FISHERY INDUSTRIES OF THE UNITED STATES

1927

By OSCAR E. SETTE and R. H. FIEDLER

DEPARTMENT OF COMMERCE
BUREAU OF FISHERIES - - - Document No. 1050

DEPARTMENT OF COMMERCE
R. P. LAMONT, Secretary
BUREAU OF FISHERIES
HENRY O'MALLEY, Commissioner

FISHERY INDUSTRIES OF THE UNITED STATES 1927

By
OSCAR E. SETTE and R. H. FIEDLER

APPENDIX IX TO THE REPORT OF THE U. S. COMMISSIONER OF FISHERIES FOR 1928

Bureau of Fisheries Document No. 1050

PRICE 25 CENTS

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1929

FISHERY INDUSTRIES OF THE UNITED STATES, 1927[1]

By

OSCAR E. SETTE

Assistant in Charge, Division of Fishery Industries

and

R. H. FIEDLER

Administrative Assistant, Division of Fishery Industries

CONTENTS

FOREWORD

This report constitutes a yearbook on fishery statistics of the United States as well as a summary of activities of the division of fishery industries. As its name indicates, this division of the Bureau of Fisheries 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 are the collection and publication of fishery statistics, the prosecution of research designed 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 all the detailed statistical information that has become available since

[1] Appendix IX to the Report of the U. S. Commissioner of Fisheries for 1928. Bureau of Fisheries Doc. No. 1050.

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 numerous members of the division's staff have taken part, and their assistance is appreciatively acknowledged.

Some changes as to scope and arrangement of statistics have been incorporated in this report. In all cases the statistics on value of property and cash capital have been discontinued, except for the Middle Atlantic States for 1926, the statistics for which were collected before this policy was adopted. Although the value of such statistical information is appreciated fully, the difficulty of collecting reliable and comparable data has been insurmountable; and since comparisons, both with one region and another and with one year and another, might be grossly misleading, it has been considered necessary to omit such items. All statistical statements applicable to the country as a whole appear in the first part of the report, and the statistics pertaining to particular localities and regions are taken up by geographical sections in the following order: New England States, Middle Atlantic States, Chesapeake Bay States, South Atlantic States, Gulf States, Pacific Coast States, Great Lakes States, and Mississippi River and tributaries. In all cases there is given a summary of the most recent statistics pertaining to the section as a whole, together with references to the previous publication that contains the detailed statements. This is followed by such detailed statistics on the particular localities of the region as have become available since the previous annual report.

PART 1.—OPERATIONS OF THE DIVISION

COLLECTION OF STATISTICS

Fishery statistics, unlike other statistical data, must serve not only as trade information but as the material that the biologist must have in studying the problems of conservation. Since statistical information is fundamental in this respect, it is highly important to achieve progress in this branch of work, which is admittedly inadequate at the present time. During the past four decades fishery statistics have been collected by canvassing the fisheries of eight geographical sections of the country, taking one at a time, and completing them as rapidly as possible with the personnel available for this purpose. In recent years it has been possible to reach each section about once every five years. This method, while the best possible under existing conditions, had two fundamental defects. First, the fisherman were reached a considerable time after the previous year's business had been closed, and unless they kept a record of their operations and catch (a rare circumstance) the information received was but an approximate estimate rather than a definite record. Second, the fortunes of a fishery fluctuate so widely from year to year that data acquired at intervals of five years are likely to be misleading, for they may represent a poor or a good year rather than a normal one. Annual statistics are essential to indicate accurately the trends in fishery matters.

[2] Fishery industries of the United States, 1926. By Oscar E. Sette. Appendix V, Report, U. S. Commissioner of Fisheries, 1927, pp. 337–483. Bureau of Fisheries Doc. No. 1025.

While the bureau's facilities are not adequate to collect annual statistics for the entire country, fortunately there is another means of accomplishing this end—that is, through cooperation with State agencies. Since early times, the fisheries in State waters have been under State control, and a number of States have included the rendering of statistical returns as an obligation of commercial fishermen who exploit the State's resources. As reported in 1925 and subsequent years, the bureau's policy has been to cooperate with those States that collect statistics in such a manner as to render the data adequate to form the material for studies in fluctuations in abundance and to render the statistics of adjoining States comparable so as to permit compilation over the entire commercial range of species inhabiting the waters of a number of contiguous States; and to encourage the collection of statistics by those States not at present doing so.

The results of this policy have been gratifying. By detailing one agent to the Pacific Coast States and employing temporary clerical assistance in that region, annual statistics based on State returns have been compiled and published since 1923. In the Great Lakes region it has been possible to compile State statistics annually since 1913. Certain improvements in the method of securing returns on the Great Lakes were necessary to make them adequate, and through several conferences of State officials of that region an agreement properly to revise collections was reached and will be effective for the calendar year 1928. Collection of statistics in the remaining sections of the country is still on the periodical canvass basis.

During the past year, statistics on the Middle Atlantic States for the calendar year 1926 were collected and published. With the completion of this canvass and the State cooperation above mentioned, the latest statistics available on each geographical section are as follows: New England States, 1924; Middle Atlantic States, 1926; Chesapeake Bay States, 1925; South Atlantic and Gulf States, 1923; Pacific Coast States, 1926; Great Lakes, 1926; Mississippi River and tributaries, 1922.

In addition to the general statistics, the series of statistics on special subjects was continued during 1927 as follows: The collection and monthly publication of the statistics of the landings of fish by vessels at the ports of Boston and Gloucester, Mass., Portland, Me., and Seattle, Wash., and landings of halibut at North Pacific coast ports, and publication of annual bulletins summarizing these landings for the year; monthly publication of statistics on the cold-storage holdings of frozen and cured fish collected by the Bureau of Agricultural Economics, Department of Agriculture; quarterly collection of the statistics of production, consumption, and holdings of oils in the fishery industries for the use of the Bureau of the Census; collection and publication of statistics on the production of canned fishery products and by-products by the United States and Alaska for 1927; collection and publication herewith of statistics on the shad and alewife fisheries of the Potomac and Hudson Rivers for 1927; the securing and publishing herewith of statistics on the quantity and value of sponges handled by the Tarpon Springs sponge exchange in 1927; the securing and publishing herewith of statistics on the quantity of fishery products handled at the municipal fish wharf and market, Washington, D. C., in 1927; the tabulation and publication herewith of statistics obtained by the Bureau of Foreign and Domestic Commerce, Depart-

ment of Commerce, on the United States import and export trade in fishery products during 1927; and the collection and publication herewith of the 1927 fishery statistics of Lakes Keokuk and Pepin.

The special statistical observations on the mackerel fishery have been of particular interest and are beginning to bear fruit of unusual importance to the industry. The project involves the collection of data on the size, date, and locality of capture of each fare of mackerel landed at the principal mackerel-receiving ports; also the measuring of a sample of 20 or more fish from each fare. These data, together with biological analyses, in which the division of scientific inquiry has had an important share, have made possible an understanding of the fluctuations in abundance of this notoriously erratic species. During the years 1925, 1926, and 1927 the commercial catch has been dominated almost completely by fish of the 1923 spawning season. In other years either spawning has been a failure or infant mortality has been so high as to have virtually prevented significant contribution to the stocks of mackerel in the sea. Knowing that for three years the commercial fishery has been drawing on a stock of mackerel that has had virtually no increase from natural reproduction it is possible to estimate the trend for at least a year in the future. The 1923 year class came into commercial importance in 1925, and the consequent increase in abundance caused a commercial catch exceeding any since 1885. In 1926 the catch was still larger, but in 1927 the catch decreased about 12 per cent. Evidently, mortality, both natural and artificial (removal of the commercial catch from the stocks in the sea), by that time had offset the increase due to growth in size of individual mackerel. Thus it has been possible to predict that the 1928 catch will fall below the 1927 catch by more than 12 per cent. Such predictions will be of inestimable value to fishermen and fish dealers when their reliability has been tested sufficiently through a number of years.

TECHNOLOGICAL INVESTIGATIONS

The technological work of the bureau is directed toward the elimination of loss in fishery industries by the utilization of material generally wasted, by making existing processes more economical or replacing them with new methods, or by making investigations and spreading information concerning new uses of fishery products. To do these things, the bureau supplies the industry with the best scientific information available and conducts investigations that promise to be of general importance and that are of such nature that the bureau can hope to prosecute them profitably with the personnel and funds available. It has been necessary, however, to point out to the industry that there are problems that the bureau is qualified to attack and can do so properly, but that there are other problems that industry must solve for itself. The latter generally are not of a technological nature but are purely matters of management, whereby great savings may be effected by applying sound business principles. The technologists are fitted to point out to the industry the sources of loss in a plant, but the solution of these problems is an individual matter best solved by the persons involved.

A prominent feature of this year's work is the greater number of contacts made in the field, through which the problems of the industry

have been learned first hand. Manufacturers of equipment were told of opportunities to introduce their products to the fishing industries with mutual profit, and the bureau itself tested equipment when advisable and practicable. A temporary field laboratory was established at Reedville, Va., mainly in order to study the problems of the menhaden and by-products industries.

Many of the bureau's technologists have left the service since last year. Nearly all of them have taken positions in the fishery industries, hence they are not lost to this field and can continue to help its progress. The bureau has had to train new men (which seems to be one of the ways in which to help the fisheries) and therefore its progress has been retarded somewhat this year. Nevertheless, a great deal of work has been done, as is indicated in the following paragraphs.

Net preservation.—Experience in recent years has established the fact that no single net preservative can be applied successfully to all forms of gear. For this reason the past year's experiments were directed toward determining the best treatment for pound nets fished in salt water. Samples of twine treated with nearly 100 different preservative mixtures were exposed at the Beaufort (N. C.) station last year, and test panels containing 10 of the most promising treatments were placed in commercial fishing localities. As a result of these tests the formula for a satisfactory preservative was developed and released. This costs approximately one-third as much as the best commercial treatment previously available and consists of cuprous and mercuric oxides and tar dissolved in water-gas tar oil. No other solvent has proved quite as efficacious as this, which is cheap though not always easily available.

By-products.—The reduction of fish into oil and scrap, or meal, is a large industry of long standing, yet it still presents many formidable problems. In the case of the menhaden industry the situation is particularly acute, due to the maladjustment of capacities in the plants. This is the outgrowth of an oversized organization to take care of previous periods of abundant supply. As a result, when the menhaden catch falls below a certain rather high level, as it has in recent years, the factories operate at a loss. The remedy is readjustment to present conditions, and our technologists have devoted much attention to the problem by showing where appropriate machinery can be installed and advocating the detection of excessive expenditures by the use of simple cost systems. The production of better meal and oil through care in operation of equipment has been demonstrated and will help to remedy the situation. These points were stressed because they promised immediate relief, whereas the investigations of a more technical nature, begun in 1927, though showing progress, can not be concluded in so short a time.

Another problem concerns the salvaging of small quantities of market waste, unmarketable or trash fish, and the waste produced on shipboard. Various angles of it were studied during the past year, especially the vacuum process of handling the waste resulting from filleting operations. Data on hand are not sufficiently complete to offer a solution of the problem. This and other experiments in the same field are being continued.

