spring	894,041	55,037	910,359	22,948		
Market, public, fall	606,530	37,024	545,351	10,826		
Market, private, spring			752,189	17,797	210,714	4,640
Market, private, fall			331,903	9,105	97,052	4,611
Scallops, bay	495,000	50,250				
Octopus			5,000	500		
Terrapin, diamond-back			5,850	1,219	9,492	2,830
Total	4,828,611	258,858	5,205,988	154,162	5,998,771	195,953
Grand total	98,161,318	1,087,558	5,836,912	211,457	7,349,813	251,138

Species	Florida		Alabama		Mississippi	
FISH	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	320,586	\$1,606				
Amberjack	6,420	194				
Barracuda	18,720	749				
Black bass	423,559	38,967				
Bluefish	1,208,255	63,679	34,875	\$1,518	18,358	\$834
Blue runner or hardtail	220,057	7,287	3,040	55		
Bonito	550	8				
Buffalo fish			44,806	2,037	9,196	502
Cabio or crab eater	9,513	226	550	15	385	14
Catfish and bullheads	3,449,427	146,017	142,773	6,489	52,462	2,008
Cero	2,310	84				
Cigarfish	35,840	819				
Crappie	489,721	17,516				
Crevalle	69,573	1,591	4,995	91	5,793	106
Croaker	46,665	882	40,871	748	11,941	326
Drum:						
Black	27,919	531	2,446	51	15,720	432
Red or redfish	1,049,393	21,320	61,826	2,084	99,518	3,618
Eels	3,344	142				
Flounders	87,138	3,202	32,041	2,205	61,171	3,929
Groupers	2,612,515	68,050	107,876	3,039	24,092	623
Grunts	20,574	451	118	4		
Hickory shad	25,248	758				

¹ Statistics on hard crabs used in this table are based on yields of 3 pounds per dozen in North Carolina, South Carolina, and Georgia; 4.104 pounds in Florida; 7 pounds in Alabama, Mississippi, and Texas; and 6 pounds in Louisiana.

² Statistics on hard clams used in this table are based on yields of 8 pounds of meats per bushel in all States.

³ Statistics on market oysters used in this table are based on yields of 5.97 pounds of meats per bushel in North Carolina, 5.07 in South Carolina, 6.24 in Georgia, 3.46 in Florida, 2.55 in Alabama, 2.53 in Mississippi, 3.92 in Louisiana, and 5.18 in Texas.

Fisheries of the South Atlantic and Gulf States, 1931—Continued

CATCH: BY STATES—Continued

Species	Florida		Alabama		Mississippi	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH—continued						
Jewfish	9,564	\$254			690	\$17
Kingfish or "king mackerel"	3,414,904	164,234	1,320	\$60		
King whiting or "kingfish"	206,375	5,549	10,819	281	6,404	175
Ladyfish	2,878	57				
Menahaden	8,156,040	21,139	3,548	71		
Mojarro	71,806	1,610				
Mullet	22,349,788	420,031	1,316,274	37,524	746,095	19,381
Muttonfish	35,664	1,303				
Paddlefish or spoonbill cat.			2,403	109		
Permit	4,730	60				
Pigfish	60,296	1,124				
Pinfish or sailors choice	46,058	1,197				
Pompano	557,539	101,784	5,181	708	521	72
Porgies	46,010	1,125				
Sea bass	103,217	5,025				
Shad	620,875	83,675				
Sharks	925,000	2,960	20,000	75		
Sheepshead	840,769	14,601	5,222	192	32,062	1,168
Snapper:						
Mangrove	114,460	3,201				
Red	4,504,850	298,474	863,201	60,430	68,236	4,777
Snook or sergeantfish	263,758	5,860				
Spadefish	533	10				
Spanish mackerel	4,835,414	198,192	12,953	470	1,303	40
Spot	131,727	2,838	783	20		
Squeteagues or "sea trout":						
Gray	23,734	1,085	7,728	256	95,713	2,612
Spotted	2,982,912	164,479	101,533	6,972	120,296	8,748
Sturgeon	14,734	1,086	15,134	1,513		
Sunfish	591,325	17,714				
Tenpounder	116,221	2,585	315	6	2,425	48
Tripletail	1,708	32	71	3	484	22
Turbot	340	3				
Yellowtail	103,794	6,716				
Total	61,264,350	1,902,082	2,842,702	127,026	1,372,865	49,452
SHELLFISH, ETC.						
Crabs:						
Hard ¹	60,535	2,823	78,358	1,062	454,381	7,076
Soft			1,164	254	4,592	1,228
Stone	142,837	9,589				
Sea crawfish or spiny lobster	455,907	41,530				
Shrimp	18,852,822	682,658	2,475,200	65,676	17,715,590	393,774
Clams:						
Coquina	5,740	48				
Hard, public ²	794,320	35,785				
Conchs:	3,500	280				
Oysters: ³						
Market, public, spring	683,895	44,993	521,307	18,236	2,679,761	110,798
Market, public, fall	799,975	58,699	224,498	8,622	758,133	33,045
Market, private, spring	146,260	8,856	3,536	260		
Market, private, fall	118,646	9,506	19,380	1,140		
Scallops, bay	13,526	924				
Frogs	104,336	12,520				
Terrapin, diamond-back				1,655	496	
Turtles:						
Green	31,086	1,896				
Soft-shell	14,690	233				
Sponges:						
Grass	118,580	26,127				
Sheepswool	311,960	701,168				
Velvet	190	99				
Wire	12,514	4,986				
Yellow	118,177	48,660				
Total	22,789,496	1,691,380	3,325,098	95,746	21,612,457	545,921
Grand total	84,053,846	3,593,462	6,167,800	222,772	22,985,322	595,373

¹ Statistics on hard crabs used in this table are based on yields of 3 pounds per dozen in North Carolina, South Carolina, and Georgia; 4.104 pounds in Florida; 7 pounds in Alabama, Mississippi, and Texas; and 6 pounds in Louisiana.

² Statistics on hard clams used in this table are based on yields of 8 pounds of meat per bushel in all States.

³ Statistics on market oysters used in this table are based on yields of 5.97 pounds of meats per bushel in North Carolina, 5.07 in South Carolina, 6.24 in Georgia, 3.46 in Florida, 2.55 in Alabama, 2.53 in Mississippi, 3.92 in Louisiana, and 5.18 in Texas.

Fisheries of the South Atlantic and Gulf States, 1931—Continued

CATCH: BY STATES—Continued

Species	Louisiana		Texas		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Alewives					8,314,136	\$82,329
Amberjack					6,420	194
Barracuda					18,720	749
Black bass					481,431	44,753
Bluefish			2,640	\$144	1,942,758	83,763
Blue runner or hardtail					223,097	7,342
Bonito					550	8
Bowfin					9,650	96
Buffalofish					54,002	2,539
Butterfish					303,700	5,173
Cabio or crab eater					10,448	255
Carp					260,200	15,351
Catfish and bullheads	83,630	\$2,193	94,682	3,469	4,297,874	182,022
Cero					7,310	484
Cigarfish					35,840	819
Crappie					489,721	17,516
Crevalle	150	9	385	7	80,896	1,804
Croaker	58,830	3,216	34,275	1,246	4,511,182	63,384
Drum:						
Black	179,166	5,457	1,136,120	32,162	1,361,371	38,633
Red or redfish	369,443	22,322	863,539	63,214	2,534,619	115,180
Eels					117,044	6,814
Flounders	28,935	2,158	74,745	6,995	1,312,230	95,266
Garfish	500	40			500	40
Gizzard shad					34,300	343
Groupers	4,170	125	45,831	1,367	2,794,484	73,204
Grunts					20,692	455
Harvestfish or "starfish"					48,400	968
Hickory shad					237,001	8,220
Jewfish	7,050	212	275	8	17,579	491
Kingfish or "king mackerel"			3,740	136	3,419,964	164,430
King whiting or "kingfish"	54,710	1,160	14,795	538	524,903	15,796
Ladyfish					2,878	57
Menhaden					76,906,036	117,869
Mojarro					71,806	1,610
Mullet	6,390	199	6,100	189	26,864,797	537,461
Muttonfish					35,664	1,303
Paddlefish or spoonbill cat					2,403	109
Permit					4,730	60
Pigfish					85,596	1,387
Pike or pickerel					6,450	506
Pinfish or sailors choice					66,858	1,413
Pompano	1,049	138	8,558	1,167	572,948	103,889
Porgies					46,510	1,140
Sea bass					411,217	17,425
Shad					1,788,100	286,468
Sharks	20,000	125			970,000	3,260
Sheepshead	133,618	7,749	46,967	2,411	1,062,338	26,281
Snapper:						
Mangrove					114,460	3,201
Red					6,207,286	424,481
Snook or sergeantfish	78,835	5,518	690,664	55,252	298,188	7,114
Spadefish			34,430	1,254	533	10
Spanish mackerel	900	36	63,205	2,361	4,998,025	207,431
Spot	10,475	309			1,871,085	29,295
Squeteagues or "sea trout":						
Gray	307,555	6,215			3,432,430	114,334
Spotted	459,615	44,847	1,083,738	99,382	5,881,444	392,165
Striped bass					326,510	34,526
Sturgeon					60,303	7,864
Suckers					9,300	186
Sunfish					599,225	17,874
Tenpounder					118,961	2,639
Tripletail	5,300	282			7,563	339
Turbot					340	3
White perch					327,650	13,025
Yellow perch					83,150	3,490
Yellowtail					103,794	6,716
Total	1,810,321	102,310	4,204,689	271,302	166,809,600	3,393,352

Fisheries of the South Atlantic and Gulf States, 1931—Continued

CATCH: BY STATES—Continued

Species	Louisiana		Texas		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.						
Crabs:						
Hard ¹	4,985,280	\$52,859	49,455	\$1,015	7,709,088	\$93,785
Soft	120,784	45,292			437,134	93,360
Stone					142,837	9,589
Sea crawfish or spiny lobster					455,907	41,530
Shrimp	35,148,226	844,061	13,814,373	458,152	96,450,883	2,730,046
Clams:						
Coquina					5,740	48
Hard, public ²					1,127,864	66,710
Conchs					3,500	280
Oysters: ³						
Market, public, spring	268,092	12,863	405,627	26,762	6,363,082	291,637
Market, public, fall	222,996	10,863	576,705	32,609	3,734,188	191,688
Market, private, spring	1,692,337	138,880			2,805,036	170,433
Market, private, fall	1,406,473	116,260			1,973,454	140,622
Scallops, bay					508,526	51,174
Octopus					5,000	500
Frogs					104,336	12,520
Terrapin, diamond-back	21,312	6,390			38,309	10,935
Turtles:						
Green					31,086	1,896
Loggerhead	27,820	556			27,820	556
Soft-shell					14,690	233
Sponges:						
Grass					118,580	26,127
Sheepwool					311,960	701,168
Velvet					190	99
Wire					12,514	4,986
Yellow					118,177	48,660
Total	43,893,320	1,228,024	14,846,160	518,538	122,499,901	4,688,582
Grand total	45,703,641	1,330,334	19,050,849	789,840	289,309,501	8,081,934

¹ Statistics on hard crabs used in this table are based on yields of 3 pounds per dozen in North Carolina, South Carolina, and Georgia; 4.104 pounds in Florida; 7 pounds in Alabama, Mississippi, and Texas; and 6 pounds in Louisiana.

² Statistics on hard clams used in this table are based on yields of 8 pounds of meats per bushel in all States.

³ Statistics on market oysters used in this table are based on yields of 5.97 pounds of meats per bushel in North Carolina, 5.07 in South Carolina, 6.24 in Georgia, 3.46 in Florida, 2.55 in Alabama, 2.53 in Mississippi, 3.92 in Louisiana, and 5.18 in Texas.

PRODUCTION OF CERTAIN SHELLFISH IN NUMBER AND BUSHELS

Product	North Carolina		South Carolina		Georgia	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard number	7,407,316	\$25,211	80,000	\$600	837,000	\$3,139
Soft do	1,242,376	46,586				
Clams, hard, public bushels	41,543	30,775			150	150
Oysters:						
Market, public, spring do	149,756	55,037	179,558	22,948		
Market, public, fall do	101,596	37,024	107,564	10,826		
Market, private, spring do			148,361	17,797	33,768	4,640
Market, private, fall do			65,464	9,105	15,553	4,611
Scallops, bay do	90,000	50,250				

Product	Florida		Alabama		Mississippi	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard number	177,004	\$2,823	134,384	\$1,062	779,263	\$7,076
Soft do			3,492	254	13,776	1,228
Clams, hard, public bushels	99,290	35,785				
Oysters:						
Market, public, spring do	197,657	44,993	204,434	18,236	1,059,194	110,798
Market, public, fall do	231,207	58,699	88,038	8,622	299,657	33,045
Market, private, spring do	42,272	8,856	1,387	260		
Market, private, fall do	34,291	9,506	7,600	1,140		
Scallops, bay do	2,552	924				

Fisheries of the South Atlantic and Gulf States, 1931—Continued

PRODUCTION OF CERTAIN SHELLFISH IN NUMBER AND BUSHELS—Continued

Product	Louisiana		Texas		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard.....number.....	9,970,560	\$52,859	84,815	\$1,015	19,470,342	\$93,785
Soft.....do.....	362,352	45,292	—	—	1,621,996	93,360
Clams, hard, public.....bushels.....	—	—	—	—	140,983	66,710
Oysters:						
Market, public, spring.....do.....	68,391	12,863	78,306	26,762	1,937,296	291,637
Market, public, fall.....do.....	56,887	10,863	111,333	32,609	996,282	191,688
Market, private, spring.....do.....	431,719	138,880	—	—	657,507	170,433
Market, private, fall.....do.....	358,794	116,260	—	—	481,702	140,622
Scallops, bay.....do.....	—	—	—	—	92,552	51,174

Industries related to the fisheries of the South Atlantic and Gulf States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	North Carolina	South Carolina	Georgia	Florida	Alabama
	Number	Number	Number	Number	Number
Transporting:					
Persons engaged:					
On vessels.....	60	85	8	43	9
On boats.....	4	39	—	73	2
Total.....	64	124	8	116	11
Vessels:					
Motor.....	37	9	4	22	8
Net tonnage.....	342	101	26	318	68
Sail.....	—	29	—	1	—
Net tonnage.....	—	263	—	16	—
Total vessels.....	37	38	4	23	8
Total net tonnage.....	342	364	26	334	68
Boats.....	2	41	—	72	1
Wholesale and manufacturing:					
Establishments.....	64	28	35	250	20
Persons engaged:					
Proprietors.....	70	23	34	311	27
Salaried employees.....	25	24	22	105	16
Wage earners:					
Average for season.....	669	763	1,198	2,447	352
Average for year.....	265	269	273	927	183
Paid to salaried employees.....	\$33,112	\$58,986	\$64,047	\$257,707	\$41,238
Paid to wage earners.....	146,855	109,845	137,498	561,198	59,919
Total salaries and wages.....	179,967	168,831	201,545	818,905	101,157
Fishermen manufacturing.....	729	10	17	254	46

Item	Mississippi	Louisiana	Texas	Total
	Number	Number	Number	Number
Transporting:				
Persons engaged:				
On vessels.....	—	147	2	354
On boats.....	16	255	—	389
Total.....	16	402	2	743
Vessels:				
Motor.....	—	71	1	152
Net tonnage.....	—	579	6	1,440
Sail.....	—	—	—	30
Net tonnage.....	—	—	—	279
Total vessels.....	—	71	1	182
Total net tonnage.....	—	579	6	1,719
Boats.....	8	127	—	251
Wholesale and manufacturing:				
Establishments.....	46	90	52	585
Persons engaged:				
Proprietors.....	62	112	61	700
Salaried employees.....	31	96	33	352
Wage earners:				
Average for season.....	2,286	3,287	1,581	12,583
Average for year.....	968	1,280	416	4,581
Paid to salaried employees.....	\$82,525	\$202,958	\$45,430	\$786,003
Paid to wage earners.....	301,101	541,074	178,050	2,035,540
Total salaries and wages.....	383,626	744,032	223,480	2,821,543
Fishermen manufacturing.....	86	10	227	1,379

Industries related to the fisheries of the South Atlantic and Gulf States, 1931—Con.

PRODUCTS MANUFACTURED

Item	North Carolina		South Carolina		Georgia		Florida	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
By manufacturing establishments:								
Alewife roe, canned standard cases	3,574	\$13,393						
Groupers:								
Frozen fillets pounds							18,000	\$2,880
Frozen steaks do							130,000	18,420
Menhaden products:								
Acid scrap tons	865	14,449	(1)	(1)	(1)	(1)	1,419	27,763
Dry scrap do	1,951	59,075	(1)	(1)			3,580	116,081
Fish meal do	456	21,367					1,254	45,276
Oil gallons	291,659	42,365	(1)	(1)	(1)	(1)	209,079	32,307
Mullet:								
Frozen fillets pounds							19,000	2,800
Salted do	278,000	11,335					320,167	12,754
Roe, salted do							30,590	6,485
Snapper, red:								
Frozen fillets do							51,500	11,375
Frozen steaks do							36,193	6,241
Spanish mackerel, frozen fillets pounds							15,500	3,140
Squeteagues, frozen fillets pounds								
Crab meat, packaged do	188,032	33,748			18,250	\$5,844	16,000	5,400
Shrimp:								
Cooked and peeled do								
Canned standard cases			(1)	(1)	(1)	(1)	48,193	312,932
Clams, hard, juice and broth, canned standard cases					(1)	(1)	7,147	32,878
Marine-shell novelties								8,375
Oysters:								
Fresh-shucked gallons	119,238	111,350	20,514	\$21,668	23,467	25,897	113,629	142,827
Canned standard cases	(1)	(1)	74,186	224,248	(1)	(1)		
Shell products:								
Poultry feed tons	1,675	7,962	9,310	85,261			28,722	152,553
Lime do	(1)	(1)	(1)	(1)			1,019	1,571
Unclassified products:								
Steaks and fillets pounds	(2)	(2)	(2)	(2)	4 3,526		³ 53,415	³ 14,981
Canned standard cases	(2)	(2)	(2)	(2)			⁵ 28,942	⁵ 188,316
Novelties								22,100
Miscellaneous			⁶ 13,222		⁷ 86,033		⁸ 43,280	⁹ 13,081
Total			328,266		417,210		478,207	1,176,536
By fishermen:								
Alewives:								
Corned pounds	2,562,600	34,975						
Tight-pack cut do	23,100	847						
Tight-pack roe do	182,000	7,862						
Smoked do	6,000	450						
Mullet, salted do	110,000	4,900					475,195	18,793
Mullet, roe, salted do							44,114	10,865
Spot, salted do	25,000	1,125						
Sturgeon caviar do			312	156				
Crab meat, packaged do							12	10
Clams, hard, fresh-shucked gallons	200	300					1,000	500
Oysters, fresh-shucked do	15,150	12,120	1,139	1,159	5,648	5,648	27,915	35,870
Scallops, bay, fresh-shucked gallons	55,000	56,250					1,265	1,305
Total			118,829		1,315		5,648	
Grand total			447,095		418,525		483,855	1,243,879

For footnotes see p. 274.

Industries related to the fisheries of the South Atlantic and Gulf States, 1931—Con.

PRODUCTS MANUFACTURED—Continued

Item	Alabama		Mississippi		Louisiana		Texas	
	Quan- tity	Value	Quan- tity (¹)	Value (¹)	Quan- tity	Value	Quan- tity	Value
By manufacturing establish- ments:								
Mullet, salted.....pounds								
Snapper, red:								
Frozen fillets.....do.....	(¹)	(¹)						
Frozen steaks.....do.....	(¹)	(¹)						
Squeteagues, frozen fillets pounds.....	(¹)	(¹)						
Crab meat, packaged.....do.....			22,500	\$5,825	174,550	\$47,184	(¹)	(¹)
Shrimp:								
Packaged, headless, fresh pounds.....								
Sun-dried.....do.....					1,333,568	302,041	1,874,000	\$262,960
Cooked and peeled do.....								
Canned standard cases.....	(¹)	(¹)	326,550	81,638	364,569	1,778,619	81,689	443,125
Meal.....tons.....	(¹)	(¹)	201,959	791,953	930	16,520		
Oysters:								
Fresh-shucked.....gallons.....	20,370	\$23,424	41,436	42,198	202,015	256,882	65,294	74,448
Canned standard cases.....	23,551	75,332	159,808	487,644	24,415	85,278		
Shell products:								
Poultry feed.....tons.....	(¹)	(¹)	32,801	224,200	93,729	654,027	(¹)	(¹)
Lime.....do.....	(¹)	(¹)	1,855	1,000	4,421	13,198	(¹)	(¹)
Unclassified products:								
Canned standard cases.....	(²)	(²)	(²)	(²)				
Miscellaneous.....		¹⁰ 253,460		¹¹ 4,160			¹² 6,366	¹³ 42,887
Total.....		352,216		1,638,618		3,160,115		823,420
By fishermen:								
Crab meat, packaged pounds.....							460	115
Shrimp:								
Sun-dried.....do.....					13,900	2,780		
Meal.....tons.....					7	105		
Oysters, fresh-shucked gallons.....	6,289	6,747	17,133	16,205			46,151	39,718
Total.....		6,747		16,205		2,885		39,833
Grand total.....		358,963		1,654,823		3,163,000		863,253

¹ This item has been included under unclassified products.² This item has been included under miscellaneous.³ Includes frozen pandressed pinfish, pompano, mangrove snapper, sheepshead, and squeteague; fresh steaks of red drum, grouper, and red snapper; frozen steaks of cabio, red drum, snook and tripletail; fresh fillets of red snapper; and frozen fillets of amberjack, bluefish, jewfish, and snook.⁴ Includes canned oysters, terrapin meat and soup, and whole hard clams.⁵ Includes canned whole, chowder, and minced hard clams; oysters; and turtle meat and soup.⁶ Includes fresh fillets of gray squeteague, salted spot, fresh-shucked bard clams, canned oysters, and oyster-shell lime.⁷ Includes canned shrimp, oyster-shell lime, and menhaden products.⁸ Includes cooked shrimp, fresh-shucked hard clams and menhaden products.⁹ Includes salted bluefish and Spanish mackerel; frozen packaged mullet roe; crab meat; fresh-shucked conchs, hard clams, and bay scallops; shark hides and oil; and miscellaneous meal and oil.¹⁰ Includes frozen fillets of red snapper and squeteague, frozen steaks of red snapper, canned shrimp, shrimp bran, oyster-shell products, and shark hides.¹¹ Includes salted mullet and creole gumbo soup.¹² Includes sun-dried squeteague and shark hides.¹³ Includes fresh-cooked crab meat; frozen packaged shrimp, frozen fillets of red drum and squeteague; and oyster-shell products.

NOTE.—The total value of the products for the South Atlantic and Gulf States was as follows: By manufacturing establishments, \$8,374,588; and by fishermen, \$258,805. Some of the above products may have been manufactured from products imported from another State or country; therefore, they cannot be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 1,098 have also been included as fishermen and 391 of the persons shown on transporting craft have also been included as fishermen. This should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

NORTH CAROLINA

Fisheries of North Carolina, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines		Gill nets			
	Men-haden	Other	Common	Long	Anchor	Drift	Run-around	Stake
Fishermen:								
On vessels	Number 601	Number -----	Number 21	Number 126	Number 34	Number -----	Number -----	Number -----
On boats and shore:								
Regular	48	7	846	137	342	318	107	286
Casual			431	12	72	14	115	92
Total	649	7	1,298	275	448	332	222	378
Vessels:								
Motor	37		7	36	12			
Net tonnage	1,291		45	247	73			
Boats:								
Motor	6	1	236	49	185	121	44	194
Other	10	2	445	46	136	64	108	94
Accessory boats	75		2	11				
Apparatus:								
Number	43	1	474	58	1,882	348	205	7,314
Length, yards	10,745	175	71,696	54,800	1,018,380	401,649	94,300	674,235
Square yards								

Item	Lines				Pound nets	Weirs	Wheels	Fyke nets	Dip nets	Otter trawls	
	Hand	Troll	Trot with baits or snoods	Trot with hooks						Fish	Shrimp
Fishermen:											
On vessels	Number 15	Number 8	Number -----	Number -----	Number	Number	Number	Number	Number	Number 12	Number 13
On boats and shore:											
Regular		15	148	6	456	1	6	43	120	-----	66
Casual		20	73		231			12	74		
Total	35	23	221	6	687	1	6	55	194	12	79
Vessels:											
Motor	5	3								4	6
Net tonnage	35	19								70	46
Boats:											
Motor	10	15	115		265	1	6	34	10	-----	33
Other			63	3	236		10	24	131		
Accessory boats		5									
Apparatus:											
Number	76	21	206	6	2,257	2	24	950	194	4	39
Yards at mouth										74	727
Hooks, baits or snoods	302	21	159,750	1,200							

Fisheries of North Carolina, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Pots, eel	Spears	Dredges			Tongs	Rakes	By hand	Total, exclusive of dupli- cation
			Crab	Oy- ster	Scal- lop				
Fishermen:									
On vessels	Number	Number	Num- ber	Num- ber	Num- ber	Number	Number	Number	Number
On boats and shore:									
Regular	30	30	75	68	237	236	270	—	2,863
Casual	16	—	—	20	15	256	325	36	1,425
Total	46	30	75	275	252	492	595	36	5,248
Vessels:									
Motor					4				95
Net tonnage					46				1,754
Sail					60				60
Net tonnage					555				555
Total vessels					64				155
Total net tonnage					601				2,309
Boats:									
Motor	12	—	71	44	124	127	19	—	1,326
Other	34	30	—	—	—	302	383	36	1,563
Accessory boats									93
Apparatus:									
Number	1,276	30	115	210	199	487	575	—	—
Yards at mouth			143	213	199				

CATCH: BY GEAR

Species	Purse seines				Haul seines			
	Menhaden		Other		Common		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives								
Black bass								
Bluefish								
Bowfin								
Butterfish								
Carp								
Catfish and bullheads								
Croaker								
Drum, red or redfish								
Eels								
Flounders								
Gizzard shad								
Harvestfish or "starfish"								
Hickory shad								
King whiting or "kingfish"								
Menhaden	66,857,400	\$92,838						
Mullet								
Pigfish								
Pike or pickerel								
Pinfish								
Pompano								
Porgies								
Sea bass								
Shad								
Sheepshead								
Spanish mackerel								
Spot								
Squateagues or "sea trout":								
Gray								
Spotted								
Striped bass			5,000	\$750				
Sunfish								
White perch								
Yellow perch								
Crabs, soft								
Total	66,857,400	\$92,838	5,000	750	7,666,871	186,469	3,050,081	66,961

Fisheries of North Carolina, 1931—Continued

CATCH: BY GEAR—Continued

Species	Gill nets							
	Anchor		Drift		Runaround		Stake	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	477,800	\$4,796	87,000	\$870	5,500	\$55	214,500	\$2,195
Bluefish	29,000	870	47,500	1,860	3,500	70	146,200	3,196
Butterfish	1,500	22						
Carp	2,550	25						
Catfish and bullheads	4,750	220					650	20
Croaker	335,000	4,950	447,000	8,880	30,600	420	114,000	1,810
Drum, red or redfish	3,500	70	200	4			1,000	20
Eels	200	12						
Flounders	13,900	356			5,500	165	10,500	320
Gizzard shad	5,500	55						
Harvestfish or "starfish"	1,000	20						
Hickory shad	26,700	871					19,100	563
King whiting or "kingfish"	33,000	990						
Mullet	63,650	1,303	320,000	5,175	455,000	10,500	187,200	5,994
Pigfish	2,000	20	3,000	30			1,000	20
Sea bass	15,000	450			10,000	300		
Shad	216,500	31,775	13,000	1,950	3,000	400	181,075	29,103
Sheepshead					200	10		
Spanish mackerel	18,400	1,040	17,000	1,360			1,200	96
Spot	96,800	1,473	98,000	1,570	52,000	940	71,000	1,140
Squeteagues or "sea trout":								
Gray	101,400	3,042	641,300	31,989	10,000	420	153,500	6,185
Spotted	7,000	305	18,800	1,336	27,500	1,800	79,500	4,470
Striped bass	43,300	4,945			400	40	20,200	1,877
Sturgeon			1,000	240				
Suckers	4,000	80						
White perch	23,300	1,162					2,300	112
Total	1,525,750	58,852	1,693,800	55,264	603,200	15,120	1,202,925	57,121

Species	Lines							
	Hand		Troll		Trot with baits or snoods		Trot with hooks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish							4,000	\$200
Catfish and bullheads								
Cero			5,000	400				
Sea bass	102,000	\$3,660						
Snapper, red	1,500	30						
Spanish mackerel			14,000	1,000				
Crabs, hard					1,565,973	\$19,767		
Total	103,500	3,690	23,000	1,520	.565,973	19,767	4,000	200

Species	Pound nets		Weirs		Wheels		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
	4,795,250	\$48,177			135,000	\$1,350	47,500	\$925
Alewives							7,643	764
Black bass								
Bluefish	11,000	340						
Bowfin	800	8					4,600	46
Butterfish	298,100	5,090						
Carp	35,300	777	3,000	\$30			61,600	3,912
Catfish and bullheads	102,200	5,110					104,300	4,006
Croaker	1,348,300	17,594						
Drum, red or redfish	17,000	565						
Eels	2,800	198					2,000	160
Flounders	652,200	60,246					11,300	352
Gizzard shad	9,100	91					4,300	43
Harvestfish or "starfish"	41,400	828						
Hickory shad	101,800	3,104					200	10
King whiting or "kingfish"	7,900	237						
Mullet	10,900	453					700	34
Pike or pickerel	500	35					1,550	119
Shad	434,950	70,929					600	90
Sheepshead	2,500	120						
Spanish mackerel	14,000	1,220						
Spot	158,000	2,422						
Squeteagues or "sea trout":								
Gray	1,584,000	48,820						
Spotted	30,750	2,045						
Striped bass	57,550	7,198					14,500	1,845
Suckers	4,900	96					400	10
Sunfish	200	6					300	6
White perch	66,750	3,262					43,300	1,599
Yellow perch	5,300	157					41,850	1,877
Total	9,704,470	279,124	3,000	20	135,000	1,350	346,643	15,798

Fisheries of North Carolina, 1931—Continued

CATCH: BY GEAR—Continued

Species	Dip nets		Otter trawls				Pots, eel	
			Fish		Shrimp			
	Pounds	Value	Pounds	Value	Pounds	\$600	Pounds	Value
Bluefish								
Croaker			180,000	\$1,800				
Eels							108,500	\$6,290
Flounders			46,000	920	32,300	946		
King whiting or "kingfish"					13,700	374		
Squeteagues or "sea trout":								
Gray					23,000	690		
Spotted					500	35		
Crabs, soft	107,512	\$16,155						
Shrimp					338,273	13,975		
Total	107,512	16,155	226,000	2,720	437,773	16,620	108,500	6,290

Species	Spears		Dredges				Scallop	
			Crab		Oyster			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders	7,000	\$210						
Crabs:								
Hard			272,256	\$4,084				
Soft			81,169	12,175				
Oysters:								
Market, public, spring					511,871	\$22,240		
Market, public, fall					380,449	18,188		
Scallops, bay							323,750	\$35,028
Total	7,000	210	353,425	16,259	892,320	40,428	323,750	35,028

Species	Tongs		Rakes		By hand			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard								
Clams, hard, public	11,600	\$800	320,744	\$29,975				
Oysters:								
Market, public, spring	336,647	28,245	164	16			45,359	4,536
Market, public, fall	197,842	16,116	1,415	141			26,824	2,579
Scallops, bay			171,250	15,222				
Total	546,089	45,161	493,573	45,354			85,783	8,475

OPERATING UNITS: BY COUNTIES

Item	Beau-fort	Bertie	Brunswick	Cam-den	Car-teret	Cho-wan	Crav-en	Curri-tuck
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels	55		122		669	3	3	
On boats and shore:								
Regular	221	19	95	8	1,137		21	1
Casual	74	14	45		254	185	71	5
Total	350	33	262	8	2,060	188	95	283
Vessels:								
Motor			10		75	1	1	
Net tonnage			319		1,317	21	5	
Sail	22				15			
Net tonnage	233				140			
Total vessels	22		10		90	1	1	
Total net tonnage	233		319		1,457	21	5	

Fisheries of North Carolina, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Beau-fort	Bertie	Brunswick	Camden	Carteret	Cho-wan	Cra-ven	Curri-tuck
	Number	Number	Number	Number	Number	Number	Number	Number
Boats:								
Motor	116	12	23	5	403	51	43	118
Other	83	10	48	5	439	51	31	121
Accessory boats			12		74		2	
Apparatus:								
Purse seines:								
Menhaden			6		37			
Length, yards			1,545		9,200			
Haul seines:								
Common	11		9		225		8	102
Length, yards	4,300		1,200		17,721		2,000	18,875
Long		1			18		1	10
Length, yards		1,600			21,600		900	8,500
Gill nets:								
Anchor			12	80	78	150		140
Square yards			5,580	17,000	94,100	112,500		44,000
Drift					110			
Square yards					66,269			
Runaround	10		42		12			5
Square yards	5,500		14,400		10,656		2,500	
Stake	392				760		260	100
Square yards	27,300				97,910		11,860	9,000
Lines:								
Hand					26			
Hooks					52			
Troll					21			
Hooks					21			
Trot with baits or snoods	128							
Baits or snoods	109,750							
Pounds nets	171	49			75	599	33	
Wheels		12						
Fyke nets				60				687
Dip nets					194			
Otter trawls:								
Fish						1		
Yards at mouth						20		
Shrimp			15		24			
Yards at mouth			255		472			
Pots, eel							128	35
Dredges:								850
Crab						115		
Yards at mouth						143		
Oyster	64					34		
Yards at mouth	64					36		
Scallop						199		
Yards at mouth						199		
Tongs						190		
Rakes						363		

Item	Dare	Gates	Hert-ford	Hyde	Lenoir	Martin	New Han-over	Onslow
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels	3			6				3
On boats and shore:								
Regular	638		9	86		15	104	4
Casual		18		6	8	22	66	150
Total	641	18	9	98	8	37	170	157
Vessels:								
Motor	1							1
Net tonnage	7							8
Sail				2				
Net tonnage				17				
Total vessels	1			2				1
Total net tonnage	7			17				8
Boats:								
Motor	245	2	4	41	2	11	15	41
Other	177	12	4	4	3	15	90	68

Fisheries of North Carolina, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Dare	Gates	Hert-ford	Hyde	Lenoir	Martin	New Han-over	Onslow
Apparatus:								
Purse seines:	Number	Number	Number	Number	Number	Number	Number	Number
Other than menhaden	1							
Length, yards	175							
Haul seines:	Number	Number	Number	Number	Number	Number	Number	Number
Common	55				2	2	18	17
Length, yards	16,500				150	800	2,000	2,200
Long	24			2				
Length, yards	19,200		1,200					
Gill nets:	Number	Number	Number	Number	Number	Number	Number	Number
Anchor	360							12
Square yards	144,000							24,000
Drift	50	10	10	10		51	107	
Square yards	250,000	1,000	700	5,330		3,450	74,900	
Runaround	12			10			4	80
Square yards	7,200			10,000			1,444	32,600
Stake	4,594			300	7	15		
Square yards	483,700			13,800	300	600		
Lines:	Number	Number	Number	Number	Number	Number	Number	Number
Hand								50
Hooks								250
Trot with hooks							6	
Hooks							1,200	
Pound nets	832	6	10	60				
Weirs						2		
Wheels						12		
Fyke nets:		28						
Pots, eel	90					8		
Spears								20
Dredges:	Number	Number	Number	Number	Number	Number	Number	Number
Oyster	8			46				
Yards at mouth	8			46				
Tongs	11							50
Rakes	4						50	10

Item	Pamlico	Pasquo-tank	Pender	Perquim-ans	Tyrrell	Wash-ing-ton
Fishermen:						
On vessels	Number	Number	Number	Number	Number	Number
On boats and shore:						
Regular	81	15				
Casual	242		38	7	45	48
Total	384	53	179	45	88	50
Vessels:	Number	Number	Number	Number	Number	Number
Motor	2	4				
Net tonnage	10	67				
Sail	20	1				
Net tonnage	154	11				
Total vessels	22	5				
Total net tonnage	164	78				
Boats:	Number	Number	Number	Number	Number	Number
Motor	91	22				
Other	158	24	4	24	38	15
Accessory boats	5		142	24	36	18
Apparatus:	Number	Number	Number	Number	Number	Number
Haul seines:	Number	Number	Number	Number	Number	Number
Common	4		19			
Length, yards	1,500		3,050			
Long	2					
Length, yards	1,800					
Gill nets:	Number	Number	Number	Number	Number	Number
Anchor	350			400	200	100
Square yards	120,000			299,200	100,000	58,000
Runaround			30			
Square yards			10,000			
Stake	226	60			600	
Square yards	5,765	2,400			21,600	
Lines:	Number	Number	Number	Number	Number	Number
Trot with baits or snoods	78					
Baits or snoods	50,000					

Fisheries of North Carolina, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Pamlico	Pasquo-tank	Pender	Perquim-ans	Tyrrell	Wash-ing-ton
	Number	Number	Number	Number	Number	Number
Apparatus—Continued						
Pound nets	199	25		50	96	52
Fyke nets		100			75	
Otter trawls:						
Fish		3				
Yards at mouth		54				
Pots, eel	20	30		75	40	
Spears			10			
Dredges:						
Oyster	54	4				
Yards at mouth	54	5				
Tongs	201			35		
Rakes				148		

CATCH: BY COUNTIES

Species	Beaufort		Bertie		Brunswick		Camden	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	344, 500	\$3, 445					11, 000	\$110
Black bass							2, 000	200
Bluefish					30, 000	\$600		
Bowfin							1, 000	10
Butterfish	15, 000	300						
Carp	17, 000	85					6, 000	60
Catfish and bullheads	8, 000	200	700	35			2, 000	100
Croaker	183, 000	1, 830			24, 000	240		
Drum, red or redfish					600	12		
Eels							400	24
Flounders	7, 500	185			32, 300	946		
Gizzard shad							300	3
Hickory shad	20, 000	600					300	9
King whiting or "kingfish"					15, 700	434		
Menhaden					11, 257, 000	15, 060		
Mullet	27, 000	610			265, 000	5, 300	1, 000	30
Pike or pickerel							250	20
Sea bass					25, 000	750		
Shad	58, 900	10, 030	1, 950	292	3, 500	525	1, 000	150
Sheepshead					200	10		
Spot	3, 500	70			7, 000	80		
Sqeuteagues or "sea trout":								
Gray	180, 000	2, 400			23, 000	690		
Spotted	11, 550	693			9, 000	630		
Striped bass	23, 500	1, 950	1, 800	180			3, 000	450
White perch	4, 600	230	9, 250	462			6, 500	325
Yellow perch	10, 500	210					2, 000	40
Crabs, hard	1, 485, 973	18, 567			13, 600	1, 360		
Shrimp					293, 868	11, 755		
Oysters:								
Market, public, spring	97, 125	4, 836						
Market, public, fall	171, 055	7, 566						
Total	2, 668, 703	53, 807	453, 700	5, 369	11, 999, 768	38, 392	36, 750	1, 531

Species	Carteret		Chowan		Craven		Currituck	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	2, 000	\$30	2, 059, 750	\$20, 597	110, 000	\$1, 100	2, 800	\$56
Black bass							55, 872	5, 586
Bluefish	208, 200	5, 886			19, 500	390	20, 000	400
Bowfin							6, 350	63
Butterfish	9, 600	188			25, 000	500	1, 000	15
Carp			2, 550	25			187, 400	13, 930
Catfish and bullheads			41, 000	2, 050			97, 200	1, 944
Cero	5, 000	400						
Croaker	1, 431, 000	18, 415	50, 000	500	270, 000	2, 700	27, 500	275
Drum, red or redfish	31, 900	638			1, 700	102	15, 000	900
Eels					306		64, 000	3, 540
Flounders	21, 800	539	15, 300		41, 000	1, 230	10, 000	400

Fisheries of North Carolina, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Carteret		Chowan		Craven		Currituck	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Gizzard shad								
Harvestfish or "starfish"	13,000	\$260	3,000	\$30				
Hickory shad	17,800	534	12,000	360	2,500	\$75	3,100	93
King whiting or "kingfish"	38,000	1,140					28,000	840
Menhaden	56,620,400	79,136						
Mullet	603,200	9,059			147,000	4,410	1,400	56
Pigfish	25,300	263						
Pike or pickerel							4,900	392
Pinfish	20,800	216						
Pompano	100	20						
Sea bass	96,000	3,360						
Shad	30,200	6,040	52,000	7,800	70,000	8,187	12,200	1,830
Sheepshead	1,000	30						
Spanish mackerel			56,800	3,836			250	20
Spot	884,900	13,085			61,000	610	11,000	165
Squeteagues or "sea trout":								
Gray	479,800	13,344			220,000	5,500	15,000	425
Spotted	120,500	5,570			35,000	2,450	12,000	720
Striped bass	200	6	14,500	1,450	15,400	1,540	56,760	6,621
Suckers			4,650	92			200	4
Sunfish							7,200	144
White perch				7,500	375			
Yellow perch				2,000	40		156,300	4,739
Crabs:							56,400	2,800
Hard	272,256	4,084						
Soft	310,594	46,586						
Shrimp	44,405	2,220						
Clams, hard, public	176,112	16,512						
Oysters:								
Market, public, spring	361,290	32,378						
Market, public, fall	178,809	17,186						
Scallops, bay	495,000	50,250						
Total	62,555,966	331,211	2,265,950	33,727	1,031,400	29,592	851,432	45,204

Species	Dare		Gates		Hertford		Hyde	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	223,500	\$2,255						
Bluefish	313,250	8,515						
Bowfin	1,000	10						
Butterfish	210,600	3,533					37,000	555
Carp	30,000	1,050	350	3				
Catfish and bullheads	24,000	1,020	5,000	250				
Croaker	1,032,700	16,947					447,000	7,390
Drum, red or redfish	29,500	1,265					20,000	400
Eels	5,750	455	300	18				
Flounders	806,400	70,608					1,000	20
Gizzard shad	1,400	14						
Harvestfish or "starfish"	5,400	108					30,000	600
Hickory shad	42,200	1,326	500	15			38,000	1,140
King whiting or "kingfish"	93,400	2,802					4,000	120
Mullet	118,200	5,600					100,000	2,000
Pike or pickerel	800	59						
Shad	453,000	75,200	4,000	600	250	37	5,000	750
Sheepshead							2,000	100
Spanish mackerel	18,000	1,740					5,200	416
Spot	149,000	2,099					104,000	2,070
Squeteagues or "sea trout":								
Gray	1,448,000	64,210					223,000	8,170
Spotted	874,500	52,650					32,200	1,972
Striped bass	107,300	10,947	200	20			350	35
Sunfish	700	16						
White perch	12,500	460	2,500	125	900	45		
Yellow perch	2,700	126	150	2				
Clams, hard, public	800	100						
Oysters:								
Market, public, spring	210,966	8,068					70,715	3,620
Market, public, fall	6,145	313					73,685	3,778
Total	6,221,711	331,496	48,000	1,383	106,150	1,132	1,310,150	35,161

Fisheries of North Carolina, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Lenoir		Martin		New Hanover		Onslow	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			232,000	\$2,320				
Carp			3,750	37				
Catfish and bullheads			1,500	75	4,000	\$200		
Croaker					3,600	60	5,000	\$70
Drum, red or redfish					400	12		
Eels			9,000	540				
Flounders					4,000	120	4,000	120
Hickory shad	1,500	\$45			2,000	60		
King whiting or "kingfish"					235,000	3,525	163,000	3,260
Mullet					500	15		
Porgies					30,000	1,500	6,000	300
Sea bass					10,000	1,500		
Shad	1,000	150	600	90				
Snapper, red					4,000	320	1,500	30
Spanish mackerel					70,000	1,400	15,000	300
Spot								
Squeteagues or "sea trout":								
Gray							400	12
Spotted							2,800	196
Striped bass	1,500	75	1,500	150				
Sturgeon					1,000	240		
White perch			2,000	100				
Clams, hard, public					114,632	11,463	4,000	400
Oysters:								
Market, public, spring							6,500	250
Market, public, fall							8,300	375
Total	4,000	270	250,350	3,312	481,363	20,511	216,500	5,313

Species	Pamlico		Pasquotank		Pender	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	58,500	\$600	71,500	\$1,430		
Bowfin			500	5		
Butterfish	5,500	82				
Carp	200	8	2,400	48		
Catfish and bullheads			50,250	2,512		
Croaker	704,000	7,040	130,300	1,309	2,000	\$20
Drum, red or redfish	3,000	60				
Eels	3,000	180	4,000	280		
Flounders	27,000	760	33,400	716	3,000	90
Gizzard shad			10,500	105		
Hickory shad	6,500	135	5,700	285		
Mullet	75,000	2,250	1,700	119	385,000	7,700
Pike or pickerel			500	35		
Shad	32,500	4,437	32,275	4,841		
Sheepshead	500	20				
Spot	100,000	1,225			310,000	4,650
Squeteagues or "sea trout":						
Gray	405,000	9,175				
Spotted	10,000	600				
Striped bass	2,100	210	11,600	2,212		
Suckers			200	6		
White perch			11,600	464		
Yellow perch			2,800	140		
Crabs, hard	80,000	1,200				
Clams, hard, public					36,800	2,300
Oysters:						
Market, public, spring	142,223	5,611	5,222	274		
Market, public, fall	155,203	7,257	11,902	509		
Total	1,810,226	40,850	386,349	15,290	736,800	14,760

Species	Perquimans		Tyrrell		Washington	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	190,000	\$1,900	1,576,500	\$15,765	2,500,000	\$25,000
Bowfin	800	8				
Carp	4,050	40	6,500	65		
Catfish and bullheads	27,250	1,360	21,000	1,050	8,000	400
Eels	7,550	453	3,000	180		
Flounders	2,100	42	5,000	100		
Gizzard shad	4,500	45				
Hickory shad	14,000	420			28,000	840
Mullet	1,150	33				
Shad	95,000	14,250	8,000	1,200	12,000	1,500
Striped bass	30,000	3,000	6,000	600	50,800	5,080
Suckers	4,250	84				
White perch	50,000	2,500	12,000	600	52,000	2,600
Yellow perch	400	8	6,200	124		
Total	431,050	24,143	1,644,200	19,684	2,650,800	35,420

SOUTH CAROLINA

Fisheries of South Carolina, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets			Lines		Otter trawls
		Anchor	Drift	Runa- round	Hand	Trot with baits or snoods	
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels							23
On boats and shore:							
Regular	38	100	120	12	150	6	102
Casual	140	245	424				
Total	178	345	544	12	160	6	125
Vessels:							
Motor						2	9
Net tonnage						20	131
Boats:							
Motor			9	21	3	15	51
Other	21	274	333		30	6	
Apparatus:							
Number	21	365	502	7	160	6	60
Length, yards	2,830						
Square yards		131,100	447,501	1,800			
Yards at mouth							1,260
Hooks, baits or snoods					520	4,500	

Item	Spears	Dredges, oyster	Tongs	Grabs	By hand	Total, ex- clusive of dupli- cation	
						Number	Number
Fishermen:							
On vessels	Number	Number	Number	Number	Number		39
On boats and shore:							
Regular	6			417	34		871
Casual			6	20	16		806
Total	6	6	6	437	50		1,716
Vessels:							
Motor		1					12
Total net tonnage		19					170
Boats:							
Motor					7		104
Other	6		3	429	33		989
Apparatus:							
Number	6	1	6	407			
Yards at mouth		1					

CATCH: BY GEAR

Species	Haul seines		Gill nets					
			Anchor		Drift		Runaround	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Drum, red or redfish	1,500	\$75						
Flounders	1,400	70						
Hickory shad			4,500	\$450	1,153	\$115		
King whiting or "kingfish"	2,700	162					2,500	\$150
Mullet	230,000	11,500					10,000	500
Shad			92,484	18,497	59,072	11,814		
Spot	5,000	150					4,000	120
Squeateagues or "sea trout":								
Gray	1,500	120						
Spotted	3,000	240						
Sturgeon			19,533	3,061	7,902	1,264		
Terrapin, diamond-back	2,958	592						
Total	248,058	12,909	116,517	22,008	68,127	13,193	16,500	770

Fisheries of South Carolina, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines				Otter trawls		Spears	
	Hand		Trot with baits or snoods					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	2,180	\$87						
Flounders	500	45			1,000	\$90	1,500	\$90
King whiting or "kingfish"	2,500	225			8,000	720		
Octopus	5,000	500						
Sea bass	150,000	6,450						
Sharks	5,000	100						
Squeteagues or "sea trout":								
Gray	2,000	120						
Spotted	12,000	1,080						
Crabs, hard			20,000	\$600				
Shrimp					2,635,336	91,167		
Total	179,180	8,607	20,000	600	2,644,336	91,977	1,500	90

Species	Dredges, oyster		Tongs		Grabs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Oyster:								
Market, public, spring					907,777	\$22,846	2,582	\$102
Market, public, fall					545,025	10,814	326	12
Market, private, spring	100,000	\$1,660	9,240	\$1,136	652,189	16,137		
Market, private, fall					322,663	7,969		
Terrapin, diamond-back							2,892	627
Total	100,000	1,660	9,240	1,136	2,427,654	57,766	5,800	741

OPERATING UNITS: BY COUNTIES

Item	Beaufort	Charleston	Colleton	Georgetown	Horry	Jasper
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels		39				
On boats and shore:						
Regular	317	326		148	60	20
Casual	153	274	103	166	110	
Total	470	639	103	314	170	20
Vessels:						
Motor		12				
Net tonnage		170				
Boats:						
Motor	25	44	6	29		
Other	365	299	85	172	48	20
Apparatus:						
Haul seines	4	3		2	12	
Length, yards	280	150		400	2,000	
Gill nets:						
Anchor	65	61	139	100		
Square yards	13,000	24,400	53,700	40,000		
Drift	76	150	20	220	36	
Square yards	52,000	127,501	12,000	220,000	36,000	
Runaround				7		
Square yards				1,800		
Lines:						
Hand		160				
Hooks		520				
Trot with baits or snoods		6				
Baits or snoods		4,500				
Otter trawls	20	34		6		
Yards at mouth	400	680		180	6	
Spears:						
Dredges, oyster		1				
Yards at mouth		1				
Tongs			6			
Grabs	247	140				20

Fisheries of South Carolina, 1931—Continued

CATCH: BY COUNTIES

Species	Beaufort		Charleston		Colleton	
	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....			2,180	\$87		
Flounders.....			1,500	135	4,000	\$400
Hickory shad.....	1,053	\$105				
King whiting or "kingfish".....			10,500	945		
Octopus.....			5,000	500		
Sea bass.....			150,000	6,450		
Shad.....	14,556	2,911	34,470	6,894	35,220	7,044
Sharks.....			5,000	100		
Sqeateagues or "sea trout":						
Gray.....			2,000	120		
Spotted.....			12,000	1,080		
Sturgeon.....					8,081	1,293
Crabs, hard.....			20,000	600		
Shrimp.....	1,910,390	66,864	651,901	21,746		
Oysters:						
Market, public, spring.....	641,174	15,074	269,185	7,874		
Market, public, fall.....	370,276	6,017	174,749	4,797		
Market, private, spring.....	230,868	6,014	496,761	10,853		
Market, private, fall.....	114,652	3,216	208,388	5,577		
Terrapin, diamond-back.....	2,600	633	3,250	586		
Total.....	3,285,569	100,834	2,046,884	68,344	47,301	8,737

Species	Georgetown		Horry		Jasper	
	Pounds	Value	Pounds	Value	Pounds	Value
Drum, red or redfish.....			1,500	\$75		
Flounders.....	1,700	\$100	1,200	60		
Hickory shad.....			600	60		
King whiting or "kingfish".....	2,500	150	2,700	162		
Mullet.....	35,000	1,750	205,000	10,250		
Shad.....	59,880	11,976	7,430	1,486		
Spot.....	8,000	240	1,000	30		
Sqeateagues or "sea trout":						
Gray.....			1,500	120		
Spotted.....			3,000	240		
Sturgeon.....	14,354	2,232	5,000	800		
Shrimp.....	73,045	2,557				
Oysters:						
Market, public, fall.....	326	12				
Market, private, spring.....					24,560	\$830
Market, private, fall.....					8,863	312
Total.....	194,805	19,017	228,930	13,283	33,423	1,242

GEORGIA

Fisheries of Georgia, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines, menhaden	Haul seines	Gill nets				Lines	
			Anchor	Drift	Run-around	Stake	Trot with baits or snoods	Trot with hooks
Fishermen:								
On vessels.....	Number	Number	Number	Number	Number	Number	Number	Number
30								
On boats and shore:								
Regular.....		2			14	2	23	
Casual.....		38	22	234		41		80
Total.....	30	40	22	234	14	43	23	80
Vessels:								
Steam.....	1							
Net tonnage.....		65						
Boats:								
Motor.....					8	2		
Other.....			18	22	122	6	45	23
Apparatus:								
Number.....	1	13	14	118	8	85	23	80
Length, yards.....	300	1,430						
Square yards.....			3,800	54,700	2,460	46,230		
Hooks, baits, or snoods.....							7,100	5,050

Fisheries of Georgia, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Fyke nets	Cast nets	Otter trawls	Traps, crab	Tongs	Rakes	Grabs	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....									
On boats and shore:									
Regular.....		2	278	10	109			41	428
Casual.....	20	10			85	6	20	75	498
Total.....	20	12	330	10	194	6	20	116	1,008
Vessels:									
Steam.....									1
Net tonnage.....									65
Motor.....				26					26
Net tonnage.....				211					211
Total vessels.....				26					27
Total net tonnage.....				211					276
Boats:									
Motor.....									
Other.....	10			139					149
Apparatus:									
Number.....	40	12	165	10	194	6	20		486
Yards at mouth.....			3,300						

CATCH: BY GEAR

Species	Purse seines, menhaden		Haul seines		Gill nets			
					Anchor		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Croaker.....			500	\$10				
Hickory shad.....					1,000	\$80	6,800	\$544
Menhaden.....	869,048	\$2,463						
Mullet.....			20,000	1,400				
Shad.....			700	14	5,500	1,375	93,794	23,448
Spot.....							2,000	700
Sturgeon.....			9,492	2,830				
Terrapin, diamond-back.....								
Total.....	869,048	2,463	30,692	4,254	6,500	1,455	102,594	24,692

Species	Gill nets—Continued				Lines			
	Runaround		Stake		Trot with baits or snoods		Trot with hooks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....								
Croaker.....	8,000	\$160						
Drum, red or redfish.....	4,000	160						
Flounders.....	1,500	45						
Hickory shad.....			6,200	\$396				
King whiting or "kingfish".....	3,000	120						
Mullet.....	16,500	1,185						
Sea bass.....	1,000	40						
Shad.....			33,000	8,250				
Spot.....	3,000	90						
Squteague or "sea trout," spotted.....	10,000	880						
Crabs, hard.....					159,250	\$2,389		
Total.....	47,000	2,680	39,200	8,646	159,250	2,389	45,000	2,250

Fisheries of Georgia, 1931—Continued

CATCH: BY GEAR—Continued

Species	Fyke nets		Cast nets		Otter trawls		Traps, crab	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	140,000	\$8,400	-----	-----	-----	-----	-----	-----
Flounders.....	-----	-----	-----	-----	8,500	\$255	-----	-----
King whiting or "kingfish".....	-----	-----	40,000	\$1,600	32,000	1,320	-----	-----
Mullet.....	-----	-----	-----	-----	-----	-----	-----	-----
Crabs, hard.....	-----	-----	-----	-----	5,471,063	180,583	50,000	\$750
Shrimp.....	-----	-----	-----	-----	-----	-----	-----	-----
Total.....	140,000	8,400	40,000	1,600	5,511,563	182,158	50,000	750

Species	Tongs		Rakes		Grabs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams, hard, public.....	-----	-----	1,200	\$150	-----	-----	-----	-----
Oysters:	-----	-----	-----	-----	-----	-----	-----	-----
Market, private, spring.....	111,866	\$2,916	-----	-----	44,086	\$565	54,762	\$1,159
Market, private, fall.....	79,695	4,032	-----	-----	-----	-----	17,357	579
Total.....	191,561	6,948	1,200	150	44,086	565	72,119	1,738

OPERATING UNITS: BY COUNTIES

Item	Bryan	Bullock	Camden	Charlton	Chatham	Glynn
	Number	Number	Number	Number	Number	Number
Fishermen:	-----	-----	-----	-----	-----	-----
On vessels.....	-----	-----	34	-----	16	28
On boats and shore:	-----	-----	-----	-----	-----	-----
Regular.....	-----	-----	38	-----	207	85
Casual.....	52	12	36	18	213	70
Total.....	52	12	108	18	436	183
Vessels:	-----	-----	-----	-----	-----	-----
Steam.....	-----	-----	1	-----	-----	-----
Net tonnage.....	-----	-----	65	-----	-----	-----
Motor.....	-----	-----	2	-----	8	14
Net tonnage.....	-----	-----	18	-----	65	104
Total vessels.....	-----	-----	3	-----	8	14
Total net tonnage.....	-----	-----	83	-----	65	104
Boats:	-----	-----	-----	-----	-----	-----
Motor.....	-----	-----	19	-----	72	26
Other.....	26	6	18	9	238	65
Apparatus:	-----	-----	-----	-----	-----	-----
Purse seines, menhaden.....	-----	-----	1	-----	-----	-----
Length, yards.....	-----	-----	300	-----	-----	-----
Haul seines.....	-----	-----	-----	4	300	9
Length, yards.....	-----	-----	-----	300	-----	1,130
Gill nets:	-----	-----	-----	-----	-----	-----
Anchor.....	-----	-----	-----	-----	-----	8
Square yards.....	-----	-----	-----	-----	-----	1,000
Drift.....	26	6	18	9	16	15
Square yards.....	14,600	2,800	5,400	2,700	9,200	4,500
Runaround.....	-----	-----	-----	-----	2	6
Square yards.....	-----	-----	-----	-----	420	2,040
Stake.....	-----	-----	-----	-----	60	-----
Square yards.....	-----	-----	-----	-----	42,480	-----
Lines:	-----	-----	-----	-----	-----	-----
Trot with baits or snoods.....	-----	-----	-----	-----	20	3
Baits or snoods.....	-----	-----	-----	-----	6,000	1,100
Trot with hooks.....	-----	-----	-----	80	-----	-----
Hooks.....	-----	-----	-----	-----	5,050	-----
Cast nets.....	-----	-----	-----	-----	12	-----
Otter trawls.....	-----	-----	21	-----	78	34
Yards at mouth.....	-----	-----	420	-----	1,560	680
Traps, crab.....	-----	-----	-----	-----	-----	10
Tongs.....	-----	-----	-----	-----	124	20
Rakes.....	-----	-----	-----	-----	6	-----

Fisheries of Georgia, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Liberty	McIntosh	Screven	Tattnall	Wayne
	Number	Number	Number	Number	Number
Fishermen:					
On vessels		4			
On boats and shore:					
Regular	18	80			
Casual		66	6	15	10
Total	18	150	6	15	10
Vessels:					
Motor		2			
Net tonnage		24			
Boats:					
Motor		30			
Other	18	75	6	15	10
Apparatus:					
Gill nets:					
Anchor			6		
Square yards			2,800		
Drift		18			
Square yards		13,500			
Stake				25	
Square yards				3,750	
Fyke nets		40			
Otter trawls		32			
Yards at mouth		640			
Tongs	18	32			
Grabs		20			

CATCH: BY COUNTIES

Species	Bryan		Bullock		Camden		Charlton	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Hickory shad	600	\$48						
Menhaden					869,048	\$2,463		
Shad	24,000	6,000	4,000	\$1,000	21,000	5,250	7,000	\$1,750
Shrimp					922,683	32,294		
Total	24,600	6,048	4,000	1,000	1,812,731	40,007	7,000	1,750

Species	Chatham		Glynn		Liberty		McIntosh	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads	45,000	\$2,250						
Croaker			8,500	\$170				
Drum, red or redfish			4,000	160				
Flounders	4,000	120	6,000	180				
Hickory shad	5,800	364	6,000	480			1,000	80
King whiting or "kingfish"	13,000	780	22,000	660				
Mullet	41,500	1,660	35,000	2,525				
Sea bass			1,000	40				
Shad	39,000	9,750	18,044	4,511			6,750	1,687
Spot	3,000	90	700	14				
Squeateagues or "sea trout", spotted	4,000	400	6,000	480				
Sturgeon	1,000	500					1,000	200
Crabs, hard	135,000	2,025	74,250	1,114				
Shrimp	1,574,327	55,050	1,403,330	46,117			1,570,723	47,122
Clams, hard, public	1,200	150						
Oysters:								
Market, private, spring	115,230	2,479	4,541	408	18,069	\$602	72,874	1,151
Market, private, fall	35,601	1,198	752	91	32,454	1,623	28,245	1,699
Terrapin, diamond-back	1,250	537	8,242	2,293				
Total	2,018,908	77,353	1,598,359	59,243	50,523	2,225	1,820,592	60,339

Species	Screven		Tattnall		Wayne	
	Pounds	Value	Pounds	Value	Pounds	Value
Hickory shad						
Shad	2,500	\$625	8,000	2,000	2,000	\$500
Total	2,500	625	8,600	2,048	2,000	500

FLORIDA

Fisheries of Florida, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines		Gill nets				Trammel nets	
	Men-haden	Other	Common	Long	Anchor	Drift	Run-around	Stake		
Fishermen:										
On vessels	Number 141	Number 10	Number	Number	Number	Number	Number	Number	Number	
On boats and shore:										
Regular			595	224	6	106	2, 411		222	
Casual			34			51	254	3	6	
Total	141	10	629	224	6	157	2, 665	3	228	
Vessels:										
Motor		5	1							
Net tonnage	246	11								
Boats:										
Motor			110	89	2	56	1, 097		102	
Other			89	146		74	1, 853	3	146	
Accessory boats		2								
Apparatus:										
Number	5	1	123	73	12	115	2, 537	3	187	
Length, yards	1, 440	300	43, 660	63, 400		9, 600	167, 650	2, 789, 002	1, 500	117, 875
Square yards										

Item	Lines				Pound nets	Stop nets	Fyke nets	Dip nets	
	Hand	Troli	Trot with baits or snoods	Trot with hooks				Common	Drop
Fishermen:									
On vessels	Number 563	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore:									
Regular		686	731	6	256	23	52	5	45
Casual		453	291		9			19	23
Total	1, 702	1, 022	6	265	23	52	5	64	48
Vessels:									
Motor		67							
Net tonnage	2, 525								
Sail		4							
Net tonnage		249							
Total vessels		71							
Total net tonnage		2, 774							
Boats:									
Motor		353	507	4	32	10	14	5	31
Other		384	50	2	181	9	38		43
Apparatus:									
Number	1, 702	1, 241	5	266	25	8	50	64	48
Square yards							12, 500		
Hooks, baits or snoods	2, 913	1, 649	840	117, 100					

Item	Cast nets	Otter trawls	Pots				Spears	Dredges	
			Crab	Eel	Fish	Sea crawfish		Clam	Scallop
Fishermen:									
On vessels	Number 112		Number	Number	Number	Number	Number	Number	Number
On boats and shore:									
Regular	6	829	33	2	107	44	7	12	3
Casual	12	8	2		5	16	33		
Total	18	949	35	2	112	60	40	12	3
Vessels:									
Motor		42							
Net tonnage		490							
Boats:									
Motor	4	341	19	2	18	36			1
Other	6		16		109	11	5		
Apparatus:									
Number	18	383	1, 443	45	4, 240	2, 073	40	1	2
Yards at mouth		7, 121							

NOTE.—Fish pots were formerly shown as wire baskets in Franklin County and fyke nets in Lake Okeechobee.