The field that holds the most promising future in the by-products industry lies in producing a fish meal suitable for feeding purposes.

White meal produced by the vacuum process from haddock and cod waste is a most excellent stock feed and is valued highly. This meal is greatly appreciated abroad (especially in Germany, where it is used for feeding hogs) as a protein supplement for cereals. It produces a sturdy frame in animals and prevents deficiency diseases because it brings with it from the sea elements necessary to normal life. In the usual feed for farm animals, many elements are not found in the proper proportions; iodine, for instance, may be absent and goiter result, or calcium be deficient and bone formation (and general health) faulty as a consequence. It is recognized that all animals require 30 elements for normal life processes. Many occur in very small quantities, but all are essential. Minerals obtained from organic sources are assimilated best. In some cases the soil has been depleted, so that land food may be deficient; but since the sea has not been depleted of its minerals, sea food is "balanced" and, when used by humans or lower animals, supplements deficient land food. For these reasons the production of fish meal for feeding purposes should be increased, and its more extensive use in this country will bring profit to the fish by-products industries and farmers alike.

Improved handling of fresh fish.—Progress has been made in marketing fresh fish, notably in the development of the filleted and packaged product. However, there are many phases of handling that are in serious need of improvement. The highly perishable nature of this commodity requires the most careful handling on shipboard, in the wholesale houses, and in transit overland. This problem is being surveyed in all its aspects. Particular attention is being given the New England vessel fisheries. To this end an office has been established on the Boston Fish Pier, where a technologist and an assistant are studying local conditions on shipboard and ashore. It is expected that this undertaking will make possible the application of scientific principles to the handling of sea foods in such a way as to insure their delivery to inland consumers in the best condition. The immediate adoption of improved methods of caring for fresh fish is highly important, but the trend of development in the fisheries indicates that the future need will be still greater as it becomes necessary to fish on more distant grounds. In six years the packaged-fish trade has grown to be an industry that utilizes more than 50,000,000 pounds of fish annually. While no one can estimate the limits of productivity of the fishing grounds, there is little doubt but that the exploitation of more distant waters will follow the expansion in fish consumption; and with the extension of the fishery will come the necessity for refrigeration and insulation on shipboard. In view of this, there can be little doubt concerning the urgent need for technological research in this field.

Nutritive value of fish.—The nutritive value of sea food for human consumption is a matter of national importance. Fish and meats are the principal sources of protein, and, in addition to its protein value, fish contains minerals and vitamins to an unusual degree. Nutrition experts appreciate the difference in various proteins and the importance of minerals and vitamins in the diet. The exact status of fish food in supplying such elements is not known, and to secure this information the bureau has been conducting research on the subject. During the past year it was determined that the pro-

teins of haddock and herring are an excellent supplement for cereals, comparing favorably with steak, liver, or kidney. They do not supplement legumes well, however. Further work will concern other metabolism studies, since feeding experience has shown fish meal to be most effective in promoting growth. This is probably due to the fact that it contains an easily available source of calcium and phosphorus, though it also may be due to the fact that the fish come from the sea, where there is no deficiency of other raw materials.

MARKET SURVEYS

During 1927 the bureau continued to make studies of the wholesale and retail fishery trade in representative cities and conducted these surveys in St. Louis, Mo., Jacksonville, Fla., and Atlanta, Ga. The complete reports are published as Bureau of Fisheries Documents Nos. 1026, 1036, and 1039, respectively. These may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents each.

Greater St. Louis.—This city is situated on the Mississippi River near the geographical center of the United States, the center of population, the center of agricultural production, and the center of many of the sources of raw materials. Being neither eastern nor western, northern nor southern, its population might be expected to represent a typical cross section of American life.

During 1926, the 12 wholesale firms in St. Louis handled 13,000,000 pounds of 74 varieties of fresh and frozen fishery products, with a wholesale value of about $3,200,000. Over one-half of these products were received from Massachusetts, Florida, Washington, and Louisiana, while 24 other States and 4 Canadian Provinces contributed the remainder. Of the amount received, about 1,000,000 pounds were reshipped or distributed, largely to the States immediately adjoining Missouri. The remainder was consumed in Greater St. Louis, which had a population of about 1,026,000. Thus, the annual per capita consumption of fresh and frozen fishery products in this area is about 12 pounds in the round or 9 pounds of the edible portion. If the amount of canned or cured fish consumed in this area were to be added, it is believed that the annual per capita consumption of all fishery products would amount to about 15 pounds, which is the average for the entire United States.

The bulk of the trade (75 per cent) is based on whiting, halibut, buffalofish, catfish, oysters, and haddock, named in order of importance. Fifteen other products constitute 20 per cent, and 53 products make up the remaining 5 per cent of the trade.

During late years, consumers have changed their preference for various well-liked local species of diminishing supply in the fresh condition to others of abundance and fine quality, frozen, which are obtained from more remote sections. This change, especially the growth in preference for frozen fish, has been an important factor in stabilizing the fisheries trade in St. Louis. Market gluts or famines of fishery products are almost unknown, prices are more uniform over the year, and the trade during the summer months is more active. By this change of preference whiting has entered the trade and now ranks first in volume and value. These fish are taken along the Atlantic coast, frozen there, and shipped in standard boxes to St. Louis, where they are held in storage until needed. They are

skinned and beheaded and sold as whiting sticks, in which form they are ready for cooking. Whiting have become popular because they may be handled easily by consumers, can be purchased by a certain number to a pound, are comparatively inexpensive, are a palatable food, and are virtually boneless. They are used extensively in hot-fish shops, where they are served as hot-fish sandwiches, which sell for 15 cents.

During 1927 there were 62 retail fish stores in Greater St. Louis that handled fish daily. In addition, there were many grocery stores, meat markets, and other retail stores that handled fishery products one or more days a week.

Of the strictly retail fish stores, 75 per cent cater to the Hebrew, Italian, and colored trade, while the remaining 25 per cent cater to the gentile white trade. The latter appear to confine their purchases of fish to grocery and meat stores or have eliminated fish from their diet.

Inquiry as to the trade during the week in strictly retail fish stores showed that on Monday, Tuesday, and Wednesday trade is dull and on Thursday, Friday, and Saturday it is brisk. Some stores remain open on Sunday and reported trade on that day to be mediocre. Stores catering to the Hebrews are busiest on Thursday, while those catering to the gentile trade reported Friday the busiest day. The stores catering to the colored trade reported Saturday and Sunday as the most active days.

Incoming and outgoing transportation facilities at Greater St. Louis are adequate for efficient and speedy handling of fishery products. Fish are received over four trunk-line routes from the East, three from the West, and three from the South. Terminal team tracks near the majority of the wholesale establishments make loading and unloading of car-lot shipments easy. Car-lot shipments of frozen fish usually are unloaded at one of the public cold-storage plants, which are near the wholesale area where siding space is available for 20 freight cars at one time. Cold-storage stocks held during 1926 amounted to about 6,700,000 pounds.

Jacksonville, Fla.—As the waters in the vicinity of Jacksonville support no extensive commercial fisheries, the wholesale dealers of this city merely assemble and distribute rather than produce fishery products. Only 5 per cent of the fishery products received in the city in 1926 were produced in the immediate locality, and 60 per cent were distributed to points outside the city.

Possibly no other city in Florida is situated so favorably with respect to Florida production centers and transportation and warehouse facilities. Trunk-line railroads from all the important fish-producing centers of Florida converge here and then spread out to the more important fish-consuming cities of the country. Warehouse facilities are such that both fresh and frozen fishery products can be handled efficiently and regularly.

In 1926, the 10 wholesale dealers handled nearly 10,000,000 pounds of fresh and frozen fishery products of 48 varieties with a wholesale value of about $1,500,000. Florida supplied about 85 per cent of these products, and the remainder was received from 10 other States and 1 Canadian Province. Most of the products received from Florida are reshipped to other markets, while those from other States are consumed largely in Jacksonville. Of the total received,

6,000,000 pounds were distributed to other cities, two-thirds by express and one-third by freight. Freight shipments, which are forwarded to New York, Philadelphia, and other large northern cities, are made up largely of less-than-carload express shipments from Florida producers. Producers making shipments of this nature via Jacksonville usually send their products on consignment; and inasmuch as it is customary for consignors to pay transportation charges to destination, this arrangement is advantageous for the reason that they obtain a car-lot freight rate on their products from Jacksonville to the consuming market.

About 3,750,000 pounds of fresh and frozen fishery products were consumed in Jacksonville in 1926. Based on a population of about 150,000 for that year, the annual per capita consumption of fish amounted to about 25 pounds in the round or 18 pounds of the edible portion. This is slightly higher than the average for the United States and is due mainly to consumption by colored and transient residents and to the fact that restaurants and other eating places feature fishery products on their menus.

The bulk of the trade (75 per cent) is based on mullet, croaker, fresh-water bream, shrimp, oysters, king whiting, red snapper, crappie, sea trout, and Spanish mackerel, named in order of importance. Fourteen other products constitute 20 per cent of the trade, and 24 products make up the remaining 5 per cent of the trade.

During 1926, there were 24 retail stores in Jacksonville that marketed fish every day in the week. Twelve of these catered almost entirely to colored residents, four to white residents, and eight to customers of both races. Of the stores catering to white residents, seven were located downtown and five in outlying districts. In other words, only five neighborhood fish stores that cater to the white trade are conducted in Jacksonville. This would indicate that there is opportunity for the sale of fish in neighborhood grocery stores, in which package fish could be handled easily. A few grocery stores and meat markets now handle fishery products, but their number is almost negligible. In the strictly retail fish store, business is dull on Monday, Tuesday, Wednesday, and Thursday, on Friday it is mediocre, and on Saturday it is brisk. Those catering to white customers reported Friday their busiest day, and those catering to colored customers reported Saturday as the busiest day.

Fresh and frozen fishery products are marketed by peddlers, also, who operate from motor trucks and horse or hand drawn vehicles. They usually canvass those sections of the city having colored residents.

The wholesale trade is conducted along the St. Johns River and is served by a belt-line railroad with spur tracks leading to most of the wholesale houses. Express terminals and downtown hotels, restaurants, and retail stores are near at hand. A private cold-storage plant is in this area and a public cold-storage plant is about 1 mile from the section. The combined equipment of these plants is sufficient to freeze about 35,000 pounds of fish per day, and storage space is available for about 2,000,000 pounds of frozen fish. This can be expanded to accommodate 4,000,000 pounds. Siding space at these plants is available to accommodate 12 freight cars at one time. Comparatively little advantage is taken of these cold-storage facilities, although it is believed the trade would be in a more stable and

prosperous condition if more attention were given to the freezing of fish, especially during market gluts when the runs of fish are at their height.

Atlanta, Ga.—In the fisheries trade, this city might be considered primarily as a consuming center rather than a place of production, assembling, or distribution of fresh and frozen fishery products. This may be observed by the fact that no productive commercial fishery is located near by, and only 8 per cent of the fishery products received during 1927 was reshipped to points outside the metropolitan area.