Fisheries of Florida, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Tongs	Rakes	Forks	Co-quina-scoops	Hooks, sponge	Diving outfits	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels.								826
On boats and shore:								
Regular.....	404	8	32		338	412	32	6,375
Casual.....	45		15	2			87	1,156
Total.....	449	8	47	2	338	412	119	8,357
Vessels:								
Motor								115
Net tonnage								3,272
Sail								4
Net tonnage								249
Total vessels.....								119
Total net tonnage.....								3,521
Boats:								
Motor.....	142		3			55		2,401
Other.....	177	4	12		287		26	3,295
Accessory boats								2
Apparatus:								
Number.....	449	8	47	2	302	55		

CATCH: BY GEAR

Species	Purse seines				Haul seines			
	Menhaden		Other		Common		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....								
Black bass.....					9,000	\$100	320,256	\$1,603
Bluefish.....					327,545	6,660	315,383	29,261
Blue runner or hardtail.....					61,798	574	3,000	270
Catfish and bullheads.....					142,594	5,659	2,249,000	95,715
Cigarfish.....					35,840	819		
Crappie.....					17,450	713	376,944	13,726
Crevalle.....					3,496	35	5,000	150
Croaker.....					6,270	75	1,200	24
Drum:								
Black.....					9,523	175	500	10
Red or redfish.....					64,670	1,553	4,088	103
Flounders.....					9,917	379		
Hickory shad.....							25,248	758
Kingfish or "king mackerel".....					25,570	898		
King whiting or "kingfish".....					6,564	143	600	18
Ladyfish.....					2,878	57		
Menhaden.....	8,105,380	\$19,891			50,660	1,248		
Mojarro.....					1,600	14	20,000	600
Mullet.....			375,000	\$7,500	2,311,485	46,868	52,641	829
Permit.....					880	9		
Pigfish.....					8,501	117	2,000	60
Pinfish or sailors choice.....					2,000	200	3,000	90
Pompano.....					34,159	5,371	4,000	120
Sea bass.....					275	5		
Shad.....					196,605	27,533	172,190	18,671
Sheepshead.....					45,485	832	400	16
Snapper, mangrove.....					4,092	47	1,500	60
Snook or sergeantfish.....					39,153	579	2,000	80
Spadefish.....					478	9		
Spanish mackerel.....					600,634	17,580		
Spot.....					4,273	71	15,408	462
Squeteagues or "sea trout":								
Gray.....					7,454	147		
Spotted.....					162,611	7,469	16,000	1,280
Sunfish.....					11,500	420	446,655	13,299
Tenpounder.....					100,714	2,403		
Turtles, soft-shell.....							11,690	173
Total.....	8,105,380	19,891	375,000	7,500	4,305,734	129,562	4,049,503	177,402

NOTE.—Fishpots were formerly shown as wire baskets in Franklin County and fyke nets in Lake Okeechobee.

Fisheries of Florida, 1931—Continued

CATCH: BY GEAR—Continued

Species	Gill nets							
	Anchor		Drift		Runaround		Stake	
	Pounds	Value	Pounds 6,818	Value \$372	Pounds	Value	Pounds	Value
Bluefish.....					746,373	\$48,955		
Blue runner or hardtail.....					111,082	2,231		
Cabio or crab eater.....					400	24		
Catfish and bullheads.....					54,718	1,990		
Crevalle.....					57,662	1,341		
Croaker.....					33,265	706		
Drum:								
Black.....					15,773	305		
Red or redfish.....					721,742	15,310		
Flounders.....					39,319	1,170		
Groupers.....					19,412	712		
Kingfish or "king mackerel".....	500	23						
King whiting or "kingfish".....	15,242	457			53,350	1,211		
Mojarri.....					35,500	760		
Mullet.....	250,000	7,500	18,043	946	330,510			
Muttonfish.....					18,000	400		
Permit.....					440	5		
Pigfish.....					48,495	927		
Pinfish or sailors choice.....					41,058	907		
Pompano.....			1,536	307	235,331	46,428		
Shad.....	228,520	33,946			22,500	3,375	1,000	\$150
Sharks.....	925,000	\$2,960						
Sheepshead.....					552,181	10,031		
Snapper:								
Mangrove.....					66,898	1,549		
Red.....					6,750	559		
Snook or sergeantfish.....					154,555	4,162		
Spadefish.....					55	1		
Spanish mackerel.....	15,132	688	4,111,976	174,888				
Spot.....	2,440	67	106,416	2,195				
Squeateagues or "sea trout":								
Gray.....			200	10	7,413	673		
Spotted.....			8,124	812	1,971,838	108,850		
Sturgeon.....			5,941	447	3,645	265		
Tenpounder.....					15,507	182		
Crabs, hard.....					1,300	13		
Turtles, green.....	16,500	1,167			14,586	729		
Total.....	941,500	4,127	534,453	44,629	27,311,376	761,462	1,000	150

Species	Trammel nets							
	Hand		Troll		Trot with baits or snoods			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack.....			6,420	\$194				
Barracuda.....			18,720	749				
Bluefish.....	445	\$20	14,325	693	64,325	\$4,653		
Blue runner or hardtail.....			2,325	90				
Cabio or crab eater.....			7,329	149				
Cero.....					2,310	84		
Crevalle.....			500	25				
Drum:								
Black.....	220	6	1,903	35				
Red or redfish.....	13,469	404	201,224	3,154				
Eels.....			2,200	110				
Flounders.....	2,002	85						
Groupers.....			2,591,840	67,313				
Grunts.....			20,574	451				
Jewfish.....			9,564	254				
Kingfish or "king mackerel".....			1,982	99	3,362,216	162,318		
King whiting or "kingfish".....	550	15	1,310	39				
Mullet.....	843,266	19,409						
Muttonfish.....			17,664	813				
Pompano.....	255,677	46,070	15,000	1,500				
Porgies.....			45,388	1,114				
Sea bass.....			101,942	4,970	1,000	50		
Sheepshead.....	9,594	278	212,993	3,172				
Snapper:								
Mangrove.....	2,630	72	37,085	1,439				
Red.....			4,498,100	297,915				

Fisheries of Florida, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines								
	Trammel nets		Hand		Troll		Trot with baits or snoods		
			Pounds	Value	Pounds	Value	Pounds	Value	
Snook or sergeantfish.....			29,033	\$528					
Spanish mackerel.....	594	\$22	17,771	654	59,965	\$3,094			
Squeteagues or "sea trout":									
Gray.....	660	12	7,530	231					
Spotted.....	129,766	6,560	582,887	34,141					
Sturgeon.....	5,148	374							
Tripletail.....			1,708	32					
Turbot.....			340	3					
Yellowtail.....			103,794	6,716					
Crabs, hard.....							49,165	\$2,458	
Total.....	1,264,021	73,327	8,551,451	426,583	3,489,816	170,199	49,165	2,458	

Species	Lines—trot with hooks		Pound nets		Stop nets		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			330	\$3				
Bluefish.....			44,489	2,022	935	\$34		
Blue runner or hardtail.....			44,052	4,368				
Bonito.....					550	8		
Cabio or crab eater.....			1,784	53				
Catfish and bullheads.....	492,200	\$22,407	350,000	13,750			10,000	\$400
Crappie.....			21,786	871				
Crevalle.....					2,915	40		
Croaker.....					5,940	78		
Drum, red or redfish.....			16,095	439	28,105	357		
Flounders.....					14,522	423		
Groupers.....			1,263	25				
Kingfish or "king mackerel".....			24,636	896				
King whiting or "kingfish".....					5,759	76		
Mojarro.....					13,706	186		
Mullet.....			1,200	24	451,850	6,778		
Permit.....					3,410	46		
Pigfish.....					1,300	20		
Pompano.....			9,032	1,478	2,804	510		
Porgies.....			622	11				
Sheepshead.....			995	27	19,118	245		
Snapper, mangrove.....			330	12	1,925	22		
Snook or sergeantfish.....					39,017	511		
Spanish mackerel.....			25,602	1,164	3,740	102		
Spot.....					3,190	43		
Squeteagues or "sea trout":								
Gray.....					477	12		
Spotted.....			64,100	2,914	47,586	2,444		
Sunfish.....			22,376	671				
Turtles, soft-shell.....	3,000	60						
Total.....	495,200	22,467	628,695	28,728	646,849	11,935	10,000	400

Species	Dip nets				Cast nets		Otter trawls	
	Common		Drop					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders.....								
King whiting or "kingfish".....								
Mojarro.....					1,000	\$50		
Mullet.....					20,500	613		
Crabs, hard.....			3,570	\$92				
Sea crawfish or spiny lobster.....	119,814	\$8,387	41,666	4,266				
Shrimp.....							18,852,822	682,658
Total.....	119,814	8,387	45,236	4,358	21,500	663	18,981,822	686,428

Fisheries of Florida, 1931—Continued

CATCH: BY GEAR—Continued

Species	Pots						Sea crawfish	
	Crab		Eel		Fish			
	Pounds	Value	Pounds	Value	Pounds	Value		
Black bass.....					99, 176	\$8, 806		
Catfish and bullheads.....					150, 915	6, 096		
Crappie.....					73, 541	2, 206		
Drum, red or redfish.....			976	\$29				
Eels.....					168	3		
Sunfish.....					110, 794	3, 324		
Crabs:								
Hard.....	6, 500	\$260						
Stone.....	142, 837	9, 589						
Sea crawfish or spiny lobster.....							294, 427 \$28, 877	
Total.....	149, 337	9, 849	976	29	434, 594	20, 435	294, 427 28, 877	

Species	Dredges						Tongs	
	Spears		Clam		Scallop			
	Pounds	Value	Pounds	Value	Pounds	Value		
Eels.....	15, 378	\$965						
Frogs.....	52, 168	6, 260	563, 288	\$24, 644				
Clams, hard, public.....								
Oysters:								
Market, public, spring.....							677, 655 \$44, 581	
Market, public, fall.....							783, 975 53, 663	
Market, private, spring.....							38, 700 3, 776	
Market, private, fall.....							10, 012 805	
Scallops, bay.....					3, 478	\$166		
Total.....	67, 546	7, 225	563, 288	24, 644	3, 478	166	1, 510, 342 106, 825	

Species	Rakes		Forks		Coquina scoops	
	Pounds	Value	Pounds	Value	Pounds	Value
Clams:						
Coquina.....						
Hard, public.....	4, 320	\$756	223, 848	\$10, 067	5, 740	\$48
Total.....	4, 320	756	223, 848	10, 067	5, 740	48

Species	Hooks, sponge		Diving outfits		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value
Frogs.....						
Clams, hard, public.....						
Conchs.....	3, 500	\$280				
Oysters:						
Market, public, spring.....					6, 240	412
Market, public, fall.....					16, 000	1, 036
Market, private, spring.....					107, 560	5, 080
Market, private, fall.....					108, 634	8, 701
Scallops, bay.....					10, 048	758
Sponges:						
Grass.....	112, 282	24, 238	6, 298	\$1, 889		
Sheepswool.....	123, 262	204, 528	188, 698	496, 640		
Velvet.....	190	99				
Wire.....	124	30	12, 390	4, 956		
Yellow.....	42, 412	12, 860	75, 765	35, 800		
Total.....	281, 770	242, 035	283, 151	539, 285	303, 514	22, 565

Fisheries of Florida, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Bay	Brevard	Broward	Charlotte	Citrus	Clay	Collier	Dade
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	156	5	—	—	—	—	—	20
On boats and shore:								
Regular.....	197	151	—	183	172	36	180	445
Casual.....	25	47	70	43	25	—	25	119
Total.....	378	203	70	226	197	36	185	584
Vessels:								
Motor.....	17	1	—	—	—	—	—	3
Net tonnage.....	437	19	—	—	—	—	—	39
Boats:								
Motor.....	51	76	33	93	63	10	66	287
Other.....	62	115	8	171	185	26	147	90
Accessory boats.....	—	—	—	—	—	—	—	2
Apparatus:								
Purse seines:								
Menhaden.....	1	—	—	—	—	—	—	—
Length, yards.....	280	—	—	—	—	—	—	—
Other.....	—	—	—	—	—	—	—	1
Length, yards.....	—	—	—	—	—	—	—	300
Haul seines:								
Common.....	15	—	—	6	—	10	—	—
Length, yards.....	6,000	—	—	2,700	—	8,000	—	—
Gill nets:								
Runaround.....	19	114	—	104	123	—	129	110
Square yards.....	13,060	99,600	—	99,134	72,364	—	141,210	256,630
Trammel nets:								
Square yards.....	2	—	—	5	—	—	9	—
Lines:								
Hand.....	173	36	30	60	33	—	71	150
Hooks.....	340	36	30	60	33	—	71	150
Troll.....	20	50	32	32	2	—	8	304
Hooks.....	20	70	32	2	—	—	8	424
Trot with hooks.....	2	—	—	—	22	—	—	—
Hooks.....	630	—	—	—	8,600	—	—	—
Stop nets:					8	—	—	—
Square yards.....	—	—	—	—	12,500	—	—	—
Dip nets, drop:					—	—	—	40
Cast nets.....	—	—	4	—	—	—	—	—
Otter trawls:					—	—	—	2
Yards at mouth.....	16	—	—	—	—	—	—	40
Pots:					—	—	—	—
Crab.....	—	28	—	—	—	—	—	100
Sea crawfish.....	—	—	—	—	—	—	—	1,000
Spears.....	6	—	—	1,000	—	—	—	—
Dredges, clam.....	—	—	—	—	—	—	1	—
Tongs.....	60	—	—	—	5	40	—	—
Forks.....	—	—	—	—	—	—	18	—

Item	Duval	Escambia	Franklin	Glades	Gulf	Hernando	Hillsborough	Indian River
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	5	333	24	—	56	—	22	—
On boats and shore:								
Regular.....	170	164	475	113	28	6	75	79
Casual.....	40	18	10	—	5	—	12	50
Total.....	215	515	509	113	89	6	109	129
Vessels:								
Motor.....	2	36	5	—	2	—	4	—
Net tonnage.....	18	1,897	29	—	96	—	47	—
Sail:								
Net tonnage.....	—	4	—	—	—	—	—	—
Total vessels.....	2	40	5	—	2	—	4	—
Total net tonnage.....	18	2,146	29	—	96	—	47	—
Boats:								
Motor.....	71	49	187	36	6	1	33	32
Other.....	87	30	92	91	5	6	59	30
Apparatus:								
Purse seines:								
Menhaden.....	—	—	—	—	2	—	—	—
Length, yards.....	—	—	—	—	560	—	—	—

Fisheries of Florida, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Duval	Escam-bia	Frank-lin	Glades	Gulf	Hernando	Hills-borough	Indian River
Apparatus—Continued								
Haul seines:	Number	Number	Number	Number	Number	Number	Number	Number
Common	6	2,120	7	2,600	3	1,200		
Length, yards								
Long				21				
Length, yards				21,600				
Gill nets:								
Drift	70		2					
Square yards		100,000		950				
Runaround	4	5,330	10	28	2	6	59	76
Square yards		61,400	18,580		4,200	3,740	43,360	69,000
Trammel nets:			22					
Square yards			11,684					
Lines:								
Hand	38	397	44		5		50	18
Hooks	76	1,104	88		5		88	36
Troll								34
Hooks								34
Trot with baits or snoods	4							
Baits or snoods	600							
Trot with hooks	48		13					
Hooks		14,400	970					
Dip nets: Drop		8					6	
Cast nets								
Otter trawls	21	4	62					
Yards at mouth	420	48	733					
Pots: Fish			240	3,500				
Spears			7					
Dredges:								
Scallop			2					
Yards at mouth			2					
Tongs		29	220		4			

Item	Jefferson	Lee	Levy	Manatee	Martin	Monroe	Nassau	Oka-loosa
Fishermen:								
On vessels	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore:								
Regular	10	235	155	96	60	449	218	122
Casual	8	35	35	6	20	19	20	
Total	18	270	190	102	80	468	329	122
Vessels:								
Motor							14	
Net tonnage							266	
Boats:								
Motor	3	127	70	44	30	105	83	29
Other	18	238	164	87	10	300	39	30
Apparatus:								
Purse seines:								
Menhaden							2	
Length, yards							1,600	
Haul seines:								
Common				8				14
Length, yards				2,000				5,600
Long					2			
Length, yards					2,000			
Gill nets:								
Anchor						12		
Square yards						9,600		
Drift							11	
Square yards							2,300	
Runaround	10	216	100	86	50	46	3	2
Square yards	5,850	155,200	52,280	81,570	60,000	124,720	2,700	712
Stake							3	
Square yards							1,500	
Trammel nets		5	46	6				34
Square yards		5,650	22,777	5,160				17,994

NOTE.—Fish pots were formerly shown as wire baskets in Franklin County and fyke nets in Lake Okeechobee.

Fisheries of Florida, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Jefferson	Lee	Levy	Manatee	Martin	Monroe	Nassau	Okealoosa
Apparatus—Continued								
Lines:								
Hand	18	61	47	20		51	40	61
Hooks	18	61	47	20		51	80	122
Troll		26	54	6	40	94		
Hooks		26	54	6	80	94		
Trot with hooks			4					
Hooks			400					
Pound nets			5					
Dip nets, common							64	
Otter trawls								75
Yards at mouth								1,500
Pots:								
Crab							165	
Sea crawfish							73	
Spears								
Tongs			33					
Forks					2			
Hooks, sponge							236	

Item	Okeechobee	Palm Beach	Pasco	Pinellas	Putnam	St. Johns	St. Lucie
Fishermen:							
On vessels	Number	Number	Number	Number	Number	Number	Number
On boats and shore:							
Regular	29	308	26	775	180	283	233
Casual	30	120		117		25	6
Total	59	428	26	943	180	347	252
Vessels:							
Motor					7		
Net tonnage					144		
Boats:							
Motor	4	133	13	161	68	100	102
Other	20	54	26	269	116	24	55
Apparatus:							
Haul seines:							
Common					11		
Length, yards					4,050		
Long	4					43	
Length, yards	4,000					33,600	
Gill nets:							
Drift					14	18	
Square yards					8,400	56,000	
Runaround		274	26	209	20	6	203
Square yards	246,600	16,350	292,955	58,000	3,000	322,287	
Trammel nets					7		
Square yards					4,200		
Lines:							
Hand		12			158		35
Hooks		12			241		35
Troll		212			35		240
Hooks		424			51		240
Trot with hooks	28				40		
Hooks	8,400				29,600		
Pound nets						20	
Fyke nets						50	
Cast nets		8					
Otter trawls							105
Yards at mouth							2,100
Pots:							40
Crab					1,150		
Eel						45	
Fish	500						
Spears	15						
Tongs							12
Rakes							8
Forks					15		
Hooks, sponge					36		
Diving outfits					55		

Fisheries of Florida, 1931—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Santa Rosa	Sarasota	Semi- nole	Taylor	Volusia	Wakulla	Walton
	Number	Number	Number	Number	Number 11	Number	Number
Fishermen:							
On vessels							
On boats and shore:							
Regular	13	188	108	70	178	175	10
Casual	7	17	—	37	25	140	—
Total	20	205	108	107	214	315	10
Vessels:							
Motor					4		
Net tonnage					32		
Boats:							
Motor	5	80	15	5	77	50	3
Other	6	203	50	80	56	241	5
Apparatus:							
Haul seines:							
Common		8	30		1	4	
Length, yards		2,640	5,400		150	1,200	
Long					3		
Length, yards					2,200		
Gill nets:							
Runaround		211		40	25	226	
Square yards		324,640		18,660	19,250	116,620	
Trammel nets:	5	5				36	5
Square yards	2,200	13,050				12,600	1,500
Lines:							
Hand		26		53	15		
Hooks		26		53	30		
Troll		84					
Hooks		84					
Trot with baits or snoods:					1		
Baits or snoods					240		
Trot with hooks:			108	1			
Hooks			54,000	100			
Otter trawls:						58	
Yards at mouth						1,160	
Spears	10						
Tongs	11					20	13
Forks						12	
Croquina scoops						2	
Hooks, sponge					30		

CATCH: BY COUNTIES

Species	Bay		Brevard		Broward		Charlotte	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	244,145	\$3,549	25,650	\$1,086	1,500	\$150	36,716	\$1,335
Blue runner or hardtail	19,800	192	1,500	75			7,304	92
Bonito							550	8
Cabio or crab eater			20,000	800			2,100	42
Catfish and bullheads								
Cigarfish	20,500	512						
Crevalle			1,500	30	500	25	4,871	61
Croaker							8,360	105
Drum:								
Black			2,650	53			330	6
Red or redfish	6,160	126	32,888	1,045			107,992	1,366
Flounders	4,180	152					17,492	504
Groupers	489,382	9,786	750	15	12,000	360	5,950	119
Grunts							3,000	60
Jewfish	600	12					850	17
Kingfish or "king mackerel"	22,044	802			170,000	10,200	28,229	1,121
King whiting or "kingfish"			2,500	50			6,969	90
Menhaden	912,800	3,788						
Mojarro							13,700	186
Mullet	573,599	11,472	1,347,553	20,588	2,000	100	1,445,394	21,679
Muttonfish					5,000	500	6,050	121
Permit							4,290	56
Pigfish			3,000	60			3,700	53
Pinfish or sailors choice			28,000	560				
Pompano	10,200	1,300	25,703	3,355			59,635	10,848
Porgies	12,900	258						
Sheepshead	3,300	75	40,000	1,200			82,826	1,074

Fisheries of Florida, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Bay		Brevard		Broward		Charlotte	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Snapper:								
Mangrove.....			750	\$15				
Red.....	820, 504	\$49, 224	1, 500	30				
Snook or sergeantfish.....			3, 000	90			53, 366	677
Spanish mackerel.....	360, 101	9, 821	15, 750	630	1, 000	\$70	156, 071	5, 246
Spot.....	2, 200	40	42, 000	840			3, 740	49
Squeteagues or "sea trout":								
Gray.....			2, 250	135			1, 797	48
Spotted.....	98, 298	3, 727	229, 689	11, 384			239, 216	12, 111
Tenpounder.....	58, 200	1, 434						
Tripletail.....							800	16
Yellowtail.....							4, 994	100
Crabs, hard.....			7, 800	273				
Sea crawfish or spiny lobster.....					90, 000	9, 000		
Shrimp.....			539, 700	21, 588				
Oysters:								
Market, public, spring.....	65, 348	5, 766					14, 130	1, 178
Market, public, fall.....	92, 956	8, 152					9, 180	459
Total.....	3, 817, 217	110, 188	2, 374, 133	63, 902	282, 000	20, 405	2, 342, 145	58, 972

Species	Citrus		Clay		Collier		Dade	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack.....								
Barracuda.....								
Black bass.....			9, 000	\$900				
Bluefish.....	8, 635	\$314			17, 224	\$626	25, 000	2, 900
Blue runner or hardtail.....					15, 479	141	10, 000	400
Catfish and bullheads.....			178, 000	7, 120				
Crappie.....			2, 450	113				
Crevalle.....					2, 915	27	3, 000	90
Drum:								
Black.....					550	5		
Red or redfish.....	43, 164	888			159, 201	2, 160		
Flounders.....	594	22			649	22		
Groupers.....	1, 200	24			6, 300	126	95, 000	5, 290
Grunts.....					3, 450	69	4, 000	120
Jewfish.....							2, 250	90
Kingfish or "king mackerel".....	1, 684	61			15, 015	410	1, 830, 039	91, 502
Mullet.....	1, 813, 380	36, 268			1, 654, 537	24, 816	1, 012, 000	21, 685
Muttonfish.....					314	6		
Pigfish.....	440	12			385	5		
Pompano.....	253	34			80, 628	14, 659	10, 000	2, 000
Porgies.....							1, 000	30
Sea bass.....							1, 000	50
Sheepshead.....	21, 267	423			200, 529	2, 725	1, 000	30
Snapper:								
Mangrove.....	22, 341	459					9, 000	900
Red.....							80, 000	7, 000
Snook or sergeantfish.....					36, 178	493	1, 000	50
Spanish mackerel.....	2, 696	123			101, 260	2, 193	1, 238, 000	62, 310
Squeteagues or "sea trout," spotted.....	119, 816	7, 182			238, 056	12, 990	6, 000	520
Sunfish.....			4, 000	120				
Tenpounder.....	15, 164	176						
Tripletail.....					758	13		
Yellowtail.....					10, 800	216	58, 000	5, 800
Crabs, stone.....							22, 657	2, 266
Sea crawfish or spiny lobster.....							213, 800	21, 882
Shrimp.....							20, 000	800
Clams, hard, public.....					733, 128	34, 262		
Oysters:								
Market, public, spring.....	32, 895	1, 633						
Market, public, fall.....	49, 080	2, 510						
Total.....	2, 132, 609	50, 129	193, 450	8, 253	3, 327, 356	95, 973	4, 665, 466	226, 614

Fisheries of Florida, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Duval		Escambia		Franklin		Glades	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds 291,529	Value 336,288
Black bass								
Bluefish	1,116	\$56	27,268	\$744	23,000	\$442		
Blue runner or hardtail			13,281	121	1,329	12		
Cabio or crab eater	400	21	212	6				
Catfish and bullheads	50,300	2,515			246,400	8,978	602,486	20,124
Croppie							214,624	6,438
Croaker								
Drum								
Black			4,961	90	220	8		
Red or redfish	2,214	111	2,530	46	8,855	242		
Eels	2,300	110				104		3
Flounder			1,221	67	7,594	308		
Grouper	412	12	1,136	795	33,937	306,036	6,121	
Jewfish			1,420	43	670	13		
Kingfish or "king mackerel"	1,982	99	2,205	60				
King whiting or "kingfish"	19,532	586	371	7	1,430	22		
Menhaden						3,000	90	
Mullet	254,002	7,622	264,582	6,715	773,602	15,454		
Pacific								
Pompano	1,536	367	5,733	860	2,122	276		
Porpoise	48	2	15,306	400	3,400	68		
Sea Bass	97,692	4,885				275		
Seal	151,442	22,383						
Sheepshead			1,746	63	1,100	31		
Snapper, red	13,608	952	2,448	334	171,657	267,778	17,269	
Spadefish			92	2	15	1		
Spanish mackerel			158,462	4,322	38,200	1,252		
Spot	2,440	67				203	4	
Squeteagues or "sea trout"								
Gray	200	10	385	7				
Spotted	40,622	4,062	9,250	328	55,324	2,463		
Sting ray						5,854	410	
Sunfish							320,392	6,783
Tenpounder						11,902	387	
Crabs, hard	32,202	1,613	3,570	92				
Shrimp	767,850	30,714	72,525	4,352	1,730,377	50,270		
Oysters								
Market, public, spring					50,932	4,494	408,354	27,847
Market, public, fall					89,604	7,818	443,638	30,483
Scallops, bay							3,478	166
Total	1,469,971	76,130	4,310,910	236,312	4,424,973	162,627	1,438,053	71,883

Species	Gulf		Hernando		Hillsborough		Indian River	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	45,452	\$1,564	1,320	\$48	1,526	\$85	10,000	\$760
Cabio or crab eater								
Crevalle							547	10
Croaker								5,200
Drum								1,700
Black	110	2						1,900
Red or redfish	1,650	45	10,230	279	27,610	517	13,450	828
Flounders	550	25					557	19
Groupers							161,883	3,236
Grunts							304	6
Kingfish or "king mackerel"								4,000
King whiting or "kingfish"	110	2						16,000
Menhaden	3,517,580	7,994						
Mullet	260,409	5,810	90,450	1,800	456,252	12,518	170,000	3,756
Muttonfish								9,000
Pigfish								270
Pinfish or sailors choice								1,900
Pompano	9,020	1,151						6,100
Porgies								1,223
Sheepshead	220	6	1,045	28	9,460	176	4,000	120
Snapper:								
Mangrove								7,000
Red							230,805	260
Snook or sergeantfish							5,610	553
Spanish mackerel	119,284	3,253					102,000	890
Spot							515	24
Squeteagues or "sea trout":								11,000
Gray								1,109
Spotted	16,313	906	9,526	520	128,535	8,582	66,160	6,126
Tenpounder	10,000	200					187	3
Oysters, market, public, fall.	7,800	510						
Total	4,018,598	21,468	117,301	2,813	1,032,842	39,656	431,400	24,448

Fisheries of Florida, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Jefferson		Lee		Levy		Manatee	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....			19,663	\$715	49,134	\$2,242	11,316	\$405
Blue runner or hardtail.....			14,410	131	47,368	4,670	1,650	15
Cabio or crab eater.....			4,500	90	1,784	53	400	8
Catfish and bullheads.....					12,853	467		
Crevalle.....							880	8
Croaker.....							550	10
Drum:								
Black.....			1,320	18	473	17	660	6
Red or redfish.....	6,655	\$182	247,160	3,503	47,765	1,302	50,891	819
Flounders.....			5,500	81	7,260	262	935	25
Groupers.....			12,600	252	4,748	95	800	16
Grunts.....			8,300	166	120	2		
Jewfish.....					844	17		
Kingfish or "king mackerel".....			37,859	1,376	96,206	3,498	3,597	164
Mojarро.....							12,600	214
Mullet.....	138,225	2,764	2,565,795	38,485	1,236,819	24,737	971,508	17,226
Permit.....							440	4
Pigfish.....			6,580	98			1,320	12
Pompano.....			79,047	14,372	29,111	4,764	14,181	2,579
Porgies.....					1,496	28		
Sea bass.....					4,250	85		
Sheepshead.....	2,640	72	220,859	3,179	27,817	758	45,980	836
Snapper:								
Mangrove.....			21,175	302	5,804	162	3,300	60
Red.....					1,260	88		
Snook or sergeantfish.....			37,697	533			37,620	684
Spanish mackerel.....			219,209	5,978	39,812	1,756	36,998	1,333
Spot.....					440	8		
Squeteagues or "sea trout":								
Gray.....							6,382	116
Spotted.....	28,413	1,291	380,088	20,732	271,290	13,404	132,973	6,681
Sturgeon.....					8,793	639		
Yellowtail.....			13,600	272				
Clams, hard, public.....							480	48
Oysters:								
Market, public, spring.....			1,615	119	12,181	796		
Market, public, fall.....			2,125	156	22,503	1,347		
Turtles, green.....					14,586	729		
Total.....	175,933	4,309	3,899,102	90,558	1,944,717	61,926	1,335,761	31,275

Species	Martin		Monroe		Nassau		Okaloosa	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	63,000	\$5,670	3,307	\$120			16,154	\$294
Blue runner or hardtail.....	800	24	5,830	106			19,250	175
Cero.....			2,310	84				
Cigarfish.....							15,340	307
Crevalle.....	15,000	450						
Croaker.....	1,800	36						
Drum:								
Black.....	900	18	165	3			1,540	28
Red or redfish.....	2,500	75	10,065	149			7,150	130
Flounders.....					200	6	4,675	295
Groupers.....			6,750	135			74,083	2,222
Grunts.....			1,200	24				
Jewfish.....			1,200	24			350	10
Kingfish or "king mackerel".....	60,000	2,400	425,267	19,260			1,320	36
King whiting or "kingfish".....	1,800	54			90,500	2,715	440	8
Menhaden.....					3,710,000	8,984	12,660	283
Mojarро.....	27,000	810						
Mullet.....	250,000	3,750	105,450	1,942			209,677	5,241
Muttonfish.....			5,300	106				
Pigfish.....	2,000	60						
Pinfish or sailors choice.....	3,000	90						
Pompano.....	24,000	6,120	3,723	677			9,606	1,441
Porgies.....			500	10			4,200	126
Shad.....					10,500	1,575		
Sharks.....			925,000	2,960				
Sheepshead.....	4,400	176	9,273	146			4,730	172
Snapper:								
Mangrove.....	4,000	160	3,850	105			101,145	7,080
Red.....			4,100	123	10,000	700		
Snook or sergeantfish.....	23,000	920	330	4			330	6
Spadefish.....							70,629	1,926
Spanish mackerel.....	180,000	12,600	505,979	13,799				
Spot.....	16,000	480	330	6	300	12	550	10

Fisheries of Florida, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Martin		Monroe		Nassau		Okaloosa	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Squeteagues or "sea trout":								
Gray								
Spotted	25,000	\$2,000	10,037	\$548	3,000	\$300	220	\$4
Sturgeon					12,250	1,225	25,802	1,409
Tenpounder					87	37		
Tripletail			150	3				
Turbot			340	3				
Yellowtail			16,400	328				
Crabs, stone			13,500	945				
Sea crawfish or spiny lobster			152,107	10,648				
Shrimp					6,578,320	209,171		
Conchs					3,500	280		
Oysters:								
Market, public, spring						2,625	233	
Market, public, fall						7,875	700	
Market, private, spring						107,560	5,080	4,080
Market, private, fall						108,634	8,701	360
Turtles, green			16,500	1,167				
Sponges:								
Grass			55,272	7,167				
Sheepswool			67,994	78,691				
Velvet			190	99				
Wire			124	30				
Yellow			28,854	6,390				
Total	704,200	35,893	2,384,897	146,082	10,648,626	239,692	600,343	21,891

Species	Okeechobee		Palm Beach		Pasco		Pinellas	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack								
Black bass	49,681	\$4,200						
Bluefish			367,204	\$29,376	3,520	\$128	103,909	5,147
Blue runner or hardtail			20,000	400			2,855	142
Cabio or crab eater							104	2
Catfish and bullheads	204,315	10,636						
Crappie	82,257	2,468						
Crevalle			5,000	150			220	2
Croaker			4,000	120				
Drum:								
Black							1,661	30
Red or redfish			6,000	240	13,750	375	65,607	1,536
Flounders							14,098	398
Groupers			7,000	170			275,282	5,603
Jewfish							1,380	28
Kingfish or "king mackerel"			377,100	17,119			39,310	1,575
King whiting or "kingfish"			5,000	150				
Ladyfish							2,878	57
Mojarro			1,000	50				
Mullet			2,000	100	488,912	9,778	2,307,305	55,614
Muttonfish			10,000	300				
Pigfish							2,306	42
Pompano			50,000	10,000	110	18	22,630	4,089
Porgies							5,220	105
Sheepshead			3,000	90	1,320	36	28,625	770
Snapper:								
Mangrove					6,820	186	5,557	144
Red							499,067	29,943
Snook or sergeantfish			3,000	90			7,506	136
Spadefish							56	1
Spanish mackerel			709,205	35,480	275	8	395,816	16,575
Spot							588	11
Squeteagues or "sea trout":								
Gray							2,117	38
Spotted			8,000	800	11,978	653	273,947	14,042
Sunfish	92,665	2,780						
Tenpounder							4,356	87
Crabs, stone							106,680	6,378
Frogs	104,336	12,520						
Clams, hard, public							4,792	479
Scallops, bay							10,048	758
Turtles, soft-shell	8,024	160						
Sponges:								
Grass							62,963	18,895
Sheepswool							221,808	583,827
Wire							12,390	4,956
Yellow							89,079	42,097
Total	541,278	32,764	1,577,509	94,635	526,685	11,182	4,572,600	794,255

Fisheries of Florida, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Putnam		St. Johns		St. Lucie		Santa Rosa	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	320,586	\$1,006						
Black bass.....	69,749	7,233						
Bluefish.....			100	\$10	70,000	\$4,800		
Blue runner or hardtail.....					21,500	430		
Catfish and bullheads.....	1,841,598	72,659						
Crappie.....	167,390	7,497						
Crevalle.....					26,500	530		
Croaker.....					26,000	520		
Drum:								
Black.....			384	8	7,700	154		
Red or redfish.....	2,588	58	15,680	1,098	27,888	1,116	3,800	\$105
Eels.....	976	29						
Flounders.....			1,950	58			8,393	606
Groupers.....					5,000	100		
Hickory shad.....	25,248	758						
Kingfish or "king mackerel".....					227,555	11,102		
King whiting or "kingfish".....			1,650	50	36,500	730		
Mojarro.....					17,500	350		
Mullet.....	10,133	379			539,000	8,085	138,980	3,474
Pigfish.....					2,500	50		
Pinfish or sailors choice.....			4,458	175	2,500	50		
Pompano.....			50	10	22,400	5,600		
Shad.....	262,268	32,184						
Sheepshead.....					27,000	810	550	20
Snapper, red.....			250	7				
Snook or sergeantfish.....					27,888	1,116		
Spanish mackerel.....					378,233	15,129		
Spot.....	5,408	162			30,750	615		
Squeteagues or "sea trout":								
Gray.....					4,083	367	660	12
Spotted.....			17,000	1,530	63,000	5,670	3,960	216
Sunfish.....	135,768	4,072						
Shrimp.....			5,319,450	212,779	2,110,000	84,400		
Clams, hard, public.....			4,320	756				
Oysters:								
Market, public, spring.....			2,000	60	13,500	1,400	8,840	780
Market, public, fall.....			6,000	180	25,988	2,695	13,838	1,221
Market, private, fall.....					1,012	105		
Turtles, soft-shell.....	6,666	73						
Total.....	2,848,378	126,710	5,373,292	216,721	3,713,997	146,014	179,021	6,434

Species	Sarasota		Seminole		Taylor	
	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	10,006	\$364				
Blue runner or hardtail.....	10,560	96				
Catfish and bullheads.....			200,000	\$10,000	983	38
Crappie.....			15,000	600		
Crevalle.....	440	4				
Croaker.....	2,640	24				
Drum:						
Black.....	275	3				
Red or redfish.....	35,797	406			37,050	1,065
Flounders.....	2,210	62			2,640	96
Groupers.....	2,563	51				
Grunts.....	200	4				
Kingfish or "king mackerel".....	71,491	3,249				
Mullet.....	1,045,543	15,683			375,653	7,513
Pigfish.....	5,915	70				
Pompano.....	40,467	7,358			2,585	352
Porgies.....	440	8				
Shad.....			196,665	27,533		
Sheepshead.....	68,312	784			14,355	392
Snapper, mangrove.....	2,060	24			2,090	57
Snook or sergeantfish.....	7,563	85				
Spanish mackerel.....	94,654	3,197			2,145	58
Spot.....	275	2			440	12
Squeteagues or "sea trout," spotted.....	96,557	4,389			106,723	5,757
Sunfish.....			7,500	300		
Clams, hard, public.....	1,280	160				
Sponges:						
Grass.....					325	65
Sheepswool.....					22,158	38,660
Yellow.....					244	173
Total.....	1,490,237	36,023	419,165	38,433	570,504	54,313

Fisheries of Florida, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Volusia		Wakulla		Walton	
	Pounds	Value	Pounds	Value	Pounds	Value
Black bass.....	3,600	\$396				
Bluefish.....	2,300	230	18,270	\$274		
Blue runner or hardtail.....			7,150	65		
Catfish and bullheads.....	92,000	3,680				
Crapie.....	8,000	400				
Crevalle.....	3,000	60				
Croaker.....			660	12		
Drum:						
Black.....	2,000	40			220	46
Red or redfish.....	12,000	640	38,813	1,059	2,090	96
Flounders.....			440	16	110	4
King whiting or "kingfish".....	23,000	600			560	15
Mullet.....	263,000	3,995	1,452,997	29,062	100,850	2,017
Pigfish.....	30,000	600				
Pinfish or sailors choice.....	2,000	200				
Pompano.....	4,000	1,000			110	22
Sheepshead.....	1,500	30	12,650	345	1,265	34
Snapper, mangrove.....	1,500	30				
Spot.....	4,000	80				
Squeteagues or "sea trout", spotted.....	115,000	5,750	133,804	6,083	10,285	468
Sunfish.....	22,000	660				
Crabs, hard.....	16,900	845				
Shrimp.....	1,714,600	68,584				
Clams:						
Coquina.....	5,740	48				
Hard, public.....	320	80				
Oysters:						
Market, public, spring.....	3,672	228	7,803	459		
Market, public, fall.....	16,057	1,503	10,251	603		
Market, private, spring.....	38,700	3,776				
Market, private, fall.....	9,000	700				
Total.....	2,393,889	94,245	1,680,838	37,978	115,480	2,662

CATCH: BY DISTRICTS

Species	East coast		West coast		Lake Okeechobee	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	320,586	\$1,606				
Amberjack.....	4,000	150	2,420	\$44		
Barracuda.....	18,720	749				
Black bass.....	82,349	8,529			341,210	\$30,438
Bluefish.....	566,570	45,198	641,685	18,481		
Blue runner or hardtail.....	53,800	1,329	166,257	5,958		
Bonito.....			550	8		
Cabio or crab eater.....	400	24	9,113	202		
Catfish and bullheads.....	2,381,898	96,774	260,726	9,483	806,803	39,760
Cero.....			2,310	84		
Cigarfish.....			35,840	819		
Crapie.....	192,840	8,610			296,881	8,906
Crevalle.....	59,700	1,479	9,873	112		
Croaker.....	33,575	715	13,090	167		
Drum:						
Black.....	15,434	309	12,485	222		
Red or redfish.....	115,408	4,915	933,985	16,405		
Eels.....	3,176	139	168	3		
Flounders.....	7,950	238	79,188	2,964		
Groupers.....	128,162	6,427	2,484,353	61,623		
Grunts.....	4,000	120	16,574	331		
Hickory shad.....	25,248	758				
Jewfish.....	2,250	90	7,314	164		
Kingfish or "king mackerel".....	2,670,676	132,622	744,228	31,612		
King whiting or "kingfish".....	196,502	5,405	9,873	144		
Ladyfish.....			2,878	57		
Menhaden.....	3,710,000	8,984	4,446,040	12,155		
Mojarro.....	45,500	1,210	26,306	400		
Mullet.....	3,849,778	70,054	18,500,010	349,977		
Muttonfish.....	24,000	1,070	11,664	233		
Permit.....			4,730	60		
Pigfish.....	39,400	827	20,896	297		
Pinfish or sailors choice.....	46,058	1,197				
Pompano.....	186,189	36,592	371,350	65,192		
Porgies.....	1,048	32	44,962	1,093		
Sea bass.....	98,692	4,935	4,525	90		
Shad.....	620,875	83,675				

Fisheries of Florida, 1931—Continued

CATCH: BY DISTRICTS—Continued

Species	East coast		West coast		Lake Okeechobee	
	Pounds	Value	Pounds	Value	Pounds	Value
Sharks			925,000	\$2,960		
Sheepshead	80,900	\$2,456	759,869	12,145		
Snapper:						
Mangrove	22,250	1,385	92,210	1,816		
Red	111,858	9,241	4,392,992	289,233		
Snook or sergeantfish	77,888	3,146	185,870	2,714		
Spadefish			533	10		
Spanish mackerel	2,533,278	127,328	2,302,136	70,864		
Spot	121,898	2,676	9,829	162		
Squeteagues or "sea trout":						
Gray	9,533	812	14,201	273		
Spotted	582,721	39,067	2,400,191	125,412		
Sturgeon	87	37	14,647	1,049		
Sunfish	169,268	5,152			422,057	\$12,562
Tenpounder			116,221	2,585		
Tripletail			1,708	32		
Turbot			340	3		
Yellowtail	58,000	5,800	45,794	916		
Crabs:						
Hard	56,965	2,731	3,570	92		
Stone	22,657	2,266	120,180	7,323		
Sea crawfish or spiny lobster	303,800	30,882	152,107	10,648		
Shrimp	17,049,920	628,036	1,802,902	54,622		
Frogs					104,336	12,520
Clams:						
Coquina	5,740	48				
Hard, public	4,640	836	789,680	34,949		
Conchs:			3,500	280		
Oysters:						
Market, public, spring	21,797	1,921	662,098	43,072		
Market, public, fall	55,920	5,078	744,055	53,621		
Market, private, spring	146,260	8,856				
Market, private, fall	118,646	9,506				
Scallops, bay			13,526	924		
Turtles:						
Green			31,086	1,896		
Soft-shell	6,666	73			8,024	160
Sponges:						
Grass			118,580	26,127		
Sheepwool			311,960	701,168		
Velvet			190	99		
Wire			12,514	4,986		
Yellow			118,177	48,660		
Total	37,065,476	1,412,095	45,009,059	2,077,021	1,979,311	104,346

Sponge fishery of Florida, 1931

OPERATING UNITS: BY GEAR

Item	Sponge hooks	Diving outfits		Total
		Number	Number	
Fishermen on boats and shore, regular	338	412	750	
Boats:				
Motor			55	55
Other	287			287
Apparatus	302	55		

CATCH: BY GEAR

Sponges	Sponge hooks		Diving outfits		Total
	Pounds	Value	Pounds	Value	
Grass	112,282	\$24,238	6,298	\$1,889	118,580
Sheepwool	123,262	204,528	188,698	496,640	311,960
Velvet	190	99			190
Wire	124	30	12,390	4,956	12,514
Yellow	42,412	12,860	75,765	35,800	118,177
Total	278,270	241,755	283,151	539,285	561,421
					781,040

ALABAMA

Fisheries of Alabama, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets, stake	Trammel nets	Lines			
				Hand	Troll	Trot with baits or snoods	Trot with hooks
Fishermen:							
On vessels.....	Number	Number	Number	Number	98	Number	Number
On boats and shore:							
Regular.....	36	4	72	15	2	6	38
Casual.....			5	28		12	
Total.....	36	4	77	141	2	18	38
Vessels:							
Motor.....					10		
Net tonnage.....					177		
Boats:							
Motor.....	7	1	28	6	1		4
Other.....	3	4	66	15		18	38
Apparatus:							
Number.....	6	22	65	141	2	18	182
Length, yards.....	3,900	3,500	21,063		249	2	3,025
Square yards.....							18,550
Hooks, baits, or snoods.....							

Item	Fyke nets	Otter trawls	Spears	Tongs	By hand	Total, exclusive of dupli- cation	
						Number	Number
Fishermen:							
On vessels.....	Number	Number	Number	Number	Number		Number
On boats and shore:							
Regular.....	30	240	5	126	12		450
Casual.....			22	3	26		71
Total.....	30	274	27	131	38		655
Vessels:							
Motor.....			17		1		28
Net tonnage.....			134		11		322
Boats:							
Motor.....	4	120			40		175
Other.....	30				47		188
Apparatus:							
Number.....	122	137	27	131			
Yards at mouth.....		1,778					

CATCH: BY GEAR

Species	Haul seines		Gill nets, stake		Trammel nets		Lines—Hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	31,300	\$1,380			3,575	\$138		
Blue runner or hardtail.....	3,040	55						
Catfish and bullheads.....					4,015	182	2,354	\$107
Crevalle.....	4,995	91						
Croaker.....	26,824	488						
Drum:								
Black.....	605	11			1,720	38	121	2
Red or redfish.....	10,060	281			43,131	1,450	8,635	358
Flounders.....	167	9			8,664	566		
Groupers.....							107,876	3,039
Jewfish.....							118	4
King whiting or "kingfish".....	8,289	219			2,200	56	330	6
Menhaden.....	3,548	71						
Mullet.....	457,188	13,716			859,086	23,808		
Pompano.....	418	57			4,763	651		
Sharks.....							20,000	75
Sheepshead.....	563	20			3,229	114	1,430	58
Snapper, red.....							863,201	60,430
Spanish mackerel.....	6,518	236			6,435	234		
Spot.....	508	14			275	6		
Squeteagues or "sea trout":								
Gray.....	1,183	32			4,730	164	1,815	60
Spotted.....	9,180	586			85,511	5,867	6,842	519
Sturgeon.....								
Tenpounder.....	315	6						
Tripletail.....							71	3
Total.....	564,701	17,272	15,134	1,513	1,040,941	33,526	1,013,233	64,664

Fisheries of Alabama, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines—Continued						Fyke nets			
	Troll		Trot with baits or snoods		Trot with hooks					
	Pounds	Value	Pounds	Value	Pounds	Value				
Buffalo fish.....										
Cabio or crab eater.....	550	\$15								
Catfish and bullheads.....										
Kingfish or "king mackerel".....	1,320	60								
Paddlefish or spoonbill cat.....										
Crabs, hard.....										
Total.....	1,870	75	78,358	1,062	113,405	5,155	70,208	3,191		

Species	Otter trawls		Spears		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders.....								
Crabs, soft.....								
Shrimp.....	2,475,200	\$65,676						
Oysters:								
Market, public, spring.....					521,307	\$18,236		
Market, public, fall.....					224,498	8,622		
Market, private, spring.....					3,536	260		
Market, private, fall.....					19,380	1,140		
Terrapin, diamond back.....							1,655	496
Total.....	2,475,200	65,676	23,210	1,630	768,721	28,258	2,819	750

OPERATING UNITS: BY COUNTIES

Item	Baldwin	Mobile
Fishermen:		
On vessels.....	Number 4	Number 130
On boats and shore:		
Regular.....	71	379
Casual.....	21	50
Total.....	96	559
Vessels:		
Motor.....	2	26
Net tonnage.....	17	305
Boats:		
Motor.....	27	148
Other.....	45	143
Apparatus:		
Haul seines.....	1	5
Length, yards.....	500	3,400
Gill nets, stake.....	22	
Square yards.....	3,500	
Trammel nets.....	30	35
Square yards.....	10,918	10,145
Lines:		
Hand.....	14	127
Hooks.....	14	235
Troll.....	2	
Hooks.....	2	
Trot with baits or snoods.....		18
Baits or snoods.....		3,025
Trot with hooks.....	4	178
Hooks.....	750	17,800
Fyke nets.....		122
Otter trawls.....	8	129
Yards at mouth.....	105	1,673
Spears.....	11	16
Tongs.....	21	110

Fisheries of Alabama, 1931—Continued

CATCH: BY COUNTIES

Species	Baldwin		Mobile	
	Pounds	Value	Pounds	Value
Bluefish	7,370	\$268	27,505	\$1,250
Blue runner or hardtail	924	17	2,116	38
Buffalofish			44,806	2,037
Cabio or crab eater	550	15		
Catfish and bullheads	13,035	592	120,738	8,897
Creville	220	4	4,775	87
Croaker	14,410	264	26,461	494
Drum:				
Black	603	13	1,753	38
Red or redfish	26,301	717	35,525	1,267
Flounders	4,510	270	27,531	1,935
Groupers			107,876	3,039
Jewfish			118	4
Kingfish or "king mackerel"	1,320	60		
King whiting or "kingfish"	600	12	10,159	200
Menhaden			3,548	71
Mullet	488,462	14,665	827,412	22,859
Paddlefish or spoonbill cat			2,403	109
Pompano	3,476	474	1,706	234
Sharks			20,000	75
Sheepshead	3,245	112	1,977	80
Snapper, red			863,201	60,430
Spanish mackerel	7,040	256	5,913	214
Spot	385	9	308	11
Squteagues or "sea trout":				
Gray			7,728	256
Spotted	33,580	2,163	67,953	4,800
Sturgeon	15,134	1,513		
Ternounder			315	6
Tripletail			71	3
Crabs:				
Hard			78,358	1,062
Soft			1,164	254
Shrimp	190,800	5,005	2,284,400	60,671
Oysters:				
Market, public, spring	3,825	169	517,482	18,067
Market, public, fall	11,135	491	213,363	8,131
Market, private, spring	3,536	260		
Market, private, fall	19,380	1,140		
Terrapin, diamond-back	978	293	677	203
Total	851,369	28,782	5,316,431	193,990

MISSISSIPPI

Fisheries of Mississippi, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trammel nets	Lines		Dip nets, drop	Cast nets
			Hand	Trot with baits or snoods		
Fishermen:						
On vessels						
On boats and shore:						
Regular	108	80	20	36		
Casual		4	126	11	38	60
Total.	108	84	162	47	38	60
Vessels:						
Motor			2			
Net tonnage			25			
Boats:						
Motor						
Other						
Apparatus:						
Number						
Length, yards						
Square yards						
Hooks, baits, or snoods						

Fisheries of Mississippi, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Otter trawls	Spears	Dredges, oyster	Tongs	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels	176		409	4		485
On boats and shore:						
Regular	554	3	229	306		1,015
Casual		62			28	213
Total	730	65	638	310	28	1,713
Vessels:						
Motor	58		96	1		127
Net tonnage	608		1,375	6		1,683
Sail			5			5
Net tonnage			70			70
Total vessels	58		101	1		132
Total net tonnage	608		1,445	6		1,753
Boats:						
Motor	277		51	17		327
Other			5	285		499
Apparatus:						
Number	335		314	308		
Yards at mouth	4,226		315			

CATCH: BY GEAR

Species	Haul seines		Trammel nets		Lines			
					Hand		Trot with baits or snares	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish			18,358	\$834				
Buffalofish					9,196	\$502		
Cabio or crab eater					385	14		
Catfish and bullheads	25,644	932	26,818	1,076				
Croaker	5,419	99	374	7				
Drum:	7,211	197	4,235	115				
Black	13,850	380	1,870	52				
Red or redfish	89,002	3,236	10,516	382				
Flounders	20,345	1,110			24,092	623		
Groupers					690	17		
Jewfish								
King whiting or "kingfish"	5,084	139						
Mullet	729,015	18,869						
Pompano			521	72				
Sheepshead	28,575	1,041	3,487	127				
Snapper, red			68,236	4,777				
Spanish mackerel	1,045	31	258	9				
Squeteagues or "sea trout":								
Gray	50,869	1,388	44,844	1,224				
Spotted	71,585	5,206	48,711	3,542				
Tenpounder			2,425	48				
Tripletail					484	22		
Crabs: Hard							382,197	\$6,045
Shrimp	62,400	\$1,560						
Total	62,400	1,560	1,068,948	33,582	244,196	12,489	382,197	6,045

Species	Dip nets, drop		Cast nets		Otter trawls		Spears	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Croaker					495	\$14		
Flounders					8,250	450	32,576	\$2,369
King whiting or "kingfish"					1,320	36		
Mullet	17,080	\$512						
Crabs: Hard	72,184	\$1,031	7,790	1,169	17,645,400	391,045		
Total	72,184	1,031	24,870	1,681	17,655,465	391,045	32,576	2,269

Fisheries of Mississippi, 1931—Continued

CATCH: BY GEAR—Continued

Species	Dredges, oyster		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds 4,592	Value \$1,228
Crabs: Soft						
Oysters:						
Market, public, spring, Mississippi	1,301,871	\$51,632	116,639	\$6,640		
Market, public, fall, Mississippi	97,246	3,935	121,735	6,759		
Market, public, spring, Louisiana	1,204,848	49,477	56,403	3,049		
Market, public, fall, Louisiana	532,323	21,982	6,829	369		
Total	3,136,288	127,026	301,606	16,817	4,592	1,228

OPERATING UNITS: BY COUNTIES

Item	Hancock	Harrison	Jackson
	Number	Number 400	Number 16
Fisherman:			
On vessels:			
On boats and shore:			
Regular	30	818	167
Casual	46	116	51
Total	76	1,403	234
Vessels:			
Motor		125	2
Net tonnage		1,658	25
Sail		5	
Net tonnage		70	
Total vessels		130	2
Total net tonnage		1,728	25
Boats:			
Motor	12	261	54
Other	43	357	99
Apparatus:			
Haul seines:		18	
Length, yards		4,045	
Trammel nets:	8	18	20
Square yards	2,672	6,916	5,765
Lines:			
Hand	30	70	62
Hooks	30	70	88
Trot with baits or snoods		37	10
Baits or snoods		10,618	1,378
Dip nets, drop	138		
Cast nets		54	6
Otter trawls:		294	41
Yards at mouth		3,732	494
Spears	9	39	17
Dredges, oyster		312	2
Yards at mouth		313	2
Tongs	13	242	53

CATCH: BY COUNTIES

Species	Hancock		Harrison		Jackson	
	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish					18,358	\$834
Buffalofish					9,196	502
Cabio or crab eater			385	\$14		
Catfish and bullheads	4,400	\$160	33,473	1,216	14,589	632
Crevalle			539	10	5,254	96
Croaker	1,320	36	5,500	150	5,121	140
Drum:						
Black	5,500	150	4,851	135	5,369	147
Red or redfish	26,070	948	32,846	1,194	40,602	1,476
Flounders	14,190	864	34,116	2,259	12,865	806
Groupers					24,092	623
Jewfish					690	17
King whiting or "kingfish"	1,320	36	2,904	80	2,180	59
Mullet	63,850	1,916	90,946	2,727	591,290	14,738
Pompano			195	27	326	45
Sheepshead	6,270	228	5,412	199	20,380	741

Fisheries of Mississippi, 1931—Continued

CATCH: BY COUNTIES—Continued

Species	Hancock		Harrison		Jackson	
	Pounds	Value	Pounds	Value	Pounds	Value
Snapper, red.....					68,236	\$4,777
Spanish mackerel.....	440	\$16	93	\$3	770	21
Sqeuteagues or "sea trout":						
Gray.....	32,901	897	31,193	852	31,619	863
Spotted.....	33,781	2,457	41,330	3,005	45,185	3,286
Tenpounder.....					2,425	48
Tripletail.....	220	10	99	4	165	8
Crabs:						
Hard.....	72,184	1,031	326,750	5,384	55,447	661
Soft.....	1,400	350	3,192	878		
Shrimp.....			15,783,450	345,353	1,932,140	48,421
Oysters:						
Market, public, spring, Mississippi.....	16,058	868	1,356,313	54,664	46,139	2,740
Market, public, fall, Mississippi.....	17,868	966	170,275	7,889	30,838	1,839
Market, public, spring, Louisiana.....			1,261,251	52,526		
Market, public, fall, Louisiana.....			539,152	22,351		
Total.....	297,772	10,933	19,724,265	500,920	2,963,285	83,520

LOUISIANA

Fisheries of Louisiana, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trammel nets	Lines			Dip nets, drop
			Hand	Trot with baits or snoods	Trot with hooks	
Fishermen:						
On boats and shore:						
Regular.....	Number 627	Number 124	Number 52	Number 221	Number 3	Number 9
Casual.....	14		104	112		17
Total.....	641	124	156	333	3	26
Boats:						
Motor.....	139	56	22	28	3	11
Other.....	161	62	96	288		24
Apparatus:						
Number.....	143	61	156	333	3	1,715
Length, yards.....	17,995					
Square yards.....		16,050				
Hooks, baits, or snoods.....			161	69,060	300	

Item	Cast nets	Otter trawls	Dredges, oyster	Tongs	By hand	Total, exclusive of dupli- cation
						Number
Fishermen:						
On vessels.....	Number	Number	Number	Number	Number	214
On boats and shore:						
Regular.....	4	1,528	14	501	121	2,618
Casual.....	12			5	92	254
Total.....	16	1,678	82	506	213	3,086
Vessels:						
Motor.....		74	12			85
Net tonnage.....		487	140			620
Sail.....			4			4
Net tonnage.....			62			62
Total vessels.....		74	16			89
Total net tonnage.....		487	202			682
Boats:						
Motor.....		764	4	3		928
Other.....				503		1,074
Apparatus:						
Number.....	16	838	36	506		
Yards at mouth.....		10,720	36			