During 1927, fish dealers in Atlanta received 5,070,000 pounds of 57 varieties of fresh and frozen fishery products, with a wholesale value of about $862,000, from 15 States and 1 Canadian Province. Of this amount, only 387,000 pounds were reshipped. The remainder, amounting to 4,683,000 pounds, was consumed within the metropolitan area of Atlanta, which in 1927 had an estimated population of about 325,000. Thus, the annual per capita consumption of fresh and frozen fishery products in this area is about 14 pounds in the round or 11 pounds of the edible portion. This compares favorably with the per capita consumption of fish for the entire United States, which averages about 15 pounds annually for all forms of fresh, frozen, cured, or canned fishery products.

The bulk of the trade (80 per cent) is based on mullet, croaker, red snapper, sea trout, and Spanish mackerel, listed in order of importance. Fifteen other products constitute 15 per cent of the trade, and 37 products make up the remaining 5 per cent.

The five wholesale establishments engaged in handling fresh and frozen fishery products in Atlanta are located in the downtown section near the Union Depot. Some have spur tracks connecting with the main-line railroads.

There are no public cold-storage plants in Atlanta where fish can be stored or frozen, although private plants are operated by some wholesalers. These can accommodate about 250,000 pounds of frozen fish.

Indications are that consumers in Atlanta desire fresh fish and accept the frozen article only when the fresh is not available. No doubt, this has tended to retard the erection of cold-storage plants or the installation of facilities for freezing or storing fishery products at existing cold-storage plants. Educating consumers to the merits of properly frozen fish may increase the sales of such products. This, in turn, may stabilize the trade, as it has done in various other cities.

In 1927, Atlanta had only 12 retail fish stores that handled fishery products daily. In every case these stores handled other products, such as poultry, meat, fruits, vegetables, or groceries. The fish trade was confined to Friday and Saturday, which days accounted for 69 per cent of the week's trade. In addition to the regular retail fish stores there are a large number of grocery stores that make a practice of handling fishery products on one or more days a week. Fully 50 per cent of the grocery stores in Atlanta carry on such a business.

PUBLICATIONS OF THE DIVISION

During the calendar year 1927 the following publications, prepared by this division, were issued. This list does not include the monthly statistical bulletins for the landings of fish at Boston and Gloucester, Mass., Portland, Me., and Seattle, Wash., nor the monthly publications of the cold-storage holdings of frozen fish. The documents may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices shown. The statistical bulletins are distributed free of charge upon request. Persons interested in securing the statistical bulletins as released may have their names placed on the bureau's mailing list upon request.

DOCUMENTS

Pacific cod fisheries. By John N. Cobb. 8°, 115 pp., 17 figs. Document No. 1014. 25 cents.

Refrigeration of fish. By Harden F. Taylor. 8°, 133 pp., 50 figs. Document No. 1016. 30 cents.

Preparation of fish for canning as sardines. By Harry R. Beard. 8°, 157 pp., 30 figs. Document No. 1020. 30 cents.

STATISTICAL BULLETINS

Statement, by fishing grounds, of quantities and values of certain fishery products landed at Seattle, Wash., by American fishing vessels during the calendar year 1926. Statistical Bulletin No. 728.

Statement, by months, of quantities and values of certain fishery products landed at Boston and Gloucester, Mass., and Portland, Me., by American fishing vessels during the calendar year 1926. Statistical Bulletin No. 729.

Statement, by fishing grounds, of quantities and values of certain fishery products landed at Boston and Gloucester, Mass., and Portland, Me., by American fishing vessels during the calendar year 1926. Statistical Bulletin No. 730.

Canned fishery products and by-products of the United States and Alaska, 1926. Statistical Bulletin No. 737.

Fisheries of Alaska, 1926. Statistical Bulletin No. 741.

Fisheries of Maryland and Virginia, 1925. Statistical Bulletin No. 745.

Fisheries of the Pacific Coast States, 1925. Statistical Bulletin No. 747.

Part 2.—FISHERY STATISTICS

REVIEW

According to the most recent statistics available, the fisheries of the various geographical sections of the United States and Alaska employ approximately 118,600 commercial fishermen and 4,300 persons on transporting vessels directly connected with the fisheries. The annual landings of fishery products amount to nearly 2,500,000,000 pounds, valued at about $103,000,000 to the fishermen. In 1927 the production of canned fishery products amounted to 475,655,000 pounds, valued at $81,384,000, and the output of by-products was valued at $12,793,000. Imports of fishery products were valued at $55,634,000, while exports aggregated $18,717,000.

In a discussion of trends in the fisheries, we are seriously handicapped by the fragmentary nature of the available statistical data. An attempt to glean some idea of recent developments may result in errors of omission where data are lacking, but at least it can bring significant developments to light where statistics are available.

Fisheries, by sections, of the United States and Alaska

Sections	Fishermen	Fishing vessels	Fishing boats	Persons on transporters	Transporting vessels	Products	
	Number	*Number*	*Number*	*Number*	*Number*	*Pounds*	*Value*
New England States, 1924	15,007	615	10,022	278	162	406,822,165	$18,818,132
Middle Atlantic States, 1926	9,953	617	4,489	107	63	168,012,495	12,456,256
Chesapeake Bay States, 1925	24,793	574	16,895	985	523	333,205,769	13,948,060
South Atlantic States, 1923	10,094	177	5,934	180	103	228,747,930	5,087,340
Gulf States, 1923	10,576	349	6,809	339	143	160,324,042	8,096,650
Pacific Coast States, 1926	18,597	703	7,129	475	172	521,286,418	18,914,733
Mississippi River States, 1922	12,310	-------	15,538	30	13	105,733,734	4,503,521
Lake States, 1926	6,233	504	3,756	162	103	75,300,268	6,642,392
Alaska, 1927	11,030	504	6,781	1,773	481	470,022,050	14,434,630
Total various years, 1922–1927	118,593	4,043	77,353	4,329	1,763	2,469,454,871	102,901,714

NOTE.—In the statistics for the Pacific Coast States, the number of transporters and persons on transporters are for 1922. For the Lake States, all persons engaged, boats, and vessels are for 1922.

Production, by States, of the fisheries of the United States and Alaska [1]

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

States	Marine and coastal rivers		Mississippi River and tributaries		Lakes [2]		Total	
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
Alabama	7,631	$342	1,243	$28	-------	-------	8,874	$370
Arkansas	-------	-------	22,794	760	-------	-------	22,794	760
California	398,651	7,904	-------	-------	-------	-------	398,651	7,904
Connecticut	25,770	2,007	-------	-------	-------	-------	25,770	2,007
Delaware	33,258	1,030	-------	-------	-------	-------	33,258	1,030
Florida	160,162	5,746	-------	-------	-------	-------	160,162	5,746
Georgia	39,897	668	-------	-------	-------	-------	39,897	668
Illinois	-------	-------	22,598	1,078	381	$56	22,979	1,134
Indiana	-------	-------	12,577	437	626	96	13,203	533
Iowa	-------	-------	6,761	326	-------	-------	6,761	326
Kansas	-------	-------	615	26	-------	-------	615	26
Kentucky	-------	-------	2,893	167	-------	-------	2,893	167
Louisiana	34,835	1,961	10,486	573	-------	-------	45,321	2,534
Maine	116,707	4,137	-------	-------	-------	-------	116,707	4,137
Maryland	56,978	4,863	-------	-------	-------	-------	56,978	4,863
Massachusetts	243,363	10,799	-------	-------	-------	-------	243,363	10,799
Michigan	-------	-------	-------	-------	26,989	2,629	26,989	2,629
Minnesota	-------	-------	5,660	230	10,552	503	16,212	733
Mississippi	25,032	986	3,328	191	-------	-------	28,360	1,177
Missouri	-------	-------	1,566	104	-------	-------	1,566	104
Nebraska	-------	-------	135	16	-------	-------	135	16
New Hampshire	447	56	-------	-------	-------	-------	447	56
New Jersey	73,299	6,254	-------	-------	-------	-------	73,299	6,254
New York	60,721	5,129	-------	-------	3,429	263	64,150	5,392
North Carolina	95,192	2,414	-------	-------	-------	-------	95,192	2,414
Ohio	-------	-------	702	30	15,934	1,517	16,636	1,547
Oklahoma	-------	-------	363	31	-------	-------	363	31
Oregon	32,998	3,068	-------	-------	-------	-------	32,998	3,068
Pennsylvania	735	43	49	2	5,001	484	5,785	529
Rhode Island	20,535	1,819	-------	-------	-------	-------	20,535	1,819
South Carolina	6,763	285	-------	-------	-------	-------	6,763	285
South Dakota	-------	-------	101	4	-------	-------	101	4
Tennessee	-------	-------	5,494	188	-------	-------	5,494	188
Texas	19,560	782	184	19	-------	-------	19,744	801
Virginia	276,228	9,085	-------	-------	-------	-------	276,228	9,085
Washington	89,637	7,943	-------	-------	-------	-------	89,637	7,943
West Virginia	-------	-------	95	8	-------	-------	95	8
Wisconsin	-------	-------	8,090	286	12,388	1,094	20,478	1,380
Alaska	470,022	14,435	-------	-------	-------	-------	470,022	14,435
Total	2,288,421	91,756	105,734	4,504	75,300	6,642	2,469,455	102,902

[1] Statistics of the New England States are for the year 1924: Middle Atlantic States, 1926; Chesapeake Bay States, 1925; South Atlantic and Gulf States, 1923; Pacific Coast States, 1926; Mississippi River and tributaries, 1922; Lake States, 1926; and Alaska, 1927.

[2] Includes Lake Ontario, Lake Erie, Lake Huron, Lake Michigan, Lake Superior, Rainy Lake, Namekan Lake, and Lake of the Woods.

In the New England States the development of the packaged-fish trade has been remarkable. The degree of this development is shown in no uncertain terms by the 37 per cent increase in landings at New England ports of haddock—the fish used most in this trade. The demand for haddock seems beyond the capacity of the present fishing fleet to supply, even though the steam trawlers averaged more trips with larger fares and a larger total catch per vessel in 1927 than in previous years. Fishing concerns are endeavoring to enlarge the fleets; vessels are being built and old vessels are being reconditioned. It is not impossible that the size of the fleet may be doubled by 1929. Flounder draggers also are turning to haddock fishing, though the catch of flounders has increased notably. Meanwhile, the shore facilities for handling the fish are being enlarged and improved. There is a decided tendency to consolidate fishing companies and to erect large plants for use in the filleting and packaging of haddock. Other branches of the New England fisheries show no marked developments. The sardine-canning season in Maine was poorer than for some years past, suffering a 27-per cent decrease in output in 1927 as compared with the previous year.