Fisheries of Louisiana, 1931—Continued

CATCH: BY GEAR

Species	Haul seines		Trammel nets		Lines			
					Hand		Trot with baits or snoods	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	20,450	\$558	33,780	\$792	27,050	\$773		
Crevalle.....			150	9				
Croaker.....	30,490	1,628	22,890	1,285	5,450	303		
Drum:								
Black.....	50,080	1,549	90,786	2,759	38,300	1,149		
Red or redfish.....	107,150	6,567	171,543	10,328	93,450	5,427		
Flounders.....	9,370	582	19,565	1,576				
Garfish.....			500	40				
Groupers.....					4,170	125		
Jewfish.....					7,050	212		
King whiting or "kingfish".....	27,050	568	27,460	588	200	4		
Mullet.....	4,040	121	250	15				
Pompano.....		24	1,025	134				
Sharks.....					20,000	125		
Sheepshead.....	30,440	1,861	85,775	4,845	17,400	1,043		
Snapper, red.....					78,835	5,518		
Spanish mackerel.....					900	38		
Spot.....	5,860	173	4,615	136				
Squateagues or "sea trout":								
Gray.....	80,470	1,642	138,835	2,808	88,250	1,765		
Spotted.....	135,672	13,593	211,553	20,402	112,390	10,852		
Tripletail.....			5,150	274	150	8		
Crabs, hard.....							4,853,730	\$52,117
Shrimp.....	598,500	14,400						
Turtles, loggerhead.....	27,820	556						
Total.....	1,127,776	43,802	813,880	45,991	491,195	27,340	4,853,730	52,117

Species	Lines, trot with hooks		Dip nets, drop		Cast nets		Otter trawls	
							Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	1,750	\$70						
Mullet.....					2,100	\$63		
Crabs, hard.....			131,550	\$742	2,350	118	34,547,316	\$829,543
Shrimp.....								
Total.....	1,750	70	131,550	742	4,450	181	34,547,316	829,543

Species	Dredges, oyster		Tongs		By hand		
					Pounds	Value	
	Pounds	Value	Pounds	Value	Pounds	Value	
Crabs, soft.....					120,784	\$45,292	
Oysters:							
Market, public, spring.....	259,848	\$12,220			8,244	\$643	
Market, public, fall.....	222,990	10,863					
Market, private, spring.....	19,420	1,832	1,672,917	137,048			
Market, private, fall.....	75,600	7,132	1,330,873	109,128			
Terrapin, diamond-back.....					21,312	6,390	
Total.....	577,864	32,047	3,012,034	246,819	142,096	51,682	

Fisheries of Louisiana, 1931—Continued

OPERATING UNITS: BY PARISHES

Item	Cameron	Iberia	Jefferson	La Fourche	Orleans	Plaquemines
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....			18	52	26	46
On boats and shore:						
Regular.....	19	30	700	453	117	374
Casual.....		16	45	5	31	8
Total.....	19	46	763	510	174	428
Vessels:						
Motor.....				9	26	9
Net tonnage.....				60	167	70
Sail.....						4
Net tonnage.....						62
Total vessels.....				9	26	9
Total net tonnage.....				60	167	70
Boats:						
Motor.....	12	6	257	168	61	150
Other.....	8	28	180	170	52	103
Apparatus:						
Haul seines.....	6	6	38	18	10	14
Length, yards.....	405	690	4,920	1,890	1,230	2,010
Trammel nets.....	1	1	7	9	11	20
Square yards.....	130	235	1,945	2,645	1,785	6,035
Lines:						
Hand.....			18		18	
Hooks.....			18		23	
Trot with baits or snoods.....	3	8	51	5		9
Baits or snoods.....	340	845	10,180	1,350		1,450
Trot with hooks.....	3					
Hooks.....	300					
Dip nets, drop.....					1,265	
Cast nets.....	4					12
Otter trawls.....	3	4	227	184	36	138
Yards at mouth.....	34	48	2,861	2,438	485	1,759
Dredges, oyster.....						8
Yards at mouth.....					8	12
Tongs.....	4	12	76	156		57

Item	St. Bern- ard	St. Charles	St. Mary	St. Tam- many	Terre- bonne	Vermil- ion
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....	4		22	8	38	
On boats and shore:						
Regular.....	158	33	179	17	486	52
Casual.....	59	8	20	4	49	9
Total.....	221	41	221	29	573	61
Vessels, motor:	2		7	2	19	
Net tonnage.....	17		77	22	119	
Boats:						
Motor.....	34	14	54	5	152	15
Other.....	147	18	105	10	236	17
Apparatus:						
Haul seines.....	16		3	3	20	9
Length, yards.....	2,345		390	325	2,415	1,375
Trammel nets.....	4		3	2	2	1
Square yards.....	1,385		755	540	460	135
Lines:						
Hand.....	52				68	
Hooks.....	52				68	
Trot with baits or snoods.....	135	18	96		3	5
Baits or snoods.....	29,965	3,240	21,050		340	300
Dip nets, drop.....				450		
Otter trawls.....	15	14	53		159	5
Yards at mouth.....	195	178	651		2,007	64
Dredges, oyster.....				8		4
Yards at mouth.....				8		4
Tongs.....				23	3	173

Fisheries of Louisiana, 1931—Continued

CATCH: BY PARISHES

Species	Cameron		Iberia		Jefferson		La Fourche	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	2,850	\$114			1,050	\$21		
Croaker.....	2,700	108	550	\$16	2,220	99	1,000	\$30
Drum:								
Black.....	250	9	800	24	16,970	510	16,350	500
Red or redfish.....	2,500	150	3,200	192	41,100	2,486	54,375	3,235
Flounders.....	4,200	168	50	4	2,695	216	9,800	784
King whiting or "kingfish".....	850	26	600	18	19,400	388		
Mullet.....	2,100	63			2,300	70		
Sharks.....					2,000	125		
Sheepshead.....	2,550	153	800	48	12,450	766	37,360	1,867
Spanish mackerel.....					150	6		
Spot.....					850	23		
Squeteagues or "sea trout:"								
Gray.....	1,800	54	950	28	7,290	146	7,950	159
Spotted.....	9,800	980	3,750	375	76,195	7,233	46,175	3,694
Tripletail.....							3,150	157
Crabs:								
Hard.....	3,060	41	24,600	328	1,024,950	13,666	309,360	4,125
Soft.....					29,320	10,995		
Shrimp.....	127,000	2,944	178,700	4,364	9,659,642	231,824	7,592,068	182,215
Oysters:								
Market, private, spring.....	18,804	1,242	50,954	4,974	586,840	45,802	257,707	24,312
Market, private, fall.....	23,426	1,547	84,508	8,249	384,287	29,984	126,703	11,953
Terrapin, diamond-back.....					21,312	6,390		
Turtles, loggerhead.....					27,820	556		
Total.....	201,890	7,599	349,462	18,620	11,936,841	351,306	8,461,998	233,031

Species	Orleans		Plaquemines		St. Bernard		St. Charles	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	15,300	\$306	15,730	\$315	5,950	\$119		
Croaker.....	11,900	714	11,490	690	16,530	992		
Drum:								
Black.....	12,200	367	47,336	1,420	50,010	1,501		
Red or redfish.....	30,760	1,845	52,508	3,151	34,860	2,091		
Flounders.....	850	68	4,420	354	1,720	138		
Grouper.....	4,170	125						
Jewfish.....	7,050	212						
King whiting or "kingfish".....	2,100	42	11,710	234	8,200	164		
Mullet.....					1,590	47		
Pompano.....	750	90			199	30		
Sheepshead.....	13,250	795	27,698	1,662	17,310	1,038		
Snapper, red.....	78,835	5,518			750	30		
Spanish mackerel.....								
Spot.....	800	24	4,475	133	3,250	96		
Squeteagues or "sea trout:"								
Gray.....	6,550	131	83,025	1,660	169,590	3,391		
Spotted.....	9,350	935	88,365	8,837	123,880	12,388		
Tripletail.....			1,500	74	300	16		
Crabs:								
Hard.....	44,850	598	145,500	1,940	860,760	11,477	258,000	\$3,440
Soft.....	7,580	2,841	4,760	1,785	74,172	27,814		
Shrimp.....	1,445,522	34,750	5,796,106	139,105	613,224	14,718	598,000	14,352
Oysters:								
Market, public, spring.....	68,648	3,232	83,895	3,948				
Market, public, fall.....	117,744	5,540	24,429	1,149				
Market, private, spring.....	19,420	1,832	115,841	9,047				
Market, private, fall.....	75,600	7,132	143,630	11,178				
Total.....	1,973,229	67,097	6,662,418	186,682	1,982,295	76,050	856,000	17,792

Species	St. Mary		St. Tammany		Terrebonne		Vermilion	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....			1,550	\$31	39,500	\$1,185	1,700	\$102
Crevalle.....							150	9
Croaker.....	2,540	\$76	3,500	210	4,600	137	1,800	144
Drum:								
Black.....	3,150	94	8,500	255	22,150	665	1,450	112
Red or redfish.....	9,200	552	6,040	302	129,300	7,758	5,600	560
Flounders.....	250	20	650	52	4,150	332	150	22
Garfish.....							500	40
King whiting or "kingfish".....	1,800	45	5,300	106	3,700	74	1,050	63
Mullet.....			150	4			250	
Pompano.....					100	18		15

Fisheries of Louisiana, 1931—Continued

CATCH: BY PARISHES—Continued

Species	St. Mary		St. Tammany		Terrebonne		Vermilion	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Sheepshead.....	2,600	\$156	4,350	\$261	13,050	\$783	2,200	\$220
Spot.....			1,100	33				
Squateagues or "sea trout":								
Gray.....	2,700	66	18,100	362	8,950	179	650	39
Spotted.....	9,800	980	15,000	1,500	73,400	7,340	3,900	585
Tripletail.....							350	35
Crabs:								
Hard.....	2,160,000	16,200	86,700	144	6,300	84	61,200	816
Soft.....			4,952	1,857				
Shrimp.....	2,207,256	53,425			6,698,128	160,767	232,580	5,597
Oysters:								
Market, public, spring.....	43,777	1,652	41,258	2,197			30,514	1,834
Market, public, fall.....			68,868	3,240			11,955	934
Market, private, spring.....	75,534	7,373			565,470	44,160	1,767	138
Market, private, fall.....	91,749	8,958	12,030	940	460,252	35,984	4,288	335
Total.....	4,610,356	89,597	278,048	11,494	8,029,050	259,466	362,054	11,600

TEXAS

Fisheries of Texas, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Tram- mel nets	Lines			
		Runa- round	Stake		Hand	Troll	Trot with baits or snoods	Trot with hooks
Fishermen:		Number	Number	Number	Number	Number	Number	Number
On vessels.....				95				
On boats and shore:								
Regular.....	100	102	286	138	173	3	10	22
Casual.....	74				193		7	
Total.....	174	102	286	138	461	3	17	22
Vessels:								
Motor.....					14			
Net tonnage.....					234			
Boats:								
Motor.....	2	29	45	57	68	3	2	4
Other.....	8	54	81	44	145		13	15
Apparatus:								
Number.....	59	102	391	81	461	6	29	34
Length, yards.....	10,000							
Square yards.....		23,279	97,172	27,003				
Hooks, baits, or snoods.....					667	6	3,670	4,970

Item	Otter trawls	Spears	Dredges, oyster	Tongs	By hand	Total, exclusive of dupli- cation	
						Number	Number
Fishermen:							
On vessels.....	Number	Number	Number	Number	Number		
On boats and shore:							
Regular.....	80		18				155
Casual.....							
Total.....	606	168	92	253	142		1,939
Vessels:							
Motor.....	31		6				41
Net tonnage.....	261		54				454
Boats:							
Motor.....	262	3	24	43			444
Other.....				172	72		489
Apparatus:							
Number.....	294	168	30	253			
Yards at mouth.....	4,318		29				

Fisheries of Texas, 1931—Continued

CATCH: BY GEAR

Species	Haul seines		Gill nets				Trammel nets	
			Runaround		Stake			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....			2,640	\$144				
Catfish and bullheads.....	25,080	\$912	5,885	214	18,612	\$495	11,770	\$428
Crevalle.....			385	7				
Croaker.....	11,715	426	8,910	324				
Drum:								
Black.....	46,475	1,600	160,944	4,649	837,346	22,971	68,970	2,078
Red or redfish.....	79,574	5,457	61,248	4,247	312,829	22,751	157,493	11,681
Flounders.....	8,525	787	2,530	230			1,925	159
King whiting or "kingfish".....	7,920	288	4,290	156			2,585	94
Mullet.....	5,500	165	600	24				
Pompano.....	5,115	697	770	106			2,673	364
Sheepshead.....	7,590	414	3,685	201	8,690	369	8,415	429
Snook or sergeantfish.....	14,630	534	2,365	86	16,885	614	550	20
Spanish mackerel.....	2,750	100	7,755	282			2,320	99
Squeteagues or "sea trout", spotted.....	119,966	11,033	119,900	10,900	315,739	28,704	236,633	21,911
Total.....	334,840	22,903	381,907	21,570	1,505,101	75,904	506,104	37,727

Species	Lines							
	Hand		Troll		Trot with baits or snoods		Trot with hooks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	22,165	\$810						
Croaker.....	880	32						
Drum:								
Black.....	21,725	750					660	24
Red or redfish.....	222,695	16,388					29,700	2,290
Groupers.....	45,831	1,367						
Jewfish.....	275	8						
Kingfish or "king mackerel".....			3,740	\$136				
Sheepshead.....	18,587	998						
Snapper, red.....	690,664	55,252						
Spanish mackerel.....	50,380	1,880						
Squeteagues or "sea trout", spotted.....	291,500	26,834					49,455	\$1,015
Crabs, hard.....								
Total.....	1,364,702	104,319	3,740	136	49,455	1,015	46,530	2,924

Species	Otter trawls		Spears		Dredges, oyster		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders.....			61,765	\$5,819						
Shrimp.....	13,814,373	\$458,152								
Oysters:										
Market, public, spring.....					176,921	\$11,329	179,858	\$12,299	48,848	\$3,134
Market, public, fall.....					211,684	12,280	275,378	15,912	89,643	4,417
Total.....	13,814,373	458,152	61,765	5,819	388,605	23,609	455,236	28,211	138,491	7,551

Fisheries of Texas, 1931—Continued

OPERATING UNITS: BY COUNTIES

Item	Aransas	Brazoria	Calhoun	Cameron	Galveston	Harris
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels			20		99	
On boats and shore:						
Regular	123	6	199	210	271	5
Casual	23		68	19	114	
Total	146	6	287	229	484	5
Vessels:						
Motor			8		17	
Net tonnage			67		258	
Boats:						
Motor	35		76	30	129	2
Other	55	6	46	46	94	2
Apparatus:						
Haul seines			2		42	
Length, yards			150		8,350	
Gill nets:						
Runaround	13					
Square yards	2,210					
Stake	60		10	188		
Square yards	9,600		1,050	62,792		
Trammel nets	12		18	14	12	
Square yards	1,560		9,250	4,200	4,128	
Lines:						
Hand	30		68	23	172	
Hooks	30		68	35	360	
Trot with baits or snoods	8				16	
Baits or snoods	800				2,420	
Trot with hooks	20					
Hooks	3,750					
Otter trawls	16		58	10	104	
Yards at mouth	209		847	131	1,572	
Spears	20		35	10	28	
Dredges, oyster	2		14			
Yards at mouth	2		14			
Tongs	30	6	76		36	5

Item	Jefferson	Matagorda	Nueces	Refugio	San Patricio
	Number	Number	Number	Number	Number
Fishermen:					
On vessels		10	16		10
On boats and shore:					
Regular		139	339	2	99
Casual	5	18	92	8	45
Total	5	167	446	10	154
Vessels:					
Motor		4	7		5
Net tonnage		41	51		37
Boats:					
Motor		46	80		46
Other	5	20	186	10	19
Apparatus:					
Haul seines			15		
Length, yards			1,500		
Gill nets:					
Runaround			51		38
Square yards			10,525		10,544
Stake			133		
Square yards			23,730		
Trammel nets		11	10		4
Square yards		4,665	2,000		1,200
Lines:					
Hand	5		118	8	37
Hooks	5		124	8	37
Troll					6
Hooks					6
Trot with baits or snoods	5				
Baits or snoods	450				
Trot with hooks					
Hooks			5	4	5
Otter trawls		30	39		37
Yards at mouth		454	561		544
Spears		26	29		20
Dredges, oyster		14			
Yards at mouth		13			
Tongs		40	58	2	

Fisheries of Texas, 1931—Continued

CATCH: BY COUNTIES

Species	Aransas		Brazoria		Calhoun		Cameron	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	6,710	\$244			9,790	\$356	8,497	\$309
Croaker.....	4,895	178			2,860	104	3,850	140
Drum:								
Black.....	31,130	1,132			13,090	476	584,223	15,933
Red or redfish.....	67,320	4,896			241,665	17,576	217,316	15,808
Flounders.....	4,400	400			8,580	780	935	88
King whiting or "kingfish".....	1,980	72			1,980	72		
Pompano.....	385	52			165	22	715	98
Sheepshead.....	2,035	111			2,332	127	8,360	304
Snapper, red.....							24,487	1,956
Snook or sergeantfish.....	715	26			385	14	16,885	614
Spanish mackerel.....	1,155	42			1,320	48	550	20
Squeteagues or "sea trout", spotted.....	78,585	7,135			260,755	23,705	246,785	22,433
Crabs, hard.....	21,630	618						
Shrimp.....	891,184	30,300			1,378,330	48,240	357,915	10,737
Oysters:								
Market, public, spring.....	19,295	1,022	3,315	\$244	101,749	6,061	1,920	228
Market, public, fall.....	36,482	1,824	3,570	262	95,198	6,683	2,688	315
Total.....	1,167,901	48,052	6,885	506	2,118,199	104,264	1,475,126	68,979
Species	Galveston		Harris		Jefferson		Matagorda	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	12,540	\$456					3,960	\$144
Croaker.....	10,175	370					1,770	64
Drum:								
Black.....	7,040	256			220	\$8	5,720	208
Red or redfish.....	63,074	4,777			1,320	120	12,463	1,133
Flounders.....	8,085	748					10,285	1,122
Groupers.....	44,511	1,331						
Jewfish.....	275	8						
King whiting or "kingfish".....	5,005	182					1,540	56
Mullet.....	5,500	165						
Pompano.....	803	109					165	22
Sheepshead.....	8,195	447			55	3	1,870	102
Snapper, red.....	610,789	48,863						
Snook or sergeantfish.....	880	34						
Spanish mackerel.....	3,685	134					835	41
Squeteagues or "sea trout", spotted.....	128,557	11,986			1,760	192	22,462	2,450
Crabs, hard.....	22,575	322			5,250	75		
Shrimp.....	6,059,048	198,359					971,135	29,130
Oysters:								
Market, public, spring.....	14,637	1,256	3,145	\$231			172,516	12,151
Market, public, fall.....	24,684	2,147	3,281	241			243,295	13,247
Total.....	7,030,058	271,950	6,426	472	8,605	398	1,448,016	59,870
Species	Nueces		Refugio		San Patricio			
	Pounds	Value	Pounds	Value	Pounds	Value		
Bluefish.....	2,640	\$144						
Catfish and bullheads.....	48,180	1,752	2,805	\$128	2,200			
Crevalle.....	385	7						
Croaker.....	6,655	242			4,070	14		
Drum:								
Black.....	472,587	13,345			22,110	80		
Red or redfish.....	208,131	14,929	9,790	890	42,460	3,08		
Flounders.....	34,320	3,120			8,140	74		
Groupers.....	1,320	36						
Kingfish or "king mackerel".....							3,740	13
King whiting or "kingfish".....	1,980	72					2,310	8
Mullet.....							600	2
Pompano.....	5,500	751					825	11
Sheepshead.....	20,955	1,143	550	30	2,615	14		
Snapper, red.....	55,388	4,430						
Snook or sergeantfish.....	13,750	500					1,815	6
Spanish mackerel.....	53,020	1,928					2,640	14
Squeteagues or "sea trout", spotted.....	222,734	20,249	7,150	780	114,950	10,45		
Shrimp.....	2,049,016	69,721			2,107,745	71,66		
Oysters:								
Market, public, spring.....	88,756	5,548	294	23				
Market, public, fall.....	167,110	7,864	397	31				
Total.....	3,452,427	145,781	20,986	1,882	2,316,220	87,68		

FISHERIES OF THE PACIFIC COAST STATES⁷

The yield of fishery products in the Pacific Coast States (Washington, Oregon, and California) during 1931 amounted to 597,306,512 pounds, valued at \$13,512,209. This is a decrease of 28 percent in the volume of the catch and 41 percent in the value of the catch as compared with the quantity and value for 1930. Of the total catch in 1931, 584,437,666 pounds, valued at \$12,203,843, were fish and 12,868,846 pounds, valued at \$1,308,366, were shellfish. These fisheries gave employment to 19,235 fishermen, or 2 percent less than in 1930. Of the total number of fishermen employed during 1931, 6,454 were employed on vessels and 12,781 in the boat and shore fisheries.

Fisheries of the Pacific Coast States, 1931

SUMMARY OF CATCH

Product	Washington		Oregon		California		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	136,690,063	\$4,601,750	24,832,283	\$1,216,821	422,915,320	\$6,385,272	584,437,666	\$12,203,843
Shellfish, etc.....	3,800,660	520,094	986,755	65,334	8,081,431	722,938	12,868,846	1,308,366
Total.....	140,490,723	5,121,844	25,819,038	1,282,155	430,996,751	7,108,210	597,306,512	13,512,209

OPERATING UNITS: BY STATES

Item	Washington				Oregon		
	Puget Sound district	Coastal district	Columbia River district	Total	Columbia River district	Coastal district	Total
Fishermen:							
On vessels.....	Number 2,971	Number 16	Number 2	Number 2,989	Number 32	Number 34	Number 66
On boats and shore.....	1,653	3,152	1,478	6,283	2,209	1,212	3,421
Total.....	4,624	3,168	1,480	9,272	2,241	1,246	3,487
Vessels:							
Steam.....	3			3			
Net tonnage.....	71			71			
Motor.....	473	8	1	482	15	12	27
Net tonnage.....	9,705	66	20	9,791	163	102	265
Sail.....	2			2			
Net tonnage.....	804			804			
Total vessels.....	478	8	1	487	15	12	27
Total net tonnage.....	10,580	66	20	10,666	163	102	265
Boats:							
Motor.....	893	318	775	1,986	1,185	759	1,944
Other.....	483	174	148	805	76	116	192
Apparatus:							
Purse seines:							
Salmon.....	251			251			
Length, yards.....	155,118			155,118			
Haul seines.....	72		47	119	39	3	42
Length, yards.....	6,154		14,133	20,287	21,860	493	22,353
Gill nets:							
Drift:							
Salmon.....	296	86	506	888	886	424	1,310
Square yards.....	490,454	159,960	1,224,760	1,875,174	2,790,900	532,544	3,323,444
Set:							
Salmon.....	10	213	201	424	141	671	812
Square yards.....	3,480	70,290	48,441	122,211	35,955	107,300	143,315

⁷ Data on the operating units and catch of the fisheries of the Pacific Coast States have been taken largely from statistics collected by the various State agencies. Supplementary surveys, compilations, and analyses have been made by agents of this Bureau in order that the figures may be presented in a manner comparable with those of other sections.

Fisheries of the Pacific Coast States, 1931—Continued

OPERATING UNITS: BY STATES—Continued

Item	Washington				Oregon		
	Puget Sound district	Coastal district	Columbia River district	Total	Columbia River district	Coastal district	Total
Apparatus—Continued							
Lines:							
Trawl, set and hand	Number 21,989	Number 5	Number 81	Number 22,075	Number 103	Number 150	Number 253
Hooks	460,727	500	8,100	469,327	11,550	18,750	30,300
Troll	2,167	184	286	2,637	860	513	1,373
Hooks	9,968	828	1,287	12,083	3,870	2,308	6,178
Pound nets	104	70	240	414	49		49
Brush weirs	7			7			
Fish wheels			32	32			
Dip nets	8	35	132	175	178		178
Drag bag nets	36	1		37			
Length, yards	3,078	60		3,138			
Reef nets	6			6			
Beam trawls	30			30			
Yards at mouth	204			204			
Traps:							
Crab	2,413	3,718		6,131		5,049	5,049
Crawfish					663		663
Tongs and rakes	212	128		340		2	2
Shovels	218	2,746		2,964		244	244
Spears		10		10			
Dredges, oyster	3			3			
Yards at mouth		5		5			

Item	California					Grand total	
	Northern district	San Francisco district	Monterey district	Southern district			
				San Pedro division	San Diego division		
Fishermen:							
On vessels	Number 16	Number 265	Number 519	Number 1,795	Number 804	Number 3,399	
On boats and shore	470	938	680	770	219	3,077	
Total	486	1,203	1,199	2,565	1,023	6,476	
Vessels:							
Steam			1			1	
Net tonnage			32			32	
Motor	6	30	50	233	104	423	
Net tonnage	58	396	859	7,387	5,647	14,347	
Sail		2				2	
Net tonnage		824				824	
Total vessels	6	33	50	233	104	426	
Total net tonnage	58	1,252	859	7,387	5,647	15,203	
Boats:							
Motor	154	557	227	401	114	1,453	
Other	158	109	45	51	6	369	
Apparatus:							
Purse seines:							
Barracuda				31		31	
Length, yards				13,672		13,672	
Salmon							
Length, yards			12	68		70	
Sardine							
Length, yards			4,350	24,081		28,431	
Tuna					71	71	
Length, yards					40,500	40,500	

Fisheries of the Pacific Coast States, 1931—Continued

OPERATING UNITS: BY STATES—Continued

Item	California						Grand total	
	Northern district	San Francisco district	Monte- rey dis- trict	Southern district		Total		
				San Pedro division	San Diego division			
Apparatus—Continued								
Lampara nets:								
Mackerel	Number	Number	Number	Number	Number	Number	Number	
Length, yards				36	36	36	36	
Sardine		13	54	14,738	14,738	14,738	14,738	
Length, yards		2,210	17,350	35	18	120	120	
Squid			38	15,400	4,070	39,030	39,030	
Length, yards			7,450			38	38	
Other					15	7,450	7,450	
Length, yards						15	15	
Haul seines	21	1		6,860		6,860	6,860	
Length, yards	2,586	125		3		25	186	
Gill nets:				420		3,131	45,771	
Drift:								
Barracuda			19	33	20	72	72	
Square yards			22,100	237,736	157,310	417,146	417,146	
Salmon	157	176				333	2,531	
Square yards	144,195	517,440				661,635	5,860,253	
Sea bass		16	26			42	42	
Square yards		24,992	88,400			113,392	113,392	
Shad		105				105	105	
Square yards		322,655				322,655	322,655	
Striped bass		135				135	135	
Square yards		332,640				332,640	332,640	
Set:								
Salmon							1,236	
Square yards							265,526	
Sea bass				46	21	67	67	
Square yards				172,929	125,420	298,349	298,349	
Other	2	82	132	32	12	260	260	
Square yards	1,600	99,920	108,892	36,821	9,740	256,973	256,973	
Trammel nets					37	14	51	
Square yards					280,941	196,668	477,609	
Lines:								
Trawl, set and hand	266	714	1,094	2,632	1,572	6,278	28,606	
Hooks	36,728	62,272	156,965	252,582	94,345	602,892	1,102,519	
Troll	678	922	569	688	370	3,227	7,237	
Hooks	3,111	4,189	2,017	688	370	10,375	28,636	
Pound nets							463	
Brush weirs							7	
Fish wheels							32	
Fyke nets		1,505				1,505	1,505	
Dip nets	31					31	384	
Bag nets, shrimp		13				13	13	
Length, yards		8,096				8,096	8,096	
Drag, bag nets							37	
Length, yards							3,138	
Reef nets							6	
Paranzella nets		11	4	5		20	20	
Yards at mouth		183	67	83		333	333	
Beam trawls		25				25	55	
Yards at mouth		167				167	371	
Traps:								
Crab	506	4,340				4,846	16,026	
Crawfish							663	
Lobster				4,987	2,226	7,213	7,213	
Octopus	10		106			116	116	
Harpoons:								
Swordfish and turtles				36	25	61	61	
Tongs and rakes	8	27	6			41	383	
Shovels	16	43	26	56		141	3,349	
Abalone outfits			15	3		18	18	
Spears							10	
Dredges, oyster							3	
Yards at mouth							5	

Fisheries of the Pacific Coast States, 1931—Continued

CATCH: BY STATES

Species	Washington		Oregon	
	Pounds	Value	Pounds 209	Value \$2
FISH				
Anchovies				
Carp	80,307	\$2,409		
Cod ²	5,891,971	68,129		
Flounders:				
" Sole "	225,405	6,762	7,845	189
Other	109,130	1,713	37,276	745
Grayfish	778,560	2,335		
Halibut	15,039,485	1,073,879	242,897	21,978
Herring, sea	920,699	11,509	45,144	540
" Lingcod "	488,213	14,029	119,986	3,570
Perch	47,851	1,778	31,714	533
Rockfishes	377,616	9,061	90,833	2,077
Sablefish	1,287,616	44,555	63,976	1,540
Salmon	107,448,325	3,244,839	20,491,307	1,054,839
Shad	268,363	5,368	1,384,985	26,111
Skates	344	4		
Smelt	1,824,087	26,481	481,452	14,539
Steelhead trout	1,835,493	87,053	1,728,801	86,350
Striped bass			18,939	1,477
Sturgeon	49,130	1,491	71,056	2,092
Whitebait			15,863	239
Other fish	17,468	355		
Total	136,690,063	4,601,750	24,832,283	1,216,821
SHELLFISH, ETC.				
Crabs	1,273,228	64,726	790,774	38,822
Crawfish			123,000	12,300
Shrimp	68,261	4,096		
Clams:				
Hard	459,472	22,418		
Razor	767,635	141,799	50,572	9,553
Soft			16,413	1,805
Octopus	59,662	2,061		
Oysters:				
Eastern, market	2,650	1,961		
Japanese, market	975,758	129,567		
Native, market	182,197	151,465	5,993	2,854
Scallops, bay	6,384	1,757		
Squid	5,413	244		
Total	3,800,660	520,094	986,755	65,334
Grand total	140,490,723	5,121,844	25,819,038	1,282,155

Species	California ¹		Total	
	Pounds	Value	Pounds	Value
FISH				
Anchovies	307,494	\$5,534	307,703	\$5,536
Baracuda	4,177,330	362,334	4,177,330	362,334
Cabrilla	227,837	9,403	227,837	9,403
Carp	77,564	4,038	157,871	6,447
Catfish	370,642	47,598	370,642	47,598
Cod ²	4,920,968	61,020	10,812,939	129,149
Corbina	2,084	96	2,084	96
Dolphin	498	13	498	13
Eels	226	6	226	6
Flounders:				
" California halibut "	962,262	99,732	962,262	99,732
" Sole "	9,418,585	415,526	9,651,835	422,477
Other	662,447	28,651	808,853	31,109
Flyingfish	46,265	1,723	46,265	1,723
Grayfish	595,930	8,980	1,374,490	11,315
Groupers	21,609	804	21,609	804
Hake	12,501	266	12,501	266
Halibut	796,189	55,499	16,078,571	1,151,356
Hardhead	45,943	5,775	45,943	5,775
Herring, sea	685,759	4,026	1,651,602	16,075
Horse mackerel	562,475	16,989	562,475	16,989
Kingfish	413,867	10,397	413,867	10,397
" Lingcod "	1,227,890	47,718	1,836,089	65,317
Mackerel	14,252,866	158,302	14,252,866	158,302
Marlin	24,102	1,050	24,102	1,050
Mullet	24,327	1,852	24,327	1,852

¹ Taken off the Pacific coast, including Latin America.² The cod were taken off Alaska.

Fisheries of the Pacific Coast States, 1931—Continued

CATCH: BY STATES—Continued

Species	California		Total	
	Pounds	Value	Pounds	Value
FISH—continued				
Perch	225, 270	\$11, 534	304, 835	\$13, 845
Pilchard or sardine	300, 204, 561	1, 185, 215	300, 204, 561	1, 185, 215
Pompano	5, 811	2, 590	5, 811	2, 590
Rock bass	545, 575	31, 168	545, 575	31, 168
Rockfishes	7, 267, 670	249, 303	7, 736, 119	260, 441
Rudderfish	40, 516	2, 658	40, 516	2, 658
Sablefish	1, 021, 209	30, 268	2, 372, 801	76, 363
Salmon	5, 420, 943	330, 972	133, 360, 575	4, 630, 650
Sculpin	91, 983	8, 280	91, 983	8, 280
Sea bass:				
Black	500, 211	22, 420	500, 211	22, 420
White	1, 398, 098	115, 513	1, 398, 098	115, 513
Shad	851, 917	27, 963	2, 505, 265	59, 442
Sheepshead	198, 347	5, 708	198, 347	5, 708
Skates	174, 507	3, 541	174, 851	3, 545
Smelt	1, 065, 324	56, 631	3, 370, 863	97, 651
Spanish mackerel	23, 702	2, 699	23, 702	2, 699
Splittail	9, 136	526	9, 136	526
Squawfish	2, 501	120	2, 501	120
Steelhead trout			3, 564, 294	173, 463
Striped bass	975, 877	94, 070	994, 816	95, 547
Sturgeon			120, 186	3, 583
Suckers	649	20	649	20
Swordfish	357, 747	48, 579	357, 747	48, 579
Tai	1, 165	58	1, 165	58
Tomcod	3, 799	76	3, 799	76
Tuna and tunalike fishes:				
Albacore	37, 322	2, 830	37, 322	2, 830
Bluefin	3, 534, 030	168, 890	3, 534, 030	168, 890
Bonito	3, 079, 667	48, 637	3, 079, 667	48, 637
Skipjack or striped tuna	16, 506, 761	504, 123	16, 506, 761	504, 123
Yellowfin	36, 579, 580	1, 979, 204	36, 579, 580	1, 979, 204
Whitebait	140, 495	6, 721	156, 358	6, 960
Whitefish	220, 428	11, 783	220, 428	11, 783
Yellowtail	2, 525, 853	83, 894	2, 525, 853	83, 894
Other fish	67, 006	1, 946	84, 474	2, 301
Total	422, 915, 320	6, 385, 272	584, 437, 666	12, 203, 843
SHELLFISH, ETC.				
Crabs	2, 230, 334	230, 595	4, 294, 336	334, 143
Crawfish			123, 000	12, 300
Sea crawfish or spiny lobster	1, 340, 085	222, 657	1, 340, 085	222, 657
Shrimp	1, 688, 877	26, 343	1, 757, 138	30, 439
Abalone	677, 580	124, 404	677, 580	124, 404
Clams:				
Cockle	22, 048	5, 352	22, 048	5, 352
Hard			459, 472	22, 418
Pismo	26, 209	9, 522	26, 209	9, 522
Razor			818, 210	131, 352
Soft	32, 570	8, 266	48, 983	10, 071
Mixed	8, 189	1, 556	8, 189	1, 556
Mussels, sea	140	15	140	15
Octopus	64, 601	4, 489	124, 263	6, 550
Oysters:				
Eastern, market	168, 916	52, 785	171, 566	54, 746
Japanese, market	58, 833	14, 684	1, 054, 591	144, 251
Native, market	17, 111	8, 032	205, 301	162, 351
Scallops, bay			6, 384	1, 757
Squid	1, 738, 621	13, 622	1, 744, 034	13, 866
Terrapin	660	110	660	110
Turtles	6, 657	506	6, 657	506
Total	8, 081, 431	722, 938	12, 868, 846	1, 308, 366
Grand total	430, 996, 751	7, 108, 210	597, 305, 512	13, 512, 209

Industries related to the fisheries of the Pacific Coast States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	Washington	Oregon	California	Total
	Number	Number	Number	Number
	202	50	22	274
Transporting:				
Persons engaged.....	202	50	22	274
Vessels:				
Motor.....	73	29	4	106
Net tonnage.....	1,782	315	238	2,335
Wholesale and manufacturing:				
Establishments.....	113	56	147	316
Persons engaged:				
Proprietors.....	135	53	208	396
Salaried employees.....	180	60	537	777
Wage earners:				
Average for season.....	2,853	796	6,829	10,478
Average for year.....	1,015	423	2,520	3,958
Paid to salaried employees.....	\$650,245	\$192,354	\$1,602,649	\$2,445,248
Paid to wage earners.....	1,136,001	444,508	2,724,850	4,305,359
Total salaries and wages.....	1,786,246	636,862	4,327,499	6,750,607
Fishermen manufacturing.....	25	—	124	149

PRODUCTS MANUFACTURED

Item	Washington			Oregon		
	Quantity	Value	Quantity	Value	Quantity	Value
By manufacturing establishments:						
Barracuda, fresh fillets.....pounds					290,000	\$53,500
Cabrilla, fresh fillets.....do					35,000	5,500
Cod, dry-salted and boneless.....do	1,561,586	\$165,085			(1)	(1)
Flounders, fresh fillets.....do					4,410,000	669,500
Halibut, fresh fillets.....do					60,000	18,000
Herring, sea:						
Salted and spiced.....do	48,795	6,767				
Smoked.....do	270,830	36,200				
Mackerel:						
Smoked.....do					53,984	8,098
Canned.....standard cases					101,217	239,327
Pilchard:						
Canned, "sardines".....do					1,713,407	4,715,089
Meal.....tons					16,319	610,462
Oil.....gallons					3,916,336	807,647
Rockfishes, fresh fillets.....pounds					1,350,000	219,500
Sablefish, kippered.....do	494,396	33,356			(1)	(1)
Salmon:						
Salted.....do	538,286	10,898	1,092,087	\$21,903	(1)	(1)
Mild-cured.....do	4,948,050	673,947	975,250	132,473	915,550	109,875
Kippered.....do	1,870,385	219,868			(1)	(1)
Smoked.....do	39,928	10,645	53,033	11,178		
Canned:						
Chinook or king.....standard cases	112,408	1,297,076	209,064	2,348,350	7,663	77,206
Blueback, red or sockeye.....do	93,714	1,423,543	2,245	35,920		
Silver or coho.....do	85,004	657,579	29,497	257,884		
Humpback or pink.....do	705,528	2,485,047				
Chum or keta.....do	67,351	213,544	11,463	34,575		
Steelhead trout.....do	4,738	57,349	7,559	98,235		
Eggs for bait.....do	4,196	120,544	1,050	28,642		
Meal.....tons	1,427	70,988	(1)	(1)		
Oil.....gallons	149,891	22,247	(1)	(1)		
Sea bass:						
Black, fresh fillets.....pounds					85,000	10,500
White, fresh fillets.....do					350,000	75,000
Totuava, fresh fillets.....do					200,000	40,000
Shad roe, canned.....standard cases	164	4,592	1,080	30,220	(1)	(1)
Tuna and tunalike fishes:						
Yellowtail, fresh fillets.....pounds					50,000	9,000
Canned.....standard cases					1,216,976	7,279,392
Meal.....tons					5,078	169,505
Oil.....gallons					15,939	3,296

¹ This item has been included under unclassified products.

Industries related to the fisheries of the Pacific Coast States, 1931—Continued

PRODUCTS MANUFACTURED—Continued

Item	Washington		Oregon		California	
	Quantity	Value	Quantity	Value	Quantity	Value
By manufacturing establishments—Contd.						
Crab meat, packaged, fresh-cooked pounds	128,900	\$51,510	140,659	\$59,542		
Spiny lobster, whole, fresh-cooked do					1,111,500	\$259,330
Abalone, steaks do					578,683	185,178
Clams:						
Hard:						
Fresh-shucked gallons	4,569	6,311				
Canned:						
Whole standard cases	11,851	50,435				
Minced do	829	4,711				
Juice and chowder do	2,112	4,833				
Razor, canned:						
Whole, minced, and juice do	40,509	354,011	2,040	17,988		
Marine-shell novelties						38,373
Oysters:						
Japanese:						
Fresh-shucked gallons	² 49,788	² 95,845	² 38,096	² 63,084	(1)	(1)
Canned standard cases	7,930	40,805				
Native, fresh-shucked gallons	13,094	102,213	6,130	38,720	(1)	(1)
Shell products:						
Poultry feed tons					23,482	135,399
Unclassified products:						
Salted pounds	(3)	(3)			⁴ 1,732,844	⁴ 225,514
Smoked do			(3)	(3)	⁵ 372,844	⁵ 81,200
Canned standard cases	⁶ 5,105	⁶ 38,019	(3)	(3)	⁷ 131,514	⁷ 230,370
Meal tons	(3)	(3)	(3)	(3)	⁸ 2,313	⁸ 114,446
Oil gallons			(3)	(3)	⁹ 36,031	⁹ 5,822
Miscellaneous		¹⁰ 51,778		¹¹ 21,602		¹² 581,988
Total		8,309,746		3,200,316		16,978,017
By fishermen:						
Cod, green-salted ¹³ pounds	1,826,511	68,129			1,525,000	61,020
Shrimp:						
Dried do					40,030	7,205
Cooked do					550,000	27,500
Meal tons					29	580
Total		68,129				96,305
Grand total		8,377,875		3,200,316		17,074,322

¹ This item has been included under unclassified products.² Includes a small amount of fresh-shucked Eastern oysters.³ This item has been included under miscellaneous.⁴ Includes salted anchovies, barracuda, corbina, Bismarck herring, mackerel, pilchard, salmon, black sea bass, yellowtail, and yellowfin tuna; mild-cured shad; spiced pilchard; and dry-salted and boneless cod.⁵ Includes smoked pilchard or sardine, and kippered sablefish and salmon.⁶ Includes canned shad, salmon roe and caviar, crabs, cat and dog food, and miscellaneous fish.⁷ Includes canned barracuda and other fish cakes, shad roe, abalone, squid, and cat and dog food.⁸ Includes mackerel, shrimp, kelp and miscellaneous meal, and fish flour.⁹ Includes oil from mackerel and miscellaneous fish.¹⁰ Includes salted sablefish, sablefish sausage, fresh-shucked scallops, packaged shrimp, salmon-fry meal, and ground clam shells.¹¹ Includes canned razor clam juice, shad and crabs; smoked sablefish; and salmon meal and oil.¹² Includes dried and cooked shrimp; fresh-shucked native, Eastern, and Japanese oysters; oyster-shell lime; glue; agar; and kelp byproducts.¹³ The production of green-salted cod is used in the preparation of dry-salted and boneless cod.

NOTE.—The total value of the products manufactured in the Pacific Coast States was as follows: By manufacturing establishments, \$23,488,079; and by fishermen, \$164,434. Some of the above products may have been manufactured from products imported from another State or country; therefore, they cannot be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 149 have also been included as fishermen. This should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

WASHINGTON

Fisheries of Washington, 1931

CATCH: BY DISTRICTS

Species	Puget Sound district		Coastal district		Columbia River district		
	FISH	Pounds	Value	Pounds	Value	Pounds 80,307	Value \$2,409
Carp							
Cod		5,891,971	\$68,129				
Flounders:							
" Sole"		225,405	6,762				
Other		109,130	1,713				
Grayfish		778,560	2,335				
Halibut		15,038,588	1,073,829	897	\$50		
Herring		920,699	11,509				
" Lingcod"		473,463	13,881	14,750	148		
Perch		47,573	1,770	278	8		
Rockfishes		335,301	8,849	42,315	212		
Sablefish		1,287,616	44,555				
Salmon:							
Blueback, red or sockeye		6,437,408	517,469	625,212	60,958	129,246	13,573
Chinook or king		10,208,087	658,530	2,359,603	125,841	7,747,834	514,919
Chum or keta		7,001,021	100,114	2,006,052	5,015	838,460	3,145
Humpback or pink		55,935,208	699,191				
Silver or coho		10,320,414	420,940	2,455,047	66,208	1,384,733	58,936
Shad		344	4			268,363	5,368
Skates							
Smelt		160,617	7,528	128,330	5,133	1,535,140	13,820
Steelhead trout		81,414	6,838	168,310	8,405	1,585,769	71,810
Sturgeon		700	38	4,440	133	43,990	1,320
Other fish		17,468	355				
Total		115,270,987	3,644,339	7,805,234	272,111	13,613,842	685,300
SHELLFISH							
Crabs		425,194	20,628	848,034	44,098		
Shrimp		68,261	4,096				
Clams:							
Hard		455,474	22,170	3,998	248		
Razor				767,635	141,799		
Octopus		59,662	2,061				
Oysters:							
Eastern, market				2,650	1,961		
Japanese, market		232,450	29,986	743,308	99,581		
Native, market		153,855	130,967	28,342	20,498		
Scallops		6,384	1,757				
Squid		5,413	244				
Total		1,406,693	211,909	2,393,967	308,185		
Grand total		116,677,680	3,856,248	10,199,201	580,296	13,613,842	685,300

Fisheries of the Puget Sound district of Washington, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines, salmon	Haul seines	Gill nets		Lines		Pound nets	Brush weirs
			Drift, salmon	Set, salmon	Trawl, set, and hand	Troll		
Fishermen:								
On vessels.....	Number	Number	Number	Number	Number	Number	Number	Number
1,946	13	3			861	184	19	
14	212	310		8	48	498	155	14
On boats and shore.....								
Total.....	1,960	225	313	8	909	682	174	14
Vessels:								
Steam.....								1
Net tonnage.....								42
Motor.....	249	4	2					4
Net tonnage.....	5,952	28	12		122	101		
Sail.....					3,041	802	119	
Net tonnage.....					2			
Total vessels.....	249	4	2					
Total net tonnage.....	5,952	28	12		804			
Boats:								
Motor.....								
38	288	3			124	101	5	
Other.....								
35	8	5			3,845	802	161	
122								
Apparatus:								
Number.....	251	72	296	10	21,989	2,167	104	7
Length, yards.....	155,118	6,154						
Square yards.....			490,454	3,480				
Hooks.....					460,727	9,968		

Fisheries of the Puget Sound district of Washington, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Dip nets	Drag bag nets	Reef nets	Beam trawls	Traps, crab	Tongs and rakes	Shovels	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels	8	94	18	57	127	89	218	2,971
On boats and shore				25				1,653
Total	8	94	18	82	127	89	218	4,624
Vessels:								
Steam				2				3
Net tonnage				29				71
Motor				18				473
Net tonnage				227				9,705
Sail								2
Net tonnage								804
Total vessels				20				478
Total net tonnage				256				10,580
Boats:								
Motor		25	6	10	114	28		893
Other		13	12	7	176			483
Apparatus:								
Number	8	36	6	30	2,413	212	218	
Length, yards		3,078			204			
Yards at mouth								

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets			
					Drift		Set	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Flounders:								
"Sole"			4,904	\$147				
Other			4,082	64				
Grayfish			5,500	16				
Herring			120,310	1,504				
"Lingcod"			600	18				
Perch			39,535	1,471				
Rockfishes			7,293	244				
Salmon:								
Blueback, red or sockeye	3,477,437	\$281,672	15,778	1,262	7,406	\$592		
Chinook or king	713,799	36,404	10,280	730	628,760	44,642		
Chum or keta	5,992,351	85,691	100	1	150,380	2,150		
Humpback or pink	37,124,046	464,051	19,475	243	133,030	1,663		
Silver or coho	3,592,648	147,299	2,256	92	2,587,424	106,084	232	10
Smelt			83,056	3,893				
Steelhead trout	504	42			27	2		
Other fish			11,395	228				
Total	50,900,785	1,015,159	324,564	9,913	3,507,027	155,133	6,107	210
SHELLFISH								
Shrimp				45	3			
Octopus				883	30			585
Squid				5,413	244			20
Total				6,341	277			585
Grand total	50,900,785	1,015,159	330,905	10,190	3,507,027	155,133	6,692	230

Fisheries of the Puget Sound district of Washington, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines				Pound nets				
	Trawl, set, and hand		Troll						
	Pounds	Value	Pounds	Value	Pounds	Value			
FISH									
Cod	5,891,971	\$68,129							
Flounders, other					1,820	\$29			
Grayfish	761,060	2,283							
Halibut	15,002,640	1,071,996	34,978	\$1,784	970	49			
Herring					298	4			
"Lingcod"	425,253	12,321	23,137	740	1,810	59			
Rockfishes	293,342	7,446	13,873	416	8,035	269			
Sablefish	1,287,586	44,554			30	1			
Salmon:									
Blueback, red or sockeye			4,270	342	2,916,256	232,300			
Chinook or king			5,428,880	374,593	3,425,224	202,081			
Chum or keta					855,660	12,236			
Humpback or pink			29,897	374	18,522,140	231,527			
Silver or coho			2,196,566	87,863	1,934,984	79,334			
Steelhead trout					80,883	6,794			
Sturgeon					700	38			
Other fish	1,310	31				363			
Total	23,663,162	1,206,760	7,731,601	466,112	27,749,173	764,729			
SHELLFISH									
Octopus	57,448	1,985				132			
Grand total	23,720,610	1,208,745	7,731,601	466,112	27,749,305	764,734			
Species		Brush weirs		Dip nets		Drag bag nets		Reef nets	
FISH		Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders, other						665	\$10		
Herring	758,000	\$9,475		3,316	\$41	38,775	485		
Perch						7,958	296		
Salmon:									
Blueback, red or sockeye								16,261	\$1,301
Chinook or king								1,144	80
Chum or keta								2,530	36
Humpback or pink								106,620	1,333
Silver or coho								6,304	258
Smelt	920	43				76,641	3,592		
Other fish						1,150	23		
Total	758,920	9,518		3,316	\$41	125,189	4,406	132,859	3,008
Species		Beam trawls		Traps		Tongs and rakes		Shovels	
FISH		Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders:									
"Sole"	220,501	\$6,615							
Other	102,563	1,610							
Grayfish	12,000	36							
"Lingcod"	18,578	609							
Perch	80	3							
Rockfishes	10,968	408							
Skates	344	4							
Other fish	3,250	65							
Total	368,284	9,350							
SHELLFISH									
Crabs									
Shrimp	68,216	4,093		425,194	\$20,628				
Clams, hard								455,474	\$22,170
Octopus	614	21							
Oysters:									
Japanese, market						232,450	\$29,986		
Native, market						153,855	130,967		
Scallops	6,384	1,757							
Total	75,214	5,871		425,194	20,628	386,305	160,953	455,474	22,170
Grand total	443,498	15,221		425,194	20,628	386,305	160,953	455,474	22,170

Fisheries of the coastal district of Washington, 1931

OPERATING UNITS: BY GEAR—Continued

Item	Gill nets		Lines		Pound nets	Dip nets	Drag bag nets
	Drift, salmon	Set, salmon	Set	Troll			
Fishermen:							
On vessels	Number	Number	Number	Number	10	Number	Number
On boats and shore	102	160	5	51	44	35	4
Total	102	160	5	61	44	35	4
Vessels:							
Motor					6		
Net tonnage					49		
Boats:							
Motor	86	65	3	34	31	*	1
Other		104	2		28		
Apparatus:							
Number	86	213	5	184	70	35	1
Length, yards							60
Square yards	159,960	70,290		500	828		
Hooks							

Item	Traps, crab	Tongs and rakes	Shovels	Spears	Dredges	Total, ex- clusive of duplication	
						Number	Number
Fishermen:							
On vessels	Number	Number	Number	Number	Number	6	Number
On boats and shore	106	68	2,746	10			16
Total	106	68	2,746	10	6		3,152
Vessels:							
Motor						2	8
Net tonnage						17	866
Boats:							
Motor	97	20					318
Other	9	33					174
Apparatus:							
Number	3,718	128	2,746	10	3		
Yards at mouth					5		

CATCH: BY GEAR

Species	Gill nets				Lines			
	Drift		Set ¹		Set		Troll	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Halibut							897	\$50
"Lingcod"							14,750	148
Perch					278	\$8		
Rockfishes					100	1	42,215	211
Salmon:								
Blueback, red or sockeye								
Chinook or king	297,712	\$7,443	625,212	\$60,958			1,633,259	107,795
Chum or keta	377,892	945	112,520	2,700				
Silver or coho	231,640	4,633	358,116	895			1,425,607	45,619
Steelhead trout	4,720	236	207,260	4,145			1,115	45
Sturgeon	4,410	132	154,455	7,723				
Total	916,374	13,389	1,457,563	76,421	378	9	3,117,843	153,868

Species	Pound nets		Dip nets		Drag bag nets	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Salmon:						
Chinook or king	316,112	\$7,903				
Chum or keta	1,270,044	3,175				
Silver or coho	590,540	11,811				
Smelt					103,830	\$4,153
Steelhead trout	8,020	401				
Sturgeon			30	1		
Total	2,184,746	23,291	103,830	4,153	24,500	980

¹ Includes catch by spears.

Fisheries of the coastal district of Washington, 1931—Continued

CATCH: BY GEAR—Continued

Species	Traps		Dredges, tongs and rakes		Shovels	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH						
Crabs.....	848,034	\$44,098				
Clams:						
Hard.....						3,998
Razor.....						767,635
Oysters:						
Eastern, market.....			2,650	\$1,961		
Japanese, market.....			743,308	99,581		
Native, market.....			28,342	20,498		
Total*.....	848,034	44,098	774,300	122,040	771,633	142,047

Fisheries of the Columbia River district of Washington, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines		Pound nets	Fish wheels	Dip nets	Total, exclu- sive of dupli- cation
		Drift, salmon	Set, salmon	Set	Troll				
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....					2				2
On boats and shore.....	416	680	82	29	84	138	21	132	1,478
Total.....						138	21	132	1,480
Vessels:									
Motor.....						1			1
Net tonnage.....						20			20
Boats:									
Motor.....	34	506	49	22	67	94		70	775
Other.....	47		33	7		71			148
Apparatus:									
Number.....	47	506	201	81	286	240	32	132	
Length, yards.....	14,133								
Square yards.....		1,224,760	48,441						
Hooks.....				8,100	1,287				

CATCH: BY GEAR

Species	Haul seines		Gill nets				Lines, set	
			Drift		Set			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Carp.....	80,307	\$2,409						
Salmon:								
Blueback, red or sockeye.....	14,660	1,539	33,823	\$3,551	2,559	\$269		
Chinook or king.....	1,386,416	92,197	3,453,608	228,629	91,061	6,037		
Chum or keta.....		503	420,838	1,578	7,078	27		
Silver or coho.....	3,944	197	116,693	5,835	2,741	137		
Shad.....	138,101	2,762	64,837	1,297	34	1		
Smelt.....			79,553	2,466				
Steelhead trout.....	227,399	10,801	351,213	13,170	25,694	1,220		
Sturgeon.....		997	30	22,017	661	342	10	5,577
Total.....	1,852,327	109,937	4,542,582	257,187	129,509	7,701	5,577	167

Fisheries of the Columbia River district of Washington, 1931—Continued

CATCH: BY GEAR—Continued

Species	Lines, troll		Pound nets		Fish wheels		Dip nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Salmon:								
Blueback, red or sockeye			43, 231	\$4, 539	21, 947	\$2, 307	13, 026	\$1, 368
Chinook or king	60, 637	\$4, 245	2, 279, 062	150, 418	200, 086	14, 006	276, 964	19, 387
Chum or keta			410, 041	1, 538				
Silver or coho	514, 911	15, 447	741, 786	37, 089			4, 658	231
Shad			38, 195	764	27, 196	544		
Smelt							1, 455, 587	11, 354
Steelhead trout				941, 704	44, 731	7, 988	379	31, 771
Sturgeon				9, 170	275	5, 823	175	1, 509
Total	575, 548	19, 692	4, 463, 189	239, 354	263, 040	17, 411	1, 782, 070	33, 851

OREGON

Fisheries of Oregon, 1931

CATCH: BY DISTRICTS

Species	Columbia River district		Coastal district	
	Pounds	Value	Pounds	Value
FISH				
Anchovies			209	\$2
Flounders:				
“Sole”	5, 275	\$138	2, 570	51
Other			37, 276	745
Halibut	107, 842	11, 469	135, 055	10, 509
Herring			45, 144	540
“Lingcod”	27, 824	787	92, 162	2, 783
Perch			31, 714	533
Rockfishes	27, 002	753	63, 831	1, 324
Sablefish	13, 455	355	50, 521	1, 185
Salmon:				
Blueback, red or sockeye	123, 765	12, 995		
Chinook or king	12, 581, 170	834, 556	1, 316, 258	62, 763
Chum or keta	379, 205	1, 421	1, 169, 363	5, 554
Silver or coho	1, 532, 380	51, 060	3, 389, 166	86, 490
Shad	590, 190	11, 805	794, 795	14, 306
Smelt	472, 453	14, 196	8, 999	343
Steelhead trout	1, 390, 356	66, 043	338, 445	20, 307
Striped bass			18, 939	1, 477
Sturgeon	68, 866	2, 068	2, 190	24
White bait			15, 863	239
Total	17, 319, 783	1, 007, 646	7, 512, 500	209, 175
SHELLFISH				
Crabs			790, 774	38, 822
Crawfish				
Clams:				
Razor	123, 000	12, 300	50, 575	9, 553
Soft			16, 413	1, 805
Oysters, native, market			5, 993	2, 854
Total	123, 000	12, 300	863, 755	53, 034
Grand total	17, 442, 783	1, 019, 946	8, 376, 255	262, 209

Fisheries of the Columbia River district of Oregon, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines		Pound nets	Dip nets	Traps, craw- fish	Total, exclusive of dupli- cation
		Drift, salmon	Set, salmon	Trawl and set	Troll				
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels				8	24				32
On boats and shore	507	1,191	57	42	234	28	178	39	2,209
Total	507	1,191	57	50	258	28	178	39	2,241
Vessels:									
Motor				2	13				15
Net tonnage				34	129				163
Boats:									
Motor	25	886	54	32	180	18		25	1,185
Other	43		3	10		14		14	76
Apparatus:									
Number	39	886	141	103	860	49	178	663	-----
Length, yards	21,860								
Square yards		2,790,900	35,955						
Hooks				11,550	3,870				

CATCH: BY GEAR

Species	Haul seines		Gill nets		Lines			
					Trawl and set	Troll		
FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders, "Sole"								
Halibut					5,275	\$138		
"Lingcod"					107,842	11,469		
Rockfishes					27,824	787		
Sablefish					27,002	753		
Salmon:					13,485	355		
Blueback, red or sockeye	34,389	\$3,611	60,802	\$6,384				
Chinook or king	2,205,281	146,430	9,367,847	619,215			141,732	\$9,921
Chum or keta	2,457	9	326,682	1,225				
Silver or coho	11,529	576	121,322	6,066			1,278,018	38,341
Shad	407,687	8,154	169,249	3,385				
Smelt			452,915	14,040				
Steelhead trout	541,510	25,723	472,619	22,449			155	8
Sturgeon	2,658	80	52,823	1,585	9,436	285		
Total	3,205,511	184,583	11,024,259	674,349	190,834	13,787	1,419,905	48,270

Species	Pound nets		Dip nets		Traps	
FISH	Pounds	Value	Pounds	Value	Pounds	Value
Salmon:						
Blueback, red or sockeye	17,528	\$1,840	11,046	\$1,160		
Chinook or king	434,686	28,776	431,624	30,214		
Chum or keta	18,880	70	31,186	117		
Silver or coho	118,755	5,939	2,756	138		
Shad	12,928	259	326	7		
Smelt			19,538	156		
Steelhead trout	337,096	16,012	38,976	1,851		
Sturgeon	511	15	3,438	103		
SHELLFISH						
Crawfish					123,000	\$12,300
Total	940,384	52,911	538,890	33,746	123,000	12,300

Fisheries of the coastal district of Oregon, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines		Traps, crab	Tongs	Shovels	Total, exclusive of dupli- cation
		Drift, salmon	Set, salmon	Trawl and set	Troll				
Fishermen:									
On vessels	Number	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore	9	537	245	23	11	153	2	244	34 1,212
Total	9	537	245	23	148	153	2	244	1,246
Vessels:									
Motor				6	6				12
Net tonnage				58	44				102
Boats:									
Motor	3	418	141		115	134	1		759
Other	1	6	104			19	2		116
Apparatus:									
Number	3	424	671	150	513	5,049	2	244	
Length, yards	493	532,544	107,360		18,750	2,308			
Square yards									
Hooks									

CATCH: BY GEAR

Species	FISH	Haul seines		Gill nets		Lines			
		Pounds	\$2	Pounds	Value	Trawl and set		Troll	
								Pounds	Value
Anchovies		209							
Flounders:									
"Sole"				2,305	\$46	265	\$5		
Other		3,367	67	27,290	546	6,619	132		
Halibut						134,778	10,488	277	\$21
Herring		8,012	95	37,132	445				
"Lingcod"						64,421	1,951	27,741	832
Perch		11,622	232	20,092	301				
Rockfishes		1,011	22	129	4	52,820	1,101	9,871	197
Sablefish						50,521	1,185		
Salmon:									
Chinook or king				1,221,553	56,802			94,705	5,961
Chum or keta				1,169,363	5,554				
Silver or coho				2,288,854	54,017			1,100,312	32,473
Shad				794,795	14,306				
Smelt		119	5	8,880	338				
Steelhead trout				338,445	20,307				
Striped bass				18,939	1,477				
Sturgeon				2,190	24				
White bait		6,604	100	9,259	139				
Total		30,944	523	5,939,226	154,306	309,424	14,862	1,232,906	39,484

Species		Traps		Tongs		Shovels	
SHELLFISH		Pounds	Value	Pounds	Value	Pounds	Value
Crabs		790,774	\$38,822				
Clams:							
Razor						50,575	\$9,553
Soft						16,413	1,805
Oysters, native, market				5,993	\$2,854		
Total		790,774	38,822	5,993	2,854	66,988	11,358

CALIFORNIA

Fisheries of California, 1931

CATCH: BY DISTRICTS

Species	Northern district		San Francisco district		Monterey district		Southern district— Off California— San Pedro division	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Anchovies			164,657	\$2,973	104,810	\$1,650	37,787	\$906
Barracuda			8,270	365	139,835	5,927	2,093,832	188,365
Carp			37,055	834			40,500	3,204
Catfish			370,642	47,598				
Cod			4,920,968	61,020				
Dolphin							498	13
Eels				86	3			140
Flounders:								
"California halibut"								
"Sole"	7,323,590	\$329,559	1,196,887	50,868	535,990	21,321	360,060	13,550
Other	379,319	15,423	212,706	8,162	58,905	2,547	11,517	2,519
Flyingfish							46,265	1,723
Grayfish	27,235	272	90,560	906	16,251	1,751	817,221	82,956
Hake	420	8	11,796	236				
Halibut	790,352	54,990	5,837	509				
Hardhead			45,943	5,775				
Herring	17,819	274	634,012	3,302	16,236	163	99	5
Horse mackerel					248,491	6,899	313,984	10,090
Kingfish			4,358	153	141,772	5,373	263,639	4,703
"Lingcod"	791,018	27,733	297,442	13,385	134,985	6,367	4,445	233
Mackerel			2,364	72	1,255,687	38,510	12,781,138	115,878
Marlin							24,102	1,050
Mullet							8,350	569
Perch	9,787	355	92,826	3,369	36,155	1,449	86,169	6,345
Pilchard or sardine			50,661,534	166,494	153,431,686	617,673	95,979,175	399,821
Pompano			20	8	731	259	3,996	2,130
Rock bass							337,502	21,071
Rockfishes	455,693	14,982	638,694	22,911	2,616,652	87,055	2,664,753	90,659
Rudderfish							40,317	2,644
Sablefish	701,959	21,743	61,932	1,858	237,817	5,744	19,501	923
Salmon	3,940,754	229,866	1,387,370	93,365	92,819	7,741		
Sculpin			624	9	422	6	78,422	7,242
Sea bass:								
Black					55	2	112,328	5,278
White			23,663	1,918	40,087	3,165	783,503	71,602
Shad			851,897	27,961			20	2
Sheepshead							171,408	4,888
Skates	39,844	797	85,415	1,708	13,551	284	34,148	718
Smelt	58,379	2,433	236,106	12,994	367,703	29,379	386,248	11,393
Splittail			9,136	526				
Squawfish			2,501	120				
Striped bass			975,877	94,070				
Suckers			649	20				
Swordfish							211,399	28,906
Tomeod	2,465	49	1,334	27				
Tuna and tunalike fishes:								
Albacore				7	1	30,080	2,151	7,235
Bluefin							2,355,088	121,314
Bonito						472	2,777,302	44,318
Skipjack or striped tuna							7,616,823	231,181
Yellowfin							99,113	7,474
Whitebait	128,505	6,050	10,192	615	1,798	56		
Whitefish							97,787	6,095
Yellowtail								727,105
Other fish	31,753	652	6,449	138	14,163	301	13,438	306
Total	14,698,892	705,186	63,049,809	624,273	159,553,928	846,307	131,696,086	1,519,442
SHELLFISH, ETC.								
Crabs	111,672	9,883	2,115,763	220,391	2,843	318	56	3
Sea crawfish or spiny lobster							248,393	41,179
Shrimp			1,684,763	25,271	4,114	1,072		
Abalone					642,165	115,932	35,415	8,472
Clams:								
Cockle	128	30	13,300	3,289			8,620	2,033
Pismo					4,128	1,381	22,081	8,141
Soft	72	13	32,479	8,251		19	2	
Mixed	7,522	1,342	667	214				

Fisheries of California, 1931—Continued

CATCH: BY DISTRICTS—Continued

Species	Northern district		San Francisco district		Monterey district		Southern district—Off California—San Pedro division	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.—CON.								
Mussels	125	\$13			15	\$2		
Octopus	2,012	161	3,852	\$270	58,412	4,018	325	\$40
Oysters:								
Eastern, market			168,916	52,785				
Japanese, market					58,833	14,684		
Native, market	7,712	3,535	9,399	4,497				
Squid			660	110	1,706,671	12,311	31,950	1,311
Terrapin								
Total	129,243	14,977	4,029,799	315,078	2,477,200	149,720	346,840	61,179
Grand total	14,828,135	720,163	67,079,608	939,351	162,031,128	996,027	132,042,926	1,580,621

Species	Southern district—Off California—San Diego division		Southern district—Off Latin America				Total, southern district	
			San Pedro division		San Diego division			
	FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds
Anchovies		240	\$5					38,027
Barracuda	1,108,496	51,325		652,128	\$102,240	174,769	\$14,112	4,029,225
Cabrilla				101,749	4,386	126,088	5,017	227,837
Carp				2,084	96			40,509
Corbina								2,084
Dolphin								498
Eels								140
Flounders:								
"California halibut"	88,441	10,902		1,634	110	38,715	4,013	946,011
"Sole"	2,058	228						362,118
Other								11,517
Flyingfish								2,519
Grayfish	180,176	987		25	1	3,345	5	46,265
Groupers				452	14	21,157	790	472,981
Hake								21,609
Herring	17,593	282						285
Horse mackerel								17,692
Kingfish	1,465	38		2,633	40			313,984
"Lingcod"								10,090
Mackerel	213,524	3,839		153	3			267,737
Marlin								4,445
Mullet	8,815	709		4,515	316	2,647	258	12,994,815
Perch	333	16						119,720
Pilchard or sardines	132,166	1,227						24,102
Pompano	326	105						1,050
Rock bass	172,311	7,577		22,339	1,436	13,423	1,084	24,327
Rockfishes	887,874	33,538		822	31	3,182	127	6,361
Rudderfish				199	14			5,060
Sablefish								2,323
Sculpin	12,400	1,014				115	9	31,168
Sea bass:								545,575
Black	142,202	5,912		114,953	5,699	130,673	5,529	124,355
White	209,942	14,300		137,567	9,686	203,336	14,842	40,516
Shad								19,501
Sheepshead	25,649	781				1,290	39	923
Skates	1,549	34						8,265
Smelt	16,791	429		88	2	9	1	5,708
Spanish mackerel				18,780	2,487	4,922	212	35,697
Swordfish	145,983	19,662		365	11			11,825
Tai						1,165	58	23,702
Tuna and tunalike fishes:								2,699
Albacore								357,747
Bluefin	3,168	228		1,168,263	47,001	7,511	347	48,579
Bonito	225,122	2,823		64,492	1,004	658	20	14,165
Skipjack or striped tuna	4,348,793	129,565		2,185,289	66,846	2,355,856	76,531	7,235
Yellowfin	56,052	2,933		12,992,690	668,497	23,431,725	1,300,300	678
Whitefish	109,212	4,945		10,670	617	2,759	126	1,979,204
Yellowtail	980,636	22,327		466,555	24,273	351,557	15,966	11,783
Other fish		353	15	850	34			83,894
Total	9,091,670	315,746	17,949,295	934,844	26,875,640	1,439,474	185,612,691	4,209,506

Fisheries of California, 1931—Continued

CATCH: BY DISTRICTS—Continued

Species	Southern district—Off California—San Diego division		Southern district—Off Latin America				Total, southern district	
	Pounds	Value	Pounds	Value	Pounds	Value		
SHELLFISH, ETC.	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs								
Sea crawfish or spiny lobster	134, 218	\$21, 353	1, 799	\$353	955, 675	\$159, 772	1, 340, 085	222, 657
Abalone							35, 415	8, 472
Clams:								
Cockle							8, 620	2, 033
Pismo							22, 081	8, 141
Octopus							325	40
Squid							31, 950	1, 311
Turtles					6, 657	506	6, 657	506
Total	134, 218	21, 353	1, 799	353	962, 332	160, 278	1, 445, 189	243, 163
Grand total	9, 225, 888	337, 099	17, 951, 094	935, 197	27, 837, 972	1, 599, 752	187, 057, 880	4, 452, 669

CATCH: BY WATERS

Species	Off California ¹		Off Latin America	
	Pounds	Value	Pounds	Value
FISH				
Anchovies	307, 494	\$5, 534		
Barracuda	3, 350, 433	245, 982	826, 897	\$116, 352
Cabrilla			227, 837	9, 403
Carp	77, 564	4, 038		
Catfish	370, 642	47, 598		
Cod	4, 920, 968	61, 820		
Corbina			2, 084	96
Dolphin	498	13		
Eels	226	6		
Flounders:				
"California halibut"	921, 913	95, 609	40, 349	4, 123
"Sole"	9, 418, 585	415, 526		
Other	662, 447	28, 651		
Flyingfish	46, 265	1, 723		
Grayfish	592, 560	8, 974	3, 370	6
Groupers			21, 609	804
Hake	12, 501	266		
Halibut	796, 189	55, 499		
Hardhead	45, 943	5, 775		
Herring	685, 759	4, 026		
Horse mackerel	562, 475	16, 989		
Kingfish	411, 234	10, 357	2, 633	40
"Lingcod"	1, 227, 890	47, 718		
Mackerel	14, 252, 713	158, 299	153	3
Marlin	24, 102	1, 050		
Mullet	17, 165	1, 278	7, 162	574
Perch	225, 270	11, 534		
Pilchard	300, 204, 561	1, 185, 215		
Pompano	5, 073	2, 502	738	88
Rock bass	509, 813	28, 648	35, 762	2, 520
Rockfish	7, 263, 666	249, 145	4, 004	158
Rudderfish	40, 317	2, 644	199	14
Sablefish	1, 021, 209	30, 268		
Salmon	5, 420, 943	330, 972		
Sculpin	91, 868	8, 271	115	9
Sea bass:				
Black	254, 585	11, 192	245, 626	11, 228
White	1, 057, 195	90, 985	340, 903	24, 528
Shad	851, 917	27, 963		
Sheepshead	197, 057	5, 669	1, 290	39
Skates	174, 507	3, 541		
Smelt	1, 065, 227	56, 628	97	3
Spanish mackerel			23, 702	2, 699
Splittail	9, 136	526		
Squawfish	2, 501	120		
Striped bass	975, 877	94, 070		
Suckers	649	20		

¹ The catch of cod was taken in Alaska waters.

Fisheries of California, 1931—Continued

CATCH: BY WATERS—Continued

Species	Off California		Off Latin America	
	Pounds	Value	Pounds	Value
FISH—continued				
Swordfish.....	357,382	\$48,568	365	\$11
Tai.....			1,165	58
Tomcod.....	3,799	76		
Tuna and tunalike fishes:				
Albacore.....	37,322	2,830		
Bluefin.....	2,358,256	121,542	1,175,774	47,348
Bonito.....	3,014,517	47,613	65,150	1,024
Skipjack or striped tuna.....	11,965,616	360,746	4,541,145	143,377
Yellowfin.....	155,165	10,407	36,424,415	1,968,797
Whitebait.....	140,495	6,721		
Whitefish.....	206,999	11,040	13,429	743
Yellowtail.....	1,707,741	43,655	818,112	40,239
Other fish.....	66,156	1,912	850	34
Total.....	378,090,385	4,010,954	44,824,935	2,374,318
SHELLFISH, ETC.				
Crabs.....	2,230,334	230,595		
Sea crawfish.....	382,611	62,532	957,474	160,125
Shrimp.....	1,688,877	26,343		
Abalone.....	677,580	124,404		
Clams:				
Cockle.....	22,048	5,352		
Pismo.....	26,209	9,522		
Soft.....	32,570	8,266		
Mixed.....	8,189	1,556		
Mussels.....	140	15		
Octopus.....	64,601	4,489		
Oysters:				
Eastern, market.....	168,916	52,785		
Japanese, market.....	58,833	14,684		
Native, market.....	17,111	8,032		
Squid.....	1,738,621	13,622		
Terrapin.....	660	110		
Turtles.....			6,657	506
Total.....	7,117,300	562,307	964,131	160,631
Grand total.....	385,207,685	4,573,261	45,789,066	2,534,949

Fisheries of the northern district of California, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines	
		Drift, salmon	Other	Set and hand	Troll
Fishermen:					
On vessels.....	Number	Number	Number	Number	Number
On boats and shore.....	40	237	2	91	176
Total.....	40	237	2	105	186
Vessels:					
Motor.....				5	5
Net tonnage.....				41	38
Boats:					
Motor.....	17		2	63	149
Other.....	4	157			
Apparatus:					
Number.....	21	157	2	266	678
Length, yards.....	2,586	144,195	1,600		
Square yards.....				36,728	3,111
Hooks.....					

Fisheries of the northern district of California, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Dip nets	Traps		Rakes	Shovels	Total, exclusive of duplication
		Crab	Octopus			
Fishermen:	Number	Number	Number	Number	Number	Number
On vessels						16
On boats and shore	31	35	1	8	16	470
Total	31	35	1	8	16	486
Vessels:						
Motor						6
Net tonnage						58
Boats:						
Motor		27	1			154
Other		1				158
Apparatus:	Number	506	10	8	16	
	31					

CATCH: BY GEAR

Species	Haul seines		Gill nets		Lines, set and hand	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Flounders:						
" Sole "	4, 299	\$495	30	\$1	215	\$7
Other			4, 231	96	64	3
Halibut					726, 411	50, 564
Herring	17, 646	269	173	5		
" Lingcod "	23	1			208, 089	5, 027
Perch	8, 329	308			64	4
Rockfishes					102, 255	2, 654
Sablefish					604, 525	18, 819
Salmon	18, 014	593	576, 278	24, 296		
Smelt	42, 293	1, 914	266	11		
Whitebait			68	3		
Other fish					5, 780	132
Total	90, 604	3, 580	581, 046	24, 412	1, 647, 403	77, 210

Species	Lines, troll		Dip nets		Paranzella nets	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Flounders:						
" Sole "					7, 323, 345	\$329, 551
Other					370, 725	14, 829
Grayfish					27, 235	272
Hake					420	8
Halibut	8, 595	\$552			55, 346	3, 874
" Lingcod "	31, 510	649			551, 396	22, 056
Perch			1, 394	\$43		
Rockfishes	3, 223	70			350, 215	12, 258
Sablefish	17	1			97, 417	2, 923
Salmon	3, 346, 462	204, 977				
Skates					39, 844	797
Smelt			15, 820	508		
Tomcod					2, 465	49
Whitebait			128, 437	6, 047		
Other fish	551	12			24, 422	508
Total	3, 390, 358	206, 261	145, 651	6, 598	8, 843, 830	387, 125
SHELLFISH						
Octopus					80	6
Grand total	3, 390, 358	206, 261	145, 651	6, 598	8, 843, 910	387, 131

NOTE.—The catch by paranzella nets was made entirely by fishermen from the San Francisco district.

Fisheries of the northern district of California, 1931—Continued

CATCH: BY GEAR—Continued

Species	Traps		Shovels		Rakes	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH	111,672	\$9,883				
Crabs						
Clams:						
Cockle			128	\$30		
Soft			72	13		
Mixed			7,522	1,342		
Mussels					125	\$13
Octopus	1,932	155				
Oysters, native, market					7,712	3,535
Total	113,604	10,038	7,722	1,385	7,837	3,548

Fisheries of the San Francisco district of California, 1931

OPERATING UNITS: BY GEAR

Item	Lam-para-nets, sardine	Haul seines	Gill nets					Lines	
			Drift, salmon	Drift, sea bass	Drift, shad	Drift, striped bass	Other	Set and hand	Troll
Fishermen:									
On vessels	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels	66							89	35
On boats and shore	39	3	315	20	175	233	94	273	245
Total	105	3	315	20	175	233	94	362	280
Vessels:									
Motor	6								3
Net tonnage	70								14
Sail									
Net tonnage									33
Total	6								195
Net tonnage	70								
Boats:									
Motor	7		172	14	101	128	51	132	243
Other		1	4	2	4	7	6	57	
Apparatus:									
Number	13	1	176	16	105	135	82	714	922
Length, yards	2,210	125	517,440	24,992	322,655	332,640	99,920	62,272	
Square yards									
Hooks									4,189

Item	Fyke nets	Bag nets, shrimp	Paranella nets	Beam trawls	Traps, crab	Tongs	Rakes	Shovels	Total, exclusive of duplication	
									Number	Number
Fishermen:										
On vessels	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels	19	104								265
On boats and shore	83	32			25	224	6	21	43	938
Total	83	51	104	25	224	6	21	43		1,203
Vessels:										
Steam			1							1
Net tonnage			32							32
Motor		4	21							30
Net tonnage		26	306							396
Sail										2
Net tonnage										824
Total		4	22							33
Net tonnage		26	338							1,252
Boats:										
Motor	33	9		25	216	3	6	4		557
Other	33				3	6	6	4		109
Apparatus:										
Number	1,505	13	11	25	4,340	6	21	43		
Length, yards		8,096		183	167					
Yards at mouth										

Fisheries of the San Francisco district of California, 1931—Continued

CATCH: BY GEAR

Species	Lampara nets		Haul seines		Gill nets		Lines, set and hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Anchovies	163,012	\$2,943						
Barracuda	8,270	365						
Carp			7,300	\$194	23,394	504	155	\$3
Catfish					31	4	39,108	5,363
Cod							4,920,968	61,020
Eels							86	3
Flounders:								
“Sole”							5,509	234
Other	383	15			620	27	1,652	62
Grayfish	35	1			402	4	16,220	162
Halibut					32	3	559	47
Hardhead			31,498	3,897				
Herring	150	1			633,862	3,301		
Kingfish	3,942	138					155	6
“Lingcod”	51	2			347	14	268,047	12,144
Mackerel	2,269	68			10	1	85	3
Perch	2,751	100			90,075	3,269		
Pilchard or sardine	50,661,384	166,493			150	1		
Pompano	20	8						
Rockfishes							564,161	20,238
Sablefish							53,858	1,616
Salmon					949,959	65,133		
Sculpin							624	9
Sea bass: White	1,793	167			20,895	1,692	13	1
Shad					851,897	27,961		
Smelt	7,176	403			228,930	12,591		
Splittail			435	32	14	1		
Squawfish					1,185	57	26	1
Striped bass					765,813	73,444	208,714	20,429
Tomcod	269	5			26	1		
Whitebait	7,930	480			2,262	135		
Other fish					500	20	298	6
Total	50,859,435	171,189	39,233	4,123	3,572,049	188,193	6,080,238	121,347
SHELLFISH								
Octopus							3,817	267
Grand total	50,859,435	171,189	39,233	4,123	3,572,049	188,193	6,084,055	121,614

Species	Lines, troll		Fyke nets		Bag nets		Paranzella nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Carp			6,206	\$133				
Catfish			331,503	42,231				
Flounders:								
“Sole”							1,191,378	\$50,634
Other							210,051	8,058
Grayfish	1,275	\$13					72,628	726
Hake							11,796	236
Halibut	564	38					4,682	421
Hardhead			14,445	1,878				
Kingfish							261	9
“Lingcod”	3,535	79					25,462	1,146
Rockfishes	523	18					74,010	2,655
Sablefish							8,074	242
Salmon	437,411	28,232						
Sea bass: White	962	58						
Skates							85,415	1,708
Splittail			8,687	493				
Squawfish			1,290	62				
Striped bass			721	71				
Suckers			649	20				
Tomcod							1,039	21
Tuna and tunalike fishes, albacore	7	1						
Other fish							5,651	112
Total	444,277	28,439	363,501	44,888			1,690,447	65,968
SHELLFISH								
Crabs							1,046	108
Shrimp					948,680	\$14,230		
Octopus							35	3
Terrapin			660	110				
Total			660	110	948,680	14,230	1,081	111
Grand total	444,277	28,439	364,161	44,998	948,680	14,230	1,691,528	66,079

Fisheries of the San Francisco district of California, 1931—Continued

CATCH: BY GEAR—Continued

Species	Beam trawls		Traps		Tongs and rakes		Shovels	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Striped bass-----	629	\$126						
SHELLFISH								
Crabs-----			2,114,717	\$220,283				
Shrimp-----	736,083	11,041						
Clams:								
Cockle-----							13,300	\$3,289
Soft-----							32,479	8,251
Mixed-----							667	214
Oysters:								
Eastern, market-----					168,916	\$52,785		
Native, market-----					9,399	4,497		
Total-----	736,083	11,041	2,114,717	220,283	178,315	57,282	46,446	11,754
Grand total-----	736,712	11,167	2,114,717	220,283	178,315	57,282	46,446	11,754

Fisheries of the Monterey district of California, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines, sardine	Lampara nets		Gill nets			Lines	
		Sardine	Squid	Drift, barracuda	Drift, sea bass	Other	Set and hand	Troll
Fishermen:								
On vessels-----	Number 127	Number 343	Number 63	Number	Number	Number 3	Number 8	Number 1
On boats and shore-----		316	169	29	41	132	229	160
Total-----	127	659	232	29	41	135	237	161
Vessels, motor-----	12	28	10			1	3	1
Net tonnage-----	504	338	102			6	18	6
Boats:								
Motor-----		26	28	18	26	65	180	158
Other-----				1		18	33	
Apparatus:								
Number-----	12	54	38	19	26	132	1,094	569
Length, yards-----	4,350	17,350	7,450	22,100	88,400	108,892		
Square yards-----							156,965	2,017
Hooks-----								

Item	Paran-zella nets	Traps, octopus	Rakes	Shovels	Abalone outfits	Total, exclusive of duplication
Fishermen:						
On vessels-----	Number 11	Number	Number	Number	Number 65	Number 519
On boats and shore-----	24	6	6	26	10	680
Total-----	35	6	6	26	75	1,199
Vessels, motor-----	2				13	50
Net tonnage-----	28				106	859
Boats:						
Motor-----	6	6			2	227
Other-----						45
Apparatus:						
Number-----	4	106	6	26	15	
Yards at mouth-----	67					

Fisheries of the Monterey district of California, 1931—Continued

CATCH: BY GEAR

Species	Purse seines		Lampara nets		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Anchoovies			103,436	\$1,628	1,374	\$22
Barracuda			104,208	4,417	35,525	1,506
Flounders:						
"California halibut"			959	103	12,053	1,298
"Sole"			118	5	693	29
Other					2,020	69
Grayfish						1,147
Herring	15,986	\$160	250	3		
Horse mackerel			240,910	6,688	7,090	197
Kingfish			61,601	2,335	74,690	2,831
"Lingcod"			20	1	648	31
Mackerel	934	28	145,857	4,473	499	15
Perch			15,782	631	17,262	688
Pilchard or sardine	63,227,529	252,910	90,197,996	364,701	6,161	62
Pompano			698	247	33	12
Rockfishes			943	42	478	18
Sablefish					50	1
Sculpin						140
Sea bass:						
Black			30	1	25	1
White			6,497	513	33,444	2,640
Skates			35	1	2,418	53
Smelt	130	10	50,980	4,074	312,737	24,989
Tuna and tunalike fishes: Bonito	130	5	9,481	370	2,422	95
Whitebait			213	7	1,585	49
Other fish			1,300	52		
Total	63,244,709	253,113	90,941,314	390,292	512,494	34,630
SHELLFISH						
Squid			1,703,018	12,146	3,653	165
Grand total	63,244,709	253,113	92,644,332	402,438	516,147	34,795

Species	Lines				Paranzella nets	
	Set and hand		Troll			
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Barracuda						
Flounders:						
"California halibut"	1,547	\$167	22	2	1,670	\$181
"Sole"	23,069	964			512,110	20,323
Other	5,042	215			51,843	2,263
Grayfish					4,007	40
Horse mackerel	491	14				
Kingfish	4,622	175			859	32
"Lingcod"	131,398	6,194	183	9	2,699	130
Mackerel	1,107,906	33,979	491	15		
Perch	3,111	130				
Rockfishes	2,557,710	84,690	116	5	57,267	2,294
Sablefish	237,372	5,733			395	10
Salmon			92,819	7,741		
Sculpin	282	4				
Sea bass, white	40	3	100	8	6	1
Skates	2,695	59			8,403	171
Smelt	3,721	295			135	11
Tuna and tunalike fishes:						
Albacore			30,080	2,151		
Bonito			60	2		
Other fish	2,921	68			9,942	181
Total	4,081,927	132,690	123,973	9,937	649,336	25,637
SHELLFISH						
Crabs						
Octopus	5,379	370			2,843	318
Total	5,379	370			21	1
Grand total	4,087,306	133,060	123,973	9,937	652,200	25,956

Fisheries of the Monterey district of California, 1931—Continued

CATCH: BY GEAR—Continued

Species	Traps		Shovels and rakes		Abalone outfits	
FISH	Pounds	Value	Pounds	Value	Pounds	Value
"Lingcod"	37	\$2				
Rockfishes	138	6				
Total	175	8				
SHELLFISH						
Shrimp	4,114	1,072				
Abalone					642,165	\$115,932
Clams:						
Pismo			4,128	\$1,381		
Soft			19	2		
Mussels			15	2		
Octopus	53,012	3,647				
Oysters, Japanese, market			58,833	14,684		
Total	57,126	4,719	62,995	16,069	642,165	115,932
Grand total	57,301	4,727	62,995	16,069	642,165	115,932

Fisheries of the San Pedro division of the southern district of California, 1931

OPERATING UNITS: BY GEAR

Item	Purse seines			Lampara nets			Haul seines	Gill nets		
	Barra-cuda	Sardine	Tuna	Mack-erel	Sardine	Other		Drift, barra-cuda	Set, sea bass	Other
Fishermen:										
On vessels	Number 281	Number 588	Number 713	Number 269	Number 373	Number 69	Number 27	Number 21	Number 13	Number 10
On boats and shore								64	88	44
Total	281	588	713	296	373	103	8	85	101	54
Vessels, motor	31	58	71	32	35	7		7	4	3
Net tonnage	882	2,522	2,989	357	933	132		41	35	30
Boats:										
Motor				4		8		26	39	20
Other							1		3	9
Apparatus:										
Number	31	58	71	36	35	15	3	33	46	32
Length, yards	13,672	24,081	40,500	14,738	15,400	6,860	420			
Square yards								237,736	172,929	36,821

Item	Tram-mel nets	Lines		Paran-zella nets	Traps, lobster	Har-poons, sword-fish	Shovels	Aba-lone outfit	Total, ex-clusive of duplication
		Set and hand	Troll						
Fishermen:									
On vessels	Number 31	Number 852		Number 20	Number 43	Number 29	Number 5	Number 5	Number 1,795
On boats and shore	65	458	151	12	177	48	56	5	770
Total	96	1,310	151	32	220	77	56	10	2,565
Vessels, motor	11	137		6	16	8			1 233
Net tonnage	75	4,576		84	176	84			9 7,387
Boats:									
Motor	25	282	129	4	111	28			2 401
Other	1	33			13				51
Apparatus:									
Number	37	2,632	688	5	4,987	36	56	3	
Square yards	280,941			83					
Yards at mouth									
Hooks	252,582	688							

Fisheries of the San Pedro division of the southern district of California, 1931—Con.

CATCH OFF CALIFORNIA: BY GEAR

Species	Purse seines		Lampara nets		Haul seines		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Anchovies			37,747	\$905			40	\$1
Barracuda	655,398	\$61,633	444,175	73,262			175,109	12,760
Carp					40,509	\$3,204		
Eels			100	2			40	1
Flounders:								
"California halibut"	58	6	1,867	229			877	90
"Sole"	100	4					88	4
Other							28	1
Flyingfish	575	11	2,360	97			43,330	1,615
Grayfish	592	18	17,498	381			40,876	928
Herring			20	1			79	4
Horse mackerel	27,956	999	281,536	8,950			1,140	33
Kingfish			240,641	4,351			670	12
Mackerel	749,775	3,337	10,356,099	93,938	54	1	24,607	262
Mullet					5,551	295	2,799	274
Perch	707	43	70,017	5,295			12,092	800
Pilchard or sardine	63,380,560	253,523	32,598,189	146,292			426	6
Pompano			3,978	2,120			18	10
Rock bass	3,419	139	10,240	577			4,055	219
Rockfishes			576	20			431	17
Rudderfish	1,582	88	8,146	536			30,571	2,019
Sculpin			1,231	109			1,119	101
Sea bass:								
Black	476	24	1,126	55			9,286	396
White	230,043	20,117	67,426	7,982	205	25	453,795	39,980
Shad			20	2			903	28
Sheepshead	235	7	345	10			531	9
Skates								
Smelt	2,072	38	287,207	8,466	58,474	1,254	36,078	1,557
Tuna and tunalike fishes:								
Albacore	942	103					41	3
Bluefin	2,256,429	116,376	98,294	4,908				
Bonito	2,482,812	39,406	92,048	1,529	65	2	33,723	621
Skipjack or striped tuna	452,607	14,356						
Yellowfin	49,210	3,566					382	24
Whitefish			1,402	80			53	3
Yellowtail	310,568	11,044	151,701	3,463			22,435	702
Other fish			825	50			309	16
Total	70,606,116	524,833	44,774,814	363,610	105,026	4,796	895,931	62,496
SHELLFISH								
Sea crawfish or spiny lobster							9	2
Octopus					32	4		
Squid	180	18	31,663	1,285			37	4
Total	180	18	31,663	1,285	32	4	46	6
Grand total	70,606,296	524,851	44,806,477	364,895	105,058	4,800	895,977	62,502

Species	Trammel nets		Lines				Paranzella nets	
			Set and hand		Troll			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Baracuda	7	\$1	558,826	\$28,847	260,317	\$11,862		
Dolphin			498	13				
Flounders:								
"California halibut"	381,026	44,281	28,573	3,168	20	2	404,800	\$35,180
"Sole"	7,009	376	3,179	179			349,524	12,979
Other	639	33	10,607	2,468			243	17
Grayfish	49,425	1,193	175,913	4,110	98	1	5,033	116
Hake			285	22				
Horse mackerel			3,352	108				
Kingfish			22,226	428				
"Lingcod"			4,445	233				
Mackerel	29	1	1,650,353	18,336	211	2		
Marlin			4,536	186			416	34
Perch			2,538	144				
Rock bass	835	56	220,879	13,649	1,465	81	392	27
Rockfishes	946	43	2,661,549	90,526			1,230	52
Rudderfish			18	1				

Fisheries of the San Pedro division of the southern district of California, 1931—Con.

CATCH OFF CALIFORNIA: BY GEAR—Continued

Species	Trammel nets		Lines				Paranzella nets	
			Set and hand		Troll			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH—continued								
Sablefish	330	\$30	19,501	\$923				
Sculpin			73,855	6,832				
Sea bass:							184	\$18
Black	2,039	96	99,299	4,702			102	5
White	4,248	562	26,519	2,776	227	\$26	1,040	134
Sheepshead	24,939	694	46,917	719	43	1	140	4
Skates	6,556	138	7,647	156			19,414	415
Smelt			2,352	77			65	1
Tuna and tunalike fishes:								
Albacore			427	39	5,866	536		
Bluefin			204	16	120	11		
Bonito	251	5	159,107	2,592	9,296	163		
Skipjack or striped tuna			7,132,238	215,987	31,978	838		
Yellowfin			33,417	2,436	16,104	1,453		
Whitefish	1,505	82	94,262	5,900				
Yellowtail	276	8	223,465	5,597	18,570	512	90	2
Other fish	578	26	9,391	607	1,945	82	390	25
Total	480,638	47,625	13,276,378	411,777	346,260	15,570	783,063	49,009
SHELLFISH								
Sea crawfish or spiny lobster	12,934	2,372	15	3			98	15
Octopus			164	21				
Squid							70	4
Total	12,934	2,372	179	24				
Grand total	493,572	49,997	13,276,557	411,801	346,260	15,570	783,231	49,028

Species	Traps		Harpoons		Shovels		Abalone outfits	
			Pounds	Value	Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Flounder: "Sole"	160	\$8						
Kingfish	102	2						
Mackerel	10	1						
Marlin			19,566	\$864				
Perch	231	14						
Rock bass	96,217	6,323						
Rockfishes			21	1				
Sculpin	1,703	152						
Sheepshead	97,886	3,425						
Swordfish			211,399	28,906				
Whitefish	565	30						
Total	196,895	9,956	230,965	29,770				
SHELLFISH								
Crabs	56	3						
Sea crawfish or spiny lobster	235,337	38,787						
Abalone							35,415	\$8,472
Clams:								
Cockle					8,620	\$2,033		
Pismo					22,081	8,141		
Octopus	129	15						
Total	235,522	38,805			30,701	10,174	35,415	8,472
Grand total	432,417	48,761	230,965	29,770	30,701	10,174	35,415	8,472

Fisheries of the San Pedro division of the southern district of California, 1931—Con-

CATCH OFF LATIN AMERICA: BY GEAR

Species	Purse seines		Lampara nets		Gill nets		Lines, set, and hand		Traps	
FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Barracuda.....	607,520	\$99,082	3,788	\$300	336	\$18	40,484	\$2,840		
Cabrilla.....							101,749	4,386		
Corbina.....							2,084	96		
Flounders, "California halibut".....	574	46						1,060	64	
Grayfish.....	25	1								
Groupers.....								452	14	
Kingfish.....			2,633	40						
Mackerel.....								153	3	
Mullet.....			4,515	316						
Rock bass.....	966	66	269	14			21,104	1,356		
Rockfishes.....								822	31	
Rudderfish.....	199	14								
Sea bass:										
Black.....	15,168	684	109	7			99,676	5,008		
White.....	112,051	7,676	4,681	622	10,374	656	10,461	732		
Smelt.....			88	2						
Spanish mackerel.....	3,768	151						15,012	2,336	
Swordfish.....	365	11								
Tuna and tunalike fishes:										
Bluefin.....	1,168,263	47,001								
Bonito.....	56,058	849	726	14	287	6	7,421	135		
Skipjack or striped tuna.....	244,321	7,970					1,940,968	58,876		
Yellowfin.....	640,009	34,129					12,352,681	634,368		
Whitefish.....	585	18						10,085	599	
Yellowtail.....	117,743	5,477	97,042	2,312			251,770	16,484		
Other fish.....			160	8			690	26		
SHELLFISH										
Sea crawfish or spiny lobster.....									1,799	\$38
Total.....	2,967,615	203,175	114,011	3,635	10,997	680	14,856,672	727,354	1,799	38

Fisheries of the San Diego division of the southern district of California, 1931

OPERATING UNITS: BY GEAR

Item	Lam-para-nets, sardine	Gill nets			Trammel nets	Lines		Traps, lobster	Harpoons, sword-fish and turtle	Total, exclusive of duplication
		Drift, barracuda	Set, sea bass	Other		Set and hand	Troll			
Fishermen:										
On vessels.....	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
65	6	13			9	789	11	23	40	80
On boats.....	29	40	40	16	26	160	68	78	36	21
Total.....	94	46	53	16	35	949	79	101	76	1,02
Vessels, motor.....	12	2	4		3	100	3	7	9	10
Net tonnage.....	99	14	24		21	5,607	25	56	83	5,64
Boats:										
Motor.....	6	18	17	8	11	84	57	53	16	11
Other.....				2		1		4		
Apparatus:										
Number.....	18	20	21	12	14	1,572	370	2,226	25	
Length, yards.....	4,070									
Square yards.....		157,310	125,420	9,740	196,668					
Hooks.....						94,345	370			

Fisheries of the San Diego division of the southern district of California, 1931—Continued

CATCH OFF CALIFORNIA: BY GEAR

Species	Purse seines		Lampara nets		Gill nets		Trammel nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Anchovies								
Barracuda	4,372	\$518						
Flounders:								
"California halibut"					354	43	85,225	\$10,554
"Sole"							257	30
Grayfish					77,339	483	46,105	212
Herring					17,593	282		
Kingfish			617	21				
Mackerel					7,140	119		
Mullet					8,815	709		
Perch			290	14				
Pilchard or sardine			131,156	1,211	43	2		
Pompano			326	105	1,010	16		
Rock bass							696	34
Rockfishes							247	12
Sea bass:								
Black					5,323	203	147	7
White					153,629	10,129	546	68
Sheepshead							130	3
Skates							484	7
Smelt							2,426	61
Tuna and tunalike fishes:							14,365	368
Bluefin								
Bonito					3,168	228		
Skipjack or striped tuna			42,223	1,266			2,665	40
Yellowfin							59	4
Whitefish								
Yellowtail							14,220	311
Total	46,595	1,784	138,223	1,645	337,112	14,710	134,838	10,965
SHELLFISH								
Sea crawfish or spiny lobster								
Grand total	46,595	1,784	138,223	1,645	337,112	14,710	136,173	11,182

Species	Lines				Traps		Harpoons	
	Set and hand		Troll					
FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Barracuda	820,989	\$37,451	250,135	\$11,411				
Flounders:								
"California halibut"	2,862	305						
"Sole"	1,785	196					16	\$2
Grayfish	56,732	292						
Kingfish	848	17						
Mackerel	206,218	3,717	166	3				
Rock bass	144,169	6,535	521	24	25,904	928		
Rockfishes	886,627	33,482			708	32		
Sculpin	12,281	1,004			119	10		
Sea bass:								
Black	136,732	5,702						
White	55,238	4,064	529	39				
Sheepshead	6,818	176					18,362	592
Skates	200	13						
Swordfish								145,983 \$19,662
Tuna and tunalike fishes:								
Bonito	209,131	2,616	13,302	166				
Skipjack or striped tuna	4,271,142	127,236	35,428	1,063				
Yellowfin	53,833	2,816	2,160	113				
Whitefish	109,195	4,944						
Yellowtail	917,101	20,893	49,315	1,123				
Other fish	333	14	20	1				
Total	7,892,234	251,473	351,576	13,943	45,109	1,564	145,983	19,662
SHELLFISH								
Sea crawfish or spiny lobster					132,883	21,136		
Grand total	7,892,234	251,473	351,576	13,943	177,992	22,700	145,983	19,662

NOTE.—The catch by purse seines was made entirely by fishermen from the San Pedro division.

Fisheries of the San Diego division of the southern district of California, 1931—
Continued

CATCH OFF LATIN AMERICA: BY GEAR

Species	Purse seines		Lampara nets		Gill nets		Trammel nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Barracuda	10,765	\$970			1,605	\$123		
Flounders, "California halibut"					166	12	38,461	\$3,992
Grayfish					3,345	5		
Mullet			2,305	\$231	342	27		
Pompano			738	88				
Sea bass:								
Black					14,647	541	5,716	221
White					101,315	7,394	52	3
Smelt					9	1		
Tuna and tunalike fishes: Bluefin	7,140	321						
Yellowtail	4,484	269			691	25		
Total	22,389	1,560	3,043	319	122,120	8,128	44,229	4,216
SHELLFISH								
Sea crawfish or spiny lobster							95	13
Grand total	22,389	1,560	3,043	319	122,120	8,128	44,324	4,229

Species	Lines				Traps		Harpoons	
	Set and hand		Troll					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Barracuda	123,101	\$9,869	39,298	\$3,150				
Cabrilla	126,088	5,017						
Flounders, "California halibut"	88	9						
Groupers	21,157	790						
Rock bass	13,381	1,081	42	3				
Rockfishes	3,182	127						
Sculpin	115	9						
Sea bass:								
Black	110,310	4,767						
White	101,372	7,401	597	44				
Sheepshead	1,290	39						
Spanish mackerel	4,922	212						
Tai	1,165	58						
Tuna and tunalike fishes:								
Bluefin	371	26						
Bonito	658	20						
Skipjack or striped tuna	2,355,856	76,531						
Yellowfin	23,431,725	1,300,300						
Whitefish	2,759	126						
Yellowtail	343,833	15,557	2,549	115				
Total	26,641,373	1,421,939	42,486	3,312				
SHELLFISH, ETC.								
Sea crawfish or spiny lobster					955,580	\$159,759		
Turtles							6,657	\$506
Total					955,580	159,759	6,657	506
Grand total	26,641,373	1,421,939	42,486	3,312	955,580	159,759	6,657	506

NOTE.—The catch by purse seines was made entirely by fishermen from the San Pedro division.

LAKE FISHERIES⁸

The yield of the United States fisheries of the Great Lakes, including the international lakes of northern Minnesota, during 1931 amounted to 91,726,845 pounds, valued at \$6,029,247. This is a decrease of 3 percent in quantity, and less than one half of 1 percent in the value as compared with the quantity and value in the previous year. These fisheries gave employment to 6,839 fishermen or 2 percent less than in 1930. Of the total number of fishermen, 1,697 regular fishermen were engaged on vessels, and 3,674 regular and 1,468 casual fishermen were employed in the shore and boat fisheries.

Lake fisheries of the United States and Canada, 1931

CATCH: BY LAKES

Species	Lake Ontario			Lake Erie		
	United States	Canada	Total	United States	Canada	Total
Blue pike.....	<i>Pounds</i> 36,946	<i>Pounds</i> 37,400	<i>Pounds</i> 74,346	<i>Pounds</i> 12,642,872	<i>Pounds</i> 5,358,300	<i>Pounds</i> 18,001,172
Bowfin.....	450	(¹)	450	2,765	(¹)	2,765
Burbot.....	56,181	(¹)	56,181	270,630	(¹)	270,630
Carp.....	34,932	45,400	80,332	2,340,069	425,300	2,765,369
Catfish and bullheads.....	42,029	163,500	205,529	508,711	141,800	650,511
Cisco.....				346,553	949,300	1,295,853
Eels.....	44,577	74,800	119,377			
Goldfish.....				79,774	(¹)	79,774
Lake herring.....	50,309	1,117,800	1,168,109			
Lake trout.....	14,004	388,200	402,204	3,047	7,100	10,147
Mooneye.....				20,593	(¹)	20,593
Pike (jacks).....	10,746	173,300	184,046	24,002	63,200	87,202
Rock bass.....	602	(¹)	602	3,451	(¹)	3,451
Sauger.....				2,025,513	(¹)	2,025,513
Sheepshead.....				1,616,889	(¹)	1,616,889
Sturgeon.....	8,275	2,303	10,578	15,234	22,736	37,970
Sucker "mullet".....	29,079	(¹)	29,079	1,414,842	(¹)	1,414,842
Sunfish.....	13,182	(¹)	13,182			
White bass.....				418,199	(¹)	418,199
Whitefish:						
Common.....	67,485	525,900	593,385	1,272,902	1,106,400	2,379,302
Menominee.....	111	(¹)	111			
Yellow perch.....	23,848	77,100	100,948	9,057,161	4,265,100	13,322,261
Yellow pike.....	8,789	25,700	34,489	2,640,556	366,400	3,006,956
Mussel shells.....				68,446	(¹)	68,446
Miscellaneous.....		266,700	266,700		1,102,000	1,102,000
Total.....	441,545	2,898,103	3,339,648	34,772,209	13,807,636	48,579,845

¹ Where there has been a Canadian catch of these species it is included under "Miscellaneous."

⁸ The statistics of the catch presented herewith were obtained largely from the records of the various State fishery agencies and from the Dominion Bureau of Statistics, Ottawa, Canada. The data for the operating units (fishermen, vessels, boats, and gear) of the United States were obtained largely by Bureau agents in a special canvass; although State records in several instances were very helpful in this work.

In all cases the statistics collected are for the calendar year, except for Lake of the Woods, Rainy Lake, and Lake Namakan in Minnesota, which are for two seasons. For Lake of the Woods the seasons are from June 1 to Nov. 1 and Dec. 1 to Apr. 1 and for Rainy and Namakan Lakes from May 15 to Nov. 1 and Dec. 1 to Apr. 1. The catch for these two seasons, in the order named, have been combined to constitute a year. The quantity of fish taken in these lakes between Jan. 1 and Apr. 1 is estimated at less than 3 percent of the total catch.

Lake fisheries of the United States and Canada, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake Huron			Lake Michigan	Lake Superior		
	United States	Canada	Total	United States	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Bowfin	3,275	(1)	3,275	86	2,994	(1)	2,994
Buffalofish				500			
Burbot	3,646	(1)	3,646	94,393	153	2,500	2,653
Carp	963,709	78,300	1,042,009	831,669			
Catfish and bullheads	107,982	11,000	118,982	46,865	25	(1)	25
Chubs	500,647	987,200	1,487,847	3,401,737	663,868	(1)	663,868
Lake herring	5,201,543	757,200	5,958,743	5,248,738	6,911,624	1,396,100	8,307,724
Lake trout	2,067,940	2,847,800	4,915,740	5,542,698	2,989,643	1,328,400	4,318,043
Mooneye				5,105			
Pike (Jacks)	39,536	213,600	253,136	34,450	11,977	8,600	20,577
Rock bass	18,671	(1)	18,671	1,641			
Sauger	170,905	(1)	170,905	26,218	583	(1)	583
Sheepshead	8,641	(1)	8,641	7,862			
Smelt				86,469			
Steelhead trout					539	(1)	539
Sturgeon		17,267	17,267			4,600	4,600
Sucker "mullet"	2,303,990	(1)	2,303,990	2,452,745	168,096	(1)	168,096
Whitefish:							
Common	4,491,458	1,460,100	5,951,558	4,327,387	489,903	256,000	745,903
Menominee	42,785	(1)	42,785	159,666	11,789	(1)	11,789
Yellow perch	822,775	40,600	863,375	1,278,968	4,847	(1)	4,847
Yellow pike	848,452	416,900	1,265,352	51,753	25,084	103,200	128,284
Crawfish				75,130			
Mussel shells	131,210	(1)	131,210	1,383,867			
Miscellaneous		385,000	385,000			69,400	69,400
Total	17,727,165	7,214,967	24,942,132	25,058,947	11,281,125	3,168,800	14,449,925

Species	Namakan Lake			Rainy Lake		
	United States	Canada	Total	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Blue pike						
Chubs	48,749		48,749	9,106	3,275	3,275
Crappie	3,106		3,106		63,657	72,763
Pike (Jacks)	40,809	4,624	45,433	59,883	112,129	172,012
Sturgeon	772	2,094	2,866	1,061	780	1,841
Sucker "mullet"	8,327		8,327	842	(1)	842
Whitefish: Common	15,629	9,590	25,219	79,768	24,035	103,803
Yellow perch	1,583	(1)	1,583	2,478	6,452	8,930
Yellow pike	49,520	16,589	66,109	89,472	159,417	248,889
Miscellaneous					1,865	1,865
Total	168,495	32,897	201,392	242,610	371,610	614,220

Species	Lake of the Woods			Total, all lakes		
	United States	Canada	Total	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Blue pike						
Bowfin		1,914	1,914	12,679,818	5,400,889	18,080,707
Buffalofish				6,576	(1)	6,576
Burbot	35,723	(1)	35,723	463,567	(1)	463,567
Carp	9,532	1,866	11,398	4,180,064	553,366	4,733,430
Catfish and bullheads	12,299	39,839	52,138	717,911	356,139	1,074,050
Chubs				4,624,107	1,050,857	5,674,964
Cisco				346,553	949,300	1,295,853
Crappie	136	(1)	136	3,242	(1)	3,242
Eels				44,577	74,800	119,377

¹ Where there has been a Canadian catch of these species it is included under "Miscellaneous."

Lake fisheries of the United States and Canada, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake of the Woods			Total, all lakes		
	United States	Canada	Total	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Goldfish				79,774	(1)	79,774
Lake herring				17,412,214	3,271,100	20,683,314
Lake trout	327	13,980	14,307	10,617,659	4,585,480	15,203,139
Mooneye				26,698	(1)	26,698
Pike (jacks)	168,352	387,287	555,639	389,755	962,740	1,352,495
Rock bass				24,365	(1)	24,365
Sauger	218,657	(1)	218,657	2,441,876	(1)	2,441,876
Sheepshead				1,633,392	(1)	1,633,392
Smelt				86,469	(1)	86,469
Steelhead trout				539	(1)	539
Sturgeon	1,135	705	1,840	26,477	50,485	76,962
Sucker "mullet"	126,000	(1)	126,000	6,503,921	(1)	6,503,921
Sunfish				13,182	(1)	13,182
Tullibees	435,225	20,398	455,623	435,225	20,398	455,623
White bass				418,199	(1)	418,199
Whitefish:						
Common	16,662	410,550	427,212	10,761,194	3,792,575	14,553,769
Menominee				214,351	(1)	214,351
Yellow perch	55,883	12,378	68,261	11,247,543	4,401,630	15,649,173
Yellow pike	954,818	642,023	1,596,841	4,668,444	1,730,229	6,398,673
Crawfish				75,130		75,130
Mussel shells				1,583,523		1,583,523
Miscellaneous		80,278	80,278		1,905,243	1,905,243
Total	2,034,749	1,611,218	3,645,967	91,726,845	29,105,231	120,832,076

*Where there has been a Canadian catch of these species it is included under "Miscellaneous."

Lake fisheries of the United States, 1931

OPERATING UNITS: BY LAKES

Item	Lake Ontario	Lake Erie	Lake Huron	Lake Michigan	Lake Superior	Lake of the Woods, Rainy Lake, and Namakan Lake	Total
	Number	Number	Number	Number	Number	Number	
Fishermen:							
On vessels	3	329	236	1,012	117	-----	1,697
On boats and shore:							
Regular	94	829	885	770	987	109	3,674
Casual	53	250	61	1,008	96	-----	1,468
Total	150	1,408	1,182	2,790	1,200	109	6,839
Vessels:							
Steam		30	15	58	8	-----	111
Net tonnage		799	247	1,179	168	-----	2,393
Motor	1	33	50	278	32	-----	394
Net tonnage	18	312	546	3,038	278	-----	4,192
Total vessels	1	63	65	336	40	-----	505
Total net tonnage	18	1,111	793	4,217	446	-----	6,585
Boats:							
Motor	43	291	337	524	479	82	1,756
Other	61	404	200	538	253	24	1,480
Apparatus:							
Haul seines	3	179	74	51	9	-----	316
Length, yards	183	80,211	33,734	18,828	1,217	-----	134,173
Gill nets:							
"Bull", 3 to 3 1/4 inches		884	-----	-----	-----	-----	884
Square yards		320,892	-----	-----	-----	-----	320,892
"Shoal", 2 1/4 to 3 3/4 inches	640	10,899	2,018	17,199	6,572	-----	37,328
Square yards	91,950	1,730,010	530,430	3,993,909	1,696,860	-----	8,043,159
"Shoal", 4 to 6 inches	602	5,840	7,043	43,227	8,471	244	65,427
Square yards	79,580	1,475,812	2,246,670	11,750,957	2,711,340	74,930	18,339,289
"Shoal", 6 to 10 inches	164	-----	-----	180	-----	-----	344
Square yards	21,320	-----	-----	34,200	-----	-----	55,520
"Shoal", 10 to 14 inches	10	108	-----	-----	-----	-----	118
Square yards	1,150	22,494	-----	-----	-----	-----	23,644

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY LAKES—Continued

Item	Lake Ontario	Lake Erie	Lake Huron	Lake Michigan	Lake Superior	Lake of the Woods, Rainy Lake, and Namakan Lake	Total
	Number	Number	Number	Number	Number	Number	Number
Trammel nets.	211			5			216
Square yards.	8,862			140			9,002
Lines:							
Hand.			2		50		52
Hooks.			4		50		54
Troll.			1	15	15		31
Hooks.			2	15	31		48
Trot.	23	54	117	632	1,349		2,175
Hooks	6,510	11,455	110,400	312,850	411,554		852,769
Pound nets.		73	612	781	131	76	1,673
Trap nets.	137	3,891	2,497	378	85		6,988
Fyke nets.	152	925	377	853	25	105	2,437
Dip nets.		1		3,680			1
Crawfish pots.							3,680
Spears.			1				1
Crowfoot bars.		2	3	411			416
Tongs.					9		9
Picks.		10	8	169			187

OPERATING UNITS: BY STATES AND LAKES

Item	New York			Pennsylvania, Lake Erie	Ohio, Lake Erie
	Lake Ontario	Lake Erie	Total		
Fishermen:					
On vessels.	3	73	76	157	99
On boats ans shore:					
Regular.	94	56	150	34	629
Casual.	53	43	96	4	84
Total.	150	172	322	195	812
Vessels:					
Steam.			5	5	17
Net tonnage.			122	122	444
Motor.	1	10	11	12	11
Net tonnage.	18	69	87	124	119
Total vessels.	1	15	16	29	19
Total net tonnage.	18	191	209	568	352
Boats:					
Motor.	43	20	63	13	214
Other.	61	49	110	16	268
Apparatus:					
Haul seines:					
Length, yards.	3	15	18		95
Gill nets:	183	1,633	1,816		59,984
“Bull”, 3 to $3\frac{1}{16}$ inches.		592	592	292	
Square yards.		214,896	214,896	105,996	
“Shoal”, $2\frac{1}{4}$ to $3\frac{3}{4}$ inches.	640	622	1,262	5,026	5,237
Square yards.	91,950	110,640	202,590	828,290	788,750
“Shoal”, 4 to 6 inches.	602	2,284	2,886	3,360	186
Square yards.	79,580	642,204	721,784	804,042	27,900
“Shoal”, 6 to 10 inches.	164		164		
Square yards.	21,320		21,320		
“Shoal”, 10 to 14 inches.	10	108	118		
Square yards.	1,150	22,494	23,644		
Trammel nets:					211
Square yards.					8,862
Lines:					
Trot.	23	54	77		
Hooks.	6,510	11,455	17,965	53	20
Pound nets.					
Trap nets.	137	23	160	26	3,722
Fyke nets.	152		152		384

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND LAKES—Continued

Item	Michigan					Indiana, Lake Michigan
	Lake Erie	Lake Huron	Lake Michigan	Lake Su- perior	Total	
Fishermen:						
On vessels.....	Number	Number	Number	Number	Number	Number
On boats and shore:		236	473	76	785	18
Regular.....	110	885	445	332	1,772	6
Casual.....	119	61	509	56	745	57
Total.....	229	1,182	1,427	464	3,302	81
Vessels:						
Steam.....		15	29	8	52	1
Net tonnage.....		247	457	168	872	26
Motor.....		50	121	18	189	5
Net tonnage.....		546	1,186	136	1,868	76
Total vessels.....		65	150	26	241	6
Total net tonnage.....		793	1,643	304	2,740	102
Boats:						
Motor.....	44	337	315	171	867	57
Other.....	71	200	368	49	688	1
Apparatus:						
Haul seines.....	69	74	1	9	153	—
Length, yards.....	18,594	33,734	300	1,217	53,845	—
Gill nets:						
"Shoal", 2½ to 3¾ inches.....	14	2,018	5,983	2,310	10,325	405
Square yards.....	2,330	530,430	1,279,340	522,810	2,334,910	99,839
"Shoal", 4 to 6 inches.....	10	7,043	26,792	5,489	39,334	448
Square yards.....	1,666	2,246,670	6,718,256	1,758,614	10,725,206	120,756
"Shoal", 6 to 10 inches.....						180
Square yards.....						34,200
Lines:						
Hand.....		2		50	52	—
Hooks.....		4		50	54	—
Troll.....		1	15	15	31	—
Hooks.....		2	15	31	48	—
Trot.....		117	86	781	984	—
Hooks.....		110,400	136,200	296,254	542,854	—
Pound nets.....		612	550	70	1,232	5
Trap nets.....	120	2,497	362	83	3,062	—
Fyke nets.....	541	377	60	6	984	—
Dip nets.....	1				1	—
Spears.....		1			1	—
Crowfoot bars.....	2	3	341		346	70
Picks.....	10	8	157		175	—

Item	Illinois, Lake Michigan	Wisconsin			Minnesota	
		Lake Michigan	Lake Superior	Total	Lake Superior	Lake of the Woods, Rainy Lake, and Nama- kan Lake
Fishermen:						
On vessels.....	Number	Number	Number	Number	Number	Number
On boats and shore:						
Regular.....	45	476	41	517	—	—
Casual.....						
Total.....						
Vessels:						
Steam.....	2	26		26		
Net tonnage.....	29	667		667		
Motor.....	11	141	14	155		
Net tonnage.....	142	1,634	142	1,776		
Total vessels.....						
Total net tonnage.....		13	167	14	181	
		171	2,301	142	2,443	

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND LAKES—Continued

Item	Illinois, Lake Michigan	Wisconsin			Minnesota		
		Lake Michigan	Lake Superior	Total	Lake Superior	Lake of the Woods, Rainy Lake, and Nama- kan Lake	Total
Boats:	Number	Number	Number	Number	Number	Number	Number
Motor	4	148	64	212	244	82	326
Other	1	168	52	220	152	24	176
Apparatus:							
Haul seines:		50		50			
Length, yards.		18,528		18,528			
Gill nets:							
"Shoal", 2½ to 3¾ inches	1,381	9,430	1,025	10,455	3,237		3,237
Square yards	312,030	2,302,700	255,480	2,558,180	918,570		918,570
"Shoal", 4 to 6 inches	1,366	14,621	1,591	16,212	1,391	244	1,635
Square yards	434,640	4,477,305	532,660	5,009,965	420,066	74,930	494,996
Trammel nets		5		5			
Square yards		140		140			
Lines:							
Trot		546	134	680	434		434
Hooks		176,650	28,550	205,200	86,750		86,750
Pound nets	1	225	61	286		76	76
Trap nets		16	2	18			
Fyke nets		793	19	812		105	105
Crawfish pots		3,680		3,680			
Tongs		9		9			
Picks		12		12			

OPERATING UNITS OF LAKE ONTARIO:¹ BY GEAR

Item	Haul seines	Gill nets				Trot lines	Trap nets	Fyke nets	Total, exclusive of dupli- cation
		"Shoal", 2½ to 3¾ inches	"Shoal", 4 to 6 inches	"Shoal", 6 to 10 inches	"Shoal", 10 to 14 inches				
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels		3							3
On boats and shore:									
Regular	6	54	45	4	7	4	29	18	94
Casual		15	2	3		20	8	2	53
Total	6	72	47	7	7	24	37	20	150
Vessels, motor		1							1
Net tonnage		18							18
Boats:									
Motor	2	25	20	4					43
Other	3	15	3		7	19	12	9	61
Apparatus:									
Number	3	640	602	164	10	23	137	152	
Length, yards	183	91,950	79,580	21,320	1,150		6,510		
Square yards									
Hooks									

¹ Includes Niagara River below the Falls and the St. Lawrence River.

*Lake fisheries of the United States, 1931—Continued*OPERATING UNITS OF LAKE ERIE:² BY GEAR

Item	Haul seines	Gill nets				Tram- mel nets	Trot lines	Pound nets
		"Bull", 3 to 3½ inches	"Shoal", 2½ to 3¾ inches	"Shoal", 4 to 6 inches	"Shoal", 10 to 14 inches			
Fishermen:								
On vessels	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore:								
Regular	267	107	30	27	11	16	14	31
Casual	148		9	2	7	3	35	2
Total	415	107	293	249	18	19	49	33
Vessels:								
Steam		7	25	21				
Net tonnage		215	677	526				
Motor		14	23	21				
Net tonnage		127	228	189				
Total vessels		21	48	42				
Total net tonnage		342	905	715				
Boats:								
Motor		73	11	8	9	8	9	12
Other		142	7	4	1	4	36	13
Apparatus:								
Number	179	884	10,899	5,840	108	211	54	73
Length, yards	80,211	320,892	1,730,010	1,475,812	22,494	8,862		
Square yards								
Hooks							11,455	

Item	Trap nets	Fyke nets	Dip nets	Crowfoot bars	Picks	By hand	Total, exclusive of dupli- cation
Fishermen:							
On vessels	Number	Number	Number	Number	Number	Number	Number
On boats and shore:							
Regular	480	123					829
Casual	16	35	1	4	10	6	250
Total	496	158	1	4	10	6	1,408
Vessels:							
Steam							30
Net tonnage							799
Motor							33
Net tonnage							312
Total vessels							63
Total net tonnage							1,111
Boats:							
Motor	174	45					291
Other	163	55	1	2	10	4	404
Apparatus: Number	3,891	925	1	2	10		

² Includes Niagara River above the Falls.

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS OF LAKE HURON: BY GEAR

Item	Haul seines	Gill nets		Lines			Pound nets
		"Shoal", 2½ to 3¾ inches	"Shoal", 4 to 6 inches	Hand	Troll	Trot	
Fishermen:							
On vessels.....	Number	Number	Number	Number	Number	Number	Number
		75	145			72	36
On boats and shore:							
Regular.....	176	175	234			54	314
Casual.....		35	45	3	1	1	2
Total.....	176	285	424	3	1	127	352
Vessels:							
Steam.....		7	12			7	2
Net tonnage.....		126	174			148	16
Motor.....		10	27			6	10
Net tonnage.....		183	347			122	62
Total vessels.....		17	39			13	12
Total net tonnage.....		309	521			270	78
Boats:							
Motor.....	53	95	129	1		24	104
Other.....	23	28	32	1	1	6	96
Apparatus:							
Number.....	74	2,018	7,043	2	1	117	612
Length, yards.....	33,734	530,430	2,246,670				
Square yards.....				4	2	110,400	
Hooks.....							