The situation in the Middle Atlantic States is not as encouraging. Though New York City shared in the increases in the vessel landings that feed the packaged-fish market, the shore fisheries, which are predominant in this section, do not appear to be increasing in productivity. Though 1927 statistics are not available for these fisheries, the 1926 statistics are published in this report. They show alarming decreases in some of the staple fishes of the region as compared with the preceding canvass of 1921. The yield of bluefish declined 72 per cent; scup, 37 per cent; and squeteague or weakfish, 36 per cent. The catches of other important species, while not lower than in 1921, are still far below those of former years. A few species show greater catches, notably the butterfish, which registered an 18 per cent increase over 1921. The yield of oysters and scallops has increased moderately.

No very recent general statistics are available on the fisheries of the Chesapeake Bay States, but it should be remarked here—and this applies to the entire Atlantic coast—that the menhaden industry experienced another very poor year. The output of the factories was slightly better than in 1926 but was still about half of what has been considered normal in recent years. This was the third poor season in the last four years and, in consequence, some of the firms have gone out of business.

In the South Atlantic and Gulf States recent general statistics also are lacking. Judging from the pack of canned oysters and shrimp in 1927, a good year was experienced in this branch of the industry, for the oyster pack was greater than last year's by 8 per cent in quantity and 17 per cent in value, and the shrimp pack was the highest on record, exceeding that of 1926 by 16 per cent in quantity and 29 per cent in value.

On the Pacific coast the smaller pack of salmon in Alaska was the outstanding feature of 1927. The decline was 46 per cent as compared with 1926. It should be said, however, that 1926 was an unusually successful year, and when compared with an average for the previous five years the pack of 1927 was only 36 per cent smaller. The catch of halibut in 1927 was greater than last year in spite of the depleted

condition of this fishery. The increase can be explained by the greater intensity of fishing and the extension of fishing to the westward. The pack of sardines in California in 1927 was 22 per cent larger than in the previous year and 6 times as large as in 1921, when the industry was at a low level due to the postwar depression. The tuna pack also was much larger, due mainly to the greater output of the striped and yellowfin varieties.

The 1926 statistics of the Great Lakes fisheries show that there has been only slight recovery from the sharp decline suffered in 1925, when a 14 per cent decrease in total catch was registered and some of the choicer species showed far greater decreases. The catch of ciscoes, on Lake Erie in particular, declined 92 per cent in that year and was still lower in 1926. A noticeable gain in total catch has occurred on Lake Superior.

CANNED FISHERY PRODUCTS AND BY-PRODUCTS

The output of canned fishery products in the United States and Alaska in 1927 was valued at $81,384,133 and the fishery by-products at $12,793,256, making the total value of the output $94,177,389. This is 4 per cent less than a year ago and 1 per cent less than in 1925, while it exceeds the output for 1921 by 71 per cent. The decrease under a year ago is due mostly to the smaller pack of canned salmon in Alaska.

Fishery products were canned at 471 establishments in the United States and Alaska in 1927. The combined output of these canneries equaled 12,281,658 standard cases,[3] or a net weight, in the can, of 475,655,039 pounds.

Canned fishery products and by-products were prepared in 23 States and Alaska during 1927. Alaska ranks first in value of products and by-products prepared and produced 34 per cent of the total. California ranks second with 22 per cent of the value, while Washington is third with 12 per cent. Considering the output by geographical sections, the Pacific Coast States and Alaska accounted for 74 per cent of the total value of canned products and by-products and 85 per cent of the total weight of canned products.

[3] Fishery products are sealed hermetically in tin and glass containers of many sizes. For the sake of uniformity these various sizes of containers have been converted to standard cases, which represent a net weight of 48 pounds to the case for salmon, sardines canned in California, alewives and alewife roe, shad and shad roe, crabs, and miscellaneous fish and shellfish; 25 pounds to the case for sardines canned in Maine and Massachusetts; 24 pounds to the case for tuna and tunalike fishes; 15 pounds to a case for whole and minced clams and 30 pounds to the case for other clam products; and 15 pounds to the case for shrimp and oysters.

Canned fishery products and by-products of the United States and Alaska, 1927

SUMMARY OF PRODUCTION: BY COMMODITIES

Products	Number of plants	Standard cases	Pounds	Value
Canned products:				
Salmon—				
United States	64	1,504,451	72,213,648	$15,712,497
Alaska	135	3,572,128	171,462,144	30,016,264
Sardines—				
Maine and Massachusetts	38	1,262,124	31,553,100	5,249,030
California	29	2,563,146	123,031,008	9,268,784
Tuna and tunalike fishes	19	1,255,818	30,139,632	8,368,227
Alewives	10	21,327	1,023,696	64,577
Alewife roe	31	45,168	2,168,064	252,120
Shad	17	11,569	555,312	61,842
Shad roe	15	767	36,816	21,890
Miscellaneous fish, caviar, roe, and eggs	34	215,334	10,336,032	1,842,874
Oysters	55	447,297	6,709,455	2,367,949
Clam products	51	525,286	12,255,240	2,744,954
Shrimp	74	852,764	13,955,900	5,321,652
Crabs	4	1,009	48,432	26,988
Miscellaneous shellfish	5	3,470	166,560	64,485
Total	[1] 471	12,281,658	475,655,039	81,384,133

		Quantity	Value
By-products:			
Shell products	tons	310,519	$2,601,050
Scrap, meal, and bran	do	91,866	4,321,082
Fish and marine-animal oils	gallons	10,874,113	4,905,021
Miscellaneous by-products			966,103
Total			12,793,256
Grand total			94,177,389

VALUE OF PRODUCTION: BY STATES

State	Canned products	By-products (including menhaden)	Total
Maine	$5,998,683	$231,357	$6,230,040
Massachusetts	1,359,895	1,331,641	2,691,536
Rhode Island, Connecticut, New York, New Jersey, Indiana, and Wisconsin	911,039	368,376	1,279,415
Pennsylvania and Delaware		472,560	472,560
Maryland	208,852	578,960	787,812
Virginia	253,034	1,964,072	2,217,106
North Carolina	120,210	859,206	979,416
South Carolina	653,039	188,827	841,866
Georgia and Florida	1,574,879	753,554	2,328,433
Alabama	776,167	50,768	826,935
Mississippi	2,068,467	204,548	2,273,015
Louisiana	2,190,382	1,130,276	3,320,658
Texas	425,388	36,055	461,443
Washington	11,239,109	106,015	11,345,124
Oregon	5,613,625	56,680	5,670,305
California	17,828,281	2,495,458	20,323,739
Alaska	30,163,083	1,964,903	32,127,986
Total	81,384,133	12,793,256	94,177,389

[1] Exclusive of duplication.

Value of canned fishery products and by-products of the United States and Alaska, 1921 to 1927

Year	Canned products	By-products (including menhaden)	Total
1921	$46,634,706	$8,351,827	$54,986,533
1922	60,464,947	11,390,693	71,855,640
1923	72,445,205	12,634,590	85,079,795
1924	72,164,589	10,308,990	82,473,579
1925	80,577,138	14,600,198	95,177,336
1926	86,193,240	12,133,110	98,326,350
1927	81,384,133	12,793,256	94,177,389

CANNED PRODUCTS

The value of the canned products in 1927 was 6 per cent lower than in the previous year. Salmon was the most important item and contributed 56 per cent of the total value; sardines were next with 18 per cent; and tuna followed with 10 per cent; while oysters, shrimp, clam products, and miscellaneous products made up the remaining 16 per cent.

Value of canned fishery products, 1921 to 1927

Year	Salmon	Sardines	Tuna	Oysters	Shrimp	Clams	Other	Total
1921	$28,867,169	$6,307,362	$3,074,626	$2,179,271	$3,804,781	$1,166,507	$1,234,990	$46,634,706
1922	38,420,717	9,111,589	4,511,873	2,423,616	3,064,087	1,716,365	1,216,700	60,464,947
1923	45,533,573	9,896,796	6,914,760	2,720,073	4,381,534	1,710,616	1,287,853	72,445,205
1924	42,401,602	12,636,599	5,756,586	2,478,044	4,608,950	2,161,389	2,121,419	72,164,589
1925	47,369,507	13,097,318	8,499,080	3,721,159	3,782,819	1,850,378	2,256,877	80,577,138
1926	56,219,306	14,534,792	5,282,283	2,026,569	4,122,092	2,004,650	2,003,548	86,193,240
1927	45,728,761	14,517,814	8,368,227	2,367,949	5,321,652	2,744,954	2,334,776	81,384,133

Salmon.—In 1927, salmon were packed at 135 plants in Alaska, 40 in Washington, 19 in Oregon, and 5 in California. Compared with the previous year, there was an increase of 3 in Alaska, 9 in Washington, 1 in Oregon, and 3 in California. The combined output of the 199 plants amounted to 5,076,579 cases, valued at $45,728,761. Of the total, 1,504,451 cases, valued at $15,712,497, were packed in the Pacific Coast States and 3,572,128 cases, valued at $30,016,264, were packed in Alaska. The pack in Alaska was 3,080,754 cases, or 46 per cent smaller than in the previous year, and is less than for any year since 1921. The decrease is due principally to the smaller packs of red, pink, and Keta salmon. On the other hand, the pack for the Pacific Coast States increased by 668,713 cases, or 80 per cent, due mainly to the greater pack of pink salmon. The increase in the Pacific Coast States is not surprising, for the run is marked by alternating good and poor years, 1927 having been the good year. Compared with 1925, the previous good year, there was a decrease of over 3 per cent.

Pack of canned salmon, Pacific Coast States and Alaska, 1927

Products	Pacific Coast States						Alaska, southeast	
	Washington		Oregon and California		Total			
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*	*Cases*	*Value*
King, chinook, or spring:								
1-pound tall	22,092	$186,863	15,228	$115,082	37,320	$301,945	3,771	$35,818
1-pound flat	38,604	532,536	83,710	1,196,557	122,314	1,729,093	2,504	29,239
1-pound oval	2,665	43,305	5,317	90,389	7,982	133,694	----	----
½-pound flat and oval	87,797	1,422,551	149,906	2,605,085	237,703	4,027,636	1,756	25,670
Total	151,158	2,185,255	254,161	4,007,113	405,319	6,192,368	8,031	90,727
Red or sockeye:								
1-pound tall	11,483	142,389	----	----	11,483	142,389	64,387	771,161
1-pound flat	18,527	259,378	----	----	18,527	259,378	21,083	265,771
½-pound flat	89,770	1,687,698	4,046	80,920	93,816	1,768,618	30,998	498,117
Total	119,780	2,089,465	4,046	80,920	123,826	2,170,385	116,468	1,535,049
Coho or silver:								
1-pound tall	68,655	618,081	16,092	151,265	84,747	769,346	97,964	798,223
1-pound flat	24,874	248,740	24,370	243,700	49,244	492,440	10,119	86,266
½-pound flat	43,140	523,381	33,406	427,596	76,546	950,977	6,887	85,081
Total	136,669	1,390,202	73,868	822,561	210,537	2,212,763	114,970	969,570
Humpback or pink:								
1-pound tall	520,641	3,332,102	----	----	520,641	3,332,102	536,799	3,160,552
1-pound flat	25,959	181,713	----	----	25,959	181,713	8,367	50,331
½-pound flat	39,998	351,982	----	----	39,998	351,982	43,125	388,373
Total	586,598	3,865,797	----	----	586,598	3,865,797	588,291	3,599,256
Chum or keta:								
1-pound tall	70,823	396,609	51,371	287,678	122,194	684,287	216,198	1,180,774
1-pound flat	6,408	38,448	44	264	6,452	38,712	----	----
½-pound flat	11,461	89,229	5,249	39,892	16,710	129,121	8,235	64,532
Total	88,692	524,286	56,664	327,834	145,356	852,120	224,433	1,245,306
Steelhead:								
1-pound tall	1,749	17,980	1,892	19,676	3,641	37,656	----	----
1-pound flat	1,523	16,753	8,855	97,405	10,378	114,158	----	----
½-pound flat and oval	4,838	68,480	13,958	198,770	18,796	267,250	----	----
Total	8,110	103,213	24,705	315,851	32,815	419,064	----	----
Grand total	1,091,007	10,158,218	413,444	5,554,279	1,504,451	15,712,497	1,052,193	7,439,908

Products	Alaska						Grand total	
	Central		Western		Total			
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*	*Cases*	*Value*
King, chinook, or spring:								
1-pound tall	26,161	$253,867	18,560	$187,634	48,492	$477,319	85,812	$779,264
1-pound flat	8,537	112,708	330	2,300	11,371	144,247	133,685	1,873,340
1-pound oval	----	----	----	----	----	----	7,982	133,694
½-pound flat and oval	8,772	144,417	----	----	10,528	170,087	248,231	4,197,723
Total	43,470	510,992	18,890	189,934	70,391	791,653	475,710	6,984,021
Red or sockeye:								
1-pound tall	247,367	2,916,372	861,796	10,097,357	1,173,550	13,784,890	1,185,033	13,927,279
1-pound flat	32,709	396,245	3,979	43,554	57,771	705,570	76,298	964,948
½-pound flat	38,788	635,645	19,088	330,263	88,874	1,464,025	182,690	3,232,643
Total	318,864	3,948,262	884,863	10,471,174	1,320,195	15,954,485	1,444,021	18,124,870
Coho or silver:								
1-pound tall	129,888	1,112,121	40	351	227,892	1,910,695	312,639	2,680,041
1-pound flat	4,928	35,731	----	----	15,047	121,997	64,291	614,437
½-pound flat	3,218	36,183	----	----	10,105	121,264	86,651	1,072,241
Total	138,034	1,184,035	40	351	253,044	2,153,956	463,581	4,366,719

Pack of canned salmon, Pacific Coast States and Alaska, 1927—Continued

Products	Alaska—Continued						Grand total	
	Central		Western		Total			
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*	*Cases*	*Value*
Humpback or pink:								
1-pound tall	803,913	$4,573,832	14,946	$75,523	1,355,658	$7,809,907	1,876,299	$11,142,009
1-pound flat	6,295	32,253			14,662	82,584	40,621	264,297
½-pound flat	7,330	57,826			50,455	446,199	90,453	798,181
Total	817,538	4,663,911	14,946	75,523	1,420,775	8,338,690	2,007,373	12,204,487
Chum or keta:								
1-pound tall	250,569	1,352,724	30,093	163,511	496,860	2,697,009	619,054	3,381,296
1-pound flat	1,449	6,977			1,449	6,977	7,901	45,689
½-pound flat	1,179	8,962			9,414	73,494	26,124	202,615
Total	253,197	1,368,663	30,093	163,511	507,723	2,777,480	653,079	3,629,600
Steelhead:								
1-pound tall							3,641	37,656
1-pound flat							10,378	114,158
½-pound flat and oval							18,796	267,250
Total							32,815	419,064
Grand total	1,571,103	11,675,863	948,832	10,900,493	3,572,128	30,016,264	5,076,579	45,728,761

NOTE.—The pack of salmon has been reduced to the equivalent of forty-eight 1-pound cans to the case.

Pack of canned salmon in the Pacific Coast States, 1921 to 1927

Year	King, chinook, or spring		Red or sockeye		Coho or silver		Humpback or pink	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	335,854	$4,527,711	104,954	$1,905,647	111,643	$806,678	402,846	$1,732,847
1922	314,126	4,572,607	97,927	1,816,901	204,252	1,533,173	3,551	18,546
1923	384,705	5,790,419	105,336	1,955,549	245,548	1,608,627	445,175	2,211,742
1924	349,014	4,599,759	85,800	1,478,698	231,139	1,774,078	12,778	79,436
1925	432,638	5,990,019	118,387	2,065,975	307,567	3,313,060	551,375	3,152,342
1926	349,600	5,281,404	75,711	1,474,722	228,141	2,223,499	2,608	19,609
1927	405,319	6,192,368	123,826	2,170,385	210,537	2,212,763	586,598	3,865,797

Year	Chum or keta		Steelhead		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	35,132	$127,659	12,519	$133,883	1,002,948	$9,234,425
1922	87,583	365,303	25,797	326,994	733,246	8,633,524
1923	154,342	769,839	32,157	324,390	1,367,263	12,660,566
1924	247,858	1,192,156	32,073	270,340	958,662	9,394,467
1925	133,368	641,310	15,278	217,270	1,558,613	15,379,976
1926	148,732	758,843	30,946	381,225	835,738	10,139,302
1927	145,356	852,120	32,815	419,064	1,504,451	15,712,497

Pack of canned salmon in Alaska, 1921 to 1927

Year	King, chinook, or spring		Red or sockeye		Coho or silver	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	44,994	$459,897	1,765,798	$15,841,404	106,555	$600,140
1922	30,660	247,673	2,070,658	19,135,696	175,993	962,790
1923	38,343	328,270	1,859,496	17,253,792	164,107	943,318
1924	33,648	299,009	1,447,895	13,803,932	183,601	1,254,551
1925	49,978	595,041	1,059,676	13,904,599	161,010	1,565,759
1926	52,476	544,246	2,157,087	21,328,739	202,527	1,700,563
1927	70,391	791,653	1,320,195	15,954,485	253,044	2,153,956

Pack of canned salmon in Alaska, 1921 to 1927—Continued

Year	Humpback or pink		Chum or keta		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	423,984	$1,788,778	255,495	$942,525	2,596,826	$19,632,744
1922	1,658,423	7,189,494	565,918	2,251,540	4,501,652	29,787,193
1923	2,448,129	11,899,956	525,622	2,447,671	5,035,697	32,873,007
1924	2,601,283	12,837,346	1,028,488	4,812,297	5,294,915	33,007,135
1925	2,110,593	11,137,102	1,078,680	4,787,030	4,459,937	31,989,531
1926	3,338,349	17,987,527	902,443	4,518,929	6,652,882	46,080,004
1927	1,420,775	8,338,690	507,723	2,777,480	3,572,128	30,016,264

Pack of canned salmon in the United States and Alaska, 1921 to 1927

Year	Pacific Coast States		Alaska		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	1,002,948	$9,234,425	2,596,826	$19,632,744	3,599,774	$28,867,169
1922	733,246	8,633,524	4,501,652	29,787,193	5,234,898	38,420,717
1923	1,367,263	12,660,566	5,035,697	32,873,007	6,402,960	45,533,573
1924	958,662	9,394,467	5,294,915	33,007,135	6,253,577	42,401,602
1925	1,558,613	15,379,976	4,459,937	31,989,531	6,018,550	47,369,507
1926	835,738	10,139,302	6,652,882	46,080,004	7,488,620	56,219,306
1927	1,504,451	15,712,497	3,572,128	30,016,264	5,076,579	45,728,761

Sardines.—In 1927, packs of sardines were reported by 37 plants in Maine, 1 in Massachusetts, and 29 in California. This is an increase of two plants in Maine and a decrease of one in California. The production in Maine and Massachusetts amounted to 1,262,124 standard cases of one hundred ¼-pound cans, valued at $5,249,030, which is a decrease of 27 per cent in quantity and 22 per cent in value as compared with the previous year. In California the production amounted to 2,563,146 standard cases of forty-eight 1-pound cans, valued at $9,268,784, which is an increase of 22 per cent in amount and 19 per cent in value. The California pack has increased continuously and markedly since 1921, when the pack was less than one-sixth as large as in 1927.

Pack of canned sardines, 1927

Sardines (herring)	Maine and Massachusetts		Sardines (pilchard)	California	
	Cases	*Value*		*Cases*	*Value*
In olive oil: Quarters, ¼-pound (100 cans)	26,023	$172,067	½-pound oval (48 cans) [2]	38,514	$114,442
In cottonseed oil: Quarters, ¼-pound (100 cans)	1,020,618	4,313,198	1-pound oval (48 cans):		
In mustard:			In tomato sauce	2,248,853	7,734,939
Quarters, ¼-pound (100 cans)	76,691	359,059	In mustard	127,943	485,368
Three-quarters, ¾-pound (48 cans)	93,114	379,482	Soused	14,650	54,829
In other sauces: Quarters, ¼-pound (100 cans)	[1] 4,707	25,224	In other sauces	10,650	38,293
			¼-pound square (100 cans) [3]	38,129	327,073
			½-pound square (100 cans)	[4] 117,057	513,840
Total	1,221,153	5,249,030	Total	2,595,796	9,268,784
Total (standard cases)	1,262,124		Total (standard cases)	2,563,146	

[1] Largely in tomato sauce. Includes a few cases of savory sauce packed in 1-pound oval cans, 24 to the case, which have been converted to the equivalent of quarter-size cans, 100 to the case.
[2] Largely in tomato sauce.
[3] Largely in olive oil.
[4] Includes the pack of 6-ounce cans, 100 to the case, and also 8-ounce glass jars, 24 to the case, which have been converted to the equivalent of ½-pound cans, 100 to the case.

NOTE.—"Standard cases" represent the various sized cases converted to the uniform basis of one hundred ¼-pound cans to the case of sardines (herring) and forty-eight 1-pound cans to the case of sardines (pilchard).

Pack of canned sardines, 1921 to 1927

Year	Maine and Massachusetts		California	
	Cases [1]	*Value*	*Cases* [2]	*Value*
1921	1,399,507	$3,960,916	398,668	$2,346,446
1922	1,869,719	5,750,109	715,364	3,361,480
1923	1,272,277	5,288,865	1,100,162	4,607,931
1924	1,899,925	7,191,026	1,367,139	5,445,573
1925	1,870,786	6,716,701	1,714,913	6,380,617
1926	1,717,537	6,727,388	2,093,278	7,807,404
1927	1,262,124	5,249,030	2,563,146	9,268,784

[1] Standard cases of one hundred ¼-pound cans. [2] Standard cases of forty-eight 1-pound cans.

Tuna and tunalike fishes.—These fishes were reported canned at 19 plants in California. The total production was 1,255,818 standard cases of forty-eight ½-pound cans, valued at $8,368,227. This is an increase of 48 per cent in quantity and 58 per cent in value as compared with the previous year, and the pack was larger than for any year during the period 1921 to 1926. Increases are noted mainly in bluefin, yellowfin, and striped tuna. While the pack of albacore also increased over that in 1926, it is still far below the average for previous years.