Item	Trap nets	Fyke nets	Spears	Crowfoot bars	Picks	By hand	Total, exclusive of dupli- cation
	Number	Number	Number	Number	Number	Number	Number
Fishermen:							
On vessels.....	Number	Number	Number	Number	Number	Number	Number
	53						236
On boats and shore:							
Regular.....	523	72					885
Casual.....		1	1	3	8	4	61
Total.....	576	73	1	3	8	4	1,182
Vessels:							
Steam.....							15
Net tonnage.....							247
Motor.....	20						50
Net tonnage.....	162						546
Total vessels.....	20						65
Total net tonnage.....	162						793
Boats:							
Motor.....	177	26		1	1		337
Other.....	58	14	1	2	8		200
Apparatus: Number.....	2,497	377	1	3	8		

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS OF LAKE MICHIGAN: BY GEAR

Item	Haul seines	Gill nets			Tram- mel nets	Lines		Pound nets
		"Shoal", 2½ to 3¾ inches	"Shoal", 4 to 6 inches	"Shoal", 6 to 10 inches		Troll	Trot	
Fishermen:								
On vessels.....	Number 3	Number 560	Number 914	Number 12	Number	Number 214	Number 73	
On boats and shore:								
Regular.....	104	251	417				23	365
Casual.....	21	220	424		5	15	29	30
Total.....	128	1,031	1,755	12	5	15	266	468
Vessels:								
Steam.....		32	50				19	2
Net tonnage.....		646	924				481	64
Motor.....	1	154	250	4			46	25
Net tonnage.....	6	1,715	2,710	56			543	171
Total vessels.....	1	186	300	4			65	27
Total net tonnage.....	6	2,361	3,634	56			1,024	235
Boats:								
Motor.....	11	150	229			9	25	160
Other.....	43	66	68		5		12	112
Apparatus:								
Number.....	51	17,199	43,227	180	5	15	632	781
Length, yards.....	18,828	3,993,909	11,750,957	34,200	140			
Square yards.....							15	312,850
Hooks.....								

Item	Trap nets	Fyke nets	Craw- fish pots	Crow- foot bars	Tongs	Picks	By hand	Total, ex- clusive of duplica- tion
Fishermen:								
On vessels.....	Number 37	Number 55	Number	Number	Number	Number	Number	Number 1,012
On boats and shore:								
Regular.....	118	145	1					770
Casual.....	1	23	36	230	9	169	67	1,008
Total.....	156	223	37	230	9	169	67	2,790
Vessels:								
Steam.....	1							58
Net tonnage.....	15							1,179
Motor.....	11	23						278
Net tonnage.....	110	183						3,038
Total vessels.....	12	23						336
Total net tonnage.....	125	183						4,217
Boats:								
Motor.....	53	59		114			35	524
Other.....	23	49	37	160	9	112		538
Apparatus: Number.....	378	853	3,680	411	9	169		

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS OF LAKE SUPERIOR: BY GEAR

Item	Haul seines	Gill nets		Lines			Pound nets	Trap nets	Fyke nets	Total, exclusive of duplication
		"Shoal", 2½ to 3¾ inches	"Shoal", 4 to 6 inches	Hand	Troll	Trot				
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....		65	96							117
On boats and shore:										
Regular.....	16	744	534	2	10	306	73	24	16	987
Casual.....	2	35	40			26				96
Total.....	18	844	670	2	10	397	79	26	16	1,200
Vessels:										
Steam.....		3	8			6				8
Net tonnage.....		92	168			124				168
Motor.....		20	24			16	2	1		32
Net tonnage.....		169	212			115	16	9		278
Total vessels.....		23	32			22	2	1		40
Total net tonnage.....		261	380			239	16	9		446
Boats:										
Motor.....	1	360	279		5	169	33	11	7	479
Other.....	8	181	51			24	35	10	7	253
Apparatus:										
Number.....	9	6,572	8,471	50	15	1,349	131	85	25	
Length, yards.....	1,217									
Square yards.....		1,696,860	2,711,340							
Hooks.....				50	31	411,554				

OPERATING UNITS OF LAKE OF THE WOODS, RAINY LAKE, AND NAMAKAN LAKE: BY GEAR

Item	Gill nets "Shoal", 4 to 6 inches	Pound nets	Fyke nets	Total, ex- clusive of duplication
Fishermen:				
On boats and shore: Regular.....	66	43	35	109
Boats:				
Motor.....	66	18	28	82
Other.....		18	8	24
Apparatus:				
Number.....	244	76	105	
Square yards.....	74,930			

OPERATING UNITS:³ BY STATES AND COUNTIES

Item	New York								
	Ca- yuga	Chau- tauqua	Erie	Jeffer- son	Mon- roe	Niagara	Or- leans	Osw- ego	St. Law- rence
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	3	73							
On boats and shore:									
Regular.....		36	20	41	12	7	8	15	
Casual.....	1	6	25	16	5	18	2	11	8
Total.....	4	115	45	57	17	25	10	26	8
Vessels:									
Steam.....			5						
Net tonnage.....			122						
Motor.....	1	10							
Net tonnage.....	18	69							
Total vessels.....	1	15							
Total net tonnage.....	18	191							

³ Exclusive of operating units used in the mussel fisheries of streams tributary to the Great Lakes.

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	New York									
	Cayuga	Chautauqua	Erie	Jefferson	Monroe	Niagara	Orleans	Oswego	St. Lawrence	
Boats:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Motor	1	4	16	17	3	4	2	9		
Other		17	20	26	7	19	4	7		7
Apparatus:										
Haul seines		15		3						
Length, yards		1,633		183						
Gill nets:										
" Bull ", 3 to $3\frac{1}{2}$ inches		592								
Square yards		214,896								
" Shoal ", $2\frac{1}{2}$ to $3\frac{1}{2}$ inches	51	616	6	80	86	67	47	230		
Square yards	8,085	109,440	1,200	11,250	11,610	9,045	6,345	35,050		
" Shoal ", 4 to 6 inches		2,284		257	45	18	34	186		
Square yards		642,204		31,975	5,625	2,250	4,250	27,730		
" Shoal ", 6 to 10 inches										164
Square yards										21,320
" Shoal ", 10 to 14 inches			108							10
Square yards			22,494							1,150
Lines:										
Trot		11	31	4	1	19	1	2		7
Hooks		2,150	6,655	950	500	4,550	10	500		2,400
Trap nets			23	137						
Fyke nets				147	5					

Item	New York—Continued		Pennsylvania		Ohio				
	Wayne	Total	Erie	Ashtabula	Cuya-hoga	Erie	Lake	Lorain	Lucas
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels		76	157		22	71		6	
On boats and shore:									
Regular	11	150	34	90	10	221	38	29	52
Casual	4	96	4	8	5	10	2	3	18
Total	15	322	195	98	37	302	40	38	70
Vessels:									
Steam		5	17		3	4			1
Net tonnage		122	444		128	73			32
Motor		11	12		1	10			
Net tonnage		87	124		9	110			
Total vessels		16	29		4	14		1	
Total net tonnage		209	568		137	183		32	
Boats:									
Motor	7	63	13	29	5	88	14	13	18
Other	3	110	16	30	6	81	8	16	34
Apparatus:									
Haul seines		18			1	9	1		14
Length, yards		1,816			148	6,434	38		5,033
Gill nets:									
" Bull ", 3 to $3\frac{1}{2}$ inches		592	292						
Square yards		214,896	105,996						
" Shoal ", $2\frac{1}{2}$ to $3\frac{1}{2}$ inches	79	1,262	5,026		1,240	3,220			609
Square yards	10,565	202,590	828,290		199,200	473,000			91,350
" Shoal ", 4 to 6 inches	62	2,886	3,360			90			84
Square yards	7,750	721,784	804,042			13,500			12,600
" Shoal ", 6 to 10 inches			164						
Square yards			21,320						
" Shoal ", 10 to 14 inches			118						
Square yards			23,644						
Trammel nets							211		
Square yards							8,862		
Lines:									
Trot	1	77							
Hooks	250	17,965							
Pound nets				53		2			
Trap nets			160	26	603	87	1,658	258	175
Fyke nets			152			87	44		233

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Ohio—Continued			Michigan					
	Ottawa	Sandusky	Total	Alcona	Alger	Allegan	Alpena	Antrim	Arenac
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels			99		31	10		38	
On boats and shore:									
Regular	189		629	18	30	14	55	8	73
Casual	24	14	84		12		3	2	
Total	213	14	812	18	73	24	96	10	73
Vessels:									
Steam			8		5	1	4		
Net tonnage			233		76	26	49		
Motor			11		5	2	5		
Net tonnage			119		42	12	81		
Total vessels			19		10	3	9		
Total net tonnage			352		118	38	130		
Boats:									
Motor	47		214	7	19	7	25	3	29
Other	85	8	268	5	5	2	9	2	7
Apparatus:									
Haul seines:	64	6	95			1			18
Length, yards	46,159	2,172	59,984			300			8,748
Gill nets:									
“Shoal”, 2½ to 3¾ inches	168		5,237	6	35	307	14	48	
Square yards	25,200		788,750	1,650	5,810	99,775	3,500	11,536	
“Shoal”, 4 to 6 inches	12		186	949	360	700	19	147	
Square yards	1,800		27,900	354,505	63,000	227,500	4,750	38,970	
Trammel nets			211						
Square yards			8,862						
Lines:									
Troll					14				
Hooks					28				
Trot					146	5	14		4
Hooks					73,900	14,000	28,000		2,000
Pound nets			20	15	5	17	28	7	4
Trap nets	661	5	3,722	22		1	223	29	92
Fyke nets	102	5	384	18					60

Item	Michigan—Continued								
	Baraga	Bay	Benzie	Berrien	Charlevoix	Cheboygan	Chippewa	Delta	Emmet
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels			32	27	72	40	17	61	
On boats and shore:									
Regular	18	217		4	13	22	80	161	12
Casual	2		2	6	9	10	20	65	18
Total	20	217	34	37	94	72	117	287	30
Vessels:									
Steam			3	1	3	1	2		
Net tonnage			49	39	39	11	11		
Motor			5	6	19	15	5		22
Net tonnage			70	67	182	130	44		208
Total vessels			8	7	22	16	7		22
Total net tonnage			119	106	221	141	55		208
Boats:									
Motor	7	66	1	5	9	16	35	74	14
Other	5	38		4	2	1	21	51	3
Apparatus:									
Haul seines		40							
Length, yards		19,416							
Gill nets:									
“Shoal”, 2½ to 3¾ inches	107	56	228	176	484	153	190	792	68
Square yards	14,980	14,224	85,300	55,060	121,000	35,430	19,400	108,930	10,761
“Shoal”, 4 to 6 inches	35	299	1,266	986	5,065	1,004	1,001	6,025	205
Square yards	5,810	76,174	658,053	323,858	1,266,250	229,448	273,924	1,319,960	25,753
Lines:									
Hand							50		
Hooks							50		
Trot	8	23	2	3	7		89	22	
Hooks	3,800	3,800	4,600	8,400	12,000		39,600	11,000	
Pound nets	8	15		2	25		39	66	
Trap nets		775					411	179	
Fyke nets	6	49							57

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Michigan—Continued									
	Gogebic	Grand Traverse	Houghton	Huron	Iosco	Keweenaw	Leelanau	Luce	Mackinac	
Fishermen:										
On vessels	Number	Number	Number	Number	Number	Number	Number	Number	Number	
On boats and shore:										
Regular	16	21	88	234	79	103	16	3	129	
Casual		16	4	3	4	5	20		11	
Total	16	46	104	264	122	111	90	3	219	
Vessels:										
Steam		1		4	1		5		1	
Net tonnage		9		107	15		83		13	
Motor		2	6	2	9	1	14		24	
Net tonnage		17	34	15	95	10	85		219	
Total vessels		3	6	6	10	1	19		25	
Total net tonnage		26	34	122	110	10	168		232	
Boats:										
Motor		8	16	39	83	27	56	15	1	59
Other		3	8	10	42	28	6	12	1	45
Apparatus:										
Haul seines		1		7	12					
Length, yards		170		877	4,700					
Gill nets:										
"Shoal", 2½ to 3¾ inches		52	264	956	168	25	716	973		940
Square yards		7,840	46,050	213,550	48,583	7,910	188,870	208,299		194,010
"Shoal", 4 to 6 inches		80	431	1,374	689	1,177	1,717	2,453	6	2,843
Square yards		2,600	126,990	396,860	236,601	491,186	515,100	579,090	1,000	899,225
Lines:										
Troll		3						12		
Hooks		3						12		
Trot		10	2	125	40	17	290	14		6
Hooks		5,000	1,200	62,500	39,600	13,800	55,454	18,800		3,000
Pound nets		2	28	2	243	122	8	27	3	223
Trap nets		38	5	558	81	1	29			150
Fyke nets					148	2				

Item	Michigan—Continued									
	Manistee	Marquette	Mason	Mennominee	Monroe	Muskegon	Oceana	Ontonagon	Ottawa	
Fishermen:										
On vessels	Number	Number	Number	Number	Number	Number	Number	Number	Number	
On boats and shore:										
Regular	16	9	19	14		21	6	11		42
Casual		2	13	8	53	78	23	4	9	24
Total	25	30	27	72	139	47	14	26		68
Vessels:										
Steam		1	1				2		2	6
Net tonnage		41	15				18		51	94
Motor		6	1	7	4		6	3	1	4
Net tonnage		50	6	67	67		54	30	6	39
Total vessels		6	2	8	4		8	3	3	10
Total net tonnage		50	47	82	67		72	30	57	133
Boats:										
Motor		3	10	2	23	32	11	2	9	15
Other		4	2	4	16	37	4	2	1	4
Apparatus:										
Haul seines		1			42					
Length, yards		170			12,499					
Gill nets:										
"Shoal", 2½ to 3¾ inches		81	101		400		295	10	142	884
Square yards		15,066	16,160		72,260		52,150	1,500	50,360	201,296
"Shoal", 4 to 6 inches		802	452	808	2,181		1,055	369	265	1,355
Square yards		148,572	208,640	202,000	541,400		180,325	70,830	103,300	291,890
Lines:										
Troll		1								
Hooks		3								
Trot		5	53				9		52	13
Hooks		3,000	26,200			21,600		25,800	31,200	
Pound nets		2		11	42		16	2	3	29
Trap nets		2		2	25	120	1			
Fyke nets					3	285				
Dip nets						1				

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Michigan—Continued								
	Pres- que Isle	Sag- i- naw	San- i- lac	School- craft	St. Clair	Tus- cola	Van Buren	Wayne	Total
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	27	—	—	33	10	4	22	—	785
On boats and shore:									
Regular.....	1	13	23	15	28	26	6	32	1,772
Casual.....	7	—	3	3	6	2	—	40	369
Total.....	35	13	26	51	44	32	28	72	2,926
Vessels:									
Steam.....	—	—	—	2	2	—	4	—	52
Net tonnage.....	—	—	—	28	41	—	57	—	872
Motor.....	5	—	—	6	—	2	2	—	189
Net tonnage.....	100	—	—	110	—	16	12	—	1,868
Total vessels.....	5	—	—	8	2	2	6	—	241
Total net tonnage.....	100	—	—	138	41	16	69	—	2,740
Boats:									
Motor.....	4	2	9	7	13	9	3	12	787
Other.....	—	5	13	8	7	8	—	19	444
Apparatus:									
Haul seines.....	—	1	—	—	—	3	—	27	153
Length, yards.....	165	—	—	—	—	705	—	6,095	53,845
Gill nets:									
"Shoal", 2½ to 3¾ inches.....	421	2	108	239	415	115	340	14	10,325
Square yards.....	173,310	532	25,435	78,900	53,095	30,600	59,448	2,330	2,334,910
"Shoal", 4 to 6 inches.....	167	10	120	1,012	644	125	1,128	10	39,334
Square yards.....	64,990	2,660	31,920	302,600	235,704	37,092	185,010	1,666	10,725,206
Lines:									
Hand.....	—	—	—	—	2	—	—	—	52
Hooks.....	—	—	—	—	4	—	—	—	54
Troll.....	—	—	—	—	1	—	—	—	31
Hooks.....	—	—	—	—	2	—	—	—	48
Trot.....	11	—	2	—	8	—	4	—	984
Hooks.....	19,000	—	2,000	—	3,200	—	10,400	—	542,854
Pound nets.....	—	—	22	45	1	7	2	—	1,232
Trap nets.....	23	32	—	13	14	56	6	—	3,062
Fyke nets.....	—	9	—	—	72	19	—	256	984
Dip nets.....	—	—	—	—	1	—	—	—	1
Spears.....	—	—	—	—	—	—	—	—	—
Crowfoot bars.....	—	—	—	—	—	—	—	—	346
Picks.....	—	—	—	—	—	—	—	—	715

Item	Indiana				Illinois			Wisconsin	
	Lake	La- porte	Porter	Total	Cook	Lake	Total	Ash- land	Bay- field
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	2	16	—	18	23	22	45	—	41
On boats and shore:									
Regular.....	2	4	—	6	8	3	11	7	109
Casual.....	1	9	2	12	—	—	—	8	20
Total.....	5	29	2	36	31	25	56	15	170
Vessels:									
Steam.....	—	1	—	1	1	1	2	—	—
Net tonnage.....	—	26	—	26	16	13	29	—	—
Motor.....	1	4	—	5	7	4	11	—	14
Net tonnage.....	—	12	64	76	78	64	142	—	142
Total vessels.....	—	1	5	6	8	5	13	—	14
Total net tonnage.....	—	12	90	102	94	77	171	—	142
Boats:									
Motor.....	2	9	1	12	3	1	4	4	54
Other.....	1	—	—	1	—	1	1	7	35
Apparatus:									
Gill nets:									
"Shoal", 2½ to 3¾ inches.....	31	356	18	405	657	724	1,381	2	990
Square yards.....	3,963	91,916	3,960	99,839	119,430	192,600	312,030	400	247,250
"Shoal", 4 to 6 inches.....	—	448	—	448	498	868	1,366	93	1,449
Square yards.....	—	120,756	—	120,756	122,040	312,600	434,640	12,270	512,060
"Shoal", 6 to 10 inches.....	—	180	—	180	—	—	—	—	—
Square yards.....	—	34,200	—	34,200	—	—	—	—	—
Lines:									
Trot.....	—	—	—	—	—	—	—	—	134
Hooks.....	—	—	—	—	—	—	—	—	28,550
Pound nets.....	2	—	3	5	—	1	1	—	60
Fyke nets.....	—	—	—	—	—	—	—	2	13
Crowfoot bars.....	—	—	—	—	70	—	—	—	—

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Wisconsin—Continued										
	Brown	Door	Douglas	Iron	Kenosha	Ke-wau-nee	Man-i-to-woc	Mar-i-nette	Mil-wau-kee	Ocon-to	
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	
On vessels	50	135			34	30	37	29	48		40
On boats and shore:											
Regular	91	61	7	3	2	4	23	27			81
Casual	56	162	6		16	32	20	51	21		52
Total	197	358	13	3	52	66	80	107	69		173
Vessels:											
Steam	1				1	1	1			11	
Net tonnage	13				30	19	18			211	
Motor	20	56			10	10	11	12	1		16
Net tonnage	158	566			182	101	203	95	31		137
Total vessels	21	56			11	11	12	12	12		16
Total net tonnage	171	566			212	120	221	95	242		137
Boats:											
Motor	22	44	5	1	6	4	11	13	4		31
Other	49	9	8	2	10	3	16	11	16		24
Apparatus:											
Haul seines	28				1		5	2			13
Length, yards	10,722				400		766	450			6,090
Gill nets:											
"Shoal", 2½ to 3¾ inches	340	2,480	24	9	559	315	1,548	947	1,035		1,500
Square yards	37,400	876,170	6,930	900	202,410	114,090	280,805	137,105	177,210		185,980
"Shoal", 4 to 6 inches	893	5,572	36	13	470	474	857	1,874	1,672		2,063
Square yards	132,535	2,538,600	6,570	1,760	211,140	106,270	144,050	379,656	341,600		282,614
Trammel nets	2							3			
Square yards	100							140			
Lines:											
Trot		168			111	77				4	
Hooks		55,300			36,150	22,900				1,200	
Pound nets	27	62	1				36	16	1		41
Trap nets		12		2		4					
Fyke nets	465	37	4		1	40	13	25	2		208
Crawfish pots		3,680									

Item	Wisconsin—Continued								Minnesota			
	Ozaukee	Racine	Sheboygan	Total	Cook	Lake	Koochiching	St. Louis	Roseau and Lake of the Woods			
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number		
On vessels	27	20	26	517								
On boats and shore:												
Regular	6		13	434	245	226	26	58	83		638	
Casual	2	7	10	463				6				
Total	35	27	49	1,414	245	226	26	64	83		644	
Vessels:												
Steam	2	5	4	26								
Net tonnage	74	126	176	667								
Motor	4		1	155								
Net tonnage	112		49	1,776								
Total vessels	6	5	5	181								
Total net tonnage	186	126	225	2,443								
Boats:												
Motor	3	1	9	212	110	111	19	23	63		326	
Other	3	6	8	207	58	70	7	24	17		176	

Lake fisheries of the United States, 1931—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Wisconsin—Continued				Minnesota					
	Ozaukee	Racine	Sheboygan	Total	Cook	Lake	Koochiching	St. Louis	Roseau and Lake of the Woods	Total
Apparatus:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Haul seines.			1	50						
Length, yards.			100	18,528						
Gill nets:										
"Shoal", 2½ to 3¾ inches.	537	68	101	10,455	1,517	1,467		253		3,237
Square yards.	240,170	17,540	33,820	2,558,180	429,060	410,760		78,750		918,570
"Shoal", 4 to 6 inches.	512	42	192	16,212	610	550		64	231	1,635
Square yards.	244,600	14,700	81,540	5,009,965	179,020	164,053	14,930	76,993	60,000	494,996
Trammel nets.				5						
Square yards.				240						
Lines:										
Trot.	15	146	25	680	381	53				434
Hooks.	6,000	46,800	8,300	205,200	80,050	6,700				86,750
Pound nets.	2		40	286				16		60
Trap nets.					18					76
Fyke nets.			2	812				7		98
Crawfish pots.				3,680						105
Tongs.				9						
Picks.				12						

CATCH: BY GEAR

Species	New York							
	Haul seines		Gill nets		Trot lines		Trap nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.			1,137,368	\$57,939			150	\$12
Bowfin.								
Burbot.			50,660	992	75	11	130	1
Carp.	8,858	\$532	31,875	1,528	60	4	4,571	228
Catfish and bullheads.	3,999	314	644	45	50	5	18,950	1,328
Cisco.			176,951	17,695				
Eels.					2,954	172	33,539	1,677
Lake herring.			40,297	3,224			10,012	801
Lake trout.			11,687	1,367			4,091	491
Pike (jacks).	540	43	785	63	50	4	6,014	561
Rock bass.			6,045	1,813	15,692	5,631	641	21
Sturgeon.								
Sucker "mullet".	15,956	1,208	11,095	296	631	19	17,654	661
Sunfish.							10,884	327
Whitefish:								
Common.			83,823	22,135			37,366	7,473
Menominee.			111	11				
Yellow perch.			60,174	3,009	16	1	14,962	748
Yellow pike.			1,273	87			13,686	1,162
Total.	29,353	2,097	1,612,788	110,204	19,678	5,859	175,588	15,716

Lake fisheries of the United States, 1931—Continued

CATCH: BY GEAR—Continued

Species	New York—Continued				Pennsylvania			
	Fyke nets		Total		Gill nets		Pound nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike								
Bowfin	300	\$3	450	15			104	1
Burbot	7,560	151	58,425	1,155			2,160	130
Carp	1,156	46	46,520	2,338			5,339	334
Catfish and bullheads	19,113	1,338	42,756	3,030	197	20		
Cisco			176,951	17,695	127,094	14,743	505	59
Eels	8,084	404	44,577	2,253				
Lake herring			50,309	4,025				
Lake trout			15,778	1,858	1,249	175	8	1
Pike (jacks)	3,357	269	10,746	940				
Rock bass			641	21				
Sheepshead							17,045	935
Sturgeon			21,921	7,499			716	215
Sucker "mullet"	5,845	175	51,181	2,359	21,509	215	4,788	48
Sunfish	2,298	69	13,182	396				
White bass							21,195	1,060
Whitefish:								
Common			121,189	29,608	588,347	98,319	55,590	9,450
Menominee			111	11				
Yellow perch	4,055	230	79,207	3,988	421,271	18,536	53,593	2,358
Yellow pike			14,959	1,249	2,624	325	9,276	1,150
Total	51,768	2,685	1,889,175	136,561	4,454,366	280,476	531,143	31,978

Species	Pennsylvania—Continued				Ohio			
	Trap nets		Total		Haul seines		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike	37,600	\$1,892	3,690,499	\$166,272	6,884	\$275	491,981	\$19,679
Bowfin					1,714	17		
Burbot	700	7	804	8	1,598	16	10,230	102
Carp	50	3	2,210	133	1,157,407	28,935	15,366	384
Catfish and bullheads	5,900	590	11,436	944	82,914	4,146	1,606	80
Cisco			127,599	14,802	50,784	508	39,509	5,531
Goldfish								
Lake trout			1,257	176	8,918	89		
Mooneye					2,274	273		
Pike (jacks)					24,195	968	340,007	13,600
Sauger					52,442	1,049	34,405	688
Sheepshead	6,325	253	23,370	1,188	525,602	13,140	9,885	247
Sturgeon	150	45	866	260			651	163
Sucker "mullet"	11,400	144	37,697	377	28,352	1,134	891	36
White bass	700	35	21,895	1,095				
Whitefish, common			643,937	107,769			21,558	3,880
Yellow perch	5,350	235	480,214	21,129	11,860	415	2,659,585	93,085
Yellow pike	4,300	533	16,200	2,008	12,948	1,424	15,011	1,651
Total	72,475	3,707	5,057,984	316,161	1,967,892	52,389	3,640,685	139,126

Lake fisheries of the United States, 1931—Continued

CATCH: BY GEAR—Continued

Species	Ohio—Continued							
	Trammel nets		Pound nets		Trap nets		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....								
Bowfin.....								
Burbot.....					255, 173	2, 552		
Carp.....	112, 377	\$2, 809	11, 880	297	107, 546	2, 689	54, 723	1, 368
Catfish and bullheads.....	564	28	8, 537	427	189, 653	9, 483	37, 848	1, 892
Cisco.....			25	4	1, 819	255		
Goldfish.....	65	7			2, 100	21	4, 032	40
Mooneye.....			5, 632	56	4, 555	46	1, 488	15
Pike (jacks).....					4, 290	515	1, 540	185
Sauger.....					1, 617, 896	64, 716	16, 945	678
Sheepshead.....	2, 363	59	249	6	928, 802	23, 220	78, 560	1, 964
Sturgeon.....					71	18		
Sucker "mullet".....	195	4	30, 294	605	931, 597	18, 632	134, 587	2, 692
White bass.....			2, 588	104	326, 635	13, 065	37, 838	1, 514
Whitefish, common.....			1, 147	206	546, 844	98, 432	2, 701	486
Yellow perch.....			2, 121	74	5, 732, 537	200, 639	49, 033	1, 716
Yellow pike.....			4, 682	515	2, 457, 235	270, 296	50, 738	5, 581
Total.....	115, 564	2, 907	80, 204	2, 816	20, 443, 650	998, 055	470, 679	18, 144

Species	Ohio—Continued			Michigan				
	Total		Haul seines		Gill nets		Lines—Hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	7, 849, 047	\$313, 961						
Bowfin.....	2, 124	21	915	\$10				
Burbot.....	267, 001	2, 670	95	2	8, 074	\$162		
Carp.....	1, 459, 299	36, 482	1, 486, 517	44, 599	1, 100	33		
Catfish and bullheads.....	321, 122	16, 056	43, 908	4, 644	72	5		
Chubs.....			1, 579	111	973, 708	68, 159		
Cisco.....	41, 353	5, 790						
Goldfish.....	56, 981	576	8, 458	592				
Lake herring.....			64, 622	2, 262	1, 048, 600	36, 701		
Lake trout.....			1, 775	231	4, 673, 170	607, 510	183	\$24
Mooneye.....	20, 593	206						
Pike (jacks).....	8, 104	973	5, 205	468	7, 860	707	71	6
Rock bass.....			1, 511	68	181	9		
Sauger.....	1, 999, 043	79, 962	1, 408	98	122, 490	8, 574		
Sheepshead.....	1, 545, 461	38, 636	21, 214	636	98	3		
Smelt.....					400	60		
Sturgeon.....	722	181						
Sucker "mullet".....	1, 183, 520	23, 670	222, 256	7, 779	298, 519	10, 448		
White bass.....	396, 304	15, 853						
Whitefish:								
Common.....	572, 250	103, 004			2, 671, 082	398, 672		
Menominee.....					165, 443	10, 754		
Yellow perch.....	8, 455, 136	295, 929	30, 549	2, 289	213, 965	16, 048	2, 198	165
Yellow pike.....	2, 540, 614	279, 467	28, 204	4, 936	60, 728	10, 627	76	13
Total.....	26, 718, 674	1, 213, 437	1, 918, 216	68, 725	10, 245, 490	1, 168, 472	2, 528	208

Lake fisheries of the United States, 1931—Continued

CATCH: BY GEAR—Continued

Species	Michigan—Continued							
	Lines—Continued				Pound nets		Trap nets	
	Troll		Trot		Pounds	Value	Pounds	Value
Bowfin.....	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	634	\$7	1,467	\$15
Burbot.....			4,673	\$94	1,551	31	2,080	42
Carp.....			215	6	23,924	718	166,479	4,994
Catfish and bullheads.....			697	52	2,568	189	110,860	8,028
Chubs.....			5,858	410	1,644	115	12,043	843
Cisco.....							650	23
Goldfish.....							8,134	569
Lake herring.....					5,368,376	187,894	190,931	6,682
Lake trout.....	38,304	\$4,980	1,375,706	178,842	269,560	35,043	227,837	29,619
Pike (jacks).....			122	11	6,632	597	39,114	3,520
Rock bass.....					2,774	125	10,346	466
Sauger.....					8,408	588	65,796	4,606
Sheepshead.....					8,054	242	16,257	488
Sucker "mullet".....			1,653	58	591,442	20,701	2,055,090	71,928
Whitefish:								
Common.....			5,830	874	3,379,909	506,986	2,320,543	348,082
Menominee.....			123	8	8,407	547	1,882	122
Yellow perch.....			5,344	401	63,396	4,754	628,598	47,032
Yellow pike.....	626	110	754	132	322,837	56,496	471,473	81,129
Total.....	38,930	5,090	1,400,975	180,888	10,060,116	815,033	6,329,580	608,188

Species	Michigan—Continued							
	Fyke nets		Dip nets		Spears		Crowfoot bars	
	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>
Bowfin.....	986	\$10						
Burbot.....	2,037	40						
Carp.....	163,931	4,918	248	\$7				
Catfish and bullheads.....	128,393	9,122						
Chubs.....	1,087	76						
Goldfish.....	6,201	434						
Lake herring.....	49,999	1,749						
Lake trout.....	1,526	198						
Pike (jacks).....	21,010	1,892	42	4				
Rock bass.....	8,912	400						
Sauger.....	26,074	1,826						
Sheepshead.....	18,058	542						
Sucker "mullet".....	310,960	10,883						
Whitefish:								
Common.....	19,203	2,882						
Menominee.....	253	16			82	\$5		
Yellow perch.....	119,424	8,753						
Yellow pike.....	94,122	16,001						
Mussel shells.....							978,349	\$20,443
Pearls and slugs.....								1,830
Total.....	972,176	59,742	290	11	82	5	978,349	22,273

Lake fisheries of the United States, 1931—Continued

CATCH: BY GEAR—Continued

Species	Michigan—Continued						Indiana—Gill nets	
	Picks		By hand		Total			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin					4,002	\$42		
Burbot					18,510	371	14,692	\$667
Carp					1,842,414	55,275	302	15
Catfish and bullheads					286,498	22,040		
Chubs					995,919	69,714	210,984	18,145
Cisco					650	23		
Goldfish					22,793	1,595		
Lake herring					6,722,528	235,288	201,296	7,524
Lake trout					6,588,061	856,447	106,212	14,775
Pike (jacks)					80,056	7,205		
Rock bass					23,724	1,068		
Sauger					224,176	15,692		
Sheepshead					63,681	1,911		
Smelt					400	60		
Sucker "mullet"					3,479,920	121,797	6,256	248
Whitefish:								
Common					8,396,567	1,257,496	2,875	622
Menominee					176,190	11,452		
Yellow perch					1,063,474	79,442	24,398	1,801
Yellow pike					978,820	169,444	170	23
Mussel shells	275,393	\$5,797	91,297	\$1,809	1,345,039	28,049		
Pearls and slugs		842		375		3,047		
Total	275,393	6,639	91,297	2,184	32,313,422	2,937,458	567,185	43,850

Species	Indiana—Continued							
	Pound nets		Crowfoot bars		By hand		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish	500	\$30					500	\$30
Burbot	75	2					14,767	699
Carp	1,700	48					2,002	63
Chubs							210,984	18,145
Lake herring	45,269	1,358					246,565	8,882
Lake trout	275	36					106,487	14,811
Sucker "mullet"	1,073	44					7,329	292
Whitefish, common	2,400	308					5,275	930
Yellow perch	1,642	157					26,040	1,958
Yellow pike							170	23
Mussel shells			164,000	\$2,870	15,000	\$315	179,000	3,185
Pearls and slugs				164		40		204
Total	52,934	1,983	164,000	3,034	15,000	355	799,119	49,222

Species	Illinois						Wisconsin—Haul seines	
	Gill nets		Pound nets		Total			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Burbot	3,350	\$34						
Carp							765,469	\$22,964
Catfish and bullheads							2,130	170
Chubs	403,630	32,290			403,630	32,290		
Lake herring	71,000	1,420	6,000	\$120	77,000	1,540	249	5
Lake trout	201,523	20,153			201,523	20,153		
Pike (jacks)							306	28
Sucker "mullet"							12,969	389
Whitefish, common	480	72	4,000	600	4,480	672	30	5
Yellow perch	25,000	2,500	2,000	200	27,000	2,700	86	13
Yellow pike								
Total	704,983	56,469	12,000	920	716,983	57,389	781,239	23,574

Lake fisheries of the United States, 1931—Continued

CATCH; BY GEAR—Continued

Species	Wisconsin—Continued							
	Gill nets		Trammel nets		Trot lines		Pound nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Burbot	31,310	\$313			25,205	\$252	1,541	\$15
Carp	8,805	264	3,521	\$106			380	11
Catfish and bullheads	704	56					14	1
Chubs	2,937,740	198,642					9,277	649
Lake herring	1,694,105	40,254					3,211,864	64,479
Lake trout	2,152,563	283,530			793,055	103,990	215,850	28,407
Mooneye	6,105	61						
Pike (jacks)	13,812	1,148			76	7	1,554	131
Sheepshead	153	4						
Smelt	84,469	4,243						
Steelhead trout							539	81
Sucker "mullet"	829,971	24,899	892	26			141,235	4,237
Whitefish:								
Common	372,844	55,926					380,414	57,063
Menominee	24,948	1,797					8,337	595
Yellow perch	150,022	10,500			1,539	108	15,070	1,055
Yellow pike	5,462	894					10,046	1,507
Total	8,313,013	622,531	4,413	132	819,875	104,357	3,996,121	158,231

Species	Wisconsin—Continued							
	Trap nets		Fyke nets		Crawfish pots		Tongs	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Burbot	382	\$4	6,549	\$65				
Carp			39,912	1,197				
Catfish and bullheads			40,952	3,276				
Chubs	1,105	77	7,237	506				
Lake herring	405	12	46,539	937				
Lake trout	4,826	629	1,647	227				
Pike (jacks)			6,057	531				
Sheepshead			727	22				
Smelt			1,600	80				
Sucker "mullet"	60	2	623,978	18,720				
Whitefish:								
Common	138,393	20,759	1,905	285				
Menominee	89	6	10	1				
Yellow perch			889,897	62,293				
Yellow pike	128	19	8,149	1,222				
Crawfish					75,130	\$4,508		
Mussel shells							24,622	\$269
Pearls and slugs								43
Total	145,388	21,508	1,675,159	89,362	75,130	4,508	24,622	312

Species	Wisconsin—Continued					Minnesota			
	Picks		Total		Gill nets		Trot lines		
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	
Burbot			64,987	\$649	17,861	\$134			
Carp			818,087	24,542					
Catfish and bullheads			43,800	3,503					
Chubs	2,955,359		199,874		40,858	1,007			
Crappie					1,653	400			
Lake herring	4,953,162		105,687		5,362,650	73,960			
Lake trout	3,167,941		416,783		505,849	51,276	30,736	\$3,393	
Mooneye	6,105	61							
Pike (jacks)	21,805		1,845		154,660	5,262			
Sauger					109,329	5,466			
Sheepshead			880	26					
Smelt			86,069	4,323					
Steelhead trout			539	81					
Sucker "mullet"	1,609,105		48,273		30,000	300			
Tullibees					217,637	2,176			
Whitefish:									
Common			893,586	134,038	78,629	8,033			
Menominee			33,384	2,399	4,666	280			
Yellow perch			1,050,528	73,956	29,676	2,408			
Yellow pike			23,871	3,655	574,703	60,578			
Crawfish			75,130	4,508					
Mussel shells	34,862	\$450	59,484	719					
Pearls and slugs		61		104					
Total	34,862	511	15,869,822	1,025,026	7,128,171	211,280	30,736	3,393	

Lake fisheries of the United States, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake Michigan—Continued					
	Illinois		Wisconsin		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin					86	
Buffalofish					500	30
Burbot	3,350	\$34	63,554	\$634	94,393	1,622
Carp			818,087	24,542	831,669	24,952
Catfish and bullheads			43,775	3,502	46,865	3,718
Chubs	403,630	32,290	2,355,563	164,889	3,401,737	245,533
Lake herring	77,000	1,540	4,290,083	85,813	5,248,738	118,442
Lake trout	201,523	20,153	2,672,759	347,458	5,542,698	715,472
Mooneye			6,105	61	6,105	61
Pike (jacks)			10,097	908	34,450	3,100
Rock bass					1,641	74
Sauger					26,218	1,835
Sheepshead			880	26	7,862	236
Smelt			86,069	4,323	86,469	4,383
Sucker "mullet"			1,532,393	45,971	2,452,745	78,219
Whitefish:						
Common	4,480	672	841,539	126,231	4,327,387	647,257
Menominee			27,174	1,902	159,666	10,514
Yellow perch	27,000	2,700	1,056,221	73,936	1,278,968	91,322
Yellow pike			4,687	778	51,753	9,008
Crawfish			75,130	4,508	75,130	4,508
Mussel shells *			59,484	719	1,383,867	29,167
Pearls and slugs *				104		2,040
Total	716,983	57,389	13,944,200	886,305	25,058,947	1,991,495

Species	Lake Superior					
	Michigan		Wisconsin		Minnesota	
	Pounds	Value	Pounds	Value	Pounds	Value
Burbot	1,561	\$31	1,433	\$15		
Carp	153	5				
Catfish and bullheads			25	1		
Chubs	63,712	4,460	599,796	34,985	360	\$14
Lake herring	886,495	31,027	662,479	19,874	5,362,650	73,960
Lake trout	1,958,176	254,563	495,182	69,325	536,285	54,639
Pike (jacks)	269	24	11,708	937		
Sauger	583	41				
Steelhead trout			539	81		
Sucker "mullet"	91,384	3,198	76,712	2,302		
Whitefish:						
Common	426,005	63,901	52,047	7,807	11,851	1,519
Menominee	913	59	6,210	497	4,666	280
Yellow perch	4,540	340	307	20		
Yellow pike	5,900	1,032	19,184	2,877		
Total	3,439,691	358,681	1,925,622	138,721	5,915,812	130,412

For footnote see p. 373.

Lake fisheries of the United States, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake Superior—Total		Lake of the Woods, Rainy Lake, and Namakan Lake		Total, all lakes	
	Minnesota					
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike					12,679,818	\$538,354
Bowfin					6,576	78
Buffalofish					500	30
Burbot	2,994	\$46	35,723	\$268	463,567	5,854
Carp	153	5	9,532	286	4,180,064	119,119
Catfish and bullheads	25	1	12,299	984	717,911	46,557
Chubs	663,868	39,459	57,855	1,419	4,624,107	321,456
Cisco					346,553	38,310
Crappie			3,242	792	3,242	792
Eels					44,577	2,253
Goldfish					79,774	2,171
Lake herring	6,911,624	124,861			17,412,214	429,382
Lake trout	2,989,643	378,527	327	33	10,617,659	1,364,900
Mooneye					26,698	267
Pike (jacks)	11,977	961	269,044	9,447	389,755	20,410
Rock bass					24,365	1,089
Sauger	583	41	218,657	10,933	2,441,876	106,587
Sheepshead					1,633,392	41,761
Smelt					86,469	4,383
Steelhead trout	539	81			539	81
Sturgeon			2,968	910	26,477	8,850
Sucker "mullet"	168,096	5,500	135,169	1,443	6,503,921	198,211
Sunfish					13,182	396
Tullibee			435,225	4,352	435,225	4,352
White bass					418,199	16,948
Whitefish:						
Common	489,903	73,227	112,059	11,305	10,761,194	1,646,341
Menominee	11,789	836			214,351	14,142
Yellow perch	4,847	360	59,944	4,860	11,247,543	483,962
Yellow pike	25,084	3,909	1,093,810	116,549	4,668,444	572,395
Crawfish					75,130	4,508
Mussel shells ⁴					1,583,523	31,953
Pearls and slugs ⁴						3,355
Total	11,281,125	627,814	2,445,854	163,581	91,726,845	6,029,247

⁴ From streams tributary to Lakes Michigan, Huron, and Erie.

Industries related to the fisheries of the Lake States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	New	Pennsyl-	Ohio	Michigan
	York	vania		
Transporting:				
Persons engaged	Number	Number	Number	Number
Vessels:			15	4
Motor			8	1
Net tonnage			88	32
Wholesale and manufacturing:				
Establishments	16	8	41	57
Persons engaged:				
Proprietors	15	14	58	67
Salaried employees	22	7	63	54
Wage earners:				
Average for season	69	58	249	438
Average for year	54	53	215	193
Paid to salaried employees	\$36,516	\$24,225	\$201,954	\$157,875
Paid to wage earners	58,062	59,860	261,908	183,872
Total salaries and wages	94,578	84,085	463,862	341,747
Fishermen manufacturing	2	2		37

Lake fisheries of the United States, 1931—Continued

CATCH: BY GEAR—Continued

Species	Minnesota—Continued					
	Pound nets		Fyke nets		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Burbot.....	8,931	\$67	8,931	\$67	35,723	\$268
Carp.....	5,000	150	4,532	136	9,532	286
Catfish and bullheads.....			12,299	984	12,299	984
Chubs.....	12,027	294	5,330	132	58,215	1,433
Crappie.....	1,589	392			3,242	792
Lake herring.....					5,362,650	73,960
Lake trout.....	27	3			536,612	54,672
Pike (jacks).....	65,221	2,304	40,163	1,881	269,044	9,447
Sauger.....	54,670	2,734	54,658	2,733	218,657	10,933
Sturgeon.....	2,833	863	135	47	2,968	910
Sucker "mullet".....	68,005	730	37,164	413	135,169	1,443
Tullibees.....	108,869	1,089	108,719	1,087	435,225	4,352
Whitefish:						
Common.....	33,068	3,460	12,213	1,331	123,910	12,824
Menominee.....					4,666	280
Yellow perch.....	15,393	1,252	14,875	1,200	59,944	4,860
Yellow pike.....	270,977	28,964	248,130	27,007	1,093,810	116,549
Total.....	646,610	42,302	556,149	37,018	8,361,666	293,993

CATCH: BY LAKES

Species	Lake Ontario		Lake Erie			
	New York		New York		Pennsylvania	
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	36,946	\$2,955	1,103,326	\$55,166	3,690,499	\$166,272
Bowfin.....	450	15				
Burbot.....	56,181	1,123	2,244	32	804	8
Carp.....	34,932	1,572	11,588	766	2,210	133
Catfish and bullheads.....	42,029	2,944	727	86	11,436	944
Cisco.....			176,951	17,695	127,599	14,802
Eels.....	44,577	2,253				
Lake herring.....	50,309	4,025				
Lake trout.....	14,004	1,681	1,774	177	1,257	176
Pike (jacks).....	10,746	940				
Rock bass.....	602	18	39	3		
Sheepshead.....					23,370	1,188
Sturgeon.....	8,275	2,767	13,646	4,732		
Sucker "mullet".....	29,079	1,028	22,102	1,331	37,697	377
Sunfish.....	13,182	396				
White bass.....					21,895	1,095
Whitefish:						
Common.....	67,485	13,497	53,704	16,111	643,937	107,769
Menominee.....	111	11				
Yellow perch.....	23,848	1,220	55,359	2,768	480,214	21,129
Yellow pike.....	8,789	879	6,170	370	16,200	2,008
Total.....	441,545	37,324	1,447,630	99,237	5,057,984	316,161

Lake fisheries of the United States, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake Erie—Continued					
	Ohio		Michigan		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike	7,849,047	\$313,961	641	\$7	12,642,872	\$535,399
Bowfin	2,124	21	581	12	2,765	28
Burbot	267,001	2,670	866,972	26,012	270,630	2,722
Carp	1,459,299	36,482	175,426	12,375	2,340,069	63,393
Catfish and bullheads	321,122	16,056			508,711	29,461
Chubs					22,793	1,595
Cisco	41,353	5,790	650	23	346,553	38,310
Goldfish	56,981	576	22,793	1,595	79,774	2,171
Lake trout			16	2	3,047	355
Mooneye	20,593	206			20,593	206
Pike (jacks)	8,104	973	15,898	1,431	24,002	2,404
Rock bass			3,412	154	3,451	157
Sauger	1,999,043	79,962	26,470	1,853	2,025,513	81,815
Sheepshead	1,545,461	38,636	48,058	1,442	1,616,889	41,266
Sturgeon	722	181			15,234	5,173
Sucker "mullet"	1,183,520	23,670	171,523	6,003	1,414,842	31,381
White bass	396,304	15,853			418,199	16,948
Whitefish, common	572,250	103,004	3,011	452	1,272,902	227,336
Yellow perch	8,455,136	295,929	66,452	4,668	9,057,161	324,494
Yellow pike	2,540,614	279,467	77,572	11,726	2,640,556	293,571
Mussel shell ⁴			68,446	1,333	68,446	1,333
Pearls and slugs ⁴				943		943
Total	26,718,674	1,213,437	1,547,921	70,031	34,772,209	1,698,866

Species	Lake Michigan					
	Lake Huron, Michigan		Michigan		Indiana	
	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin	3,275	\$33	86	\$2	500	\$30
Buffalo fish					14,767	699
Burbot	3,646	73	12,722	255		
Carp	963,709	28,911	11,580	347	2,002	63
Catfish and bullheads	107,982	9,449	3,090	216		
Chubs	500,647	35,045	431,560	30,209	210,984	18,145
Lake herring	5,201,543	182,054	634,490	22,207	246,565	8,882
Lake trout	2,067,940	268,832	2,561,929	333,050	106,487	14,811
Pike (jacks)	39,536	3,558	24,353	2,192		
Rock bass	18,671	840	1,641	74		
Sauger	170,905	11,963	26,218	1,835		
Sheepshead	8,641	259	6,982	210		
Smelt			400	60		
Sucker "mullet"	2,303,990	80,640	913,023	31,956	7,329	292
Whitefish:						
Common	4,491,458	673,719	3,476,093	519,424	5,275	930
Menominee	42,785	2,781	132,492	8,612		
Yellow perch	822,775	61,706	169,707	12,728	26,040	1,958
Yellow pike	848,452	148,479	46,896	8,207	170	23
Mussel shells ⁴	131,210	1,453	1,145,383	25,263	179,000	3,185
Pearls and slugs ⁴		372		1,732		204
Total	17,727,165	1,510,167	9,598,645	998,579	799,119	49,222

For footnote see p. 373.

Lake fisheries of the United States, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake Michigan—Continued					
	Illinois		Wisconsin		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin					86	\$2
Buffalofish					500	30
Burbot	3,350	\$34	63,554	\$634	94,393	1,622
Carp			818,087	24,542	831,669	24,952
Catfish and bullheads			43,775	3,502	46,865	3,718
Chubs	403,630	32,200	2,355,563	164,889	3,401,737	245,533
Lake herring	77,000	1,540	4,290,683	85,813	5,248,738	118,442
Lake trout	201,523	20,153	2,672,759	347,458	5,542,698	715,472
Mooneye			6,105	61	6,105	61
Pike (jacks)			10,097	908	34,450	3,100
Rock bass					1,641	74
Sauger			880	26	26,218	1,835
Sheepshead					7,862	236
Smelt			86,069	4,323	86,469	4,383
Sucker "mullet"			1,532,393	45,971	2,452,745	78,219
Whitefish:						
Common	4,480	672	841,539	126,231	4,327,387	647,257
Menominee			27,174	1,902	159,666	10,514
Yellow perch	27,000	2,700	1,056,221	73,936	1,278,968	91,322
Yellow pike			4,687	778	51,753	9,008
Crawfish			75,130	4,508	75,130	4,508
Mussel shells *			59,484	719	1,383,867	29,167
Pearls and slugs *				104		2,040
Total	716,983	57,389	13,944,200	886,305	25,058,947	1,991,495

Species	Lake Superior					
	Michigan		Wisconsin		Minnesota	
	Pounds	Value	Pounds	Value	Pounds	Value
Burbot	1,561	\$31	1,433	\$15		
Carp	153	5				
Catfish and bullheads			25	1		
Chubs	63,712	4,460	599,796	34,985	360	\$14
Lake herring	886,495	31,027	662,479	19,874	5,362,650	73,960
Lake trout	1,958,176	254,563	495,182	69,325	536,285	54,639
Pike (jacks)	269	24	11,708	937		
Sauger	583	41				
Steelhead trout			539	81		
Sucker "mullet"	91,384	3,198	76,712	2,302		
Whitefish:						
Common	426,005	63,901	52,047	7,807	11,851	1,519
Menominee	913	59	6,210	497	4,666	280
Yellow perch	4,540	340	307	20		
Yellow pike	5,900	1,032	19,184	2,877		
Total	3,439,691	358,681	1,925,622	138,721	5,915,812	130,412

For footnote see p. 373.

Lake fisheries of the United States, 1931—Continued

CATCH: BY LAKES—Continued

Species	Lake Superior—Total		Lake of the Woods, Rainy Lake, and Namakan Lake		Total, all lakes	
	Minnesota					
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike					12,679,818	\$538,354
Bowfin					6,576	78
Buffalofish					500	30
Burbot	2,994	\$46	35,723	\$268	463,567	5,854
Carp	153	5	9,532	286	4,180,064	119,119
Catfish and bullheads	25	1	12,299	984	717,911	46,557
Chubs	663,868	39,459	57,855	1,419	4,624,107	321,456
Cisco					346,553	38,310
Crappie			3,242	792	3,242	792
Eels					44,577	2,253
Goldfish					79,774	2,171
Lake herring	6,911,624	124,861			17,412,214	429,382
Lake trout	2,989,643	378,527	327	33	10,617,659	1,364,900
Mooneye					26,698	267
Pike (jacks)	11,977	961	269,044	9,447	389,755	20,410
Rock bass					24,365	1,089
Sauger	583	41	218,657	10,933	2,441,876	106,587
Sheepshead					1,633,392	41,761
Smelt					86,469	4,383
Steelhead trout	539	81			539	81
Sturgeon			2,968	910	26,477	8,850
Sucker "mullet"	168,096	5,500	135,169	1,443	6,503,921	198,211
Sunfish					13,182	396
Tullibee			435,225	4,352	435,225	4,352
White bass					418,199	16,948
Whitefish:						
Common	489,903	73,227	112,059	11,305	10,761,194	1,646,341
Menominee	11,789	836			214,351	14,142
Yellow perch	4,847	360	59,944	4,860	11,247,543	483,962
Yellow pike	25,084	3,909	1,093,810	116,549	4,668,444	572,395
Crawfish					75,130	4,508
Mussel shells ⁴					1,583,523	31,953
Pearls and slugs ⁴						3,355
Total	11,281,125	627,814	2,445,854	163,581	91,726,845	6,029,247

⁴ From streams tributary to Lakes Michigan, Huron, and Erie.

Industries related to the fisheries of the Lake States, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	New York	Pennsyl-vania	Ohio	Michigan
	Number	Number	Number	Number
Transporting:				
Persons engaged				
Vessels:				
Motor			8	1
Net tonnage			88	32
Wholesale and manufacturing:				
Establishments	16	8	41	57
Persons engaged:				
Proprietors	15	14	58	67
Salaried employees	22	7	63	54
Wage earners:				
Average for season	69	58	249	438
Average for year	54	53	215	193
Paid to salaried employees	\$36,516	\$24,225	\$201,954	\$157,875
Paid to wage earners	58,062	59,860	261,908	183,872
Total salaries and wages	94,578	84,085	463,862	341,747
Fishermen manufacturing	2	2		37

Industries related to the fisheries of the Lake States, 1931—Continued
 OPERATING UNITS, SALARIES, AND WAGES—Continued

Item	Indiana	Illinois	Wiscon-	Minne-	Total
	Number	Number	Number	Number	Number
Transporting:					
Persons engaged.....					19
Vessel:					
Motor.....					9
Net tonnage.....					120
Wholesale and manufacturing:					
Establishments.....	3	55	35	15	230
Persons engaged:					
Proprietors.....	3	26	33	9	225
Salaried employees.....	1	249	48	27	471
Wage earners:					
Average for season.....	4	352	275	61	1,506
Average for year.....	4	318	150	47	1,034
Paid to salaried employees.....	\$5,500	\$765,402	\$109,407	\$49,010	\$1,349,889
Paid to wage earners.....	5,500	479,437	167,271	44,640	1,260,550
Total salaries and wages.....	11,000	1,244,839	276,678	93,650	2,610,439
Fishermen manufacturing.....	3	12	50		106

PRODUCTS MANUFACTURED

Item	New York	Pennsylvania	Ohio	Michigan		
	Quantity	Value	Quantity	Value		
By manufacturing establishments:						
Blue pike:						
Fresh fillets.....pounds	132,900	\$28,462	423,747	\$81,495	638,082	\$123,138
Frozen fillets.....do.....	39,500	8,075	225,646	43,594	181,240	35,975
Chubs, smoked.....do.....	(1)	(1)			(1)	(1)
Eels, smoked.....do.....	(1)	(1)				
Lake herring:						
Salted.....do.....						2,052,300
Smoked.....do.....	(1)	(1)			(1)	(1)
Lake trout, smoked.....do.....					(1)	(1)
Salmon, smoked.....do.....	(1)	(1)			115,000	24,200
Sturgeon, smoked.....do.....	(1)	(1)			12,150	8,135
Tullibee, smoked.....do.....	(1)	(1)			142,500	28,230
Whitefish, smoked.....do.....	(1)	(1)			44,500	9,780
Yellow perch:						
Fresh fillets.....do.....	(1)	(1)	18,454	3,587	666,718	126,444
Frozen fillets.....do.....			19,155	3,884	141,517	26,883
Mussel-shell button blanks.....gross.....						220,488
Unclassified products:						
Fillets, fresh and frozen.....pounds	(1)	(1)			422,190	4,955
Smoked.....do.....	(1)	(1)			790,000	24,440
Miscellaneous.....	299,951	70,890				
Total.....	472,351	107,427	687,002	132,560	2,053,897	412,180
						185,072
By fishermen:						
Chubs, smoked.....pounds.....						17,700
Lake herring:						
Salted.....do.....						249,600
Smoked.....do.....						6,250
Lake trout, smoked.....do.....						550
Sturgeon roe, salted.....do.....	45	52	50	50		153
Whitefish:						
Common, smoked.....do.....						5,300
Menominee, smoked.....do.....						200
Total.....	45	52	50	50		1,240
Grand total.....	472,396	107,479	687,052	132,610	2,053,897	412,180
						199,688

See footnotes on facing page.

Industries related to the fisheries of the Lake States, 1931—Continued

PRODUCTS MANUFACTURED—Continued

Item	Indiana		Illinois		Wisconsin		Minnesota	
	Quantity	Value	Quantity	Value	Quantity ⁽¹⁾	Value ⁽¹⁾	Quantity	Value
By manufacturing establishments:								
Blue pike: Fresh fillets pounds								
Chubs, smoked do	(2)	(2)	² 905,476	² \$218,931	665,562	\$119,346	(1)	(1)
Eels, smoked do			17,804	4,483				
Lake herring:								
Salted do					923,350	17,906	(1)	(1)
Smoked do					456,832	22,529	(1)	(1)
Lake trout, smoked do	(2)	(2)	² 13,803	² 3,534	160,290	28,847	(1)	(1)
Salmon, smoked do			636,965	161,866	37,360	6,364	(1)	(1)
Sturgeon, smoked do					(1)			
Tullibee, smoked do			325,536	65,165	(1)	(1)	(1)	(1)
Whitefish, smoked do					100,267	19,840	(1)	(1)
Yellow perch: Fresh fillets pounds					341,200	46,790		
Unclassified products:								
Fillets, fresh and frozen pounds								
Smoked do					(3)	(3)	(3)	(3)
Miscellaneous			⁸ 13,986	⁸ 4,240	⁶ 46,900	⁶ 9,080	¹² 12,793	¹⁴ \$34,064
			11 2,706,000	11 46,200	(3)	(3)	14 174,250	
					(12)			
Total	(2)	(2)	² 4,619,570	² 504,419		283,495	174,250	34,064
By fishermen:								
Chubs, smoked pounds	42,200	\$10,550	53,000	10,600				
Lake herring, salted do					1,027,000	25,675		
Lake trout, smoked do	8,450	2,113						
Whitefish: Common, smoked pounds	750	188						
Total	51,400	12,851	53,000	10,600	1,027,000	25,675		
Grand total	² 51,400	² 12,851	² 4,672,570	² 515,019		309,170	174,250	34,064

¹ The production of this item is included under unclassified products.² A small amount of smoked chubs and lake trout produced in Indiana is included with Illinois.³ The production of this item is included under miscellaneous.⁴ Includes fresh and frozen sauger fillets, fresh whitefish fillets, and frozen yellow pike fillets.⁵ Includes fresh fillets of lake herring, lake trout, whitefish, and yellow pike.⁶ Includes fresh fillets of blue pike, lake trout, sauger, and yellow pike.⁷ Includes smoked carp, chubs, lake herring, lake trout, sablefish, and spoonbill catfish.⁸ Includes smoked buffalofish, butterfish, carp, flounders, lake herring, mackerel, sablefish, shad, sturgeon, and whitefish.⁹ Includes fresh fillets of yellow perch; and smoked chub, cisco, eels, lake herring, salmon, sturgeon, tullibee, and whitefish.¹⁰ Includes smoked buffalofish, butterfish, carp, lake herring, sablefish, salmon, and menominee; and pickled sea herring.¹¹ Includes pickled sea herring and fresh fillets of yellow perch and yellow pike.¹² Data not available.¹³ Includes smoked tullibees, canned whitefish caviar, spiced alewives, pickled sea herring, and mussel shell products.¹⁴ Includes smoked chubs, lake herring, lake trout, salmon, suckers, tullibees, and whitefish; salted lake trout; and fresh fillets of lake herring.

NOTE.—The total value of the products manufactured in the Lake States was as follows: By manufacturing establishments, \$1,659,217; and by fishermen, \$63,844. Some of the above products may have been manufactured from products imported from another State or country; therefore, they cannot be correlated directly with the catch within the State. Of the total number of persons engaged on transporting craft none has been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 103 have also been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

FISHERIES OF THE MISSISSIPPI RIVER AND TRIBUTARIES⁹

The yield of fishery products of the Mississippi River and tributaries during 1931 amounted to 82,382,523 pounds, valued at \$2,897,357. This is a decrease of 22 percent in the catch and 36 percent in value as compared with the catch and its value in 1922, when the latest preceding canvass was made. Of the total catch in 1931, 44,061,714 pounds, valued at \$2,257,204, were fish and 38,320,809 pounds, valued at \$640,153, were shellfish and miscellaneous products. The fisheries of this section gave employment to 15,884 fishermen, or 29 percent more than in 1922. All of these fishermen were engaged in the boat and shore fisheries, 5,153 regular, and 10,731 casual.