Pack of canned tuna and tunalike fishes in California, 1927

Sizes	Albacore		Yellowfin		Bluefin	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
¼-pound round (48 cans) [1]	8,705	$47,984	56,783	$282,134	16,634	$84,739
½-pound round (48 cans) [2]	111,688	957,318	299,017	2,041,695	27,639	184,323
1-pound round (48 cans) [3]	5,839	94,942	45,160	570,185	4,692	56,468
Flakes [4]	3,439	18,741	22,372	91,132	923	3,421
Total	129,671	1,118,985	423,332	2,985,146	49,888	328,951
Total (standard cases)	131,157		440,101		46,263	

Sizes	Tuna, bluefin, and yellowfin		Tuna, striped		"Tonno"	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
¼-pound round (48 cans) [1]	1,734	$7,997	56,378	$205,858	185,611	$790,810
½-pound round (48 cans) [2]	22,448	154,976	307,204	1,751,762	21,823	178,465
1-pound round (48 cans) [3]	3,594	48,003	36,447	384,141	853	10,585
Flakes [4]	16,824	69,122	6,027	20,826		
Total	44,600	280,098	406,056	2,362,587	208,287	979,860
Total (standard cases)	47,327		414,314		116,335	

Sizes	Bonito		Yellowtail		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
¼-pound round (48 cans) [1]	12,343	$46,743	9,943	$37,515	348,131	$1,503,780
½-pound round (48 cans) [2]	10,498	56,290	23,474	106,885	823,791	5,431,714
1-pound round (48 cans) [3]	959	8,220	6,644	56,947	104,188	1,229,491
Flakes [4]					49,585	203,242
Total	23,800	111,253	40,061	201,347	1,325,695	8,368,227
Total (standard cases)	18,587		41,734		1,255,818	

[1] Includes the pack of ⅛-pound round and square, 96 cans to the case, and ¼-pound round and square, 100 cans to the case, which have been converted to the equivalent of ¼-pound round, 48 cans to the case.
[2] Includes the pack of ½-pound square, 48 cans to the case and 50 cans to the case, which have been converted to the equivalent of ½-pound round, 48 cans to the case.
[3] Includes the pack of 4-pound round, 12 cans to the case, which have been converted to the equivalent of 1-pound round, 48 cans to the case.
[4] Flakes have been converted to standard cases.

NOTE.—"Standard cases" represent the various sized cases converted to the uniform basis of 48 half-pound cans to the case. Tuna and tunalike fishes were canned at 19 plants.

Pack of canned tuna and tunalike fishes, 1921 to 1927

Year	Albacore		Bluefin and yellowfin tuna		Striped tuna		"Tonno"	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	456, 152	$2, 657, 266	64, 816	$306, 486	27, 972	$109, 929		
1922	296, 210	2, 304, 935	168, 874	1, 047, 621	177, 995	942, 356	13, 714	$139, 067
1923	310, 037	3, 106, 329	261, 773	1, 959, 812	96, 452	578, 254	124, 416	1, 136, 814
1924	416, 820	4, 024, 509	65, 941	455, 048	43, 159	239, 198	97, 304	861, 861
1925	518, 079	4, 412, 655	261, 482	1, 745, 338	168, 177	997, 697	131, 159	1, 212, 024
1926	61, 197	471, 502	287, 699	1, 718, 744	290, 278	1, 525, 146	137, 720	1, 209, 041
1927	131, 157	1, 118, 985	533, 691	3, 594, 195	414, 314	2, 362, 587	116, 335	979, 860

Year	Bonito		Yellowtail		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921			210	$945	549, 150	$3, 074, 626
1922	10, 810	$58, 900	4, 718	18, 994	672, 321	4, 511, 873
1923	15, 099	77, 906	10, 059	55, 645	817, 836	6, 914, 760
1924	12, 899	94, 806	16, 293	81, 164	652, 416	5, 756, 586
1925	10, 090	61, 207	13, 484	70, 159	1, 102, 471	8, 499, 080
1926	48, 113	259, 204	26, 192	98, 646	851, 199	5, 282, 283
1927	18, 587	111, 253	41, 734	201, 347	1, 255, 818	8, 368, 227

NOTE.—Cases are on the standard basis of forty-eight ½-pound cans.

Shrimp.—In 1926, shrimp were canned in 1 plant in North Carolina, 2 in South Carolina, 10 in Georgia, 7 in Florida, 4 in Alabama, 19 in Mississippi, 26 in Louisiana, and 5 in Texas, a total of 74 plants, or 3 more than a year ago. The total pack amounted to 852,764 standard cases of 48 No. 1 cans (5-ounce cans dry pack and 5¾-ounce cans wet pack) valued at $5,321,652. This is an increase of 16 per cent in quantity and 29 per cent in value as compared with the previous year and is the largest pack of any year during the period 1921 to 1927.

Pack of canned shrimp, 1927

STANDARD CASES [1]

States	Dry pack (in tins)		Wet pack (in tins)		Wet pack (in glass)		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*	*Cases*	*Value*
North Carolina and South Carolina	4, 087	$25, 705	11, 504	$68, 824			15, 591	$94, 529
Georgia	30, 871	196, 201	78, 191	471, 356			109, 062	667, 557
Florida	4, 508	26, 983	34, 447	203, 657	31, 327	$337, 152	70, 282	567, 792
Alabama	81, 040	489, 822	28, 411	167, 294			109, 451	657, 116
Mississippi	55, 117	336, 782	83, 071	473, 659	4, 176	40, 488	142, 364	850, 929
Louisiana	147, 355	916, 280	192, 012	1, 118, 084			339, 367	2, 034, 364
Texas	12, 257	72, 742	41, 758	241, 266			54, 015	314, 008
Georgia, Louisiana, and Texas					12, 632	135, 357	12, 632	135, 357
Total	335, 235	2, 064, 515	469, 394	2, 744, 140	48, 135	512, 997	852, 764	5, 321, 652

ACTUAL CASES

Sizes	Total		Sizes	Total	
	Cases	*Value*		*Cases*	*Value*
In tins, dry:			In glass, wet:		
No. 1, 5-ounce (4 dozen)	308, 575	$1, 834, 202	5¼-ounce (2 dozen)	83, 741	$415, 221
No. 1½, 8¼-ounce (2 dozen)	38, 321	228, 813	6¼-ounce (2 dozen)	16, 608	91, 656
In tins, wet:			Other sizes, in tins and glass, wet and dry (standard cases)	1, 258	7, 892
No. 1, 5¾-ounce (4 dozen)	467, 352	2, 729, 890			
No. 1½, 9¾-ounce (2 dozen)	2, 353	13, 978			
			Total		5, 321, 652

[1] A "standard case" contains 4 dozen 5-ounce cans in the dry pack and 4 dozen 5¾-ounce cans in the wet pack.

NOTE.—Shrimp were canned at 1 plant in North Carolina, 2 in South Carolina, 10 in Georgia, 7 in Florida, 4 in Alabama, 19 in Mississippi, 26 in Louisiana, and 5 in Texas.

Pack of canned shrimp, 1921 to 1927

Year	Cases	Value	Year	Cases	Value
1921	655, 364	$3, 804, 781	1925	735, 714	$3, 782, 819
1922	579, 797	3, 064, 087	1926	732, 365	4, 122, 092
1923	700, 429	4, 381, 534	1927	852, 764	5, 321, 652
1924	718, 517	4, 608, 950			

NOTE.—Cases have been reduced to the equivalent of 48 No. 1 cans.

Clams.—In 1927, razor-clam products were canned at 14 plants in Washington, 6 in Oregon, and 6 in Alaska; hard-clam products at 2 plants in Florida, 1 in Georgia, 1 in Rhode Island, 1 in New Jersey, and 3 in Washington; and soft-clam products at 15 plants in Maine and 2 in Massachusetts—a total of 51 plants, or one more than in the previous year. In standard cases of 48 No. 1 cans, the pack was as follows: Razor clams, 130,016 cases, valued at $1,046,797; hard clams, 37,693 cases, valued at $231,526; soft clams, 65,847 cases, valued at $270,747; and other clam products, such as chowders, soups, bouillon, and juices, 291,730 cases, valued at $1,195,884. The total pack amounted to 525,286 standard cases, valued at $2,744,954. This is an increase of 37 per cent in value compared with the previous year.

Pack of canned clam products, 1927

Items and States	Cases	Value	Items and States	Cases	Value
Razor clams (Washington, Oregon, and Alaska):			Soft clams (Maine and Massachusetts):		
Whole—			Whole—		
No. 1, 5-ounce (4 dozen)	8, 236	$69, 412	5-ounce (4 dozen)	37, 510	$161, 061
1-pound, 8-ounce (4 dozen)	4, 066	46, 352	8-ounce (4 dozen)	8, 103	52, 335
No. 2, 10-ounce (2 dozen)	647	5, 435	10-ounce (2 dozen)	5, 180	20, 459
Minced—			Other sizes (standard cases)	10, 000	36, 892
½-pound flat, 4-ounce (4 dozen)	85, 989	563, 117	Total	60, 793	270, 747
No. 1, 5-ounce (4 dozen)	42, 224	334, 183			
Other sizes (standard cases)	3, 612	28, 298	Total (standard cases)	65, 847	
Total	144, 774	1, 046, 797	Other hard, soft, and razor clam products (Maine, Massachusetts, Rhode Island, New Jersey, Georgia, Florida, Washington, and Oregon):		
Total (standard cases)	130, 016		Chowder and soup—		
Hard clams (Washington and Florida):			No. 1, 10-ounce (4 dozen)	139, 558	557, 817
Whole—			No. 3, 33-ounce (2 dozen)	41, 702	239, 090
1-pound, 8-ounce (4 dozen)	3, 858	28, 549	No. 10, 102-ounce (½ dozen)	2, 602	9, 907
No. 1, 5-ounce (4 dozen)	8, 123	67, 508	Other sizes (standard cases)	53, 954	269, 186
No. 2, 10-ounce (2 dozen)	12, 181	75, 409	Bouillon and juice—Miscellaneous sizes in tins and glass (standard cases)	26, 092	119, 884
No. 10, 52-ounce (½ dozen)	4, 774	25, 064			
Minced—			Total	263, 908	1, 195, 884
No. 1, 5-ounce (4 dozen)	1, 534	11, 629			
Other sizes (standard cases)	3, 476	23, 367	Total (standard cases)	291, 730	
Total	33, 946	231, 526	Grand total (standard cases)	525, 286	2, 744, 954
Total (standard cases)	37, 693				

NOTE.—"Standard cases" represent the various-sized cases converted to a uniform basis of No. 1 cans, 4 dozen to the case. "Cut out" or "drained" weights of can contents are shown for whole and minced clams and gross can contents for chowder, soup, bouillon, and juice.

Value of canned clams and clam products, 1921 to 1927

Year	Razor clams	Hard clams	Soft clams	Clam chowders, juices, etc.	Total
1921	$506,591	$138,699	$338,775	$182,442	$1,166,507
1922	876,364	201,270	327,287	311,444	1,716,365
1923	883,535	194,937	308,560	323,584	1,710,616
1924	863,126	271,911	459,882	566,470	2,161,389
1925	860,002	218,601	287,073	484,702	1,850,378
1926	795,256	191,044	279,996	738,354	2,004,650
1927	1,046,797	231,526	270,747	1,195,884	2,744,954

Oysters.—In 1927, oysters were reported canned at 3 plants in Maryland, 4 in North Carolina, 14 in South Carolina, 3 in Georgia, 3 in Florida, 4 in Alabama, 17 in Mississippi, 6 in Louisiana, and 1 in Texas, a total of 55 plants, or the same number as a year ago. The total output of these plants amounted to 447,297 standard cases of forty-eight 5-ounce cans, valued at $2,367,949. This is an increase in quantity of 8 per cent and 17 per cent in value, as compared with the previous year.

Pack of canned oysters, 1927

STANDARD CASES [1]

States	Cases	Value
Maryland	20,472	$126,972
North Carolina	15,618	81,715
South Carolina	111,923	588,070
Georgia and Florida	17,109	85,821
Alabama	23,032	119,051
Mississippi	229,801	1,217,538
Louisiana and Texas	29,342	148,782
Total	447,297	2,367,949

ACTUAL CASES

Sizes	Cases	Value
4-ounce (4 dozen)	62,610	$293,184
5-ounce (4 dozen)	318,650	1,643,788
8-ounce (2 dozen)	24,423	115,105
10-ounce (2 dozen)	55,612	288,462
Other sizes (standard cases)	3,409	27,410
Total		2,367,949

[1] A "standard case" contains 4 dozen 5-ounce cans.

Pack of canned oysters, 1921 to 1927

Year	Cases	Value	Year	Cases	Value
1921	442,086	$2,179,271	1925	654,755	$3,721,159
1922	505,973	2,423,616	1926	413,834	2,026,569
1923	524,544	2,720,073	1927	447,297	2,367,949
1924	447,481	2,478,044			

NOTE.—Cases are on the standard basis of forty-eight 5-ounce cans.

Miscellaneous canned fish products.—In addition to the products shown in the foregoing, 298,644 standard cases of forty-eight 1-pound cans of various miscellaneous fishery products, valued at $2,334,776, were canned during 1927. Alewives and alewife roe were canned at 41 plants, shad and shad roe at 32 plants, crabs at 4 plants, miscellaneous shellfish at 5 plants, and miscellaneous fish, caviar, roe, and salmon eggs at 34 plants. Compared with a year ago, the pack of alewives and alewife roe, which amounted to 66,495 cases valued at $316,697, increased 24 per cent in quantity and 19 per cent in value; the pack of shad and shad roe, which amounted to 12,336 cases valued at $83,732, decreased 20 per cent in quantity and 19 per cent in value; the value of the crab pack amounted to $26,988 and increased 7 per cent.

Pack of miscellaneous canned fishery products in the United States and Alaska, 1927 [1]

Items	Cases	Value	Items	Cases	Value
Alewives	21,327	$64,577	Salmon eggs (for bait)	5,257	$130,735
Alewife roe	45,168	252,120	Crabs	1,009	26,988
Shad	11,569	61,842	Other shellfish	3,470	64,485
Shad roe	767	21,890			
Other fish	203,683	1,639,469	Total	298,644	2,334,776
Roe and caviar	6,394	72,670			

[1] All packs under this heading have been converted to the equivalent of "standard cases" of forty-eight 1-pound cans.

Pack of canned alewives and alewife roe, 1921 to 1927

Year	Alewives		Alewife roe		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	156	$813	20,304	$157,841	20,460	$158,654
1922	489	1,994	18,099	137,514	18,588	139,508
1923	537	1,915	20,404	169,435	20,941	171,350
1924	1,550	5,118	41,642	332,245	43,192	337,363
1925	4,449	15,045	35,183	240,461	39,632	255,506
1926	19,920	65,405	33,886	201,278	53,806	266,683
1927	21,327	64,577	45,168	252,120	66,495	316,697

NOTE.—Cases have been converted to the equivalent of forty-eight 1-pound cans.

Pack of canned shad and shad roe, 1921 to 1927

Year	Shad		Shad roe		Total	
	Cases	*Value*	*Cases*	*Value*	*Cases*	*Value*
1921	641	$2,455	38	$142	679	$2,597
1922	1,781	9,961	292	8,517	2,073	18,478
1923	2,162	37,165	536	16,288	2,698	53,453
1924	6,470	20,461	1,164	72,932	7,634	93,393
1925	12,569	53,875	2,430	100,571	14,999	154,446
1926	14,275	63,334	1,121	39,422	15,396	102,756
1927	11,569	61,842	767	21,890	12,336	83,732

NOTE.—Cases have been reduced to the equivalent of forty-eight 1-pound cans.

Value of canned crabs, 1921 to 1927

Year	Value	Year	Value
1921	$115,800	1925	$52,499
1922	104,171	1926	25,222
1923	47,023	1927	26,988
1924	35,944		

BY-PRODUCTS

The total value of by-products, including the products of the menhaden and whaling industries, amounted to $12,793,256 in 1927. These were made up of fish and whale oils; fish, whale, and shrimp scrap, meal, and bran; shell products; fish glue; and miscellaneous by-products. Their total value was 5 per cent more than in the previous year.

Oils.—The production of fish and marine-animal oils in 1927 amounted to 10,874,113 gallons valued at $4,905,021, which is slightly less in quantity and value than a year ago. Of the total production in 1927, 37 per cent consisted of menhaden oil; 23 per cent, sardine oil; 21 per cent, herring oil; 14 per cent, whale and sperm oil; and 5 per cent, oil from miscellaneous fish.

Scrap and meal.—The total value of fish scrap and meal of all kinds produced in 1927 was $4,321,082, which is an increase of 18 per cent over the value for the preceding year. Of the total value, that for dried scrap and meal accounted for 85 per cent; acidulated scrap, 13 per cent; shrimp bran and crude or green scrap, 2 per cent. The quantity of dried scrap and meal and shrimp bran produced was greater than in the previous year, while there was a decline in the production of acidulated scrap and crude or green scrap.

Production of miscellaneous by-products, 1927

Products	Atlantic and Gulf coasts		Pacific coast (including Alaska)		Total	
Fish and whale scrap and meal:	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
Dried tons	10,071	$532,019	32,007	$1,761,900	42,078	$2,293,919
Crude or green do	1,960	8,942			1,960	8,942
Shrimp bran do	1,427	44,716			1,427	44,716
Oil:						
Salmon gallons			205,519	85,061	205,519	85,061
Sardine do			2,514,562	1,116,725	2,514,562	1,116,725
Tuna do			32,895	8,265	32,895	8,265
Herring do	257,020	96,416	2,034,667	863,834	2,291,687	960,250
Whale do			1,520,900	751,765	1,520,900	751,765
Sperm do			10,500	4,200	10,500	4,200
Cod liver, crude do	283,817	242,424			283,817	242,424
Miscellaneous do	14,025	7,250	43,140	12,607	57,165	19,857
Liquid glue do	512,136	860,396			512,136	860,396
Miscellaneous by-products[1] pounds	1,731,709	87,008	584,950	18,699	2,316,659	105,707
Total		1,879,171		4,623,056		6,502,227

[1] Includes herring skins and scales, isinglass, fish flour, pickled whale meat, whalebone, and shark skins, fins, and meat.

NOTE.—The oils produced on the Pacific coast are reported in "trade" gallons (7½ pounds), and those produced on the Atlantic and Gulf coasts are reported in United States gallons (about 7.74 pounds).

Production of fish and marine-animal oils, 1921 to 1927

Year	Menhaden		Herring		Sardine	
	Gallons	*Value*	*Gallons*	*Value*	*Gallons*	*Value*
1921	6, 260, 478	$1, 719, 892	112, 838	$26, 735	170, 977	$35, 760
1922	7, 102, 677	2, 904, 833	450, 362	150, 144	428, 859	145, 668
1923	7, 461, 365	3, 316, 277	945, 424	384, 053	966, 247	424, 103
1924	3, 923, 904	1, 817, 626	1, 324, 002	571, 399	2, 338, 711	1, 076, 903
1925	6, 023, 108	3, 001, 106	2, 442, 527	1, 034, 071	3, 120, 048	1, 568, 753
1926	3, 942, 821	1, 729, 160	3, 116, 936	1, 382, 763	2, 113, 028	932, 651
1927	3, 957, 068	1, 716, 474	2, 291, 687	960, 250	2, 514, 562	1, 116, 725

Year	Other fish oils		Whale and sperm		Total	
	Gallons	*Value*	*Gallons*	*Value*	*Gallons*	*Value*
1921	378, 887	(1)	523, 101	(1)	7, 446, 281	$2, 078, 670
1922	306, 430	$145, 401	2, 247, 145	$884, 714	10, 535, 473	4, 230, 760
1923	443, 935	187, 877	1, 556, 830	791, 884	11, 373, 801	5, 104, 194
1924	381, 832	184, 534	1, 242, 836	661, 271	9, 211, 285	4, 311, 733
1925	480, 195	211, 250	1, 221, 198	685, 011	13, 287, 076	6, 500, 191
1926	439, 252	234, 832	1, 276, 009	748, 075	10, 888, 046	5, 027, 491
1927	579, 396	355, 607	1, 531, 400	755, 965	10, 874, 113	4, 905, 021

[1] Data not available.

Production of fish, shellfish, and marine-animal meal and scrap, 1921 to 1927

Year	Dried scrap and meal		Acidulated scrap		Crude or green scrap		Shrimp bran		Total
	Tons	*Value*	*Tons*	*Value*	*Tons*	*Value*	*Tons*	*Value*	*Value*
1921	60, 031	$2, 613, 361	44, 454	$895, 140	2, 160	$31, 827	628	$16, 814	$3, 557, 142
1922	89, 459	3, 755, 787	25, 712	555, 973	433	9, 519	562	15, 398	4, 336, 677
1923	66, 088	3, 286, 504	44, 935	1, 064, 870	1, 593	13, 721	1, 269	48, 290	4, 413, 385
1924	51, 855	2, 370, 237	24, 963	504, 639	3, 543	6, 262	936	31, 580	2, 912, 718
1925	69, 733	3, 500, 496	41, 773	1, 109, 067	5, 477	9, 414	1, 079	31, 658	4, 650, 635
1926	61, 929	3, 056, 406	23, 852	551, 405	6, 157	9, 491	1, 036	33, 775	3, 651, 077
1927	68, 495	3, 700, 834	19, 984	566, 590	1, 960	8, 942	1, 427	44, 716	4, 321, 082

Glue.—In 1927, fish glue was manufactured at four plants in Massachusetts. The production amounted to 512,136 gallons, valued at $860,396, which is a decrease of 2 per cent in quantity and an increase of 18 per cent in value compared with the previous year.