Fisheries of the Mississippi River and tributaries, 1931

SUMMARY OF CATCH

Products	Alabama		Arkansas		Illinois		Indiana	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fish-----	187,153	\$20,178	4,859,717	\$285,094	6,818,525	\$271,623	387,960	\$32,632
Shellfish, etc.-----	1,635,000	12,576	10,872,790	126,357	7,444,105	95,615	7,329,636	124,590
Total-----	1,822,153	32,754	15,732,507	411,451	14,262,630	367,238	7,717,596	157,222

Products	Iowa		Kansas		Kentucky		Louisiana	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fish-----	3,373,648	\$214,785	142,859	\$13,324	508,719	\$51,244	18,163,253	\$858,394
Shellfish, etc.-----	4,404,319	87,610	312,562	3,349	1,113,032	9,638	1,050,115	135,980
Total-----	7,777,967	302,395	455,421	16,673	1,621,751	60,882	19,213,368	994,374

Products	Minnesota		Mississippi		Missouri		Nebraska	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fish-----	2,715,650	\$128,498	2,639,623	\$121,458	833,636	\$75,670	145,310	\$16,253
Shellfish, etc.-----	782,630	9,158	10,100	1,503	94,000	1,311	-----	-----
Total-----	3,498,280	137,656	2,649,723	122,961	927,636	76,981	145,310	16,253

Products	Ohio		Oklahoma		South Dakota		Tennessee	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fish-----	31,481	\$3,759	39,640	\$4,145	114,361	\$10,576	1,275,749	\$86,275
Shellfish, etc.-----	154,000	3,313	-----	-----	-----	-----	2,159,320	17,640
Total-----	185,481	7,072	39,640	4,145	114,361	10,576	3,435,069	103,915

Product	Texas		Wisconsin		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish-----	138,500	\$6,368	1,685,930	\$56,928	44,061,714	\$2,257,204
Shellfish, etc.-----	-----	-----	959,200	11,513	38,320,809	640,153
Total-----	138,500	6,368	2,645,130	68,441	82,382,523	2,897,357

⁹ It should be noted that the statistics for the various States of the Mississippi River and tributaries include tables on the operating units and catch by waters. Where waters are inset in the stub under other waters, it indicates that they are tributary to such waters; also in those cases where one or more waters follow another, separated by colons, such waters are tributary to the water immediately preceding.

Fisheries of the Mississippi River and tributaries, 1931—Continued

OPERATING UNITS: BY STATES

Fisheries of the Mississippi River and tributaries, 1931—Continued

OPERATING UNITS: BY WATERS

Item	Arkansas River and tributaries			Atchafalaya River	Des Moines River and tributaries			Illinois River and tributaries		
	River proper	Tributaries	Total		River proper	Tributaries	Total	River proper	Tributaries	Total
Fishermen:										
On boats and shore:										
Regular	124	6	130		1,073			9	347	353
Casual	147	40	187		1,947			15	261	292
Total	271	46	317	3,020	183	24	207	608	37	645
Boats:										
Motor	14		14	440					215	5
Other	259	44	303	1,370	126	10	136	239	32	271
Apparatus:										
Haul seines	2	1	3	65		5	5	66	2	68
Length, yards	1,000	50	1,050	32,066		3,565	3,565	26,115	160	26,275
Anchor gill nets		3	3							
Square yards	990	990								
Trammel nets	4		4	28						
Square yards	250		250	6,400						
Lines:										
Trot	510	53	563	2,424				240	38	278
Hooks	58,425	10,065	68,490	614,800				45,400	1,520	46,920
Fyke nets	256	30	286	2,050				6,073	123	6,196
Dip nets			159							
Traps, shrimp			12							
Baskets								1,600	55	1,655
Crowfoot bars								164		164
Forks		29	29						5	5
Grabs				1,771						

Item	Iowa River and tributaries			Lake Des Allemands	Minnesota River and tributaries				Mississippi River and tributaries	
	River proper	Tributaries	Total		River proper	Blue Earth River and tributaries	Minor tributaries ¹	Total	River proper	Cannon River and tributaries
Fishermen:										
On boats and shore:										
Regular	Number	Number	Number	Number	14	14	16	25	55	6
Casual		7	110	117	26	96	25	56	177	1,439
Total		7	110	117	40	110	41	81	232	2,482
Boats:										
Motor					24	7			7	1,028
Other		7	61	68	26	84	16	32	132	1,517
Apparatus:										
Haul seines					8	21	7	16	44	443
Length, yards					2,600	3,031	5,063	10,227	18,321	87,319
Anchor gill nets										3,299
Square yards										43
Trammel nets										29,314
Square yards										82
Lines:										10,413
Trot					96	38			38	3,451
Hooks					25,200	11,400			11,400	550,650
Pound nets							23		23	348
Fyke nets					120	17			17	8,895
Dip nets										32
Traps:										
Crawfish					18					
Shrimp					4					422
Baskets										2,082
Mussel dredges										13
Yards at mouth										9
Crowfoot bars							26	8	40	768
Forks										5
Grabs					17					302

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Item	Mississippi River and tributaries—Continued				Missouri River and tributaries			Ohio River and tributaries	
	Crow River and tributaries	Reel-foot Lake	Minor tributaries ¹	Total	River proper	Tributaries	Total	River proper	Cumberland River
Fishermen:									
On boats and shore:									
Regular	Number 5	Number 90	Number 223	Number 1,367	Number 80	Number 41	Number 121	Number 98	Number 28
Casual	62	16	343	1,890	444	67	511	484	96
Total	67	106	566	3,257	524	108	632	582	124
Boats:									
Motor		30	153	1,211	64	8	72	39	5
Other	36	102	444	2,119	402	58	460	518	115
Apparatus:									
Haul seines	12		46	507	27	16	43	61	
Length, yards	6,195		21,095	117,908	3,204	5,513	8,717	5,557	
Anchor gill nets			11	54					
Square yards			6,933	36,247					
Trammel nets		46	26	154	248	16	264		
Square yards	3,150		4,587	18,150	22,472	2,900	25,372		
Lines:									
Hand		67		67					
Hooks		67		67					
Trot		80	1,010	4,541	184	69	253	1,002	172
Hooks	8,000	221,830	780,480	12,285	6,745	19,030	72,015	13,530	
Pound nets			1	349	2		2		
Fyke nets		465	1,089	10,449	1,009	229	1,238	1,568	302
Dip nets				32					
Traps, shrimp				422					
Baskets				2,082					
Spears		12		12					
Mussel dredges				13					
Yards at mouth				9					
Crowfoot bars	34		16	840					
Forks				5					
Grabs			20	322					

Ohio River and tributaries—Continued

Item	Tennessee River and tributaries			Wabash River and tributaries				Minor tributaries ¹	Total
	River proper	Tributaries	Total	River proper	White River and tributaries	Minor tributaries ¹	Total		
Fishermen:									
On boats and shore:									
Regular	Number 212	Number 212	Number 22					Number 22	Number 365
Casual	364	6	370	872	703	156	1,731	58	2,739
Total	576	6	582	894	703	156	1,753	63	3,104
Boats:									
Motor	158		158	356	205	58	619		821
Other	412	5	417	543	510	101	1,154	60	2,264
Apparatus:									
Haul seines				19			19		80
Length, yards				2,290			2,290		7,847
Trammel nets				3			3		3
Square yards				360			360		360
Lines:									
Trot	578	8	586	185		28	213	122	2,095
Hooks	47,905	460	48,365	7,692		800	8,492	5,490	147,892
Fyke nets	947		947	206		122	328	106	3,251
Baskets				22		10	32		32
Crowfoot bars	654		654	978	288	24	1,290		1,944
Tongs				12	60		72		72
Forks				483	700	118	1,301		1,301

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Item	Red River and tributaries							Rock River and tributaries		
	River proper	Black River (Louisiana)	Ouachita River and tributaries			Minor tributaries ¹	Total	River proper	Tributaries	Total
			River proper	Tributaries	Total					
Fishermen:										
On boats and shore:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Regular-----	96	21	30	14	44	24	185	85	2	87
Casual-----	365	54	159	171	330	160	909	477	93	570
Total-----	461	75	189	185	374	184	1,094	562	95	657
Boats:										
Motor-----	261	41	93	25	118	85	505	191	22	213
Other-----	300	53	166	155	321	156	830	195	28	223
Apparatus:										
Haul seines-----	59	28	22	39	61	17	165	7		7
Length, yards-----	14, 100	2, 800	3, 800	3, 525	7, 325	5, 210	29, 435	1, 010		1, 010
Anchor gill nets-----	12		20	12	32		44			
Square yards-----	2, 400		4, 000	2, 000	6, 000		8, 400			
Trammel nets-----	24			1	1	21	46		2	2
Square yards-----	6, 800			140	140	4, 996	11, 936		250	250
Lines:										
Trot-----	1, 225	102	383	250	633	288	2, 248		221	221
Hooks-----	249, 200	20, 400	47, 460	42, 150	89, 610	55, 710	414, 920		6, 030	6, 030
Fyke nets-----	1, 545	202	683	556	1, 239	282	3, 268		74	74
Mussel dredges-----								1		1
Yards at mouth-----								1		1
Crowfoot bars-----			10		10		10	379	47	426
Tongs-----		5		5		5			9	9
Forks-----			10		10		10			
Grabs-----		48	43	10	21	31		122		
Item	St. Francis River and tributaries					White River (Ark. and Mo.) and tributaries				
	River proper	Tributaries	Total	River proper	Black River and tributaries	Minor tributaries ¹	Number	Number	Number	Total
Fishermen:										
On boats and shore:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Regular-----	233	24	257	761	184	76	1, 021			
Casual-----	292	27	319	498	146	109	753			
Total-----	525	51	576	1, 259	330	185	1, 774			
Boats:										
Motor-----	26	6	32	583	141	64	788			
Other-----	512	49	561	825	220	157	1, 202			
Apparatus:										
Haul seines-----				10					10	
Length, yards-----				4, 200					4, 200	
Trammel nets-----				12		3		1	16	
Square yards-----				688	200	60		60	948	
Lines:										
Trot-----	1, 575		1, 575	1, 416	472	355	2, 243			
Hooks-----	51, 095		51, 095	156, 225	37, 270	39, 290	232, 785			
Fyke nets-----	528		528	2, 355	665	383	3, 403			
Mussel dredges-----				305	103	18	426			
Length, yards-----				205	69	12	286			
Crowfoot bars-----	30		30	766	206	36	1, 008			
Tongs-----	137		137		22		22			22
Rakes-----	3		3	67					67	
Forks-----				97					97	

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Item	Wisconsin River and tributaries			Yazoo River and tributaries			Grand total
	River proper	Tributaries	Total	River proper	Tributaries	Total	
	Number	Number	Number	Number	Number	Number	
Fishermen:							
On boats and shore:							
Regular	4		4	84	28	112	5,153
Casual		9	9	73	14	87	10,731
Total	4	9	13	157	42	199	15,884
Boats:							
Motor	1	5	6	54	19	73	4,426
Other	1	4	5	121	29	150	10,120
Apparatus:							
Haul seines	1		1	2	5	7	1,013
Length, yards	300		300	1,100	1,385	2,485	255,779
Anchor gill nets							101
Square yards							45,637
Trammel nets					1	1	518
Square yards					133	133	63,799
Lines:							
Hand							67
Hooks							67
Trot				450	104	554	17,129
Hooks				36,160	3,910	40,070	2,459,112
Pound nets							374
Fyke nets				1,262	399	1,661	32,541
Dip nets							191
Traps:							
Crawfish							18
Shrimp							438
Baskets							3,769
Spears							12
Mussel dredges							440
Yards at mouth							26
Crowfoot bars			18	18			4,480
Tongs							245
Rakes							70
Forks							1,447
Grabs							2,232

CATCH: BY STATES

Species	Alabama		Arkansas		Illinois		Indiana		Iowa	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH										
Bowfin	21,330	\$2,342	2,182,446	\$28	8,308	\$241	85,045	\$8,156	91,825	\$3,759
Buffalofish	11,000	1,118	808,206	131,474	911,609	51,939	157,641	746,615	746,615	59,705
Carp			27,268		4,878,744	128,221		10,162	1,594,244	80,134
Catfish and bullheads	81,200	8,850	1,077,343	93,150	647,696	68,890	35,370	5,302	467,340	48,593
Crappie	9,772	1,004	11,325	227						
Eels					4,985	322				
Mooneye					1,000	20				
Paddlefish or spoonbill cat.	3,958	338	93,200	2,159	104,846	5,480	16,492	1,724	9,400	638
Pike or pickerel									4,700	470
Quillback or "American carp"	7,657	875	6,830	676	17,532	608	30,312	1,436	60,450	1,339
Sheepshead	45,909	4,972	676,358	29,877	177,709	11,321	38,740	3,711	343,449	17,619
Sturgeon, shovelnose					39,766	3,448	3,013	292	17,650	1,663
Sucker "mullet"	5,752	609	3,309	235	25,130	1,087	16,797	1,156	36,550	822
White bass					1,200	92				
Yellow pike							4,550	693		
Total	187,153	20,178	4,859,717	285,094	6,818,525	271,623	387,960	32,632	3,373,648	214,785
SHELLFISH, ETC.										
Mussel shells	1,635,000	10,132	10,872,790	108,819	7,429,528	82,894	7,328,736	105,632	4,366,219	65,685
Pearls					3,137	190				7,244
Slugs					14,401		11,835		18,788	13,924
Terrapin										377
Turtles:										
Snapper					14,577	696	500	25	2,000	40
Soft-shell							400	20	17,000	340
Total	1,635,000	12,576	10,872,790	126,357	7,444,105	95,615	7,329,636	124,590	4,404,319	87,610
Grand total	1,822,153	32,754	15,732,507	411,451	14,262,630	367,238	7,717,596	157,222	7,777,967	302,395

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY STATES—Continued

Species	Kansas		Kentucky		Louisiana		Minnesota	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin					5,715	\$114	16,598	\$282
Buffalo fish	24,325	\$2,222	164,558	\$14,429	8,784,314	263,261	257,431	15,092
Carp	117,489	10,956	113,461	8,124	204,743	4,127	2,151,119	97,756
Catfish and bullheads	770	111	131,777	17,043	6,602,987	528,579	53,804	4,841
Eels					200	6		
Garfish					72,450	791		
Mooneye		990	105					
Paddlefish or spoonbill cat			18,322	1,617	495,544	21,508		
Quillback or "American carp"	100	11	11,355	984	20,700	431	17,246	519
Sauper			2,365	451				
Sheepshead			52,560	6,762	1,976,600	39,577	152,545	7,938
Sturgeon, shovelnose	175	24	2,967	380			1,634	115
Sucker "mullet"			10,294	1,331			65,273	1,955
Yellow pike			70	18				
Total	142,859	13,324	508,719	51,244	18,163,253	858,394	2,715,650	128,498
SHELLFISH, ETC.								
Crawfish					29,248	292		
Shrimp					38,503	2,423		
Mussel shells	312,562	2,713	1,113,032	8,786	50,000	375	782,630	7,827
Pearls			636	852				157
Slugs								1,174
Frogs					872,651	130,612		
Turtles:								
Snapper					58,013	2,244		
Soft-shell					1,700	34		
Total	312,562	3,349	1,113,032	9,638	1,050,115	135,980	782,630	9,158
Grand total	455,421	16,673	1,621,751	60,882	19,213,368	994,374	3,498,280	137,656
Species	Mississippi		Missouri		Nebraska		Ohio	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin								
Buffalo fish	1,511,126	\$63,824	17,000	\$520				
Carp	225,276	6,730	178,991	16,414	18,104	\$1,813	6,433	\$662
Catfish and bullheads	635,049	42,384	433,117	33,356	93,032	9,305	14,370	1,543
Eels	250	20	91,430	15,487	34,174	5,135	4,380	811
Minnows			1,055	53				
Paddlefish or spoonbill cat	158,821	5,879	40,103	2,917				
Quillback or "American carp"	2,157	42	13,672	946				
Sheepshead	106,844	2,576	38,186	3,773				
Sturgeon, shovelnose	100	3	17,282	1,703				
Sucker "mullet"			2,275	292				
Yellow pike								
Total	2,639,623	121,458	833,636	75,670	145,310	16,253	31,481	3,759
SHELLFISH, ETC.								
Shrimp	10,000	1,500						
Mussel shells			94,000	1,193				
Slugs				118				308
Turtles, snapper	100	3						
Total	10,100	1,503	94,000	1,311				
Grand total	2,649,723	122,961	927,636	76,981	145,310	16,253	31,481	3,759

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY STATES—Continued

Species	Oklahoma		South Dakota		Tennessee	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Black bass					14,000	\$1,680
Buffalo fish	21,605	\$2,142	38,926	\$3,894	478,592	34,247
Carp	4,268	425	52,836	2,642	247,841	9,594
Catfish and bullheads	4,935	695	13,500	3,528	271,753	24,750
Crappie			1,392	70	18,652	1,658
Eels					163	25
Paddlefish or spoonbill cat	5,332	533	400	40	5,034	301
Quillback or "American carp"	1,950	195	4,364	220	6,065	843
Sheepshead	1,550	155	697	70	197,670	10,465
Sturgeon, shovelnose					3,706	393
Sucker "mullet"			2,246	112	8,323	1,119
Sunfish					21,850	1,094
White bass					2,100	106
Total	39,640	4,145	114,361	10,576	1,275,749	86,275
SHELLFISH, ETC.						
Mussel shells					2,157,000	15,604
Pearls						28
Slugs						1,724
Frogs					2,250	270
Terrapin					70	14
Total					2,159,320	17,640
Grand total	39,640	4,145	114,361	10,576	3,435,069	103,915
Species	Texas		Wisconsin		Total	
FISH	Pounds	Value	Pounds	Value	Pounds	Value
Black bass					14,000	\$1,680
Bowfin			288,170	\$4,355	428,316	9,299
Buffalo fish	73,000	\$2,190	268,001	13,528	15,772,451	687,288
Carp	6,900	138	777,474	23,800	11,891,761	455,399
Catfish and bullheads	47,800	3,824	65,539	5,825	10,266,847	877,798
Crappie					41,141	2,959
Eels					6,978	441
Garfish					72,450	791
Minnows					525	209
Mooneye					3,090	153
Paddlefish or spoonbill cat					951,452	43,134
Pike or pickerel					4,700	470
Quillback or "American carp"	500	10	66,353	2,032	268,438	11,286
Sauger					2,365	451
Sheepshead	10,300	206	84,409	3,692	3,904,844	142,938
Sturgeon, shovelnose					87,426	8,163
Sucker "mullet"			135,984	3,696	314,835	12,682
Sunfish					21,850	1,094
White bass					3,300	198
Yellow pike					4,945	771
Total	138,500	6,368	1,685,930	56,928	44,061,714	2,257,204
SHELLFISH, ETC.						
Crawfish					29,248	292
Shrimp					48,503	3,923
Mussel shells			959,200	8,946	37,254,697	421,611
Pearls				555		11,436
Slugs				2,012		68,216
Frogs					874,901	130,882
Terrapin					19,170	391
Turtles:						
Snapper					75,190	3,008
Soft-shell					19,190	394
Total			959,200	11,513	38,320,809	640,153
Grand total	138,500	6,368	2,645,130	68,441	82,382,523	2,897,357

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS

Species	Arkansas River and tributaries						Atchafalaya River	
	River proper		Tributaries		Total			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Buffalo fish	164,921	\$16,346	12,905	\$1,271	177,826	\$17,617	3,638,907	\$108,901
Carp	50,659	5,066	3,453	344	54,112	5,410	6,343	126
Catfish and bullheads	117,919	12,310	830	88	118,749	12,398	3,998,234	322,252
Garfish							650	13
Paddlefish or spoonbill cat	2,020	100	6,425	569	8,445	669	6,137	361
Quillback or "American carp"	7,080	709	1,500	150	8,580	859		
Sheepshead	93,984	9,399	2,320	232	96,304	9,631	1,101,591	22,026
Total	436,583	43,930	27,433	2,654	464,016	46,584	8,751,862	453,679
SHELLFISH, ETC.								
Shrimp							1,686	168
Mussel shells			312,562	2,713	312,562	2,713		
Slugs				636		636		
Frogs							451,056	67,634
Turtles, snapper							26,431	1,613
Total			312,562	3,349	312,562	3,349	479,173	69,435
Grand total	436,583	43,930	339,995	6,003	776,578	49,933	9,231,035	523,114

Species	Des Moines River and tributaries						Illinois River and tributaries	
	River proper		Tributaries		Total			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin							7,508	\$209
Buffalo fish			21,537	\$1,610	21,537	\$1,610	512,987	25,044
Carp			187,858	9,857	187,858	9,857	4,055,456	96,077
Catfish and bullheads							228,044	21,091
Eels							3,150	198
Paddlefish or spoonbill cat							10,961	569
Quillback or "American carp"							1,172	40
Sheepshead							25,647	1,306
Sturgeon, shovelnose							360	36
Sucker "mullet"							8,640	331
Total			209,395	11,467	219,395	11,467	4,853,925	144,901
SHELLFISH, ETC.								
Mussel shells	885,162	\$14,626			885,162	14,626	1,034,400	8,341
Pearls		1,656				1,656		
Slugs		2,965				2,965		719
Turtles, snapper							13,827	638
Total	885,162	19,247			885,162	19,247	1,048,227	9,698
Grand total	885,162	19,247	209,395	11,467	1,094,557	30,714	5,902,152	154,599

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	Illinois River and tributaries—Continued				Iowa River and tributaries			
	Tributaries		Total		River proper		Tributaries	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin			7,508	\$209				
Buffalofish	4,900	\$415	517,887	25,459				
Carp	21,600	1,645	4,077,056	97,722				
Catfish and bullheads	17,200	2,277	245,244	23,368				
Eels			3,150	198				
Paddlefish or spoonbill cat			10,961	569				
Quillback or "American carp"	2,200	116	3,372	156				
Sheepshead	1,100	110	26,747	1,416				
Sturgeon, shovelnose			360	36				
Sucker "mullet"			8,640	331				
Total	47,000	4,563	4,900,925	149,464				
SHELLFISH, ETC.								
Mussel shells	34,900	422	1,069,300	8,763	18,680	\$252	659,938	\$8,685
Pearls						18		640
Slugs		80		799		54		1,740
Turtles, snapper	500	50	14,327	688				
Total	35,400	552	1,083,627	10,250	18,680	324	659,938	11,065
Grand total	82,400	5,115	5,984,552	159,714	18,680	324	659,938	11,065

Species	Iowa River and tributaries—Con.				Minnesota River and tributaries			
	Lake Des Allemands		River proper		Blue Earth River and tributaries			
	Total							
FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin			9,545	\$159				
Buffalofish			175,011	\$5,250	43,492	3,450	54,176	\$3,522
Carp			800	16	87,079	3,191	229,898	9,262
Catfish and bullheads			134,464	10,757	20,541	1,841		
Paddlefish or spoonbill cat			2,280	182				
Quillback or "American carp"					6,435	195		
Sheepshead			7,414	148	51,290	2,573	5,875	447
Sucker "mullet"					6,045	177		
Total			319,969	16,353	224,427	11,586	289,949	13,231
SHELLFISH, ETC.								
Crawfish			29,248	292				
Shrimp			317	30				
Mussel shells	678,618	\$8,937			38,500	385	37,400	374
Pearls		658						15
Slugs		1,794				25		144
Frogs			11,393	1,608				
Turtles, snapper			8,282	165				
Total	678,618	11,389	49,240	2,095	38,500	410	37,400	533
Grand total	678,618	11,389	369,209	18,448	262,927	11,996	327,349	13,764

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	Minnesota River and tributaries—Continued				Mississippi River and tributaries			
	Tributaries ¹		Total		River proper		Cannon River and tributaries	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin			9,545	\$159	397,795	\$8,649		
Buffalo fish	19,900	\$1,011	117,568	7,983	2,911,904	159,439	667	\$31
Carp	590,357	26,155	907,334	38,608	3,587,513	151,526	103,051	5,083
Catfish and bullheads			20,541	1,841	1,800,370	160,918		
Eels					2,665	138		
Garfish					14,800	148		
Mooneye					2,100	48		
Paddlefish or spoonbill cat					215,424	11,700		
Pike or pickerel					4,700	470		
Quillback or "American carp"			6,435	195	138,594	4,229		
Sheepshead	5,135	207	62,300	3,227	790,757	36,644	17,740	610
Sturgeon, shovelnose					57,794	5,735		
Sucker "mullet"			6,045	177	217,885	5,980		
White bass					100	15		
Total	615,392	27,373	1,129,768	52,190	10,142,401	545,639	121,458	5,724
SHELLFISH, ETC.								
Shrimp					46,500	3,725		
Mussel shells	44,000	440	119,900	1,199	5,234,792	63,368	114,070	1,141
Pearls				15		5,380		47
Slugs		80		249		13,538		304
Frogs					318,719	47,529		
Terrapin					19,100	377		
Turtles:								
Snapper					14,050	284		
Soft-shell					17,700	354		
Total	44,000	520	119,900	1,463	5,650,861	134,555	114,070	1,492
Grand total	659,392	27,893	1,249,668	53,653	15,793,262	680,194	235,528	7,216
Mississippi River and tributaries—Continued								
Species	Crow River and tributaries		Reelfoot Lake		Minor tributaries ¹		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
			14,000	\$1,680			14,000	\$1,680
FISH								
Black bass			14,000	\$1,680	6,453	\$114	404,248	8,763
Bowfin								
Buffalo fish	7,749	\$440	238,750	16,643	1,035,516	40,903	4,194,586	217,456
Carp	301,368	14,045	57,850	1,737	459,548	20,454	4,509,330	192,845
Catfish and bullheads			107,950	8,636	877,771	69,830	2,786,091	239,384
Crappie			16,600	1,238			16,600	1,238
Eels							2,665	138
Garfish					11,000	120	25,800	268
Mooneye							2,100	48
Paddlefish or spoonbill cat					212,407	8,439	427,831	20,139
Pike or pickerel							4,700	470
Quillback or "American carp"					7,662	208	146,256	4,437
Sheepshead			89,450	1,789	365,447	9,472	1,263,394	48,515
Sturgeon, shovelnose					1,340	94	59,134	5,829
Sucker "mullet"					21,557	648	239,442	6,628
Sunfish			21,850	1,094			21,850	1,094
White bass			2,100	106			2,200	121
Total	309,117	14,485	548,550	32,923	2,998,701	150,282	14,120,227	749,053
SHELLFISH, ETC.								
Shrimp							46,500	3,725
Mussel shells	225,100	2,251			141,623	1,775	5,715,585	68,535
Pearls		20				350		5,797
Slugs		65				509		14,416
Frogs			2,250	270	2,693	403	323,662	48,202
Terrapin							19,100	377
Turtles:								
Snapper					5,100	103	19,150	387
Soft-shell							17,700	354
Total	225,100	2,336	2,250	270	149,416	3,140	6,141,697	141,793
Grand total	534,217	16,821	550,800	33,193	3,148,117	153,422	20,261,924	890,846

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	Missouri River and tributaries						Ohio River and tributaries	
	River proper		Tributaries		Total		River proper	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin							300	\$6
Buffalofish	88,674	\$8,584	139,967	\$9,853	228,641	\$18,437	270,733	23,410
Carp	409,025	38,099	271,998	15,445	681,023	53,544	308,089	19,023
Catfish and bullheads	84,396	15,639	12,443	2,504	96,839	18,143	172,745	23,818
Crappie			1,392	70	1,392	70		
Minnows	525	209			525	209		
Mooneye							990	105
Paddlefish or spoonbill cat	1,115	112	2,000	210	3,115	322	92,457	5,170
Quillback or "American carp"	1,000	66	4,364	220	5,364	286	31,532	2,202
Sauger							2,365	451
Sheepshead	18,894	1,605	6,779	919	25,673	2,524	109,558	11,914
Sturgeon, shovelnose	3,368	376			3,368	376	17,505	1,266
Sucker "mullet"	250	11	4,221	359	4,471	370	25,976	2,444
White bass							1,100	77
Yellow pike							4,945	771
Total	607,247	64,701	443,164	29,580	1,050,411	94,281	1,038,295	90,657
SHELLFISH, ETC.								
Mussel shells			1,000	10	1,000	10		
Grand total	607,247	64,701	444,164	29,590	1,051,411	94,291	1,038,295	90,657

Ohio River and tributaries—Continued

Species	Tennessee River and tributaries							
	Cumberland River		River proper		Tributaries			
	Pounds	Value	Pounds	Value	Pounds	Value		
FISH								
Buffalofish	21,095	\$2,112	52,306	\$5,522			52,306	\$5,522
Carp	14,550	1,283	25,236	2,261			25,236	2,261
Catfish and bullheads	30,053	4,085	136,298	15,572	480	\$96	136,778	15,668
Crappie	2,052	420	9,772	1,004			9,772	1,004
Eels	95	16	68	9			68	9
Paddlefish or spoonbill cat	1,897	183	6,265	631			6,265	631
Quillback or "American carp"	3,630	331	12,732	1,513			12,732	1,513
Sheepshead	24,735	3,634	62,569	7,500	140	28	62,709	7,528
Sturgeon, shovelnose	2,868	304	1,566	171			1,566	171
Sucker "mullet"	4,915	663	9,060	1,082			9,060	1,082
Total	105,890	13,031	315,872	35,265	620	124	316,492	35,389
SHELLFISH, ETC.								
Mussel shells			4,905,032	34,522			4,905,032	34,522
Pearls				28				28
Slugs				5,020				5,020
Terrapin	70	14						
Total	70	14	4,905,032	39,570			4,905,032	39,570
Grand total	105,960	13,045	5,220,904	74,835	620	124	5,221,524	74,959

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	Ohio River and tributaries—Continued							
	Wabash River and tributaries							
	River proper		White River and tributaries		Minor tributaries ¹		Total	
FISH	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin	400	\$16			100	\$10	500	\$26
Buffalo fish	30,509	2,153			10,040	878	40,549	3,031
Carp	73,601	3,351			17,350	1,228	90,951	4,579
Catfish and bullheads	41,220	5,941			3,328	482	44,548	6,423
Eels	1,000	80					1,000	80
Paddlefish or spoonbill cat	3,760	259			400	16	4,160	275
Quillback or "American carp"	10,120	229					10,120	229
Sheepshead	19,210	1,551			2,350	195	21,560	1,746
Sturgeon, shovelnose	2,625	181					2,625	181
Sucker "mullet"	6,792	506			175	8	6,967	514
Total	189,237	14,267			33,743	2,817	222,980	17,084
SHELLFISH, ETC.								
Mussel shells	5,480,870	74,870	2,344,866	\$34,537	338,000	4,992	8,163,736	114,399
Pearls		125						125
Slugs		12,895			6,363		1,045	
Turtles:								
Snapper	500	25					500	25
Soft-shell	400	20					400	20
Total	5,481,770	87,935	2,344,866	40,900	338,000	6,037	8,164,636	134,872
Grand total	5,671,007	102,202	2,344,866	40,900	371,743	8,854	8,387,616	151,956
Species	Ohio River and tributaries—Con.					Red River and tributaries		
	Minor tributaries ¹		Total			River proper		Black River (Louisiana)
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Bowfin			800	\$32	5,715	\$114		
Buffalo fish	13,735	\$1,077	398,418	35,152	2,178,441	65,407	256,000	\$7,680
Carp	4,642	369	443,468	27,515	95,640	1,941	8,600	178
Catfish and bullheads	7,675	753	391,799	50,747	777,258	62,183	108,100	8,648
Crappie			11,824	1,424				
Eels			1,163	105				
Garfish					25,000	300	3,000	30
Mooneye			990	105				
Paddlefish or spoonbill cat	80	10	104,859	6,269	213,521	8,540	13,000	650
Quillback or "American carp"			58,014	4,275	100	2	6,300	146
Sauger			2,365	451				
Sheepshead	1,480	205	220,042	25,027	308,114	6,168	31,350	671
Sturgeon, shovelnose			24,564	1,922				
Sucker "mullet"	825	73	47,743	4,776				
White bass			1,100	77				
Yellow pike			4,945	771				
Total	28,437	2,487	1,712,094	158,648	3,603,789	144,655	426,350	18,003
SHELLFISH, ETC.								
Mussel shells	154,000	3,005	13,222,768	151,926				
Pearls				153				
Slugs		308		25,631				
Frogs					60,900	9,135	16,500	2,475
Terrapin			70	14				
Turtles:								
Snapper			500	25	6,500	130		
Soft-shell			400	20	1,000	20		
Total	154,000	3,313	13,223,738	177,769	68,400	9,285	16,500	2,475
Grand total	182,437	5,800	14,935,832	336,417	3,672,189	153,940	442,850	20,478

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	Red River and tributaries—Continued							
	Ouachita River and tributaries						Minor tributaries ¹	
	River proper		Tributaries		Total			
FISH	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>
Buffalofish.....	407,809	\$14,424	462,127	\$15,653	869,936	\$30,077	484,900	\$14,645
Carp.....	27,728	556	27,600	552	55,328	1,108	14,075	335
Catfish and bullheads.....	172,606	15,099	173,209	14,193	345,815	29,292	223,690	18,312
Garfish.....	4,000	40	14,000	140	18,000	180		
Paddlefish or spoonbill cat.....	7,505	340	10,378	507	17,883	847	15,150	1,215
Quillback or "American carp".....	4,800	96	9,100	179	13,900	275	600	20
Sheepshead.....	71,241	1,933	45,746	1,226	116,987	3,159	57,275	1,152
Sucker "mullet".....	1,369	131			1,369	131		
Total	697,058	32,619	742,160	32,450	1,439,218	65,069	795,690	35,679
SHELLFISH, ETC.								
Mussel shells.....	56,075	421			56,075	421		
Frogs.....	866	130	10,524	1,678	11,390	1,808		
Total	56,941	551	10,524	1,678	67,465	2,229		
Grand total	753,999	33,170	752,684	34,128	1,506,683	67,298	795,690	35,679
Species	Red River and tributaries—Con.			Rock River and tributaries				
	Total		River proper		Tributaries		Total	
	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>
FISH								
Bowfin.....	5,715	\$114						
Buffalofish.....	3,789,277	117,809	19,335	\$1,283			19,335	\$1,283
Carp.....	173,643	3,562	92,729	4,513			92,729	4,513
Catfish and bullheads.....	1,454,863	118,435						
Garfish.....	46,000	510						
Paddlefish or spoonbill cat.....	259,554	11,252						
Quillback or "American carp".....	20,900	443	8,880	266			8,860	266
Sheepshead.....	513,726	11,150						
Sucker "mullet".....	1,369	131	5,010	127			5,010	127
Total	6,265,047	263,406	125,934	6,189			125,934	6,189
SHELLFISH, ETC.								
Mussel shells.....	56,075	421	3,945,240	51,334	341,422	\$3,863	4,286,662	55,197
Slugs.....				6,894			368	7,262
Frogs.....	88,790	13,418						
Turtles:								
Snapper.....	6,500	130						
Soft-shell.....	1,000	20						
Total	152,365	13,989	3,945,240	58,228	341,422	4,231	4,286,662	62,459
Grand total	6,417,412	277,395	4,071,174	64,417	341,422	4,231	4,412,596	68,648

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	St. Francis River and tributaries								White River (Ark. and Mo.) and tributaries	
	River proper		Tributaries		Total		River proper			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value		
FISH										
Bowfin			500	\$22	500	\$22				
Buffalofish	102,370	\$8,983	13,174	1,055	115,544	10,038	1,062,812	\$54,381		
Carp	229,995	11,037	33,811	1,699	263,806	12,736	286,951	3,490		
Catfish and bullheads	161,895	16,552	24,155	3,003	186,050	19,555	397,806	29,396		
Paddlefish or spoonbill cat			584	29	584	29	70,046	1,400		
Sheepshead	57,880	4,623	3,035	268	60,915	4,891	370,270	7,791		
Sucker "mullet"	970	44	40	2	1,010	46	200			
Total	553,110	41,239	75,299	6,078	628,409	47,317	2,188,085	96,498		
SHELLFISH, ETC.										
Mussel shells	1,464,340	14,740	80,475	761	1,544,815	15,501	7,027,650	70,218		
Pearls		560		75		635		1,078		
Slugs		2,044		131		2,175		8,697		
Total	1,464,340	17,344	80,475	967	1,544,815	18,311	7,027,650	79,993		
Grand total	2,017,450	58,583	155,774	7,045	2,173,224	65,623	9,215,735	176,491		

Species	White River (Ark. and Mo.) and tributaries—Con.							
	Black River and tributaries		Tributaries ¹		Total			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Buffalofish	268,224	\$19,672	182,513	\$9,385	1,513,549	\$83,438		
Carp	64,182	2,640	39,791	558	390,924	6,688		
Catfish and bullheads	87,008	8,511	67,919	5,307	552,733	43,214		
Crappie			11,325	227	11,325	227		
Paddlefish or spoonbill cat			8,730	160	78,776	1,560		
Sheepshead	63,952	4,626	40,372	872	474,594	13,289		
Sucker "mullet"	905	56			1,105	96		
Total	484,271	35,505	350,650	16,509	3,023,006	148,512		
SHELLFISH, ETC.								
Mussel shells	1,880,400	18,967	431,700	4,317	9,339,750	93,502		
Pearls		1,341		83		2,502		
Slugs		2,809		712		12,218		
Total	1,880,400	23,117	431,700	5,112	9,339,750	108,222		
Grand total	2,364,671	58,622	782,350	21,621	12,362,756	256,734		

¹ Includes all tributaries not shown separately.

Fisheries of the Mississippi River and tributaries, 1931—Continued

CATCH: BY WATERS—Continued

Species	Wisconsin River and tributaries					
	River proper		Tributaries		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Buffalofish.....	33,000	\$1,650	-----	-----	33,000	\$1,650
Carp.....	7,000	265	-----	-----	7,000	265
Quillback or "American carp".....	10,000	350	-----	-----	10,000	350
Total.....	50,000	2,265	-----	-----	50,000	2,265
SHELLFISH, ETC.						
Mussel shells.....	-----	-----	22,500	\$281	22,500	281
Pearls.....	-----	-----	-----	20	-----	20
Slugs.....	-----	-----	-----	71	-----	71
Total.....	-----	-----	22,500	372	22,500	372
Grand total.....	50,000	2,265	22,500	372	72,500	2,637
Species	Yazoo River and tributaries					
	River proper		Tributaries		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Black bass.....	-----	-----	-----	-----	14,000	\$1,680
Bowfin.....	-----	-----	-----	-----	428,316	9,299
Buffalofish.....	583,365	\$25,085	248,000	\$10,120	831,365	\$35,205
Carp.....	60,435	1,216	35,900	776	96,335	1,992
Catfish and bullheads.....	222,840	14,222	58,400	3,482	281,240	17,704
Crappie.....	-----	-----	-----	-----	41,141	2,959
Eels.....	-----	-----	-----	-----	6,978	441
Garfish.....	-----	-----	-----	-----	72,450	791
Minnows.....	-----	-----	-----	-----	525	209
Mooneye.....	-----	-----	-----	-----	3,090	153
Paddlefish or spoonbill cat.....	44,510	1,626	4,400	156	48,910	1,782
Pike or pickerel.....	-----	-----	-----	-----	951,452	43,134
Quillback or "American carp".....	657	19	-----	-----	4,700	470
Sauger.....	-----	-----	-----	657	19	268,438
Sheepshead.....	44,644	944	7,500	150	52,144	1,094
Sturgeon, shovelnose.....	-----	-----	-----	-----	3,904,844	142,938
Sucker "mullet".....	-----	-----	-----	-----	87,426	8,163
Sunfish.....	-----	-----	-----	-----	314,835	12,682
White bass.....	-----	-----	-----	-----	21,850	1,094
Yellow pike.....	-----	-----	-----	-----	3,300	198
Total.....	956,451	43,112	354,200	14,684	1,310,651	57,796
SHELLFISH, ETC.					44,061,714	2,257,204
Crawfish.....	-----	-----	-----	-----	29,248	292
Shrimp.....	-----	-----	-----	-----	48,503	3,923
Mussel shells.....	-----	-----	-----	-----	37,254,697	421,611
Pearls.....	-----	-----	-----	-----	-----	11,436
Slugs.....	-----	-----	-----	-----	-----	68,216
Frogs.....	-----	-----	-----	-----	874,901	130,882
Terrapin.....	-----	-----	-----	-----	19,170	391
Turtles:						
Snapper.....	-----	-----	-----	-----	75,190	3,008
Soft-shell.....	-----	-----	-----	-----	19,100	394
Total.....	-----	-----	-----	-----	38,320,809	640,153
Grand total.....	956,451	43,112	354,200	14,684	1,310,651	57,796
					82,382,523	2,897,357

ALABAMA

Fisheries of Alabama, 1931

OPERATING UNITS: BY GEAR

Item	Trot lines	Fyke nets	Crowfoot bars	Total, exclusive of duplication
	Number	Number	Number	Number
Fishermen:				
On boats and shore:				
Regular.....	65	51	38	104
Casual.....	85	21	46	131
Total.....	150	72	84	235
Boats:				
Motor.....	22	9	10	32
Other.....	113	45	77	190
Apparatus:				
Number.....	449	610	168	-----
Hooks.....	35,980	-----	-----	-----

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Trot lines		Fyke nets	Crow-foot bars
	Regu- lar	Casual	Total	Motor	Other				
Mississippi River:									
Ohio River: Tennessee River.....	Number 104	Number 131	Number 235	Number 32	Number 190	Number 449	Hooks 35,980	Number 610	Number 168

CATCH: BY GEAR

Species	Trot lines		Fyke nets		Crowfoot bars		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish.....	13,995	\$1,491	7,335	\$851	-----	-----	21,330	\$2,342
Carp.....	9,280	935	1,720	183	-----	-----	11,000	1,118
Catfish and bullheads.....	76,190	8,271	5,010	579	-----	-----	81,200	8,850
Crappie.....	8,622	867	1,150	137	-----	-----	9,772	1,004
Paddlefish or spoonbill cat.....	3,272	259	686	79	-----	-----	3,958	338
Quillback or "American carp".....	6,512	736	1,145	139	-----	-----	7,657	875
Sheepshead.....	38,009	4,116	7,900	856	-----	-----	45,909	4,972
Sturgeon, shovelnose.....	250	37	325	33	-----	-----	575	70
Sucker "mullet".....	2,303	280	3,449	329	-----	-----	5,752	609
Mussel shells.....	-----	-----	-----	-----	1,635,000	\$10,132	1,635,000	10,132
Slugs.....	-----	-----	-----	-----	2,444	-----	2,444	-----
Total.....	158,433	16,992	28,720	3,186	1,635,000	12,576	1,822,153	32,754

NOTE.—The catch in Alabama was confined to the Tennessee River.

ARKANSAS

Fisheries of Arkansas, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Trammel nets	Trot lines	Fyke nets	Mussel dredges
Fishermen:						
On boats and shore:						
Regular-----	Number 45	Number 3	Number 25	Number 666	Number 241	Number 398
Casual-----	10	2	7	1,246	81	21
Total-----	55	5	32	1,912	322	419
Boats:						
Motor-----	14	1	16	332	201	392
Other-----	17	5	32	1,770	291	33
Apparatus:						
Number-----	16	4	31	5,327	5,346	426
Length, yards-----	7,308					
Square yards-----		2,800	3,899			
Yards at mouth-----						286
Hooks-----				455,000		

Item	Crow- foot bars	Tongs	Rakes	Forks	By hand	Total, exclusive of du- plication
Fishermen:						
On boats and shore:						
Regular-----	Number 497	Number 108	Number 70	Number 18	Number 53	Number 1,463
Casual-----	42	51		84		1,524
Total-----	539	159	70	102	53	2,987
Boats:						
Motor-----	401	4	44			907
Other-----	118	155	52	98	53	2,359
Apparatus:						
Number-----	1,038	159	70	102		

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regular	Casual	Total	Motor	Other		
	Number	Number	Number	Number	Number	Number	Length, yards
Mississippi River-----	25	47	72	23	72		
Arkansas River-----	121	143	264	14	254	2	1,000
Minor tributaries-----	4	4	8			8	
Boggy Bayou-----		1	1			1	
Cypress Creek-----		2	2			2	
Horseshoe Lake-----	4		4	1		1	1,333
L'Anguille River-----	2	5	7			7	
Red River-----	11	87	98	23		82	
Little River-----	3	10	13	1		12	
Ouachita River-----	8	86	94	16		80	1
Bayou Bartholomew-----	3	7	10	3		10	
Massey Lake-----	1	4	5			1	425
Boeuf River-----		4	4			4	
Little Missouri River-----		4	4			4	
Saline River-----	1	22	23			23	
Sulphur River-----	1	5	6	5		10	
St. Francis River-----	231	283	514	26		502	
Rainbow Lake-----	2		2			2	
Tyronza River-----	1	7	8			8	
Little River and Big Lake-----	21	20	41	6		39	
White River-----	759	494	1,253	582		819	10
Black River-----	184	133	317	141		207	
Spring River-----		13	13			13	
Cache River-----	21	57	78	32		70	
Fork of Little Red River-----	53	47	100	31		80	
Minor tributaries-----	1	1	2			2	
Minor tributaries-----	6	38	44	3		46	1
Total-----	1,463	1,524	2,987	907	2,359	16	7,308

Fisheries of Arkansas, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Waters	Anchor gill nets		Trammel nets		Trot lines	
	Number	Square yards	Number	Square yards	Number	Hooks
Mississippi River					235	28,700
Arkansas River			4	250	507	58,325
Minor tributaries					39	9,600
Cypress Creek			1	156	6	205
L'Anguille River					27	520
Red River					167	31,800
Little River					36	7,200
Ouachita River					186	8,060
Bayou Bartholomew					17	2,570
Boeuf River					4	1,350
Little Missouri River					4	165
Saline River			1	140	39	1,865
Sulphur River					15	1,500
St. Francis River					1,566	50,545
Rainbow Lake			2	250		
Tyronza River					23	540
Little River and Big Lake					198	5,490
White River					1,396	155,100
Black River			12	688		
Spring River			3	200	438	36,020
Cache River					34	1,250
Fork of Little Red River					163	13,725
Minor tributaries			1	60	175	24,400
Minor tributaries	4	2,800	7	2,155	49	40
Total	4	2,800	31	3,899	5,327	455,000

Waters	Fyke nets	Mussel dredges		Crow-foot bars		Tongs	Rakes	Forks
		Number	Number	Yards at mouth	Number			
Mississippi River	465							
Arkansas River	221							
L'Anguille River	27							
Red River	105							
Little River	5							
Ouachita River	339							5
Bayou Bartholomew	75							
Saline River	108							
Sulphur River	16							
St. Francis River	508				30	128	3	
Tyronza River	6					2		
Little River and Big Lake	68					7		
White River	2,355	305	205	766			67	97
Black River	665	103	69	206	22			
Cache River	186	8	5	16				
Fork of Little Red River	185	10	7	20				
Minor tributaries	12							
Total	5,346	426	286	1,038	159	70		102

Fisheries of Arkansas, 1931—Continued

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
Haul seines:								
Mississippi River:	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Arkansas River.....	9,019	\$902	2,786	\$279	62	\$10		
Horseshoe Lake.....	28,930	2,314	6,700	536				
Red River:								
Ouachita River.....	1,140	114	28	2				
Bayou Bartholomew:								
Massey Lake.....	3,424	171						
White River.....	52,246	2,611	12,564	127	537	38		
Minor tributaries.....	6,373	319					41	3
Total.....	101,132	6,431	22,078	944	640	51		
Anchor gill nets:								
Mississippi River:								
Minor tributaries.....	10,440	514	347	10				
Trammel nets:								
Mississippi River:								
Arkansas River.....	10,261	1,027	3,970	396	68	10		
Boggy Bayou: Cypress Creek.....	521	26						
Red River: Ouachita River: Saline River.....	744	74						
St. Francis River: Rainbow Lake.....	3,554	284	596	48	25	2		
White River.....	21,133	1,037	1,052	10	568	40		
Black River.....	5,786	463	397	16				
Fork of Little Red River.....	2,646	132	474	5				
Minor tributaries.....	22,944	1,164	3,225	65	49	3		
Total.....	67,589	4,207	9,714	540	710	55		
Trot lines:								
Mississippi River:								
Arkansas River.....	31,245	1,591	2,835	142	35,494	2,996		
Minor tributaries.....	82,559	8,256	30,367	3,037	100,328	9,727		
Boggy Bayou: Cypress Creek.....	2,400	220	500	50	100	15		
L'Anguille River.....	715	59	905	39	705	76		
Red River.....			5,300	106	106,600	8,528		
Little River.....			1,000	20	13,000	1,440		
Ouachita River.....	3,134	306			18,796	2,647		
Bayou Bartholomew.....					3,265	328		
Boeuf River.....					1,005	80		
Little Missouri River.....	45	5			275	33		
Saline River.....					3,318	470		
Sulphur River.....			500	10	6,000	480		
St. Francis River.....	42,535	3,718	120,160	5,786	96,590	9,814		
Tyronza River.....	475	37	1,100	55	680	82		
Little River and Big Lake.....	150	\$4	1,320	108	23,585	1,169	22,110	2,752
White River.....	523,832	27,417	119,950	1,769	246,355	17,833		
Black River.....	86,835	6,671	25,335	998	48,085	4,698		
Spring River.....			3,950	316	2,530	380		
Cache River.....	30,630	1,624	7,080	78	16,765	1,229		
Fork of Little Red River.....	69,800	3,488	11,620	117	31,840	2,228		
Minor tributaries.....	30	3	90	4	125	15		
Minor tributaries.....	40	4	175	9	17,364	1,399		
Total.....	150	4	875,595	53,507	354,452	13,705	771,680	67,275
Fyke nets:								
Mississippi River:								
Arkansas River.....	200	6	118,173	7,085	75,967	1,764	18,270	1,445
L'Anguille River.....			54,082	5,285	12,936	1,294	13,576	1,986
Red River.....			1,460	121	3,760	155	555	62
Little River.....			80,000	2,400	3,100	62	4,500	360
Ouachita River.....			5,000	150	100	2	300	24
Bayou Bartholomew.....			37,035	3,009			2,125	318
Saline River.....			17,244	1,380			1,531	153
Sulphur River.....			11,480	1,148			515	65
St. Francis River.....			16,000	480	1,000	20	1,000	80
Tyronza River.....			58,980	5,179	107,985	5,125	62,855	6,371
Little River and Big Lake.....	325	26	430	22			65	8
White River.....	350	18	7,500	600	8,100	405	1,275	159
Black River.....			465,401	23,276	153,210	1,556	145,054	10,162
Cache River.....			175,603	12,538	34,500	1,310	36,393	3,433
Fork of Little Red River.....			28,244	1,435	3,100	34	7,709	542
Minor tributaries.....			43,930	2,197	12,605	127	8,590	601
Total.....	550	24	1,127,690	66,815	421,615	12,069	304,313	25,769

Fisheries of Arkansas, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Total by waters:								
Mississippi River	200	\$6	149,418	\$8,676	78,802	\$1,906	53,764	\$4,441
Arkansas River			155,921	15,470	50,059	5,006	114,034	11,733
Minor tributaries			2,400	220	500	50	100	15
Boggy Bayou:			521	26			350	25
Cypress Creek			28,930	2,314	6,700	536		
Horseshoe Lake			2,175	180	4,665	194	1,260	138
L'Anguille River			80,000	2,400	8,400	168	111,100	8,888
Red River:			5,000	150	1,100	22	13,300	1,464
Little River			41,309	3,429	28	2	20,921	2,965
Ouachita River			17,244	1,380			4,796	481
Bayou Bartholomew			3,424	171				
Massey Lake								
Boeuf River							1,005	80
Little Missouri River							275	33
Saline River			12,224	1,222			3,833	535
Sulphur River			16,000	480	1,500	30	7,000	560
St. Francis River			101,515	8,897	228,145	10,911	159,445	16,185
Rainbow Lake			3,554	284	596	48	25	2
Tyronza River			800	63	1,530	77	745	90
Little River and Big Lake	500	22	8,820	708	31,685	1,574	23,385	2,911
White River			1,062,612	54,341	286,776	3,462	392,514	28,073
Black River			268,224	19,672	60,232	2,324	84,478	8,131
Spring River					3,950	316	2,530	380
Cache River			58,874	3,059	10,180	112	24,474	1,771
Fork of Little Red River			116,376	5,817	24,699	249	40,430	2,829
Minor tributaries			7,263	509	4,912	197	125	15
Minor tributaries			39,797	2,001	3,747	84	17,454	1,405
Total	700	28	2,182,446	131,474	808,206	27,268	1,077,343	93,150

Gear and waters	Crappie		Paddlefish or spoonbill cat		Quillback or "American carp"		Sheepshead	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River:								
Arkansas River			125	\$5				
Red River:								
Ouachita River			82	10			11	\$1
Bayou Bartholomew:								
Massey Lake			3,486	157				
White River			13,510	271			460	9
Minor tributaries			1,683	67				
Total			18,886	510			471	10
Anchor gill nets:								
Mississippi River:								
Minor tributaries			2,744	83			450	14
Trammel nets:								
Mississippi River:								
Red River:								
Ouachita River:								
Saline River			229	17				
St. Francis River: Rainbow Lake			584	29				
White River			1,101	22			1,122	21
Fork of Little Red River			55	1				
Minor tributaries			1,752	61			307	9
Total			3,721	130			1,429	30

Fisheries of Arkansas, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Crappie		Paddlefish or spoonbill cat		Quillback or "American carp"		Sheepshead	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Trot lines:								
Mississippi River								
Arkansas River			1,561	\$77	3,985	\$399	2,960	\$258
Minor tributaries			1,275	54			1,250	125
L'Anguille River							195	17
Red River							11,300	226
Little River							1,800	36
Ouachita River							2,275	164
Saline River							175	13
Sulphur River							800	16
St. Francis River							34,245	2,529
Tyronza River							245	24
Little River and Big Lake							900	91
White River			49,895	997			161,403	3,527
Black River							41,880	3,129
Cache River			2,705	38			14,505	342
Fork of Little Red River	6,200	\$124	4,300	87			20,730	416
Minor tributaries			601	24			65	7
Total	6,200	124	60,337	1,277	3,985	399	378,987	19,348
Fyke nets:								
Mississippi River								
Arkansas River			302	15	2,745	275	4,541	401
L'Anguille River							9,375	938
Red River					100	2	425	40
Little River							6,300	126
Ouachita River							500	10
Bayou Bartholomew							7,655	572
Saline River							2,967	178
Sulphur River							3,004	223
St. Francis River							1,000	20
Tyronza River							23,410	2,071
Little River and Big Lake							90	9
White River			5,540	110			1,800	144
Black River							206,745	4,132
Cache River			250	5			22,072	1,497
Fork of Little Red River	5,125	103	1,420	29			2,537	65
Total	5,125	103	7,512	159	2,845	277	295,021	10,475
Total by waters:								
Mississippi River								
Arkansas River			1,988	97	6,730	674	7,501	659
Minor tributaries			1,275	54			93,634	9,366
L'Anguille River							1,250	125
Red River					100	2	620	57
Little River							17,600	352
Ouachita River					82	10	2,300	46
Bayou Bartholomew							9,941	737
Massey Lake			3,486	157			2,967	178
Saline River			229	17			3,179	236
Sulphur River							1,800	36
St. Francis River							57,655	4,600
Rainbow Lake					584	29		
Tyronza River							335	33
Little River and Big Lake							2,700	235
White River			70,046	1,400			369,730	7,689
Black River							63,952	4,626
Cache River			2,955	43			17,042	407
Fork of Little Red River	11,325	227	5,775	117			23,330	465
Minor tributaries			6,780	235			822	30
Total	11,325	227	93,200	2,159	6,830	676	676,358	29,877

Fisheries of Arkansas, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sucker "mullet"		Mussel shells		Pearls	Slugs	Total	
	Pounds	Value	Pounds	Value	Value	Value	Pounds	Value
Haul seines:								
Mississippi River:								
Arkansas River							11,992	\$1,196
Horseshoe Lake							35,630	2,850
Red River:								
Ouachita River							1,261	127
Bayou Bartholomew:							6,910	328
Massey Lake							79,317	3,056
White River							8,097	389
Minor tributaries								
Total							143,207	7,946
Anchor gill nets:								
Mississippi River:								
Minor tributaries							13,981	621
Trammel nets:								
Mississippi River:								
Arkansas River							14,299	1,433
Boggy Bayou: Cypress Creek							521	26
Red River:								
Ouachita River:							973	91
Saline River								
St. Francis River: Rainbow							4,759	363
Lake							24,976	1,130
White River							6,183	479
Black River							3,175	138
Fork of Little Red River							28,277	1,302
Minor tributaries								
Total							83,163	4,962
Trot lines:								
Mississippi River								
Arkansas River							72,534	4,987
Minor tributaries							303,059	29,924
Boggy Bayou: Cypress Creek							5,525	464
L'Anguille River							350	25
Red River							2,520	191
Little River							123,200	8,860
Ouachita River							15,800	1,496
Bayou Bartholomew							25,574	3,248
Boeuf River							3,265	328
Little Missouri River							1,005	80
Saline River							320	38
Sulphur River							3,493	483
St. Francis River							7,300	506
Tyronza River							293,530	21,847
Little River and Big							2,500	198
Lake							48,065	4,124
White River							1,101,435	51,543
Black River							202,135	15,496
Spring River	350	28					6,830	724
Cache River							71,685	3,311
Fork of Little Red River							144,490	6,460
Minor tributaries							245	22
Minor tributaries							18,245	1,443
Total	1,719	159					2,453,105	155,798
Fyke nets:								
Mississippi River								
Arkansas River	125	7					217,276	10,708
L'Anguille River							93,016	9,793
Red River							6,200	378
Little River							94,000	2,950
Ouachita River							5,900	186
Bayou Bartholomew							46,815	3,899
Saline River							21,742	1,711
Sulphur River							14,999	1,436
St. Francis River	870	39					19,000	600
Tyronza River	40	2					254,100	18,785
Little River and Big							950	67
Lake							19,025	1,326
White River							975,950	39,236
Black River	555	28					269,123	18,806
Cache River							41,840	2,081
Fork of Little Red River							74,270	3,106
Minor tributaries							12,055	699
Total	1,590	76					2,166,261	115,767

Fisheries of Arkansas, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sucker “mullet”		Mussel shells		Pearls	Slugs	Total	
Mussel dredges:								
Mississippi River:	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Value</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>
White River-----	2,201,900	\$21,990	246	\$2,555	\$2,201,900	\$24,791		
Black River-----	741,500	7,415	101	1,051	741,500	8,567		
Cache River-----	140,000	1,400	16	231	140,000	1,647		
Fork of Little Red River-----	74,200	742	23	123	74,200	888		
Total-----		3,157,600	31,547	386	3,960	3,157,600	35,893	
Crowfoot bars:								
Mississippi River:								
St. Francis River-----		158,610	1,648	70	249	158,610	1,967	
White River-----	3,771,000	37,710	692	4,731	3,771,000	43,133		
Black River-----	924,500	9,245	150	1,353	924,500	10,748		
Cache River-----	140,000	1,400	16	231	140,000	1,647		
Fork of Little Red River-----	77,500	775	28	127	77,500	930		
Total-----		5,071,610	50,778	956	6,691	5,071,610	58,425	
Tongs:								
Mississippi River:								
St. Francis River-----	1,118,300	11,272	415	1,542	1,118,300	13,229		
Tyronza River-----	16,450	148	23	23	16,450	171		
Little River and Big Lake-----	58,500	531	75	108	58,500	714		
White River: Black River-----	183,900	1,977	945	349	183,900	3,271		
Total-----		1,377,150	13,928	1,435	2,022	1,377,150	17,385	
Rakes:								
Mississippi River:								
St. Francis River-----	24,380	184	55	35	24,380	274		
White River-----	345,750	3,428	26	301	345,750	3,755		
Total-----		370,130	3,612	81	336	370,130	4,029	
Forks:								
Mississippi River:								
Red River: Ouachita River-----	6,075	46	114	1,110	6,075	46		
White River-----	709,000	7,090	114	1,110	709,000	8,314		
Total-----		715,075	7,136	114	1,110	715,075	8,360	
By hand:								
Mississippi River:								
Boggy Bayou-----	4,150	45	26	4,150	71			
St. Francis River-----	141,050	1,361	20	200	141,050	1,581		
Tyronza River-----	5,525	82	56	5,525	82			
White River: Black River-----	30,500	330	145	30,500	531			
Total-----		181,225	1,818	165	282	181,225	2,265	
Total by waters:								
Mississippi River-----	125	\$7					289,810	15,695
Arkansas River-----							422,366	42,346
Minor tributaries-----							5,525	464
Boggy Bayou-----		4,150	45	26			4,150	71
Cypress Creek-----							871	51
Horseshoe Lake-----							35,630	2,850
L'Anguille River-----							8,720	569
Red River-----							217,200	11,810
Little River-----							21,700	1,682
Ouachita River-----	1,369	131	6,075	46			79,725	7,320
Bayou Bartholomew-----							25,007	2,039
Massey Lake-----							6,910	328
Boeuf River-----							1,005	80
Little Missouri River-----							320	38
Saline River-----							19,465	2,010
Sulphur River-----							26,300	1,106
St. Francis River-----	870	39	1,442,340	14,465	560	2,026	1,989,970	57,683
Rainbow Lake-----							4,759	363
Tyronza River-----	40	2	21,975	230	23	25,425	518	
Little River and Big Lake-----			58,500	531	75	108	125,590	6,164
White River-----			7,027,650	70,218	1,078	8,697	9,209,328	174,958
Black River-----	555	28	1,880,400	18,967	1,341	2,809	2,357,841	57,898
Spring River-----	350	28					6,830	724
Cache River-----			280,000	2,800	32	462	393,525	8,686
Fork of Little Red River-----			151,700	1,517	51	250	373,635	11,522
Minor tributaries-----							12,300	721
Minor tributaries-----							68,600	3,755
Total-----	3,309	235	10,872,790	108,819	3,137	14,401	15,732,507	411,451

ILLINOIS

Fisheries of Illinois, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trammel nets	Trot lines	Fyke nets	Dip nets	Baskets
	Number	Number	Number	Number	Number	Number
Fishermen:						
On boats and shore:						
Regular	323	60	201	441	22	136
Casual	67	2	241	305		42
Total	390	62	442	746	22	178
Boats:						
Motor	122	27	73	245		92
Other	169	16	347	317		51
Apparatus:						
Number	127	28	1,312	9,852	22	3,769
Length, yards	33,975					
Square yards		4,890				
Hooks			124,715			

Item	Mussel dredges	Crowfoot bars	Forks	By hand	Total, ex- clusive of duplication
	Number	Number	Number	Number	Number
Fishermen:					
On boats and shore:					
Regular	10	131		18	708
Casual	4	336	33	482	1,318
Total	14	467	33	500	2,026
Boats:					
Motor	14	356	20	1	676
Other	5	102	11	263	957
Apparatus:					
Number	14	840	33		
Yards at mouth	10				

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	Trammel nets		
	Regu- lar	Casual	Total	Motor	Other		Num- ber	Length, yards	Num- ber
Mississippi River	196	234	430	133	236	46	6,090		28
Big Muddy River	1	3	4	2	4				4,890
Illinois River	347	261	608	215	239	66	26,115		
Sangamon River	6	17	23	5	19	1	60		
Spring Lake		3	3		3				
Vermilion River		2	2		1	1	100		
Salt Fork of Vermilion River		4	4		4				
Ohio River	56	44	100	27	97	5	500		
Wabash River	15	153	168	78	104	1	100		
Embarra River		6	6		6				
Little Wabash River		21	21	3	21				
Rock River	85	47	52	191	195	7	1,010		
Kishwaukee River		2	2		2				
Pecatonica River		2	91	22	26				
Total	708	1,318	2,026	676	957	127	33,975	28	4,890

Fisheries of Illinois, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Waters	Trot lines		Fyke nets	Dip nets	Baskets	Mussel dredges		Crow-foot bars	Forks
	Number	Hooks	Number	Number	Number	Number	Yards at mouth	Number	Number
Mississippi River	528	38,335	2,834	22	2,082	13	9	52	5
Big Muddy River			45						
Illinois River	240	45,400	6,073		1,600				
Sangamon River	38	1,520	116		55				
Spring Lake			7						
Ohio River	334	32,400	504						
Wabash River	144	6,260	151		22				
Embarra River			8		10				
Little Wabash River	28	800	114				1	1	
Rock River							1	379	
Pecatonica River								47	
Total	1,312	124,715	9,852	22	3,769	14	10	840	33

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River								
Illinois River	4,788	\$72	310,139	\$5,439	264,075	\$8,457	12,423	\$1,467
Sangamon River			200	25	2,459,602	63,452	66,092	6,072
Vermilion River			2,000	80		100		5
Ohio River			2,000	120	1,000	20	2,000	300
Wabash River			185	18	550	33	90	15
Rock River			19,335	1,283	92,729	4,513		
Total	4,788	72	426,296	22,082	2,818,256	76,496	80,605	7,854
Trammel nets: Mississippi River			16,910	889	43,330	1,162	3,970	380
Trot lines:								
Mississippi River								
Illinois River			535	26	14,627	446	69,404	9,034
Sangamon River					31,923	958	39,938	3,736
Ohio River			32,500	2,280	600	48	3,000	390
Wabash River			2,320	172	40,100	980	52,575	6,121
Little Wabash River			500	50	12,690	675	23,130	3,438
Total			35,855	2,528	1,300	124	2,100	310
Fyke nets:								
Mississippi River			134,285	8,788	230,692	9,321	38,637	4,989
Big Muddy River			5,000	575	3,500	300	600	87
Illinois River	2,720	137	202,313	9,901	1,562,606	31,635	77,890	7,226
Sangamon River			2,700	310	18,700	1,496	900	117
Spring Lake					2,000	80		
Ohio River	300	6	65,900	4,773	59,800	1,761	13,000	1,503
Wabash River	400	16	3,810	319	10,760	627	10,640	1,590
Embarra River			840	70	1,020	72	68	9
Little Wabash River	100	10	8,700	758	15,000	1,030	1,050	147
Total	3,520	169	423,548	25,494	1,904,078	46,322	142,785	15,668
Dip nets: Mississippi River			9,000	900	10,275	964		
Baskets:								
Mississippi River								
Illinois River								
Sangamon River					1,325	32	44,124	4,057
Ohio River:								
Wabash River								
Embarra River					210	12	715	104
Total					30	2	110	16
					1,565	46	230,189	21,959

Fisheries of Illinois, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Total by waters:								
Mississippi River	252,632	\$16,016	562,999	\$20,350	296,374	\$31,882		
Big Muddy River	5,000	575	3,500	300	600	87		
Illinois River	7,508	\$209	512,987	25,044	4,055,456	96,077	228,044	21,091
Sangamon River			2,900	335	19,500	1,560	17,200	2,277
Spring Lake					2,000	80		
Vermilion River			2,000	80	100	5		
Salt Fork of Vermilion								
Ohio River	300	6	100,400	7,173	100,900	2,761	67,575	7,924
Wabash River	400	16	6,315	509	24,210	1,347	34,575	5,147
Embarra's River			840	70	1,050	74	178	25
Little Wabash River	100	10	9,200	808	16,300	1,154	3,150	457
Rock River			19,335	1,283	92,729	4,513		
Total	8,308	241	911,609	51,893	4,878,744	128,221	647,696	68,890
Gear and waters	Eels		Mooneye		Paddlefish or spoonbill cat		Quillback or "American carp"	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:			1,000	\$20	18,800	\$1,774	900	\$37
Mississippi River					7,974	399	1,172	40
Illinois River							2,000	100
Vermilion River								
Ohio River					70,000	2,800		
Rock River							8,860	266
Total			1,000	20	96,774	4,973	12,932	443
Trammel nets: Mississippi River					155	8		
Trot lines:								
Mississippi River	835	\$44						
Illinois River	2,050	132						
Ohio River:								
Wabash River	1,000	80						
Total	3,885	256						
Fyke nets:								
Mississippi River					4,530	313	2,000	85
Illinois River	150	9			2,987	170		
Sangamon River							200	16
Ohio River							2,100	58
Wabash River							300	
Little Wabash River					400	16		
Total	150	9			7,917	499	4,600	165
Baskets:								
Mississippi River: Illinois River	950	57						
Total by waters:								
Mississippi River	835	44	1,000	20	23,485	2,095	2,900	122
Illinois River	3,150	198			10,961	569	1,172	40
Sangamon River							200	16
Vermilion River							2,000	100
Ohio River					70,000	2,800	2,100	58
Wabash River	1,000	80					300	
Little Wabash River					400	16		
Rock River							8,860	266
Total	4,985	322	1,000	20	104,846	5,480	17,532	608

Fisheries of Illinois, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sheepshead		Sturgeon, shovelnose		Sucker, “mullet,”		White bass	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	63,612	\$3,507	2,559	\$354	300	\$12		
Illinois River	15,742	776			4,950	201		
Ohio River			4,000	240				
Wabash River	30	3						
Rock River					5,010	127		
Total	79,384	4,286	6,559	594	10,260	340		
Trammel nets: Mississippi River	2,740	137	20,350	2,035	960	30		
Trot lines:								
Mississippi River	4,195	203	1,240	123				
Illinois River	200	10	360	36				
Ohio River	23,100	1,653	6,000	270				
Wabash River	8,340	834	1,340	82	80	8		
Little Wabash River	400	34						
Total	36,235	2,734	8,940	511	80	8		
Fyke nets:								
Mississippi River	34,790	2,469	1,217	168	5,995	268	100	\$15
Big Muddy River	200	23						
Illinois River	9,705	520			3,690	130		
Sangamon River	1,100	110						
Ohio River	9,900	723	2,200	110	1,650	91	1,100	77
Wabash River	1,060	105	500	30	2,320	212		
Embarra River					50	5		
Little Wabash River	1,950	161			125	3		
Total	58,705	4,111	3,917	308	13,830	709	1,200	92
Dip nets: Mississippi River	645	53						
Total by waters:								
Mississippi River	105,982	6,369	25,366	2,680	7,255	310	100	15
Big Muddy River	200	23						
Illinois River	25,647	1,306	360	36	8,640	331		
Sangamon River	1,100	110						
Ohio River	33,000	2,376	12,200	620	1,650	91	1,100	77
Wabash River	9,430	942	1,840	112	2,400	220		
Embarra River					50	5		
Little Wabash River	2,350	195			125	3		
Rock River					5,010	127		
Total	177,709	11,321	39,766	3,448	25,130	1,087	1,200	92
Gear and waters	Mussel shells		Pearls	Slugs	Turtles, snapper		Total	
	Pounds	Value	Value	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River							456,106	\$21,067
Illinois River					11,957	\$556	2,882,416	86,685
Sangamon River							400	41
Vermilion River					500	50		235
Ohio River							79,000	3,480
Wabash River							855	69
Rock River							125,934	6,189
Total					12,457	606	3,549,311	117,766
Trammel nets: Mississippi River							88,415	4,641
Trot lines:								
Mississippi River							90,301	9,850
Illinois River							75,006	4,898
Sangamon River							3,600	438
Ohio River							154,275	11,304
Wabash River							48,900	5,289
Little Wabash River							4,300	518
Total							376,382	32,297

Fisheries of Illinois, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Mussel shells		Pearls	Slugs	Turtles, snapper		Total	
	Pounds	Value	Value	Value	Pounds	Value	Pounds	Value
Fyke nets:								
Mississippi River					250	\$8	452,496	\$26,424
Big Muddy River							9,300	985
Illinois River:					1,870	82	1,863,931	49,810
Sangamon River							23,600	2,049
Spring Lake							2,000	80
Ohio River:							155,950	9,102
Wabash River							29,790	2,905
Embarra River							1,978	156
Little Wabash River							27,325	2,125
Total					2,120	90	2,566,370	93,636
Dip nets: Mississippi River							19,920	1,917
Baskets:								
Mississippi River							171,940	16,012
Illinois River							46,399	4,146
Sangamon River							13,300	1,770
Ohio River:							925	116
Wabash River							140	18
Embarra River							232,704	22,062
Total								
Mussel dredges:								
Mississippi River	537,500	\$4,424		\$607			537,500	5,031
Rock River	4,000	34					4,000	34
Total	541,500	4,458		607			541,500	5,065
Crowfoot bars:								
Mississippi River	245,000	2,045	\$65	613			245,000	2,723
Illinois River	630,900	5,211		447			630,900	5,658
Ohio River: Wabash River	789,500	8,410		1,440			789,500	9,850
Rock River	3,138,320	41,464		5,853			3,138,320	47,317
Pecatonica River	158,372	1,745		163			158,372	1,908
Total	4,962,092	58,875	65	8,516			4,962,092	67,456
Forks:								
Mississippi River	12,500	104		62			12,500	166
Ohio River:								
Wabash River	54,500	545		110			54,500	655
Embarra River	15,500	155		40			15,500	195
Total	82,500	804		212			82,500	1,016
By hand:								
Mississippi River	443,566	3,594	125	977			443,566	4,696
Illinois River	403,500	3,130		272			403,500	3,402
Sangamon River	8,000	52					8,000	52
Vermilion River: Salt Fork of Vermilion River	1,900	20		5			1,900	25
Ohio River: Wabash River: Little Wabash River	500	7					500	7
Rock River	802,920	9,836		1,041			802,920	10,877
Kishwaukee River	12,000	150					12,000	150
Pecatonica River	171,050	1,968		205			171,050	2,173
Total	1,843,436	18,757	125	2,500			1,843,436	21,382
Total by waters:								
Mississippi River	1,238,566	10,167	190	2,259	250	8	2,517,744	92,527
Big Muddy River							9,300	985
Illinois River	1,034,400	8,341		719	13,827	638	5,902,152	154,599
Sangamon River	8,000	52					48,900	4,350
Spring Lake							2,000	80
Vermilion River							4,600	235
Salt Fork of Vermilion River	1,900	20		5			1,900	25
Ohio River:							389,225	23,886
Wabash River	844,000	8,955		1,550			924,470	18,884
Embarra River	15,500	155		40			17,618	369
Little Wabash River	500	7					32,125	2,650
Rock River	3,945,240	51,334		6,894			4,071,174	64,417
Kishwaukee River	12,000	150					12,000	150
Pecatonica River	329,422	3,713		368			329,422	4,081
Total	7,429,528	82,894	190	11,835	14,577	696	14,262,630	367,238

INDIANA

Fisheries of Indiana, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Tram- mel nets	Trot lines	Fyke nets	Crow- foot bars	Tongs	Forks	By hand	Total, exclusive of dupli- cation
Fishermen:									
On boats and shore:	Number	Number	Number	Number	Number	Number	Number	Number	Number
Regular-----	19			3					20
Casual-----	83	8	111	88	546	72	1,278	1,060	1,735
Total-----	102	8	111	91	546	72	1,278	1,060	1,755
Boats:									
Motor-----	8			1	362	25	450	325	544
Other-----	49	3	109	86	194	47	833	733	1,189
Apparatus:									
Number-----	50	3	320	335	1,092	72	1,278		
Length, yards-----	5,170								
Square yards-----		360							
Hooks-----			16,767						

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regular	Casual	Total	Motor	Other		
Mississippi River:							
Illinois River: Kankakee River: Iroquois River-----	Number	Number	Number	Number	Number	Number	Length, yards
Ohio River-----	13	179	192	6	161	32	2,980
Wabash River-----	7	719	726	278	439	18	2,190
Tippecanoe River-----		129	129	55	74		
White River-----		13	13	5	8		
East Fork of White River-----		651	651	194	467		
Driftwood River-----		3	3		3		
West Fork of White River-----		36	36	6	32		
Total-----	20	1,735	1,755	544	1,189	50	5,170

Waters	Trammel nets		Trot lines		Fyke nets	Crow- foot bars	Tongs	Forks
	Number	Square yards	Number	Hooks	Number	Number	Number	Number
Mississippi River:								
Illinois River: Kankakee River: Iroquois River-----			279	15,335	280			
Ohio River-----	3	360	41	1,432	55	780	12	459
Wabash River-----						24		114
Tippecanoe River-----						8	2	10
White River-----								
East Fork of White River-----						280	58	651
Driftwood River-----								3
West Fork of White River-----								36
Total-----	3	360	320	16,767	335	1,092	72	1,278

Fisheries of Indiana, 1931—Continued

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River:						
Ohio River	18,061	\$1,720	62,790	\$3,278	6,082	\$786
Wabash River	16,407	1,084	38,984	1,375	950	95
Total	34,468	2,804	101,774	4,653	7,032	881
Trammel nets: Mississippi River:						
Ohio River:						
Wabash River	500	50	700	70	25	4
Trot lines: Mississippi River:						
Ohio River	22,782	2,451	11,225	1,235	12,407	2,028
Wabash River	400	32	1,337	101	2,375	351
Total	23,182	2,483	12,562	1,336	14,782	2,379
Fyke nets: Mississippi River:						
Ohio River	20,008	2,341	34,235	3,645	10,236	1,694
Wabash River	6,887	478	8,370	458	3,295	344
Total	26,895	2,819	42,605	4,103	13,531	2,038
Total by waters: Mississippi River:						
Ohio River	60,851	6,512	108,250	8,158	28,725	4,508
Wabash River	24,194	1,644	49,391	2,004	6,645	794
Total	85,045	8,156	157,641	10,162	35,370	5,302

Gear and waters	Paddlefish or spoonbill cat		Quillback or "American Carp"		Sheepshead	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River:						
Ohio River	11,877	\$1,382	11,960	\$394	13,440	\$974
Wabash River	2,760	209	7,580	162	7,425	448
Total	14,637	1,591	19,540	556	20,865	1,422
Trammel nets: Mississippi River:						
Ohio River:						
Wabash River			50	3		
Trot lines: Mississippi River:						
Ohio River			130	14	9,800	1,378
Wabash River					200	16
Total			130	14	10,000	1,394
Fyke nets: Mississippi River:						
Ohio River	855	83	8,402	805	5,720	750
Wabash River	1,000	50	2,190	58	2,155	145
Total	1,855	133	10,592	863	7,875	895
Total by waters: Mississippi River:						
Ohio River	12,732	1,465	20,492	1,213	28,960	3,102
Wabash River	3,760	259	9,820	223	9,780	609
Total	16,492	1,724	30,312	1,436	38,740	3,711

Fisheries of Indiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sturgeon, shovel-nose		Sucker “mullet”		Yellow pike		Mussel shells	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River:								
Ohio River.....	1,263	\$99	6,600	\$361	1,300	\$195	.....	.....
Wabash River.....	450	37	2,902	174	.....	.....	.....	.....
Total.....	1,713	136	9,502	535	1,300	195	.....	.....
Trammel nets: Mississippi River:								
Ohio River:								
Wabash River.....	100	15	200	16	.....	.....	.....	.....
Trot lines: Mississippi River:								
Ohio River.....	850	108	.....	.....	.....	.....	.....	.....
Wabash River.....	175	13	40	4	.....	.....	.....	.....
Total.....	1,025	121	40	4	.....	.....	.....	.....
Fyke nets: Mississippi River:								
Ohio River.....	115	16	5,805	509	3,250	498	.....	.....
Wabash River.....	60	4	1,250	92	.....	.....	.....	.....
Total.....	175	20	7,055	601	3,250	498	.....	.....
Crowfoot bars: Mississippi River:								
Ohio River:								
Wabash River.....	.....	.....	.....	.....	.....	.....	1,321,120	\$17,597
Tippecanoe River.....	.....	.....	.....	.....	.....	.....	24,000	360
White River.....	.....	.....	.....	.....	.....	.....	14,235	152
East Fork of White River.....	.....	.....	.....	.....	.....	.....	302,565	4,454
Total.....	.....	.....	.....	.....	.....	.....	1,661,920	22,563
Tongs: Mississippi River:								
Ohio River:								
Wabash River.....	.....	.....	.....	.....	.....	.....	48,000	672
White River.....	.....	.....	.....	.....	.....	.....	9,900	100
East Fork of White River.....	.....	.....	.....	.....	.....	.....	134,826	2,022
Total.....	.....	.....	.....	.....	.....	.....	192,726	2,794
Forks: Mississippi River:								
Illinois River:								
Kankakee River:								
Iroquois River.....	.....	.....	.....	.....	.....	.....	25,000	350
Ohio River:								
Wabash River.....	.....	.....	.....	.....	.....	.....	2,070,550	29,706
Tippecanoe River.....	.....	.....	.....	.....	.....	.....	106,000	1,590
White River.....	.....	.....	.....	.....	.....	.....	48,800	493
East Fork of White River.....	.....	.....	.....	.....	.....	.....	1,208,350	18,170
Driftwood River.....	.....	.....	.....	.....	.....	.....	5,000	75
West Fork of White River.....	.....	.....	.....	.....	.....	.....	228,900	3,435
Total.....	.....	.....	.....	.....	.....	.....	3,692,600	53,819
By hand: Mississippi River:								
Ohio River:								
Wabash River.....	.....	.....	.....	.....	.....	.....	1,197,200	17,940
Tippecanoe River.....	.....	.....	.....	.....	.....	.....	192,000	2,880
White River.....	.....	.....	.....	.....	.....	.....	31,150	312
East Fork of White River.....	.....	.....	.....	.....	.....	.....	262,990	3,844
West Fork of White River.....	.....	.....	.....	.....	.....	.....	98,150	1,480
Total.....	.....	.....	.....	.....	.....	.....	1,781,490	26,456
Total by waters: Mississippi River:								
Illinois River:								
Kankakee River:								
Iroquois River.....	.....	.....	.....	.....	.....	.....	25,000	350
Ohio River.....	2,228	223	12,405	870	4,550	693	.....	.....
Wabash River.....	785	69	4,392	286	.....	.....	4,636,870	65,915
Tippecanoe River.....	.....	.....	.....	.....	.....	.....	322,000	4,830
White River.....	.....	.....	.....	.....	.....	.....	104,085	1,057
East Fork of White River.....	.....	.....	.....	.....	.....	.....	1,908,731	28,490
Driftwood River.....	.....	.....	.....	.....	.....	.....	5,000	75
West Fork of White River.....	.....	.....	.....	.....	.....	.....	327,050	4,915
Total.....	3,013	292	16,797	1,156	4,550	693	7,328,736	105,632

Fisheries of Indiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Pearls	Slugs	Turtles				Total	
			Snapper		Soft-shell			
Haul seines: Mississippi River:								
Ohio River			500	\$25	400	\$20	133, 373	\$9, 189
Wabash River							78, 358	3, 629
Total			500	25	400	20	211, 731	12, 818
Trammel nets: Mississippi River:								
Ohio River								
Wabash River							1, 575	158
Trot lines: Mississippi River:								
Ohio River							57, 194	7, 214
Wabash River							4, 527	517
Total							61, 721	7, 731
Fyke nets: Mississippi River:								
Ohio River							88, 626	10, 341
Wabash River							25, 207	1, 629
Total							113, 833	11, 970
Crowfoot bars: Mississippi River:								
Ohio River:								
Wabash River			\$3, 094				1, 321, 120	20, 691
Tippecanoe River			75				24, 000	435
White River			29				14, 235	181
East Fork of White River			910				302, 565	5, 364
Total			4, 108				1, 661, 920	26, 671
Tongs: Mississippi River:								
Ohio River:								
Wabash River			120				48, 000	792
White River			22				9, 900	122
East Fork of White River			402				134, 826	2, 424
Total			544				192, 726	3, 338
Forks: Mississippi River:								
Illinois River:								
Kankakee River:								
Iroquois River			75				25, 000	425
Ohio River:								
Wabash River			5, 192				2, 070, 550	34, 898
Tippecanoe River			330				106, 000	1, 920
White River			109				48, 800	602
East Fork of White River			3, 627				1, 208, 350	21, 797
Driftwood River			12				5, 000	87
West Fork of White River			250				228, 900	3, 685
Total			9, 595				3, 692, 600	63, 414
By hand: Mississippi River:								
Ohio River:								
Wabash River			\$125	2, 939			1, 197, 200	21, 004
Tippecanoe River				600			192, 000	3, 480
White River				68			31, 150	380
East Fork of White River				826			262, 990	4, 670
West Fork of White River				108			98, 150	1, 588
Total			125	4, 541			1, 781, 490	31, 122

Fisheries of Indiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Pearls	Slugs	Turtles				Total		
			Snapper		Soft-shell				
Total by waters: Mississippi River:									
Illinois River:									
Kankakee River:			Value	Value			Pounds	Value	
Iroquois River			\$75				25,000	\$425	
Ohio River:							279,193	26,744	
Wabash River	\$125		11,345	500	\$25	400	\$20	4,746,537	
Tippecanoe River			1,005				322,000	83,318	
White River			228				104,085	5,835	
East Fork of White River			5,765				1,908,731	1,285	
Driftwood River			12				5,000	87	
West Fork of White River			358				327,050	5,273	
Total	125	18,788	500	25		400	20	7,717,596	
								157,222	

IOWA

Fisheries of Iowa, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trot lines	Pound nets	Fyke nets	Dip nets	Crow-foot bars	By hand	Total, exclusive of duplication
Fishermen:								
On boats and shore:	Number	Number	Number	Number	Number	Number	Number	Number
Regular	117	127		191		106		245
Casual	184	183	4	195	10	137	342	648
Total	301	310	4	386	10	243	342	893
Boats:								
Motor	108	187		267		193		309
Other	116	103	2	168		42	235	457
Apparatus:								
Number	133	1,158	2	1,981	10	464		
Length, yards.	36,339	186,250						
Hooks								

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regular	Casual	Total	Motor	Other		
Mississippi River	Number	Number	Number	Number	Number	Number	Length, yards
Des Moines River	245	273	518	309	191	125	34,774
Iowa River		183	183		126		
Cedar River		7	7		7		
Shell Rock River		108	108		59		
Missouri River		2	2		2		
Big Sioux River		33	33		31	8	1,565
Skunk River		2	2		2		
Wapsipinicon River		6	6		6		
Total	245	648	893	309	457	133	36,339

Fisheries of Iowa, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Waters	Trot lines		Pound nets	Fyke nets	Dip nets	Crowfoot bars
	Number	Hooks	Number	Number	Number	Number
Mississippi River	1,029	179,800				
Missouri River	129	6,450	2	1,855	10	464
Total	1,158	186,250	2	1,981	10	464

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River	89,725	\$3,701	261,562	\$20,774	701,054	\$33,961	65,200	\$6,520
Missouri River			5,000	460	33,000	2,640	1,950	340
Total	89,725	3,701	266,562	21,234	734,054	36,601	67,150	6,860
Trot lines: Mississippi River					64,600	3,116	321,290	32,129
Missouri River					5,290	423	13,400	2,680
Total					69,890	3,539	334,690	34,809
Pound nets: Mississippi River:								
Missouri River			1,000	100	7,000	560	1,000	200
Fyke nets: Mississippi River	2,100	58	476,453	38,115	741,000	36,050	59,800	5,980
Missouri River			2,600	256	42,300	3,384	4,200	694
Total	2,100	58	479,053	38,371	783,300	39,434	64,000	6,674
Dip nets: Mississippi River							500	50
Total by waters: Mississippi River	91,825	3,759	738,015	58,889	1,506,654	73,127	446,790	44,679
Missouri River			8,600	816	87,590	7,007	20,550	3,914
Total	91,825	3,759	746,615	59,705	1,594,244	80,134	467,340	48,593

Gear and waters	Eels		Mooneye		Paddlefish or spoonbill cat		Pike or pickerel	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River	325	\$15	1,100	\$28	9,400	\$638	4,700	\$470

Gear and waters	Quillback or "American carp"		Sheepshead		Sturgeon, shovelnose	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River	35,150	\$743	156,100	\$7,805	17,200	\$1,609
Missouri River	700	35	3,800	306	150	30
Total	35,850	778	159,900	8,111	17,350	1,639
Trot lines: Mississippi River			40,800	2,055		
Missouri River			4,050	319		
Total			44,850	2,374		
Pound nets: Mississippi River:						
Missouri River			1,600	128		
Fyke nets: Mississippi River	24,600	561	132,149	6,607	300	24
Missouri River			4,950	399		
Total	24,600	561	137,099	7,006	300	24
Total by waters: Mississippi River	59,750	1,304	329,049	16,467	17,500	1,633
Missouri River	700	35	14,400	1,152	150	30
Total	60,450	1,339	343,449	17,619	17,650	1,663

Fisheries of Iowa, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sucker "mullet"		Mussel shells		Pearls	Slugs
	Pounds	Value	Pounds	Value	Value	Value
Haul seines: Mississippi River						
Missouri River	25,200	\$529				
Total	150	7				
	25,350	536				
Fyke nets: Mississippi River						
Missouri River	5,100	102				
Total	100	4				
	5,200	106				
Dip nets: Mississippi River						
Crowfoot bars: Mississippi River	6,000	180	2,671,266	\$40,455	\$4,580	\$8,762
By hand: Mississippi River:						
Des Moines River			885,162	14,626	1,656	2,965
Iowa River			18,680	252	18	54
Cedar River			655,938	8,625	640	1,740
Shell Rock River			4,000	60		
Missouri River: Big Sioux River			1,000	10		
Skunk River			26,580	304		30
Wapsipinicon River			103,593	1,353	350	373
Total			1,694,953	25,230	2,664	5,162
Total by waters: Mississippi River	36,300	811	2,671,266	40,455	4,580	8,762
Des Moines River			885,162	14,626	1,656	2,965
Iowa River			18,680	252	18	54
Cedar River			655,938	8,625	640	1,740
Shell Rock River			4,000	60		
Missouri River	250	11				
Big Sioux River			1,000	10		
Skunk River			26,580	304		30
Wapsipinicon River			103,593	1,353	350	373
Total	36,550	822	4,366,219	65,685	7,244	13,924
Gear and waters	Turtles		Terrapin		Total	
	Snapper		Soft-shell			
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines: Mississippi River	2,000	\$40	17,000	\$340	18,900	\$373
Missouri River					1,404,616	\$77,546
Total	2,000	40	17,000	340	18,900	373
Trot lines: Mississippi River						
Missouri River					426,690	37,300
Total					22,740	3,422
Pound nets: Mississippi River						
Missouri River						
Total					449,430	40,722
Fyke nets: Mississippi River						
Missouri River						
Total					1,441,702	87,501
Dip nets: Mississippi River						
Crowfoot bars: Mississippi River						
By hand: Mississippi River:						
Des Moines River						
Iowa River					885,162	19,247
Cedar River					18,680	324
Shell Rock River					655,938	11,005
Missouri River: Big Sioux River					4,000	60
Skunk River					1,000	10
Wapsipinicon River					26,580	334
Total					103,593	2,076
Total					1,694,953	33,056
Total by waters: Mississippi River	2,000	40	17,000	340	19,100	377
Des Moines River					5,950,774	256,374
Iowa River					885,162	19,247
Cedar River					18,680	324
Shell Rock River					655,938	11,005
Missouri River					4,000	60
Big Sioux River					132,246	12,965
Skunk River					1,000	10
Wapsipinicon River					26,580	334
Total	2,000	40	17,000	340	19,100	377
					103,593	2,076
					7,777,967	302,395

KANSAS

Fisheries of Kansas, 1931

OPERATING UNITS: BY GEAR

Item	Trammel nets	Trot lines	Fyke nets	Forks	Total, exclusive of duplication
Fishermen:					
On boats and shore:					
Regular.....	Number 35	Number 3	Number 24	Number 29	Number 35
Casual.....	59	2	24		88
Total.....	94	5	48	29	123
Boats:					
Motor.....	16	2	15		18
Other.....	93	5	47	29	123
Apparatus:					
Number.....	90	17	189	29	
Square yards.....	9,026				
Hooks.....		360			

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Trammel nets		Trot lines		Fyke nets		Forks
	Regu- lar	Casual	Total	Motor	Other							
Mississippi River:												
Missouri River.....	Number 35	Number 59	Number 94	Number 18	Number 94	Number 90	Square yards 9,026	Number 17	Hooks 360	Number 189		
Arkansas River.....			29		29							29
Neosho River.....												
Total.....	35	88	123	18	123	90	9,026	17	360	189		29

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads		Quillback or "American carp"	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Trammel nets: Mississippi River: Missouri River.....	20,172	\$1,842	98,383	\$9,144	183	\$22	100	\$11
Trot lines: Mississippi River: Missouri River.....					587	89		
Fyke nets: Mississippi River: Missouri River.....	4,153	380	19,106	1,812				
Total by waters: Mississippi River: Missouri River.....	24,325	2,222	117,489	10,956	770	111	100	11

Gear and waters	Sturgeon, shovelnose		Mussel shells		Slugs		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Trammel nets: Mississippi River: Missouri River.....	175	\$24					119,013	\$11,043
Trot lines: Mississippi River: Missouri River.....							587	89
Fyke nets: Mississippi River: Missouri River.....							23,259	2,192
Forks: Mississippi River: Arkansas River: Neosho River.....			312,562	\$2,713	\$636		312,562	3,349
Total by waters: Mississippi River: Missouri River.....	175	24	312,562	2,713	636		142,859	13,324
Arkansas River: Neosho River.....							312,562	3,349
Total.....	175	24	312,562	2,713	636		455,421	16,673

KENTUCKY

Fisheries of Kentucky, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trot lines	Fyke nets	Crowfoot bars	Total, ex- clusive of duplication
	Number	Number	Number	Number	Number
Fishermen:					
On boats and shore:					
Regular.....	3	57	46	30	89
Casual.....	36	271	179	95	440
Total.....	39	328	225	125	529
Boats:					
Motor.....	3	16	8	79	92
Other.....	23	300	206	49	420
Apparatus:					
Number.....	24	627	1,231	256	-----
Length, yards.....	2,057	-----	-----	-----	-----
Hooks.....	37,395	-----	-----	-----	-----

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines		Trot lines		Fyke nets	Crow- foot bars
	Regu- lar	Casual	Total	Motor	Other						
	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Length, yards	Num- ber	Hooks	Num- ber	Num- ber
Mississippi River.....	5	11	16	4	13	2	160	22	1,200	81	-----
Ohio River.....	29	234	263	6	233	22	1,897	370	23,380	708	-----
Cumberland River.....	10	37	47	46	-----	-----	-----	58	3,300	159	-----
Green River.....	2	15	17	17	-----	-----	-----	36	1,800	71	-----
Barren River.....	3	21	24	21	-----	-----	-----	86	3,690	35	-----
Tennessee River.....	40	122	162	82	90	-----	-----	55	4,025	177	256
Total.....	89	440	529	92	420	24	2,057	627	37,395	1,231	256

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads		Mooneye	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River.....	2,215	\$234	2,960	\$319	1,070	\$154	-----	-----
Ohio River.....	2,215	234	2,960	319	1,070	154	-----	-----
Total.....	2,215	234	2,960	319	1,070	154	-----	-----
Trot lines:								
Mississippi River.....	20,789	1,812	90	6	5,815	810	-----	-----
Ohio River.....	3,827	336	1,363	70	32,697	4,759	-----	-----
Cumberland River.....	3,120	218	682	46	2,998	272	-----	-----
Green River.....	1,525	153	1,105	111	1,655	123	-----	-----
Barren River.....	4,545	484	810	61	835	125	-----	-----
Tennessee River.....	33,806	3,003	22,924	2,069	5,530	669	-----	-----
Total.....	33,806	3,003	22,924	2,069	49,530	6,758	-----	-----
Fyke nets:								
Mississippi River.....	9,960	877	8,825	388	5,509	814	-----	-----
Ohio River.....	80,045	7,017	62,735	4,467	38,298	5,662	990	\$105
Cumberland River.....	13,102	1,145	4,622	211	7,360	701	-----	-----
Green River.....	7,040	501	1,930	119	3,810	299	-----	-----
Barren River.....	2,050	205	925	93	1,375	206	-----	-----
Tennessee River.....	16,340	1,447	8,540	458	24,825	2,449	-----	-----
Total.....	128,537	11,192	87,577	5,736	81,177	10,131	990	105
Total by waters:								
Mississippi River.....	9,960	877	8,915	394	11,324	1,624	-----	-----
Ohio River.....	103,049	9,063	84,569	6,561	72,065	10,575	990	105
Cumberland River.....	16,929	1,481	5,985	281	10,358	973	-----	-----
Green River.....	10,160	719	2,612	165	5,465	422	-----	-----
Barren River.....	3,575	358	2,030	204	2,210	331	-----	-----
Tennessee River.....	20,885	1,931	9,350	519	30,355	3,118	-----	-----
Total.....	164,558	14,429	113,461	8,124	131,777	17,043	990	105

Fisheries of Kentucky, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Paddlefish or spoonbill cat		Quillback or "American carp"		Sauger	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River	4,400	\$305	1,000	\$78	180	\$27
Ohio River	7,500	700				
Total	11,900	1,005	1,000	78	180	27
Trot lines:						
Mississippi River:						
Ohio River	600	63	30	3		
Cumberland River	50	5	200	10		
Tennessee River						
Total	650	68	230	13		
Fyke nets:						
Mississippi River	1,402	92	970	46		
Ohio River	1,625	142	6,715	731	2,185	424
Cumberland River	1,210	110	2,015	95		
Green River	80	10				
Tennessee River	1,455	190	425	21		
Total	5,772	544	10,125	893	2,185	424
Total by waters:						
Mississippi River	5,802	397	970	46		
Ohio River	9,725	905	7,745	812	2,365	451
Cumberland River	1,260	115	2,015	95		
Green River	80	10				
Tennessee River	1,455	190	625	31		
Total	18,322	1,617	11,355	984	2,365	451
Gear and waters	Sheepshead		Sturgeon, shovelnose		Sucker "mullet"	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River:						
Ohio River	4,540	\$1,053	170	\$25		
Trot lines:						
Mississippi River	160	8				
Ohio River	8,565	1,676	1,007	220		
Green River	15	1				
Barren River					475	48
Total	8,740	1,685	1,007	220	475	48
Fyke nets:						
Mississippi River	1,175	59	295	17	150	13
Ohio River	33,175	3,483	1,342	106	8,849	1,205
Cumberland River	2,320	163	53	2		
Green River	160	8			350	25
Barren River	1,305	196				
Tennessee River	1,145	115	100	10	300	30
Total	39,280	4,024	1,790	135	9,649	1,273
Total by waters:						
Mississippi River	1,335	67	295	17	150	13
Ohio River	46,280	6,212	2,519	351	9,019	1,215
Cumberland River	2,320	163	53	2		
Green River	175	9			350	25
Barren River	1,305	196			475	48
Tennessee River	1,145	115	100	10	300	30
Total	52,560	6,762	2,967	380	10,294	1,331

Fisheries of Kentucky, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Yellow pike		Mussel shells		Slugs	Total	
	Pounds	Value	Pounds	Value	Value	Pounds	Value
Haul seines:							
Mississippi River						4,400	\$305
Ohio River						19,805	2,600
Total						24,205	2,905
Trot lines:							
Mississippi River						6,065	824
Ohio River						82,562	10,308
Cumberland River						8,238	683
Green River						5,472	388
Barren River						3,940	437
Tennessee River						11,085	1,224
Total						117,362	13,864
Fyke nets:							
Mississippi River						28,286	2,306
Ohio River	70	\$18				236,029	23,360
Cumberland River						30,682	2,427
Green River						13,370	962
Barren River						5,655	700
Tennessee River						53,130	4,720
Total	70	18				367,152	34,475
Crowfoot bars:							
Mississippi River:							
Ohio River:							
Tennessee River			1,113,032	\$8,786	\$852	1,113,032	9,638
Total by waters:							
Mississippi River						38,751	3,435
Ohio River	70	18				338,396	36,268
Cumberland River						38,920	3,110
Green River						18,842	1,350
Barren River						9,595	1,137
Tennessee River			1,113,032	8,786	852	1,177,247	15,582
Total	70	18	1,113,032	8,786	852	1,621,751	60,882

LOUISIANA

Fisheries of Louisiana, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Trammel nets	Trot lines	Fyke nets	Dip nets
	Number	Number	Number	Number	Number	Number
Fishermen:						
On boats and shore:						
Regular	148	14	13	428	377	59
Casual	633	50	51	1,439	1,007	
Total	781	64	64	1,867	1,384	59
Boats:						
Motor	218	38	52	872	912	10
Other	238	33	14	786	1,621	49
Apparatus:						
Number	377	74	78	5,757	5,908	159
Length, yards	85,166	17,400	19,696			
Square yards						
Hooks				1,392,200		

Fisheries of Louisiana, 1931—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Crawfish traps	Shrimp traps	Crowfoot bars	Tongs	Forks	Grabs	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number	Number
Fishermen:							
On boats and shore:							
Regular	8						
Casual	6	28	5	5	5	2,144	1,402
Total	6	36	5	5	5	3,034	3,108
Boats:							
Motor		27	2			196	1,225
Other	6	15	5	5	5	1,394	2,369
Apparatus:							
Number	18	88	10	5	5	2,232	

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regu- lar	Casual	Total	Motor	Other		
Mississippi River							
Atchafalaya River	101	389	490	205	317	118	13,800
Lake Des Allemands	1,073	1,947	3,020	440	1,370	65	32,066
Lake Larto	14	26	40	24	26	8	2,600
Red River	62	115	177	105	100	24	7,800
Black River	85	275	360	238	216	39	14,100
Caddo Lake	21	54	75	41	53	28	2,800
Dorcheat Bayou	2	30	32	18	22		
Ouachita River	10	41	51	40	46	6	600
Bayou Bartholomew	22	73	95	77	86	21	3,700
Boeuf River	2	10	12	3	11		
Little River and Catahoula Lake	40	40	40	4	25	25	1,800
Tensas River	1	18	19	4	20	6	600
Bayou Macon	2	26	28		23	4	400
Minor tributaries	3	28	31	15	20	10	4,600
Total	1,402	3,108	4,510	1,225	2,369	377	85,166

Waters	Anehor gill nets		Trammel nets		Trot lines		Fyke nets
	Number	Square yards 9,000	Number	Square yards	Number	Hooks	Number
Mississippi River	30		5	1,500	924	231,800	658
Atchafalaya River			28	6,400	2,424	614,800	2,050
Lake Des Allemands					96	25,200	120
Lake Larto					625	175,000	550
Red River	12	2,400	24	6,800	1,058	217,400	1,425
Black River					102	20,400	202
Caddo Lake			16	4,221	30	6,000	50
Dorcheat Bayou			3	300	85	17,000	105
Ouachita River	20	4,000			197	39,400	344
Bayou Bartholomew	12	2,000			15	3,000	39
Boeuf River					41	7,200	59
Little River and Catahoula Lake					77	15,400	115
Tensas River					35	7,000	65
Bayou Macon					18	3,600	95
Minor tributaries			2	475	30	9,000	31
Total	74	17,400	78	19,696	5,757	1,392,200	5,908

Fisheries of Louisiana, 1931—Continued

OPERATING UNITS: BY WATERS—Continued

Waters	Dip nets	Craw-fish traps	Shrimp traps	Crow-foot bars	Tongs	Forks	Grabs
	Number	Number	Number	Number	Number	Number	Number
Mississippi River			72				302
Atchafalaya River	159		12				1,771
Lake Des Allemands		18	4				17
Lake Larto							20
Red River							48
Black River							43
Ouachita River					10	5	10
Tensas River							1
Bayou Macon							20
Total	159	18	88	10	5	5	2,232

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	158,645	\$4,759	20,000	\$400	23,783	\$1,902		
Atchafalaya River	479,403	14,418	2,000	40	329,246	26,339		
Lake Des Allemands	70,409	2,112	300	6	17,500	1,400		
Lake Larto	193,000	5,790	3,000	60	259,000	20,720		
Red River	5,000	\$100	385,741	11,572	30,000	600	68,128	5,450
Black River			51,000	1,530	1,700	34	8,500	680
Dorcheat Bayou			14,000	420	200	4	2,800	224
Ouachita River			67,500	2,025	4,000	80	5,500	440
Boeuf River			28,000	840	400	8	1,000	80
Little River and Catahoula Lake			15,000	450	1,000	20	1,000	80
Tensas River			10,000	300	1,000	20	1,000	80
Bayou Macon			3,000	90	500	10	500	40
Minor tributaries			35,000	1,050			4,000	320
Total	5,000	100	1,510,698	45,356	64,100	1,282	721,957	57,755
Anchor gill nets:								
Mississippi River			10,000	300	1,600	32	1,000	80
Red River			6,900	180	200	6	500	40
Ouachita River			15,000	450	3,000	60	2,000	166
Bayou Bartholomew			12,000	360	300	6	3,000	240
Total			43,000	1,290	5,100	104	6,500	520
Trammel nets:								
Mississippi River			3,500	105	500	10	300	24
Atchafalaya River			29,117	873			5,321	425
Red River			72,000	2,160	20,800	419	7,000	560
Caddo Lake			30,000	900	600	15	1,000	80
Dorcheat Bayou			2,500	75			2,000	160
Minor tributaries			10,000	300			1,500	120
Total			147,117	4,413	21,900	444	17,121	1,369
Trot lines:								
Mississippi River					3,300	66	499,900	37,742
Atchafalaya River							3,306,636	266,929
Lake Des Allemands							114,000	9,120
Lake Larto					2,500	50	355,061	28,604
Red River					1,800	39	546,000	43,680
Black River					1,800	42	93,000	7,440
Caddo Lake					700	14	18,000	1,440
Dorcheat Bayou					800	16	67,000	5,360
Ouachita River					6,600	132	132,000	10,560
Bayou Bartholomew					300	6	9,000	720
Boeuf River					1,000	20	24,000	1,920
Little River and Catahoula Lake					3,300	66	69,000	5,520
Tensas River					1,500	30	28,000	2,240
Bayou Macon					600	12	7,500	600
Minor tributaries							45,000	3,600
Total					24,200	493	5,314,097	425,475

Fisheries of Louisiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fyke nets:								
Mississippi River			646,320	\$19,389	8,700	\$176	28,732	\$2,298
Atchafalaya River			3,130,387	93,610	4,343	86	357,031	28,559
Lake Des Allemands			104,602	3,138	500	10	2,964	237
Lake Larto			420,000	12,600	3,000	60	58,000	4,640
Red River	715	\$14	634,000	49,020	34,300	695	44,500	3,560
Black River			205,000	6,150	5,100	102	6,600	528
Caddo Lake			50,000	1,500	700	19	1,500	120
Dorcheat Bayou			186,000	5,580	1,000	20	10,500	840
Ouachita River			284,000	8,520	14,100	282	12,185	974
Bayou Bartholomew			39,000	1,170	800	16	5,000	400
Boeuf River			52,000	1,560	1,700	34	2,400	192
Little River and Catahoula Lake			115,000	3,450	5,600	112	4,300	344
Tensas River			65,000	1,950	6,000	120	3,600	288
Bayou Macon			90,190	2,705	3,600	72	4,000	320
Minor tributaries			62,000	1,860			2,000	160
Total	715	14	7,083,499	212,202	89,443	1,804	543,312	43,460
Total by waters:								
Mississippi River			818,465	24,553	34,100	684	533,715	42,946
Atchafalaya River			3,638,907	108,901	6,343	1263	998,234	222,282
Lake Des Allemands			175,011	5,250	800	16	134,464	10,757
Lake Larto			613,000	18,350	8,500	170	672,061	53,964
Red River	5,715	114	2,097,741	62,932	87,100	1,759	666,128	53,290
Black River			256,000	7,680	8,600	178	108,100	8,648
Caddo Lake			80,000	2,400	2,000	48	20,500	1,640
Dorcheat Bayou			202,500	6,075	2,000	40	82,300	6,584
Ouachita River			366,500	10,995	27,700	554	151,685	12,134
Bayou Bartholomew			51,000	1,530	1,400	28	17,000	1,360
Boeuf River			80,000	2,400	3,100	62	27,400	2,192
Little River and Catahoula Lake			130,000	3,900	9,900	158	74,300	5,944
Tensas River			75,000	2,250	8,500	170	32,600	2,608
Bayou Macon			93,190	2,795	4,700	94	12,000	960
Minor tributaries			107,000	3,210			52,500	4,200
Total	5,715	114	8,784,314	263,261	204,743	4,127	6,602,987	528,579
Gear and waters	Eels		Garfish		Paddlefish or spoonbill cat		Quillback or "American carp"	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River			14,800	\$148	101,254	\$4,467		
Atchafalaya River			650	13	6,137	361		
Lake Des Allemands					2,280	182		
Lake Larto			11,000	120	126,766	5,270		
Red River			25,000	300	213,521	8,540		
Black River			3,000	30	13,000	650	3,500	\$70
Ouachita River			4,000	40	7,423	330	1,000	20
Boeuf River			3,000	30			500	10
Little River and Catahoula Lake			10,000	100				
Tensas River			1,000	10	6,663	333	1,000	20
Bayou Macon							300	3
Minor tributaries					10,000	800		
Total			72,450	791	487,044	20,933	6,300	123
Anchor gill nets:								
Mississippi River							3,500	175
Red River:								
Ouachita River								500
Bayou Bartholomew								200
Total							3,500	175
Trot lines:								
Mississippi River			200	\$6				

Fisheries of Louisiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Eels		Garfish		Paddlefish or spoonbill cat		Quillback or "American carp"	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fyke nets:								
Mississippi River							500	\$10
Red River:								
Black River							2,800	76
Ouachita River							3,300	66
Bayou Bartholomew							500	10
Boeuf River							1,300	26
Little River and Catahoula Lake							2,400	48
Tensas River							1,700	34
Bayou Macon							1,200	24
Total							13,700	294
Total by waters:								
Mississippi River	200	\$6	14,800	\$148	104,754	\$4,642	500	10
Atchafalaya River			650	13	6,137	361		
Lake Des Allemands					2,280	182		
Lake Larto			11,000	120	126,766	5,270		
Red River			25,000	300	213,521	8,540		
Black River			3,000	30	13,000	650	6,300	146
Ouachita River			4,000	40	7,423	330	4,800	96
Bayou Bartholomew							700	14
Boeuf River			3,000	30			1,800	36
Little River and Catahoula Lake			10,000	100			2,400	48
Tensas River			1,000	10	6,663	333	2,700	54
Bayou Macon							1,500	27
Minor tributaries					15,000	1,200		
Total	200	6	72,450	791	495,544	21,508	20,700	431
Gear and waters	Sheepshead		Crawfish		Shrimp		Mussel shells	
Haul seines:	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Mississippi River	46,131	\$922						
Atchafalaya River	226,377	4,525						
Lake Des Allemands	3,000	60						
Lake Larto	211,000	4,220						
Red River	120,859	2,417						
Black River	5,550	111						
Dorcheat Bayou	3,500	70						
Ouachita River	18,000	350						
Boeuf River	2,500	50						
Little River and Catahoula Lake	2,000	40						
Tensas River	2,000	40						
Bayou Macon	800	16						
Minor tributaries	5,000	100						
Total	646,717	12,921						
Anchor gill nets:								
Mississippi River	10,000	200						
Red River	1,000	20						
Ouachita River	3,000	60						
Bayou Bartholomew	400	8						
Total	14,400	288						
Trammel nets:								
Mississippi River	700	14						
Atchafalaya River	8,254	165						
Red River	8,000	160						
Caddo Lake	1,500	30						
Dorcheat Bayou	2,000	40						
Total	20,454	409						

Fisheries of Louisiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sheepshead		Crawfish		Shrimp		Mussel shells	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Trot lines:								
Mississippi River	32,450	\$667						
Atchafalaya River	77,055	1,539						
Lake Des Allemands	1,500	30						
Lake Larto	27,555	551						
Red River	61,800	1,236						
Black River	5,300	130						
Caddo Lake	2,000	40						
Dorcheat Bayou	9,800	196						
Ouachita River	14,300	266						
Bayou Bartholomew	500	10						
Boeuf River	2,000	60						
Little River and Cata-								
houla Lake	4,100	82						
Tensas River	2,000	40						
Bayou Macon	1,500	30						
Minor tributaries	1,500	30						
Total	243,360	4,907						
Fyke nets:								
Mississippi River	29,750	595						
Atchafalaya River	789,905	15,797						
Lake Des Allemands	2,914	58						
Lake Larto	44,500	890						
Red River	98,800	1,976						
Black River	20,500	430						
Caddo Lake	4,500	90						
Dorcheat Bayou	10,000	200						
Ouachita River	26,000	520						
Bayou Bartholomew	1,500	30						
Boeuf River	5,700	114						
Little River and Cata-								
houla Lake	5,800	116						
Tensas River	4,300	86						
Bayou Macon	4,500	90						
Minor tributaries	3,000	60						
Total	1,051,669	21,052						
Traps, crawfish:								
Mississippi River: Lake Des Allemands			29,248	\$292				
Traps, shrimp:								
Mississippi River					36,500	\$2,225		
Atchafalaya River					1,686	168		
Lake Des Allemands					317	30		
Total					38,503	2,423		
Crowfoot bars:								
Mississippi River: Red River:								
Ouachita River							30,000	\$225
Tongs:								
Mississippi River: Red River:								
Ouachita River							10,000	75
Forks:								
Mississippi River: Red River:								
Ouachita River							10,000	75
Total by waters:								
Mississippi River	119,031	2,398						
Atchafalaya River	1,101,591	22,026			36,500	2,225		
Lake Des Allemands	7,414	148	29,248	292	1,686	168		
Lake Larto	283,055	5,661			317	30		
Red River	290,459	5,809						
Black River	31,350	671						
Caddo Lake	8,000	160						
Dorcheat Bayou	25,300	506						
Ouachita River	61,300	1,196						
Bayou Bartholomew	2,400	48					50,000	375
Boeuf River	10,200	224						
Little River and Cata-								
houla Lake	11,900	238						
Tensas River	8,300	166						
Bayou Macon	6,800	136						
Minor tributaries	9,500	190						
Total	1,976,600	39,577	29,248	292	38,503	2,423	50,000	375

Fisheries of Louisiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Frogs		Turtles				Total	
			Snapper		Soft-shell			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	9,800	\$196	700	\$14	375,113	\$12,808		
Atchafalaya River	19,359	385			1,063,172	46,081		
Lake Des Allemands	8,282	165					101,771	3,925
Lake Larto	5,000	100					808,766	35,280
Red River	4,000	80					852,249	29,059
Black River							86,250	3,105
Dorcheat Bayou							20,500	718
Ouachita River							107,423	3,285
Boeuf River							35,400	1,018
Little River and Catahoula Lake							29,000	690
Tensas River							22,663	63
Bayou Macon							5,100	159
Minor tributaries							54,000	2,270
Total	46,441	926	700	14	3,581,407	140,201		
Anchor gill nets:								
Mississippi River							26,100	787
Red River							7,700	246
Ouachita River							23,500	740
Bayou Bartholomew							15,900	618
Total							73,200	2,391
Trammel nets:								
Mississippi River							5,000	153
Atchafalaya River							42,692	1,463
Red River							107,800	3,299
Caddo Lake							33,100	1,025
Dorcheat Bayou							6,500	275
Minor tributaries							16,500	820
Total							211,592	7,035
Trot lines:								
Mississippi River	2,000	40					537,850	38,521
Atchafalaya River	1,499	29					3,385,190	268,497
Lake Des Allemands							115,500	9,150
Lake Larto							385,116	29,205
Red River							609,600	44,955
Black River							100,100	7,612
Caddo Lake							20,700	1,494
Dorcheat Bayou							77,600	5,572
Ouachita River							152,900	10,958
Bayou Bartholomew							9,800	736
Boeuf River							27,000	2,000
Little River and Catahoula Lake							76,400	5,668
Tensas River							31,500	2,310
Bayou Macon							9,600	642
Minor tributaries							46,500	3,630
Total	3,499	69					5,585,356	430,950
Fyke nets:								
Mississippi River							714,002	22,468
Atchafalaya River	1,500	30					4,283,166	138,082
Lake Des Allemands							110,980	3,443
Lake Larto							525,500	18,190
Red River	2,500	50	1,000	20	1,815,815	55,335		
Black River							240,000	7,286
Caddo Lake							56,700	1,729
Dorcheat Bayou							207,500	6,640
Ouachita River							339,585	10,362
Bayou Bartholomew							46,800	1,626
Boeuf River							63,100	1,926
Little River and Catahoula Lake							133,100	4,070
Tensas River							80,600	2,478
Bayou Macon							103,490	3,211
Minor tributaries							67,000	2,080
Total	4,000	80	1,000	20	8,787,338	278,926		

Fisheries of Louisiana, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Frogs		Turtles				Total	
			Snapper		Soft-shell			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Dip nets:								
Mississippi River: Atchafalaya River			3,625	\$1,160				
Traps, crawfish:								
Mississippi River: Lake Des Allemands							29,248	292
Traps, shrimp:								
Mississippi River							36,500	2,225
Atchafalaya River							1,686	168
Lake Des Allemands							317	30
Total							38,503	2,423
Crowfoot bars:								
Mississippi River: Red River:								
Ouachita River							30,000	225
Tongs:								
Mississippi River: Red River:								
Ouachita River							10,000	75
Forks:								
Mississippi River: Red River:								
Ouachita River							10,000	75
Grabs:								
Mississippi River	318,719	\$47,529					318,719	47,529
Atchafalaya River	451,056	67,654	448	9			451,504	67,663
Lake Des Allemands	11,393	1,608					11,393	1,608
Lake Larto	2,693	403					2,693	403
Red River	60,900	9,135					60,900	9,135
Black River	16,500	2,475					16,500	2,475
Ouachita River	866	130					866	130
Tensas River	300	45					300	45
Bayou Macon	10,224	1,633					10,224	1,633
Total	872,651	130,612	448	9			873,099	130,621
Total by waters:								
Mississippi River	318,719	47,529	11,800	236	700	\$14	2,013,284	124,491
Atchafalaya River	451,056	67,654	26,431	1,613			9,231,035	523,114
Lake Des Allemands	11,393	1,608	8,282	165			369,209	18,448
Lake Larto	2,693	403	5,000	100			1,722,075	84,078
Red River	60,900	9,135	6,550	130	1,000	20	3,454,064	142,029
Black River	16,500	2,475					442,850	20,478
Caddo Lake							110,500	4,248
Dorcheat Bayou							312,100	13,205
Ouachita River							674,274	25,850
Bayou Bartholomew							72,500	2,980
Boeuf River							125,500	4,944
Little River and Catahoula Lake							238,500	10,428
Tensas River	300	45					135,063	5,636
Bayou Macon	10,224	1,633					128,414	5,645
Minor tributaries							184,000	8,800
Total	872,651	130,612	58,013	2,244	1,700	34	19,213,368	994,374

MINNESOTA

Fisheries of Minnesota, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Trot lines	Pound nets	Fyke nets	Crowfoot bars	Total, ex- clusive of duplication
Fishermen:							
On boats and shore:							
Regular	Number 145	Number 9	Number 4	Number 6	Number 14	Number 3	Number 160
Casual	274	6	182	20	17	93	578
Total	419	15	186	26	31	96	738
Boats:							
Motor	39	9		5	10	10	65
Other	166	9	186	20	9	86	446
Apparatus:							
Number	113	9	186	27	74	192	
Length, yards	49,968						
Square yards		9,999					
Hooks			41,800				

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regular	Casual	Total	Motor	Other		
Mississippi River	Number 38	Number 205	Number 243	Number 50	Number 162	Number 27	Length, yards 7,061
Cannon River		15	15		12	1	500
Minor tributaries	6	15	21		8	5	2,799
Crow River	2	15	17		17		
Minor tributaries	3	47	50		19	12	6,195
Des Moines River:							
Minor tributaries	9	15	24		10	5	3,565
Minnesota River	14	96	110	7	84	21	3,031
Blue Earth River		4	4		4		
Minor tributaries	16	21	37		12	7	5,063
Pomme de Terre River	1	2	3		3		
Minor tributaries	24	54	78		29	16	10,227
Missouri River:							
Big Sioux River—							
Minor tributaries	17	6	23	1	8	3	2,765
St. Croix River	8	48	56	7	50	5	1,898
Vermilion River	6	3	9		5	2	599
Minor tributaries	8	3	11		4	2	1,499
Whitewater River		2	2		2		
Rochester Lake		2	2		1	1	400
Minor tributaries	8	25	33		16	6	4,366
Total	160	578	738	65	446	113	49,968

Waters	Anchor gill nets		Trot lines		Pound nets	Fyke nets	Crow- foot bars
	Number	Square yards	Number	Hooks	Number	Number	Number
Mississippi River	6	6,666	107	21,400	3	57	80
Cannon River							22
Crow River							34
Minnesota River			38	11,400	23	17	26
Blue Earth River							8
Pomme de Terre River							6
St. Croix River	3	3,333	39	8,600	1		8
Whitewater River			2	400			
Minor tributaries							8
Total	9	9,999	186	41,800	27	74	192

Fisheries of Minnesota, 1931—Continued

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	600	\$9	20,868	\$1,044	157,596	\$6,383	14,278	\$1,287
Cannon River					2,622	105		
Minor tributaries			667	31	100,429	4,978		
Crow River: Minor tributaries			7,749	440	301,368	14,045		
Des Moines River: Minor tributaries					21,537	1,610	187,858	9,857
Minnesota River	2,560	38	27,657	2,233	63,776	2,370	6,986	606
Blue Earth River: Minor tributaries			54,176	3,522	229,898	9,262		
Minor tributaries			19,900	1,011	590,357	26,155		
Missouri River: Big Sioux River: Minor tributaries					72,890	3,119	163,989	7,820
St. Croix River	3,078	46	7,534	377	53,366	2,137	7,331	659
Vermilion River	3,375	68	20	2	44,731	1,823		
Minor tributaries			432	42	86,238	4,454		
Whitewater River: Rochester Lake						2,935	160	
Minor tributaries			1,811	126	107,743	5,964		
Total	9,613	161	235,241	13,557	2,092,906	95,513	28,595	2,552
Anchor gill nets:								
Mississippi River			2,490	125	18,985	773		
St. Croix River					2,800	112		
Total			2,490	125	21,785	885		
Trot lines:								
Mississippi River			360	17	4,849	207	7,016	635
Minnesota River					4,880	203	6,825	636
St. Croix River					712	29	2,219	200
Whitewater River					100	4	42	4
Total			360	17	10,541	443	16,102	1,475
Pound nets:								
Mississippi River			185	9	3,950	158	195	16
Minnesota River	2,910	43	3,670	183	7,045	292	4,915	435
St. Croix River			700	35			300	27
Total	2,910	43	4,555	227	10,995	450	5,410	478
Fyke nets:								
Mississippi River			2,620	132	3,514	139	1,882	172
Minnesota River	4,075	78	12,165	1,034	11,378	326	1,815	164
Total	4,075	78	14,785	1,166	14,892	465	3,697	336
Total by waters:								
Mississippi River	600	9	26,523	1,327	188,894	7,660	23,371	2,110
Cannon River					2,622	105		
Minor tributaries			667	31	100,429	4,978		
Crow River: Minor tributaries			7,749	440	301,368	14,045		
Des Moines River: Minor tributaries					21,537	1,610	187,858	9,857
Minnesota River	9,545	159	43,492	3,450	87,079	3,191	20,541	1,841
Blue Earth River: Minor tributaries			54,176	3,522	229,898	9,262		
Minor tributaries			19,900	1,011	590,357	26,155		
Missouri River: Big Sioux River: Minor tributaries					72,890	3,119	163,989	7,820
St. Croix River	3,078	46	8,234	412	56,878	2,278	9,850	886
Vermilion River	3,375	68	20	2	44,731	1,823		
Minor tributaries			432	42	86,238	4,454		
Whitewater River						100	42	4
Rochester Lake						2,935	160	
Minor tributaries			1,811	126	107,743	5,964		
Total	16,598	282	257,431	15,092	2,151,119	97,756	53,804	4,841

Fisheries of Minnesota, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Quillback or "American carp"		Sheepshead		Sturgeon, shovelnose		Sucker "mullet"	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	4,649	\$139	36,830	\$2,000			35,315	\$1,059
Cannon River: Minor tributaries			17,740	610				
Minnesota River	3,575	108	25,822	1,298			3,645	105
Blue Earth River: Minor tributaries			5,875	447				
Minor tributaries			5,135	207				
St. Croix River	6,162	185	25,187	1,511	920	\$64	19,877	597
Vermilion River: Minor tributaries			230	16				
Total	14,386	432	116,819	6,089	920	64	58,837	1,761
Anchor gill nets: Mississippi River			1,045	52	284	20	900	27
Trot lines:								
Mississippi River			4,940	274	10	1	1,375	42
Minnesota River			3,555	216				
St. Croix River			833	49	420	30	1,240	37
Whitewater River							40	1
Total			9,328	539	430	31	2,655	80
Pound nets:								
Mississippi River			220	13			140	4
Minnesota River	1,185	36	4,615	276			1,540	46
St. Croix River			2,000	120			150	5
Total	1,185	36	6,835	409			1,830	55
Fyke nets:								
Mississippi River			1,220	66			191	6
Minnesota River	1,675	51	17,298	783			860	26
Total	1,675	51	18,518	849			1,051	32
Total by waters:								
Mississippi River	4,649	139	44,255	2,405	294	21	37,921	1,138
Cannon River: Minor tributaries			17,740	610				
Minnesota River	6,435	195	51,290	2,573			6,045	177
Blue Earth River: Minor tributaries			5,875	447				
Minor tributaries			5,135	207				
St. Croix River	6,162	185	28,020	1,680	1,430	94	21,267	639
Vermilion River: Minor tributaries			230	16			40	1
Whitewater River								
Total	17,246	519	152,545	7,938	1,634	115	65,273	1,955

Fisheries of Minnesota, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Mussel shells		Pearls	Slugs	Total	
	Pounds	Value	Value	Value	Pounds	Value
Haul seines:						
Mississippi River	270,136	\$11,921				
Cannon River		2,622				105
Minor tributaries		118,836				5,619
Crow River: Minor tributaries		309,117				14,485
Des Moines River: Minor tributaries		209,395				11,467
Minnesota River		134,021				6,758
Blue Earth River: Minor tributaries		289,949				13,231
Minor tributaries		615,392				27,373
Missouri River: Big Sioux River: Minor tributaries		236,879				10,939
St. Croix River		123,455				5,576
Vermilion River		48,126				1,893
Minor tributaries		86,900				4,512
Whitewater River: Rochester Lake		2,935				160
Minor tributaries		109,554				6,090
Total		2,557,317				120,129
Anchor gill nets:						
Mississippi River		23,704				997
St. Croix River		2,800				112
Total		26,504				1,109
Trot lines:						
Mississippi River		18,550				1,176
Minnesota River		15,260				1,055
St. Croix River		5,424				345
Whitewater River		182				9
Total		39,416				2,585
Pound nets:						
Mississippi River		4,690				200
Minnesota River		25,880				1,311
St. Croix River		3,150				187
Total		33,720				1,698
Fyke nets:						
Mississippi River		9,427				515
Minnesota River		49,266				2,462
Total		58,693				2,977
Crowfoot bars:						
Mississippi River	316,260	\$3,163	\$75	\$476	316,260	3,714
Cannon River	114,070	1,141	47	304	114,070	1,492
Crow River	225,100	2,251	20	65	225,100	2,336
Minnesota River	38,500	385		25	38,500	410
Blue Earth River	37,400	374	15	144	37,400	533
Pomme de Terre River	44,000	440		80	44,000	520
Minor tributaries	7,300	73		80	7,300	153
Total	782,630	7,827	157	1,174	782,630	9,158
Total by waters:						
Mississippi River	316,260	3,163	75	476	642,767	18,523
Cannon River	114,070	1,141	47	304	116,692	1,597
Minor tributaries					118,836	5,619
Crow River	225,100	2,251	20	65	225,100	2,336
Minor tributaries					309,117	14,485
Des Moines River: Minor tributaries					209,395	11,467
Minnesota River	38,500	385		25	262,927	11,996
Blue Earth River	37,400	374	15	144	37,400	533
Minor tributaries					289,949	13,231
Pomme de Terre River	44,000	440		80	44,000	520
Minor tributaries					615,392	27,373
Missouri River:						
Big Sioux River: Minor tributaries					236,879	10,939
St. Croix River					134,829	6,220
Vermilion River					48,126	1,893
Minor tributaries					86,900	4,512
Whitewater River					182	9
Rochester Lake					2,935	160
Minor tributaries	7,300	73		80	116,854	6,243
Total	782,630	7,827	157	1,174	3,498,280	137,656

MISSISSIPPI

Fisheries of Mississippi, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Trammel nets	Trot lines	Fyke nets	Shrimp traps	Total, ex- clusive of duplication
Fishermen:							
On boats and shore:							
Regular.....	Number 40	Number 4	Number 13	Number 139	Number 162	Number 20	Number 211
Casual.....	33		18	148	36		198
Total.....	73	4	31	287	198	20	409
Boats:							
Motor.....	11	1	5	101	126		138
Other.....	27	4	17	254	147	20	329
Apparatus:							
Number.....	16	4	17	847	2,591	350	
Length, yards.....	6,885						
Square yards.....		800	2,867				
Hooks.....				72,155			

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regular	Casual	Total	Motor	Other		
	Number	Number	Number	Number	Number	Number	Length, yards
Mississippi River.....	72	64	136	56	111	5	1,450
Beulah Lake.....	3	1	4	1	3	1	400
Big Black River.....	2	13	15	2	15		
Flower Lake.....	3		3		3		
Lake Washington.....		28	28	3	27	2	2,250
Moon Lake.....	17		17	1	17		
Yazoo River.....	84	73	157	54	121	2	1,100
Sunflower River.....	20	14	34	13	21	5	1,385
Steele Bayou.....	8		8	6	8		
Minor tributaries.....	2	5	7	2	3	1	300
Total.....		211	198	409	138	329	16
							6,885

Waters	Anchor gill nets		Trammel nets		Trot lines		Fyke nets	Shrimp traps
	Number	Square yards	Number	Square yards	Number	Hooks	Number	Number
Mississippi River.....								
Beulah Lake.....						4	2,000	
Big Black River.....						65	3,175	46
Flower Lake.....			3	600		3	300	
Lake Washington.....			8	1,066		30	3,000	
Moon Lake.....	4	800	1	200		22	2,200	
Yazoo River.....						450	36,160	1,262
Sunflower River.....						104	3,910	260
Steele Bayou.....			1	133				139
Minor tributaries.....						6	300	10
Total.....	4	800	17	2,867	847	72,155	2,591	350

Fisheries of Mississippi, 1931—Continued

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River	80,500	\$3,520	13,000	\$520	10,600	\$710
Beulah Lake	35,000	1,400	15,000	300	1,000	60
Lake Washington	44,392	1,776	5,406	90	1,179	70
Yazoo River	65,000	2,600	7,000	140	12,000	820
Sunflower River	96,000	4,040	3,700	124	1,000	57
Minor tributaries	5,500	220				
Total	320,392	13,556	44,106	1,174	25,779	1,717
Anchor gill nets:						
Mississippi River: Moon Lake	7,500	375	7,500	300		
Trammel nets:						
Mississippi River	9,000	720	12,000	960	300	30
Flower Lake	10,000	400	4,000	160	500	40
Lake Washington	104,869	4,193	9,985	173	2,830	145
Moon Lake	2,500	125	2,500	100		
Yazoo River: Steele Bayou	3,000	120	600	12	300	18
Total	129,369	5,558	29,085	1,405	3,930	233
Trot lines:						
Mississippi River	4,500	180			126,500	8,630
Big Black River	500	30			25,000	2,050
Flower Lake					5,000	400
Lake Washington					30,000	1,800
Moon Lake	3,000	150			15,000	1,500
Yazoo River			95	4	150,714	9,974
Sunflower River					34,500	2,000
Minor tributaries					12,000	740
Total	8,000	360	95	4	407,714	27,094
Fyke nets:						
Mississippi River	357,000	14,875	59,050	2,119	114,900	7,885
Big Black River	5,500	255	400	14	8,000	560
Yazoo River	518,365	22,485	53,340	1,072	51,126	3,428
Steele Bayou	77,000	3,080	25,400	508	12,300	858
Sunflower River	72,000	2,880	6,200	132	10,300	549
Minor tributaries	10,000	400	100	2	1,000	60
Total	1,039,865	43,975	144,490	3,847	197,626	13,340
Total by waters:						
Mississippi River	451,000	19,295	84,050	3,599	252,300	17,255
Beulah Lake	35,000	1,400	15,000	300	1,000	60
Big Black River	6,000	285	400	14	33,000	2,610
Flower Lake	10,000	400	4,000	160	5,500	440
Lake Washington	149,261	5,969	15,391	263	34,009	2,015
Moon Lake	13,000	650	10,000	400	15,000	1,500
Yazoo River	583,365	25,085	60,435	1,216	222,840	14,222
Sunflower River	168,000	6,920	9,900	256	45,800	2,606
Steele Bayou	80,000	3,200	26,000	520	12,600	876
Minor tributaries	15,500	620	100	2	13,000	800
Total	1,511,126	63,824	225,276	6,730	635,049	42,384

Gear and waters	Eels		Paddlefish or spoonbill cat		Quillback or "American carp"		Sheepshead	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	23,500	\$875					8,500	\$205
Beulah Lake	10,000	300					2,000	40
Lake Washington	33,956	1,123	500	\$8				
Yazoo River	30,000	1,050					7,000	140
Sunflower River	800	32					700	14
Minor tributaries	200	8					300	6
Total	98,456	3,388	500	8			18,500	405

Fisheries of Mississippi, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Eels		Paddlefish or spoonbill cat		Quillback or "American carp"		Sheepshead	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Trammel nets:								
Mississippi River							150	\$6
Flower Lake							1,000	30
Lake Washington			11,330	\$373	1,000	\$15		
Yazoo River: Steele Bayou			300	12			750	15
Total			11,630	385	1,000	15	1,900	51
Trot lines:								
Mississippi River	250	\$20	1,900	51			3,900	122
Beulah Lake			1,500	60				
Big Black River							400	24
Moon Lake			20,000	1,000			3,000	90
Yazoo River							2,410	62
Sunflower River			2,000	60				
Total	250	20	25,400	1,171			9,710	298
Fyke nets:								
Mississippi River							33,800	903
Big Black River			100	6			650	36
Yazoo River			14,510	576	657	19	35,234	742
Steele Bayou							1,250	25
Sunflower River			1,300	52			4,800	96
Minor tributaries							1,000	20
Total			23,335	935	657	19	76,734	1,822
Total by waters:								
Mississippi River	250	20	32,825	1,227			46,350	1,236
Beulah Lake			11,500	360			2,000	40
Big Black River			100	6			1,050	60
Flower Lake							1,000	30
Lake Washington			45,286	1,496	1,500	23		
Moon Lake			20,000	1,000			3,000	90
Yazoo River			44,510	1,626	657	19	44,644	944
Sunflower River			4,100	144			5,500	110
Steele Bayou			300	12			2,000	40
Minor tributaries			200	8			1,300	26
Total	250	20	158,821	5,879	2,157	42	106,844	2,576
Gear and waters	Sturgeon, shovelnose		Shrimp		Turtles, snapper		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River							136,100	\$5,830
Beulah Lake							63,000	2,100
Lake Washington							85,433	3,067
Yazoo River							121,000	4,750
Sunflower River							102,200	4,267
Minor tributaries							6,000	234
Total							513,733	20,248
Anchor gill nets:								
Mississippi River: Moon Lake							15,000	675
Trammel nets:								
Mississippi River							21,450	1,716
Flower Lake							15,500	630
Lake Washington							130,014	4,899
Moon Lake							5,000	225
Yazoo River: Steele Bayou							4,950	177
Total							176,914	7,647

Fisheries of Mississippi, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sturgeon, shovelnose		Shrimp		Turtles, snapper		Total	
	Pounds 100	Value \$3	Pounds	Value	Pounds	Value	Pounds	Value
Trot lines:								
Mississippi River							137,150	\$9,006
Beulah Lake							1,500	60
Big Black River					100	\$3	26,000	2,107
Flower Lake							5,000	400
Lake Washington							30,000	1,800
Moon Lake							41,000	2,740
Yazoo River							162,219	10,040
Sunflower River							36,500	2,060
Minor tributaries							12,000	740
Total	100	3			100	3	451,369	28,953
Fyke nets:								
Mississippi River							572,175	26,083
Big Black River							14,650	871
Yazoo River							673,232	28,322
Steele Bayou							115,950	4,471
Sunflower River							94,600	3,709
Minor tributaries							12,100	482
Total							1,482,707	63,938
Shrimp traps:								
Mississippi River			10,000	\$1,500			10,000	1,500
Total by waters:								
Mississippi River	100	3	10,000	1,500			876,875	44,135
Beulah Lake							64,500	2,160
Big Black River					100	3	40,650	2,978
Flower Lake							20,500	1,030
Lake Washington							245,447	9,766
Moon Lake							61,000	3,640
Yazoo River							956,451	43,112
Sunflower River							233,300	10,036
Steele Bayou							120,900	4,648
Minor tributaries							30,100	1,456
Total	100	3	10,000	1,500	100	3	2,649,723	122,961

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Fisheries of Missouri, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Tram- mell nets	Trot lines	Fyke nets	Tongs	By hand	Total, ex- clusive of dupli- cation
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On boats and shore:								
Regular	49	1	80	64	132			177
Casual	48	1	47	54	64	9	30	170
Total	97	2	127	118	196	9	30	347
Boats:								
Motor	33	1	41	40	71			84
Other	87	2	114	116	189	8	8	304
Apparatus:								
Number	47	1	104	516	1,872	9		
Length, yards	5,668							
Square yards		160	14,668					
Hooks				34,600				

Fisheries of Missouri, 1931—Continued

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines	
	Regular	Casual	Total	Motor	Other		
Mississippi River	Number	Number	Number	Number	Number	Number	Length, yards
Missouri River	103	108	211	61	179	38	4,135
Lamine River	45	30	75	16	67	7	733
Osage River	3	4	7	—	7	—	—
Minor tributaries	11	8	19	5	19	—	—
St. Francis River	10	3	13	—	11	2	800
White River	2	9	11	—	10	—	—
Current River	2	4	6	1	6	—	—
Lake Taneycomo	1	—	1	—	1	—	—
Total	177	170	347	84	304	47	5,668

Waters	Anchor gill nets		Trammel nets		Trot lines		Fyke nets	Tongs
	Number	Square yards	Number	Square yards	Number	Hooks	Number	Number
Mississippi River	1	160	45	3,155	384	23,180	1,293	—
Missouri River	—	—	43	8,613	20	1,875	330	—
Lamine River	—	—	—	—	42	5,875	—	—
Osage River	—	—	4	800	27	870	229	—
Minor tributaries	—	—	12	2,100	—	—	—	—
St. Francis River	—	—	—	—	9	550	20	9
White River	—	—	—	—	20	1,125	—	—
Current River	—	—	—	—	4	200	—	—
Lake Taneycomo	—	—	—	—	10	925	—	—
Total	1	160	104	14,668	516	34,600	1,872	9

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River	17,000	\$520	39,319	\$3,210	98,311	\$5,722	3,670	\$522
Missouri River	—	—	2,300	231	12,662	1,257	1,549	297
Minor tributaries	—	—	5,830	583	9,716	777	1,943	350
Total	17,000	520	47,449	4,024	120,689	7,756	7,162	1,169
Anchor gill nets:								
Mississippi River	—	—	425	34	895	63	160	22
Trammel nets:								
Mississippi River	—	—	12,085	1,082	36,663	2,483	4,115	605
Missouri River	—	—	19,454	1,932	60,656	6,018	6,546	1,263
Osage River	—	—	1,638	164	833	84	703	141
Minor tributaries	—	—	13,542	1,355	37,819	3,301	2,896	650
Total	—	—	46,719	4,533	135,971	11,886	14,260	2,659
Trot lines:								
Mississippi River	—	—	9,579	758	4,300	240	32,940	4,625
Missouri River	—	—	430	43	—	—	1,510	302
Lamine River	—	—	1,691	170	3,129	313	347	52
Osage River	—	—	325	33	—	—	1,130	226
St. Francis River	—	—	40	4	300	15	2,000	300
White River	—	—	200	40	175	28	5,292	1,323
Current River	—	—	—	—	—	—	615	123
Lake Taneycomo	—	—	—	—	—	—	2,275	569
Total	—	—	12,265	1,048	7,904	596	46,109	7,520

Fisheries of Missouri, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Bowfin		Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fyke nets:								
Mississippi River	50,732	\$4,631	124,836	\$8,880	12,068	\$1,876		
Missouri River	14,411	1,422	34,796	3,416	5,797	1,089		
Osage River	6,175	640	6,476	648	5,424	1,085		
St. Francis River	815	82	1,550	111	450	67		
Total	72,133	6,775	167,658	13,055	23,739	4,117		
Total by waters:								
Mississippi River	17,000	\$520	112,140	9,715	265,005	17,388	52,953	7,650
Missouri River			36,595	3,628	108,114	10,691	15,402	2,951
Lamine River			1,691	170	3,129	313	347	52
Osage River			8,138	837	7,309	732	7,257	1,452
Minor tributaries			19,372	1,938	47,535	4,078	4,839	1,000
St. Francis River			855	86	1,850	126	2,450	367
White River			200	40	175	28	5,292	1,323
Current River							615	123
Lake Taneycomo							2,275	569
Total	17,000	520	178,991	16,414	433,117	33,356	91,430	15,487
Gear and waters	Eels		Minnows		Paddlefish or spoonbill cat		Quillback or "American carp"	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River			525	\$209	25,103	\$1,747	1,570	\$86
Missouri River								
Total			525	209	25,103	1,747	1,570	86
Anchor gill nets: Mississippi River							355	18
Trammel nets: Mississippi River							918	46
Trot lines:								
Mississippi River	1,055	\$53			11,160	790		
Missouri River					715	72		
Lamine River					2,000	210		
Total	1,055	53			13,875	1,072		
Fyke nets:								
Mississippi River					1,125	98	10,629	776
Missouri River							200	20
Total					1,125	98	10,829	796
Total by waters:								
Mississippi River	1,055	53			37,388	2,635	13,472	926
Missouri River			525	209	715	72	200	20
Lamine River					2,000	210		
Total	1,055	53	525	209	40,103	2,917	13,672	946
Gear and waters	Sheepshead		Sturgeon, shovelnose		Sucker "mullet"			
	Pounds	Value	Pounds	Value	Pounds	Value		
Haul seines:								
Mississippi River	4,192	\$335	7,500	\$731				
Missouri River	144	14	450	45				
Total	4,336	349	7,950	776				
Anchor gill nets: Mississippi River			210	17				
Trammel nets:								
Mississippi River	7,042	643	1,193	143				
Missouri River	3,131	315	2,593	277				
Osage River	441	46						
Minor tributaries	200	20						
Total	10,814	1,024	3,786	420				

Fisheries of Missouri, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sheepshead		Sturgeon, shovelnose		Sucker "mullet"	
	Pounds	Value	Pounds	Value	Pounds	Value
Trot lines:						
Mississippi River	540	\$102	515	\$33	200	\$40
White River	540	102	515	33	200	40
Total						
Fyke nets:						
Mississippi River	15,401	1,351	5,031	474		
Missouri River	1,219	124				
Osage River	5,441	783			1,975	247
St. Francis River	225	23			100	5
Total	22,286	2,281	5,031	474	2,075	252
Total by waters:						
Mississippi River	26,845	2,346	14,239	1,381		
Missouri River	4,494	453	3,043	322		
Osage River	5,882	829			1,975	247
Minor tributaries	200	20				
St. Francis River	225	23			100	5
White River	540	102			200	40
Total	38,186	3,773	17,282	1,703	2,275	292
Gear and waters	Mussel shells		Slugs	Total		
	Pounds	Value	Value	Pounds	Value	
Haul seines:						
Mississippi River				196,665	\$12,873	
Missouri River				17,630	2,053	
Minor tributaries				17,489	1,710	
Total				231,784	16,636	
Anchor gill nets: Mississippi River					2,045	154
Trammel nets:						
Mississippi River				62,016	5,002	
Missouri River				92,380	9,805	
Osage River				3,615	435	
Minor tributaries				54,457	5,326	
Total				212,468	20,568	
Trot lines:						
Mississippi River				59,549	6,499	
Missouri River				2,655	417	
Lamine River				7,167	745	
Osage River				1,455	259	
St. Francis River				2,340	319	
White River				6,407	1,533	
Current River				615	123	
Lake Taneycomo				2,275	569	
Total				82,463	10,464	
Fyke nets:						
Mississippi River				219,822	18,086	
Missouri River				56,423	6,071	
Osage River				25,491	3,403	
St. Francis River				3,140	288	
Total				304,876	27,848	
Tongs: Mississippi River: St. Francis River	22,000	\$275	\$18	22,000	293	
By hand: Mississippi River	72,000	918	100	72,000	1,018	
Total by waters:						
Mississippi River	72,000	918	100	612,097	43,632	
Missouri River				169,088	18,346	
Lamine River				7,167	745	
Osage River				30,561	4,097	
Minor tributaries				71,946	7,036	
St. Francis River	22,000	275	18	27,480	900	
White River				6,407	1,533	
Current River				615	123	
Lake Taneycomo				2,275	569	
Total	94,000	1,193	118	927,636	76,981	

NEBRASKA

Fisheries of Nebraska, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trammel nets	Fyke nets	Total, exclusive of duplication
Fishermen:				
On boats and shore, casual.....	Number 36	Number 176	Number 97	Number 299
Boats:				
Motor.....	8	24	9	30
Other.....	12	115	76	187
Apparatus:				
Number.....	12	115	296	-----
Length, yards.....	906	-----	4,833	-----
Square yards.....	-----	-----	-----	-----

OPERATING UNITS: BY WATERS

Waters	Fisher- men, casual	Boats		Haul seines		Trammel nets		Fyke nets
		Motor	Other					Number 115
				Number 299	Number 30	Number 187	Number 12	
Mississippi River: Missouri River.....								

CATCH: BY GEAR

Species	Haul seines		Trammel nets		Fyke nets		Total	
Buffalofish.....	Pounds 9,060	Value \$906	Pounds 7,564	Value \$756	Pounds 1,480	Value \$151	Pounds 18,104	Value \$1,813
Carp.....	12,684	1,270	71,971	7,198	8,377	837	93,032	9,305
Catfish and bullheads.....	2,919	446	26,031	3,906	5,224	783	34,174	5,135
Total.....	24,663	2,622	105,566	11,860	15,081	1,771	145,310	16,253

NOTE.—The catch in Nebraska was confined to the Missouri River.

OHIO

Fisheries of Ohio, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trot lines	Fyke nets	By hand	Total, ex- clusive of duplication
Fishermen:					
On boats and shore, casual.....	Number 4	Number 14	Number 17	Number 22	Number 49
Boats, other than motor.....	4	14	17	22	49
Apparatus:					
Number.....	2	19	76	-----	-----
Length, yards.....	180	-----	900	-----	-----
Hooks.....	-----	-----	-----	-----	-----

Fisheries of Ohio, 1931—Continued

OPERATING UNITS: BY WATERS

Waters	Fisher-men, casual	Boats, other than motor	Haul seines		Trot lines		Fyke nets
	Number	Number	Number	Length, yards	Number	Hooks	Number
Mississippi River:							
Ohio River.....	27	27	2	180	19	900	76
Muskingum River.....	6	6					
Tuscarawas River.....	6	6					
Walhonding River.....	7	7					
Mohican River.....	3	3					
Total.....	49	49	2	180	19	900	76

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River: Ohio River.....	100	\$10	2,000	\$200	110	\$22
Trot lines:						
Mississippi River: Ohio River.....			150	18	2,115	403
Fyke nets:						
Mississippi River: Ohio River.....	6,333	652	12,220	1,325	2,155	386
Total by waters:						
Mississippi River: Ohio River.....	6,433	662	14,370	1,543	4,380	811

Gear and waters	Quillback or "American carp"	Sheepshead		Sturgeon, shovelnose		Sucker "mullet"		
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:								
Mississippi River: Ohio River.....	100	\$15					150	\$15
Trot lines:								
Mississippi River: Ohio River.....			140	26	100	\$15		
Fyke nets:								
Mississippi River: Ohio River.....	1,195	\$119	1,078	183	458	57	2,752	253
Total by waters:								
Mississippi River: Ohio River.....	1,195	119	1,318	224	558	72	2,902	268

Gear and waters	Yellow pike		Mussel shells		Slugs	Total	
	Pounds	Value	Pounds	Value	Value	Pounds	Value
Haul seines:							
Mississippi River: Ohio River.....						2,460	\$262
Trot lines:							
Mississippi River: Ohio River.....						2,505	462
Fyke nets:							
Mississippi River: Ohio River.....	325	\$60				26,516	3,035
By hand:							
Mississippi River:							
Ohio River:							
Muskingum River.....			14,000	\$280	\$28	14,000	308
Tuscarawas River.....			30,000	525	60	30,000	585
Walhonding River.....			92,000	1,840	184	92,000	2,024
Mohican River.....			18,000	360	36	18,000	396
Total.....			154,000	3,005	308	154,000	3,313
Total by waters:							
Mississippi River:							
Ohio River.....	325	60				31,481	3,759
Muskingum River.....			14,000	280	28	14,000	308
Tuscarawas River.....			30,000	525	60	30,000	585
Walhonding River.....			92,000	1,840	184	92,000	2,024
Mohican River.....			18,000	360	36	18,000	396
Total.....	325	60	154,000	3,005	308	185,481	7,072

OKLAHOMA

Fisheries of Oklahoma, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Trot lines	Fyke nets	Total, exclusive of duplication
Fishermen:					
On boats and shore:					
Regular-----	Number	Number	Number	Number	Number
Casual-----	4	1	13	13	19
Total-----	4	3	14	17	24
Boats:					
Other than motor-----	2	2	11	13	18
Apparatus:					
Number-----	2	3	29	85	-----
Length, yards-----	60	-----	-----	-----	-----
Square yards-----	990	-----	-----	-----	-----
Hooks-----	-----	-----	1,075	-----	-----

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats other than motor
	Regular	Casual	Total	
Mississippi River:				
Arkansas River-----	Number	Number	Number	Number
Canadian River:	3	4	7	5
Gaines Creek-----	2	3	5	3
North Canadian River-----	-----	3	3	3
Deep Fork River-----	-----	1	1	1
Red River-----	-----	3	3	2
Minor tributaries-----	-----	5	5	4
Total-----	5	19	24	18

Waters	Haul seines		Anchor gill nets		Trot lines		Fyke nets
	Number	Length, yards	Number	Square yards	Number	Hooks	Number
Mississippi River:							
Arkansas River-----	Number	Length, yards	Number	Square yards	Number	Hooks	Number
Canadian River:	1	50	3	990	6	165	10
Gaines Creek-----	-----	-----	-----	-----	6	240	18
North Canadian River-----	-----	-----	-----	-----	2	60	2
Deep Fork River-----	-----	-----	-----	-----	-----	-----	15
Red River-----	-----	-----	-----	-----	12	510	5
Minor tributaries-----	1	10	-----	-----	-----	-----	-----
Total-----	2	60	3	990	29	1,075	85

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads		Paddlefish or spoonbill cat	
Haul seines:	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Mississippi River:	300	\$30	75	\$7	200	\$20	300	\$30
Arkansas River:	500	50	-----	-----	-----	-----	-----	-----
Canadian River: Gaines Creek-----	-----	-----	-----	-----	-----	-----	-----	-----
Red River: Minor tributaries-----	-----	-----	-----	-----	-----	-----	-----	-----
Total-----	800	80	75	7	200	20	300	30
Anchor gill nets:								
Mississippi River: Arkansas River: Canadian River: Gaines Creek-----	1,500	150	-----	-----	-----	-----	2,100	210
Trot lines:								
Mississippi River:								
Arkansas River:								
Canadian River:	125	13	75	7	200	20	150	15
Gaines Creek-----	180	18	153	15	30	3	-----	-----
North Canadian River-----	-----	-----	-----	-----	-----	-----	-----	-----
Deep Fork River-----	-----	-----	50	5	-----	-----	-----	-----
Red River: Minor tributaries-----	400	40	125	12	240	33	150	15
Total-----	705	71	403	39	555	68	300	30

Fisheries of Oklahoma, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Buffalofish		Carp		Catfish and bullheads		Paddlefish or spoonbill cat	
Fyke nets:								
Mississippi River:								
Arkansas River-----	Pounds 9,000	Value \$876	Pounds 600	Value \$60	Pounds 3,800	Value \$565	Pounds 32	Value \$3
Canadian River:								
Gaines Creek-----	3,000	300	1,000	100	300	30	2,600	260
North Canadian River-----	5,300	530	1,300	130	330	33	-----	-----
Deep Fork River-----	100	10	300	30	30	5	-----	-----
Red River-----	700	75	140	14	50	7	-----	-----
Minor tributaries-----	500	50	450	45	-----	-----	-----	-----
Total-----	18,600	1,841	3,790	379	4,180	607	2,632	263
Total by waters:								
Mississippi River:								
Arkansas River-----	Pounds 9,000	Value 876	Pounds 600	Value 60	Pounds 3,885	Value 577	Pounds 32	Value 3
Canadian River:								
Gaines Creek-----	4,925	493	1,150	114	400	40	5,150	515
North Canadian River-----	5,480	548	1,453	145	330	33	-----	-----
Deep Fork River-----	100	10	350	35	30	5	-----	-----
Red River-----	700	75	140	14	290	40	150	15
Minor tributaries-----	1,400	140	575	57	-----	-----	-----	-----
Total-----	21,605	2,142	4,268	425	4,935	695	5,332	533
Gear and waters	Quillback or "American carp"		Sheepshead		Total			
Haul seines:								
Mississippi River:								
Arkansas River:								
Canadian River: Gaines Creek-----	Pounds 200	Value \$20	Pounds 100	Value \$10	Pounds 1,175	Value \$117	Pounds 500	Value 50
Red River: Minor tributaries-----	-----	-----	-----	-----	-----	-----	-----	-----
Total-----	200	20	100	10	1,675	167	-----	-----
Anchor gill nets:								
Mississippi River: Arkansas River: Canadian River: Gaines Creek-----	-----	-----	-----	-----	-----	-----	3,600	360
Trot lines:								
Mississippi River:								
Arkansas River:								
Canadian River:								
Gaines Creek-----	50	5	135	17	-----	-----	-----	-----
North Canadian River-----	100	10	150	15	800	80	105	10
Deep Fork River-----	-----	-----	105	10	468	46	50	5
Red River: Minor tributaries-----	100	10	75	8	1,090	118	-----	-----
Total-----	200	20	380	38	2,543	266	-----	-----
Fyke nets:								
Mississippi River:								
Arkansas River-----	Pounds 350	Value 35	Pounds 300	Value 28	Pounds 14,082	Value 1,567	Pounds -----	Value -----
Canadian River:								
Gaines Creek-----	1,000	100	500	50	8,100	810	-----	-----
North Canadian River-----	200	20	200	20	7,300	730	-----	-----
Deep Fork River-----	-----	-----	15	2	415	42	55	5
Red River-----	-----	-----	55	7	925	101	1,000	102
Minor tributaries-----	-----	-----	-----	-----	-----	-----	-----	-----
Total-----	1,550	155	1,070	107	31,822	3,352	-----	-----
Total by waters:								
Mississippi River:								
Arkansas River-----	Pounds 350	Value 35	Pounds 350	Value 33	Pounds 14,217	Value 1,584	Pounds -----	Value -----
Canadian River:								
Gaines Creek-----	1,300	130	750	75	13,675	1,367	-----	-----
North Canadian River-----	200	20	305	30	7,768	776	-----	-----
Deep Fork River-----	-----	-----	15	2	465	47	55	5
Red River-----	-----	-----	55	7	925	101	100	101
Minor tributaries-----	100	10	75	8	2,590	270	-----	-----
Total-----	1,950	195	1,550	155	39,640	4,145	-----	-----

SOUTH DAKOTA

Fisheries of South Dakota, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Trot lines	Fyke nets	Total exclusive of duplication
	Number	Number	Number	Number
Fishermen:				
On boats and shore, casual	44	9	20	67
Boats:				
Motor	2			2
Other	11	9	20	34
Apparatus:				
Number	11	18	68	
Length, yards	1,948			
Hooks		3,600		

OPERATING UNITS: BY WATERS

Waters	Fisher-men, casual	Boats		Haul seines		Trot lines		Fyke nets
		Motor	Other	Number	Length, yards	Number	Hooks	
Mississippi River:								
Missouri River	Number	Number	Number	Number	Length, yards	Number	Hooks	Number
James River	23	2	11	11	1,948	18	3,600	68
Total	44							
	67	2	34	11	1,948	18	3,600	68

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River: Missouri River: James River	37,876	\$3,789	50,036	\$2,502		
Trot lines:						
Mississippi River: Missouri River	350	35	1,400	70	2,300	\$276
Fyke nets:						
Mississippi River: Missouri River	700	70	1,400	70	11,200	3,252
Total by waters:						
Mississippi River:						
Missouri River	1,050	105	2,800	140	13,500	3,528
James River	37,876	3,789	50,036	2,502		
Total	38,926	3,894	52,836	2,642	13,500	3,528

Gear and waters	Crappie		Paddlefish or spoonbill cat		Quillback or "American carp"	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River: Missouri River: James River	1,392	\$70				
Trot lines:						
Mississippi River: Missouri River			400	\$40		
Total by waters:						
Mississippi River:						
Missouri River			400	40		
James River	1,392	70			4,364	220
Total	1,392	70	400	40	4,364	220

Fisheries of South Dakota, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Sheepshead		Sucker "mullet"		Total	
Haul seines:						
Mississippi River: Missouri River: James River	Pounds 697	Value \$70	Pounds 2,246	Value \$112	Pounds 96,611	Value \$6,763
Trot lines:						
Mississippi River: Missouri River					4,450	421
Fyke nets:						
Mississippi River: Missouri River					13,300	3,392
Total by waters:						
Mississippi River:						
Missouri River:						
James River	697	70	2,246	112	17,750 96,611	3,813 6,763
Total	697	70	2,246	112	114,361	10,576

TENNESSEE

Fisheries of Tennessee, 1931

OPERATING UNITS: BY GEAR

Item	Trammel nets	Hand lines	Trot lines	Fyke nets	Spears	Crowfoot bars	Total, exclusive of duplication
Fishermen:							
On boats and shore:							
Regular	Number 50	Number 67	Number 159	Number 159	Number 45	Number 327	
Casual	3		104	68	12	70	206
Total	53	67	263	227	12	115	533
Boats:							
Motor			6	94		42	138
Other	52	67	252	217	12	73	467
Apparatus:							
Number	52	67	464	1,735	12	230	
Square yards	3,560		41,690				
Hooks		67					

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Trammel nets	
	Regu-	Casual	Total	Motor	Other		
	Num-	Num-	Num-	Num-	Num-	Num-	Square
Mississippi River	60	5	65	33	61		
Hatchie River	17	6	23	2	21	6	410
Obion River	74	3	77	24	77		
Reelfoot Lake	90	16	106	30	102	46	3,150
Ohio River:							
Cumberland River	18	59	77	5	69		
Tennessee River	68	111	179	44	132		
Clinch River		6	6		5		
Total	327	206	533	138	467	52	3,560

Waters	Hand lines		Trot lines		Fyke nets	Spears	Crow-foot bars
	Num-	Hooks	Num-	Hooks	Num-	Num-	Num-
Mississippi River							
Hatchie River							
Obion River							
Reelfoot Lake	67	67	80	8,000	465	12	
Ohio River:							
Cumberland River							
Tennessee River							
Clinch River							
Total	67	67	464	41,690	1,735	12	230

Fisheries of Tennessee, 1931—Continued

CATCH: BY GEAR AND WATERS

Fisheries of Tennessee, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Quillback or "American carp"		Sheepshead		Sturgeon, shovelnose	
	Pounds	Value	Pounds	Value	Pounds	Value
Trammel nets:						
Mississippi River:						
Hatchie River			1,500	\$60		
Obion River: Reelfoot Lake			17,900	358		
Total			19,400	418		
Trot lines:						
Mississippi River:			900	36		
Obion River			5,050	202		
Reelfoot Lake			4,050	81		
Ohio River:						
Cumberland River	55	\$8	10,640	1,711		
Tennessee River	2,000	249	6,654	853	300	\$15
Clinch River			140	28		
Total	2,055	257	27,434	2,911	300	15
Fyke nets:						
Mississippi River:			25,100	969		
Hatchie River			2,350	94		
Obion River			35,250	1,403		
Reelfoot Lake			67,500	1,350		
Ohio River:						
Cumberland River	1,560	228	11,775	1,760	2,815	302
Tennessee River	2,450	358	8,861	1,560	591	76
Total	4,010	586	150,836	7,136	3,406	378
Total by waters:						
Mississippi River:			26,000	1,005		
Hatchie River			3,850	154		
Obion River			40,300	1,605		
Reelfoot Lake			89,450	1,789		
Ohio River:						
Cumberland River	1,615	236	22,415	3,471	2,815	302
Tennessee River	4,450	607	15,515	2,413	891	91
Clinch River			140	28		
Total	6,065	843	197,670	10,465	3,706	393
Gear and waters	Sucker "mullet"		Sunfish		White bass	
	Pounds	Value	Pounds	Value	Pounds	Value
Trammel nets:						
Mississippi River:						
Obion River: Reelfoot Lake			3,750	\$189		
Trot lines:						
Mississippi River: Obion River: Reelfoot Lake			800	40		
Fyke nets:						
Mississippi River	150	\$5				
Obion River	250	8				
Reelfoot Lake			17,300	865	1,350	68
Ohio River:						
Cumberland River	4,915	663				
Tennessee River	3,008	443				
Total	8,323	1,119	17,300	865	1,350	68
Crowfoot bars:						
Mississippi River: Ohio River: Tennessee River						
Total by waters:						
Mississippi River	150	5				
Obion River	250	8				
Reelfoot Lake			21,850	1,094	2,100	106
Ohio River:						
Cumberland River	4,915	663				
Tennessee River	3,008	443				
Total	8,323	1,119	21,850	1,094	2,100	106
					2,157,000	\$15,604

Fisheries of Tennessee, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Pearls	Slugs	Frogs		Terrapin		Total	
	Value	Value	Pounds	Value	Pounds	Value	Pounds	Value
Trammel nets:								
Mississippi River:								
Hatchie River-----							13,550	\$830
Obion River: Reelfoot Lake-----							121,950	6,871
Total-----							135,500	7,701
Hand lines:								
Mississippi River: Obion River: Reelfoot Lake-----							14,000	1,680
Trot lines:								
Mississippi River-----							38,070	2,469
Hatchie River-----							13,025	860
Obion River-----							70,455	5,115
Reelfoot Lake-----							103,050	7,857
Ohio River:								
Cumberland River-----					70	\$14	26,362	4,042
Tennessee River-----							34,733	4,674
Clinch River-----							620	124
Total-----					70	14	286,315	25,141
Fyke nets:								
Mississippi River-----							240,460	13,109
Hatchie River-----							25,500	1,403
Obion River-----							194,045	10,378
Reelfoot Lake-----							309,550	16,515
Ohio River:								
Cumberland River-----							40,678	5,893
Tennessee River-----							29,771	4,469
Total-----							840,004	51,767
Spears:								
Mississippi River: Obion River: Reelfoot Lake-----				2,250	\$270		2,250	270
Crowfoot bars:								
Mississippi River: Ohio River: Tennessee River-----		\$28	\$1,724				2,157,000	17,356
Total by waters:								
Mississippi River-----							278,530	15,578
Hatchie River-----							52,075	3,093
Obion River-----							264,500	15,493
Reelfoot Lake-----			2,250	270			550,800	33,193
Ohio River:								
Cumberland River-----	28	1,724				70	14	67,040
Tennessee River-----							2,221,504	26,499
Clinch River-----							620	124
Total-----	28	1,724	2,250	270	70	14	3,435,069	103,915

TEXAS

Fisheries of Texas, 1931

OPERATING UNITS: BY GEAR

Item	Trot lines	Fyke nets	Total, exclusive of duplication
	Number	Number	Number
Fishermen:			
On boats and shore:			
Regular-----	5	5	5
Casual-----	41	26	41
Total-----	46	31	46
Boats:			
Motor-----	6	6	6
Other-----	39	29	42
Apparatus:			
Number-----	80	70	
Hooks-----	14,500		

Fisheries of Texas, 1931—Continued

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Trot lines		Fyke nets
	Regular	Casual	Total	Motor	Other			
Mississippi River: Red River:								
Caddo Lake-----	2	18	20	3	19	35	7,000	30
Sulphur River-----	3	23	26	3	23	45	7,500	40
Total-----	5	41	46	6	42	80	14,500	70

CATCH: BY GEAR AND WATERS

Gear and waters	Buffalofish		Carp		Catfish and bullheads	
Trot lines:						
Mississippi River:						
Red River:						
Caddo Lake-----		Pounds	Value	Pounds	Value	Pounds
Sulphur River-----		-----	-----	2,000	\$40	20,000
Total-----		-----	-----	1,900	38	24,000
Total-----		-----	-----	3,900	78	44,000
Total-----		-----	-----	-----	-----	3,520
Fyke nets:						
Mississippi River:						
Red River:						
Caddo Lake-----	35,000	\$1,050	2,000	40	2,000	160
Sulphur River-----	38,000	1,140	1,000	20	1,800	144
Total-----	73,000	2,190	3,000	60	3,800	304
Total by waters:						
Mississippi River:						
Red River:						
Caddo Lake-----	35,000	1,050	4,000	80	22,000	1,760
Sulphur Lake-----	38,000	1,140	2,900	58	25,800	2,064
Total-----	73,000	2,190	6,900	138	47,800	3,824

Gear and waters	Quillback or "American carp"		Sheepshead		Total	
Trot lines:						
Mississippi River:						
Red River:						
Caddo Lake-----		Pounds	Value	Pounds	Value	Pounds
Sulphur River-----		-----	-----	2,500	\$50	24,500
Total-----		-----	-----	3,000	60	28,900
Total-----		-----	-----	5,500	110	53,400
Total-----		-----	-----	-----	-----	3,708
Fyke nets:						
Mississippi River:						
Red River:						
Caddo Lake-----	500	\$10	2,000	40	41,500	1,300
Sulphur River-----		-----	2,800	56	43,600	1,360
Total-----	500	10	4,800	96	85,100	2,660
Total by waters:						
Mississippi River:						
Red River:						
Caddo Lake-----	500	10	4,500	90	66,000	2,990
Sulphur Lake-----		-----	5,800	116	72,500	3,378
Total-----	500	10	10,300	206	138,500	6,368

WISCONSIN

Fisheries of Wisconsin, 1931

OPERATING UNITS: BY GEAR

Item	Haul seines	Anchor gill nets	Trot lines	Pound nets	Fyke nets	Crow- foot bars	By hand	Total, exclusive of dupli- cation
Fishermen:								
On boats and shore:								
Regular-----	132	6	1	32	15	47	40	202
Casual-----	50	9	1	4	-----	55	2	112
Total-----	182	15	2	36	15	102	42	314
Boats:								
Motor-----	76	6	-----	31	11	61	-----	160
Other-----	78	6	2	31	13	41	42	180
Apparatus:								
Number-----	83	6	3	345	222	190	-----	-----
Length, yards-----	20,149	-----	-----	-----	-----	-----	-----	-----
Square yards-----	13,488	-----	-----	-----	-----	-----	-----	-----
Hooks-----	-----	-----	125	-----	-----	-----	-----	-----

OPERATING UNITS: BY WATERS

Waters	Fishermen			Boats		Haul seines
	Regular	Casual	Total	Motor	Other	
	Number	Number	Number	Number	Number	Number
Mississippi River-----	198	103	301	154	175	82
Wisconsin River-----	4	-----	4	1	1	1
Fox River: Wolf River-----	-----	9	9	5	4	-----
Total-----	202	112	314	160	180	83
Length, yards-----						
Mississippi River-----	6	13,488	-----	-----	-----	172
Wisconsin River: Fox River: Wolf River-----	-----	-----	-----	-----	-----	18
Total -----	6	13,488	3	125	345	222
Crow-foot bars-----						
Mississippi River-----	-----	-----	-----	-----	-----	-----
Wisconsin River: Fox River: Wolf River-----	-----	-----	-----	-----	-----	-----
Total -----	-----	-----	-----	-----	-----	-----

CATCH: BY GEAR AND WATERS

Gear and waters	Bowfin		Buffalofish		Carp	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River-----	248,436	\$3,742	157,958	\$7,956	670,292	\$20,332
Wisconsin River-----	-----	-----	33,000	1,650	7,000	265
Total-----	248,436	3,742	190,958	9,606	677,292	20,597
Anchor gill nets: Mississippi River-----	-----	-----	13,430	741	18,838	496
Pound nets: Mississippi River-----	20,284	319	31,048	1,553	53,304	1,798
Fyke nets: Mississippi River-----	19,450	294	32,565	1,628	28,040	909
Total, by waters:						
Mississippi River-----	288,170	4,355	235,001	11,878	770,474	23,535
Wisconsin River-----	-----	-----	33,000	1,650	7,000	265
Total-----	288,170	4,355	268,001	13,528	777,474	23,800

Fisheries of Wisconsin, 1931—Continued

CATCH: BY GEAR AND WATERS—Continued

Gear and waters	Catfish and bullheads		Quillback or "American carp"		Sheepshead	
	Pounds	Value	Pounds	Value	Pounds	Value
Haul seines:						
Mississippi River	41,017	\$3,538	45,930	\$1,369	49,518	\$2,245
Wisconsin River			10,000	350		
Total	41,017	3,538	55,930	1,719	49,518	2,245
Trot lines: Mississippi River	950	110			250	12
Pound nets: Mississippi River	15,747	1,507	10,423	313	23,651	980
Fyke nets: Mississippi River	7,825	670			10,990	455
Total, by waters:						
Mississippi River	65,539	5,825	56,353	1,682	84,409	3,692
Wisconsin River			10,000	350		
Total	65,539	5,825	66,353	2,032	84,409	3,692

Gear and waters	Sucker "mullet"		Mussel shells	Pearls	Slugs	Total	
	Pounds	Value	Pounds	Value	Value	Pounds	Value
Haul seines:							
Mississippi River	109,036	\$3,267				1,322,187	\$42,449
Wisconsin River						50,000	2,265
Total	109,036	3,267				1,372,187	44,714
Anchor gill nets: Mississippi River						32,268	1,237
Trot lines: Mississippi River						1,200	122
Pound nets: Mississippi River	25,498	385				179,955	6,855
Fyke nets: Mississippi River	1,450	44				100,320	4,000
Crowfoot bars:							
Mississippi River			786,500	\$7,763	\$1,546	786,500	9,769
Wisconsin River: Fox River: Wolf River			22,500	281	20	22,500	372
Total			809,000	8,044	480	1,617	809,000
By hand: Mississippi River			150,200	902	75	395	150,200
Total, by waters:							
Mississippi River	135,984	3,696	936,700	8,665	535	1,941	2,572,630
Wisconsin River			22,500	281	20	71	50,000
Fox River: Wolf River							22,500
Total	135,984	3,696	959,200	8,946	555	2,012	2,645,130
							68,441

Industries related to the fisheries of the Mississippi River and tributaries, 1931

OPERATING UNITS, SALARIES, AND WAGES

Item	Arkansas	Illinois	Indiana	Iowa	Kentucky	Louisiana	Minnesota and North Dakota
	Number	Number	Number	Number	Number	Number	Number
Transporting:							
Persons engaged	13				11	5	
Vessels, motor	4				2	2	
Net tonnage	69				15	20	
Wholesale and manufacturing:							
Establishments	6	38	4	61	11	22	13
Persons engaged:							
Proprietors	3	42	1	52	8	24	11
Salaried employees	9	3	5	79	20	14	27
Wage earners:							
Average for season	152	331	140	2,500	261	70	112
Average for year	72	235	93	2,179	159	68	112
Paid to salaried employees	\$11,417	\$9,520	\$6,820	\$141,346	\$33,159	\$12,400	\$55,200
Paid to wage earners	53,503	145,683	51,444	1,417,678	81,643	37,700	81,500
Total salaries and wages	64,920	155,203	58,264	1,559,024	114,802	50,100	136,700
Fishermen manufacturing			4	2		200	

Industries related to the fisheries of the Mississippi River and tributaries, 1931—Continued

OPERATING UNITS, SALARIES, AND WAGES—Continued

Item	Mississipi Number	Missouri and Oklahoma Number	Ne- braska and Kansas Number	Ohio and Penn- sylvania Number	Tennes- see Number	Wis- consin Number	Total Number
Transporting:							
Persons engaged.....							29
Vessels, motor.....							8
Net tonnage.....							104
Wholesale and manufacturing:							
Establishments.....	6	21	3	13	11	8	217
Persons engaged:							
Proprietors.....	7	24	3	17	9	3	204
Salaried employees.....	3	125	8	37	15	10	355
Wage earners:							
Average for season.....	26	328	52	175	90	38	4,275
Average for year.....	26	261	52	145	52	29	3,483
Paid to salaried employees.....	\$16,000	\$291,874	\$17,400	\$95,878	\$34,884	\$12,998	\$738,896
Paid to wage earners.....	22,382	202,944	45,580	138,817	38,177	24,483	2,341,534
Total salaries and wages.....	38,382	494,818	62,980	234,695	73,061	37,481	3,080,430
Fishermen manufacturing.....	7	3					216

PRODUCTS MANUFACTURED

Item	Arkansas		Illinois		Indiana	
	Quantity	Value	Quantity	Value	Quantity	Value
By manufacturing establishments:						
Mussel-shell products:						
Buttons.....gross						
Button blanks.....do	503,548	\$87,752	(1)	(1)	(1)	(1)
Poultry feed.....tons			(1)	(1)	(1)	(1)
Unclassified.....				\$235,814		\$115,866
Total.....		87,752		235,814		115,866
By fishermen:						
Carp, smoked.....pounds			667	67		
Paddlefish roe, salted.....do			617	77	450	180
Sheepshead, smoked.....do						
Sturgeon:						
Smoked.....do			1,333	400		
Roe, salted.....do			35	32		
Total.....				576		180
Grand total.....		87,752		236,390		116,046

Item	Iowa		Kentucky		Louisiana	
Quantity	Value	Quantity	Value	Quantity	Value	
By manufacturing establishments:						
Salmon, smoked.....pounds	240,000	\$48,800				
Sturgeon, smoked.....do	162,000	39,140				
Tullibees, smoked.....do	58,000	11,440				
Mussel-shell products:						
Buttons.....gross	12,121,024	3,399,952				
Button blanks.....do	8,590,598	1,424,618	(1)	(1)		
Cut shells.....tons	22,239	42,749	(1)	(1)		
Lime.....do	2,291	2,291				
Poultry feed.....do	11,288	89,503	(1)	(1)		
Unclassified.....				\$155,182		
Unclassified, miscellaneous.....		152,092				
Total.....		5,210,585		155,182		
By fishermen:						
Alligator hides.....pounds					88,356	\$7,363
Grand total.....		5,210,585		155,182		7,363

¹ The production of this item is included under unclassified products.² Includes the production of buttons, button blanks, and poultry feed.³ Includes the production of button blanks, and a small quantity of poultry feed and stucco.⁴ Includes the production of button blanks, cut shells, and poultry feed.⁵ Includes the production of smoked buffalofish, and mussel-shell novelties, bird shell sugar, dyed chips, polished chips, and stucco.

Industries related to the fisheries of the Mississippi River and tributaries, 1931—Continued

PRODUCTS MANUFACTURED—Continued

Item	Minnesota, Nebraska, Kansas, and Wisconsin		Mississippi		Missouri		Ohio and Penn- sylvania	
	Quan- tity	Value	Quan- tity	Value	Quan- tity	Value	Quan- tity (¹)	Value (¹)
By manufacturing establishments:								
Salmon, smoked.....pounds								
Sturgeon, smoked.....do.....	(¹)	(¹)						
Tullibees, smoked.....do.....								
Whitefish, smoked.....do.....	255,000	\$47,200						
Mussel-shell products:								
Buttons.....gross.....	(¹)	(¹)			(¹)	(¹)		
Button blanks.....do.....	(¹)	(¹)			(¹)	(¹)		
Cut shells.....tons.....	(¹)	(¹)			(¹)	(¹)		
Lime.....do.....	(¹)	(¹)			(¹)	(¹)		
Poultry feed.....do.....	252	1,875			(¹)	(¹)		
Unclassified.....							\$141,697	
Unclassified, miscellaneous.....		7,230,218						\$131,433
Total.....		279,293					141,697	131,433
By fishermen:								
Paddlefish roe, salted.....pounds.....			245	\$92	900	540		
Grand total.....		279,293		92		142,237		131,433

¹ The production of this item is included under unclassified products.⁶ Includes the production of buttons, button blanks, lime, and poultry feed.⁷ Includes the production of smoked eels, salmon, and sturgeon, and buttons, button blanks, cut shell, and novelties.⁸ Includes the production of smoked buffalofish, butterfish, carp, chubs, lake trout, paddlefish, salmon, tullibees, and whitefish, and button blanks, and cut shells.

NOTE.—The total value of the products in the Mississippi River and tributaries was as follows: By manufacturing establishments, \$6,357,622; by fishermen, \$8,751. Some of the above products may have been manufactured from fishery products imported from another section of the United States or foreign countries; therefore, they cannot be correlated directly with the catch within the section. None of the persons engaged on transporting vessels has been included as fishermen; and of the total number of persons engaged in the preparation of fishermen's manufactured products, 16 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

LAKE PEPIN

Fisheries of Lake Pepin, 1931

Item	Haul seines		Anchor gill nets		Pound nets		Total, exclusive of duplication	
	Number	Value	Number	Value	Number	Value	Number	Value
OPERATING UNITS								
Fishermen:								
On boats and shore:								
Regular.....	33		7		18		44	
Casual.....	20		10		7		27	
Total.....	53		17		25		71	
Boats:								
Motor.....	24		7		18		39	
Other.....	24		7		18		39	
Apparatus:								
Number.....	24		7		166			
Length, yards.....	9,365							
Square yards.....			13,933					
CATCH								
Bowfin.....	700	\$11			1,764	\$40	2,464	\$51
Buffalofish.....	2,367	175	2,599	\$199	5,513	276	10,479	650
Carp.....	274,100	8,744	21,274	746	26,819	842	322,193	10,332
Catfish and bullheads.....	3,492	403			6,787	814	10,279	1,217
Quillback or "American carp".....	4,200	126			10,423	313	14,623	439
Sheepshead.....	11,503	642			17,886	712	29,389	1,354
Suckers.....	16,584	497			25,498	385	42,082	882
Total.....	312,946	10,598	23,873	945	94,690	3,382	431,509	14,925

LAKE KEOKUK

Fisheries of Lake Keokuk, 1931

Item	Haul seines	Trot lines	Fyke nets	Baskets	Total, exclusive of duplication	
Operating Units						
Fishermen:						
On boats and shore:						
Regular-----	Number 21	Number 36	Number 42	Number 24	Number 51	
Casual-----	20	32	18		38	
Total-----	41	68	60	24	89	
Boats:						
Motor-----	19	28	37	12	41	
Other-----	17	40	34	10	46	
Apparatus:						
Number-----	18	254	1,359	1,180		
Length, yards-----	5,482					
Hooks-----		38,800				
CATCH	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin-----	5,125	\$149			1,900	\$54
Buffalofish-----	37,112	2,968	75,253	5,853		
Carp-----	105,004	4,179	9,395	\$350	55,750	1,914
Catfish and bullheads-----	12,130	1,213	46,060	4,579	12,190	1,207
Eels-----			215	11		
Mooneye-----	500	10				
Paddlefish-----	7,100	478				
Quillback or "American carp"-----	6,500	130			2,200	44
Sheepshead-----	53,300	2,665	3,735	186	15,794	765
Sturgeon, shovelnose-----	300	30				
Sucker "mullet"-----	3,000	60			1,000	20
Terrapin-----	3,800	76				
Turtles:						
Snapper-----	2,000	40				
Soft-shell-----	3,000	60				
Total-----	238,871	12,058	59,405	5,126	164,087	9,857
					49,290	4,722
					511,653	31,763

MISSISSIPPI RIVER BETWEEN LAKE PEPIN AND LAKE KEOKUK

Fisheries of Mississippi River between Lake Pepin and Lake Keokuk, 1931

Item	Haul seines	Anchor gill nets	Trammel nets	
Operating Units				
Fishermen:				
On boats and shore:				
Regular-----	Number 241	Number 5	Number 12	
Casual-----	220	5		
Total-----	461	10	12	
Boats:				
Motor-----	184	5	6	
Other-----	192	5	6	
Apparatus:				
Number-----	212	5	6	
Length, yards-----	49,030			
Square yards-----		6,221	1,000	
CATCH	Pounds	Value	Pounds	Value
Bowfin-----	329,176	\$7,213		
Buffalofish-----	453,614	29,874	13,321	\$667
Carp-----	1,255,579	51,708	16,549	523
Catfish and bullheads-----	109,151	10,426		
Eels-----	325	15		
Paddlefish-----	2,000	195		
Pickerel-----	4,700	470		
Quillback or "American carp"-----	58,709	1,500		
Sheepshead-----	219,187	11,182	1,045	52
Sturgeon, shovelnose-----	15,959	1,583	284	20
Suckers-----	145,667	4,174	900	27
Terrapin-----	13,100	257		
Turtles, soft-shell-----		14,000	280	
Total-----	2,621,167	118,877	32,099	1,289
				25,800
				1,141

Fisheries of Mississippi River between Lake Pepin and Lake Keokuk, 1931—Con.

Item	Trot lines		Pound nets		Fyke nets	
OPERATING UNITS						
Fishermen:						
On boats and shore:						
Regular	Number		Number		Number	
Casual	110		15		236	
Total	229				168	
Boats:						
Motor	166		14		290	
Other	158		14		168	
Apparatus:						
Number	1, 116		181		2, 698	
Hooks	177, 400					
CATCH						
Bowfin	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish	18, 520	\$279	19, 450	\$294		
Carp	25, 535	1, 277	457, 590	34, 845		
Catfish and bullheads	30, 200	1, 105	802, 606	38, 238		
Eels	8, 960	693	79, 214	8, 713		
Paddlefish			3, 840	269		
Quillback or "American carp"			19, 400	427		
Sheepshead	38, 416	1, 958	5, 825	271	138, 405	7, 115
Sturgeon, shovelnose					1, 467	187
Suckers	1, 325	40			6, 141	144
Terrapin					200	4
Total	394, 738	36, 055	89, 040	3, 625	1, 528, 313	90, 236

Item	Dip nets		Baskets		Total, exclusive of duplication	
OPERATING UNITS						
Fishermen:						
On boats and shore:						
Regular	Number		Number		Number	
Casual	4		22		436	
Total			1		439	
Boats:						
Motor			13		428	
Other					425	
Apparatus:						
Number	4		690			
CATCH						
Bowfin	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish					367, 146	\$7, 786
Carp	1, 275	\$64			957, 285	67, 074
Catfish and bullheads			77, 300	\$7, 140	2, 182, 179	95, 078
Eels					570, 027	58, 147
Paddlefish					375	18
Pickerel					5, 840	464
Quillback or "American carp"					4, 700	470
Sheepshead	645	53			78, 109	1, 927
Sturgeon, shovelnose					404, 433	20, 676
Suckers					18, 950	1, 914
Terrapin					154, 033	4, 385
Turtles, soft-shell					13, 300	261
Total	1, 920	117	77, 300	7, 140	4, 770, 377	258, 480

STATISTICAL SURVEY PROCEDURE

For data on the statistical survey procedure generally followed in collecting and compiling the figures given in part 2 of this report and also for a list of common and scientific names of the fishery products mentioned in this report, the reader is referred to "Fishery Industries of the United States, 1931", Appendix II to the Report of the Commissioner of Fisheries for the fiscal year 1932.