Production of fish glue, 1921 to 1927

Year	Gallons	Value	Year	Gallons	Value
1921	347, 048	$364, 415	1925	510, 816	$589, 064
1922	323, 003	278, 424	1926	520, 622	732, 109
1923	465, 814	680, 054	1927	512, 136	860, 396
1924	502, 940	550, 391			

Shell products.—Shell products were manufactured at 47 plants in 1927. The production amounted to 310,519 tons of oyster-shell products, valued at $2,601,050. This is an increase in quantity and value as compared with the previous year. This does not include crushed shell produced as a by-product of the fresh-water pearl-button industry, statistics of which are not available. Of the total production, 80 per cent consisted of crushed oyster shell for poultry

and 20 per cent was lime. The production in 1927 of crushed shell was slightly less and lime slightly more, compared with the production of these commodities in the previous year.

Louisiana ranks as the most important State in the production of oyster-shell products and accounted for 40 per cent of the total quantity produced and 42 per cent of the total value. Many of the shells used there were dead shells taken from marine-shell deposits.

Production of oyster-shell products, 1927

States	Crushed oyster shell for poultry feed		Oyster-shell lime		Total	
	Tons	*Value*	*Tons*	*Value*	*Tons*	*Value*
Connecticut, Rhode Island, and Pennsylvania	8,274	$88,090	1,970	$7,563	10,244	$95,653
New Jersey	3,904	43,450	1,265	4,210	5,169	47,660
Maryland	50,734	501,216	25,662	68,544	76,396	569,760
Virginia	12,515	130,846	22,976	161,423	35,491	292,269
North Carolina and South Carolina	16,199	180,139	2,375	16,588	18,574	196,727
Florida and Alabama	8,438	70,730	2,150	2,088	10,588	72,818
Mississippi and Texas	26,712	235,469	2,095	3,394	28,807	238,863
Louisiana	123,183	1,082,125	2,067	5,175	125,250	1,087,300
Total	249,959	2,332,065	60,560	268,985	310,519	2,601,050

Production of oyster-shell products, 1921 to 1927

Year	Crushed oyster shell for poultry feed		Oyster-shell lime		Total
	Tons	*Value*	*Tons*	*Value*	*Value*
1921	185,474	$1,759,120	73,764	$502,634	$2,261,754
1922	236,021	2,005,838	93,168	431,213	2,437,051
1923	224,983	1,986,249	83,808	372,286	2,358,535
1924	219,211	2,019,254	70,269	336,384	2,355,638
1925	226,971	2,075,057	67,818	303,261	2,378,318
1926	251,166	2,379,141	57,232	207,019	2,586,160
1927	249,959	2,332,065	60,560	268,985	2,601,050

Menhaden industry.—In 1927, 1 menhaden plant operated in Connecticut, 1 in New York, 2 in New Jersey, 3 in Delaware, 14 in Virginia, 15 in North Carolina, 1 in Georgia, and 2 in Florida. These 39 plants utilized 586,214,000 fish for the manufacture of 26,417 tons of scrap and meal, valued at $1,406,915; 19,984 tons of acidulated scrap, valued at $566,590; and 3,957,068 gallons of oil, valued at $1,716,474, making a total value of products of $3,689,979. This is an increase in value over that for the previous year of 7 per cent, indicating that this industry has recovered slightly from the poor season of 1926. However, the value is considerably less than in the years 1922 and 1923. Virginia ranks first in importance in the menhaden industry and in 1927 accounted for 42 per cent of the total value of all menhaden products.

Fish utilized and products of the menhaden industry, 1927

States	Quantity of menhaden utilized	Products				Total
		Scrap and meal		Oil		
	Number	*Tons*	*Value*	*Gallons*	*Value*	*Value*
Connecticut, New York, New Jersey, and Delaware	68,997,000	7,147	$219,550	795,226	$384,132	$603,682
Virginia	181,013,000	[1] 13,188	741,271	1,867,279	798,286	1,539,557
North Carolina	148,886,000	[2] 14,821	519,449	782,778	330,685	850,134
Georgia and Florida	187,318,000	11,245	493,235	511,785	203,371	696,606
Total	[3] 586,214,000	[4] 46,401	1,973,505	3,957,068	1,716,474	3,689,979

[1] Of this quantity, 9,869 tons, valued at $537,188, were reported as dry scrap and 3,319 tons, valued at $204,083, as fish meal.

[2] Of this quantity, 5,049, tons, valued at $233,549, were reported as dry scrap; 2,304 tons, valued at $124,110, as fish meal; and 7,468 tons, valued at $161,790, as green and acidulated scrap.

[3] 351,728,760 pounds.

[4] Of this quantity, 19,430 tons, valued at $993,472, were reported as dry scrap; 6,987 tons, valued at $413,443, as fish meal; and 19,984 tons, valued at $566,590, as green and acidulated scrap.

NOTE.—Menhaden oil is reported in United States gallons (about 7.74 pounds).

Products of the menhaden industry, 1921 to 1927

Year	Dried scrap and meal		Acidulated scrap		Oil		Total
	Tons	*Value*	*Tons*	*Value*	*Gallons*	*Value*	*Value*
1921	37,858	$1,380,455	44,804	$905,640	6,260,478	$1,719,892	$4,005,987
1922	67,821	2,665,441	25,755	556,317	7,102,677	2,904,833	6,126,591
1923	43,452	2,029,406	44,935	1,064,870	7,461,365	3,316,277	6,410,553
1924	21,008	996,866	24,409	495,684	3,923,904	1,817,626	3,310,176
1925	30,167	1,519,458	41,463	1,102,051	6,023,108	3,001,106	5,622,615
1926	24,226	1,164,396	23,553	548,204	3,942,821	1,729,160	3,441,760
1927	26,417	1,406,915	19,984	566,590	3,957,068	1,716,474	3,689,979

FROZEN-FISH TRADE

During 1927, there were 150 freezers and cold-storage establishments devoted wholly or in part to the storage of frozen fish. This is a smaller number than was operated in the previous year, although the volume of fish handled was larger. That frozen fish is being used more generally is evidenced by the fact that average monthly holdings in the last three years have become greater, those in 1927 amounting to 48,957,000 pounds, or 7 per cent more than in 1926 and 18 per cent more than is normal or than the 5-year average. The quantity of fish frozen annually also has increased during the past few years. The holdings per month during the first 7 months of 1927 were 17 to 53 per cent greater than during the corresponding period in 1926, and during the last 5 months they were 6 to 11 per cent less than in the previous year and varied from 24,732,000 pounds in April to 66,791,000 pounds in November. Compared with the 5-year average for each month, the holdings per month in 1927 were 3 to 54 per cent greater, the largest gains being registered generally in the late spring months.

Holdings of frozen fish for 1927 and 1926, and the 5-year average

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

Month	1927	1926	5-year average	Increase (+) or decrease (−)	
				Compared with 1926	Compared with 5-year average
				Per cent	*Per cent*
January	58,655	48,181	48,894	+22	+20
February	48,684	37,378	37,332	+30	+30
March	34,889	24,894	25,304	+40	+38
April	24,732	16,154	17,631	+53	+40
May	29,781	21,540	19,304	+38	+54
June	36,694	31,345	25,808	+17	+42
July	42,116	33,902	34,988	+24	+20
August	54,063	57,627	45,092	−6	+20
September	60,328	64,657	54,216	−7	+11
October	65,958	70,310	62,611	−6	+5
November	66,791	75,034	65,052	−11	+3
December	64,788	69,854	61,839	−7	+5
Average for year	48,957	45,906	41,506	+7	+18

Holdings of frozen fish in the United States in 1927, and a 5-year average, 1922 to 1926

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

Species	Month ended—					
	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15
Bluefish (all trade sizes)	561	416	276	196	198	284
Butterfish (all trade sizes)	1,153	903	581	428	386	311
Catfish	227	225	223	152	151	169
Cisco (Lake Erie)	514	314	202	116	75	58
Cisco (lake herring), including bluefin, blackfin, and chub	2,850	1,998	1,116	655	551	477
Cisco (tullibees, Canadian Lakes)	1,723	2,170	1,965	1,499	1,340	1,204
Cod, haddock, hake, pollock	2,196	1,854	1,379	743	1,024	1,100
Croaker	1,252	981	225	55	824	1,251
Flounders	726	623	424	330	398	670
Halibut (all trade sizes)	6,265	4,221	2,905	3,096	5,109	7,567
Herring, sea (including alewives and blue-backs)	2,154	1,951	2,020	1,593	2,166	2,718
Lake trout	1,564	1,245	896	556	641	554
Mackerel (except Spanish)	7,047	5,629	3,817	1,748	3,010	3,798
Pike:						
Blue and sauger	647	512	257	121	657	512
Yellow or wall-eyed	313	452	382	274	218	196
Pike (including pickerel, jacks, and yellow jack)	1,542	1,542	1,404	1,121	1,031	1,036
Sablefish (black cod)	1,359	968	572	398	356	368
Salmon:						
Chinook	899	686	397	113	81	501
Silver	2,712	1,902	1,489	1,187	1,048	998
Fall and pink	1,084	757	442	208	176	141
Steelhead trout	377	315	141	124	36	66
All other	2,450	2,098	1,657	1,239	920	1,054
Scup (porgies)	103	62	27	6	1	223
Shad and shad roe	331	305	136	108	377	595
Shellfish	1,561	1,558	1,166	792	681	690
Smelts, eulachon, etc	669	1,309	1,383	745	653	509
Squid	1,790	1,502	1,303	825	672	1,010
Sturgeon and spoonbill cat	1,161	1,078	858	1,009	1,015	1,095
Suckers	92	66	58	36	43	50
Weakfish (including southern "sea trout")	1,096	771	269	77	314	653
Whitefish	1,279	1,493	1,228	837	607	555
Whiting	5,449	3,452	1,890	1,429	1,417	2,221
Miscellaneous frozen fish	5,509	5,326	3,801	2,916	3,605	4,060
Total frozen fish	58,655	48,684	34,889	24,732	29,781	36,694
5-year average, 1922–1926	48,894	37,332	25,304	17,631	19,304	25,808

Holdings of frozen fish in the United States in 1927, and a 5-year average, 1922 to 1926—Continued

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

Species	Month ended—					
	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15
Bluefish (all trade sizes)	316	275	343	358	337	304
Butterfish (all trade sizes)	280	433	522	703	591	437
Catfish	236	318	339	404	395	353
Cisco (Lake Erie)	188	279	448	865	654	751
Cisco (lake herring), including bluefin, blackfin, and chub	627	1,496	2,244	2,138	2,490	3,720
Cisco (tullibees, Canadian Lakes)	1,110	1,009	1,017	962	962	1,157
Cod, haddock, hake, pollock	1,207	1,348	1,950	2,695	2,303	1,800
Croaker	1,442	2,109	1,780	1,615	1,272	1,001
Flounders	667	707	669	800	778	678
Halibut (all trade sizes)	9,019	12,233	13,990	14,114	13,585	13,031
Herring, sea (including alewives and blue-backs)	2,627	2,769	3,082	3,982	4,106	4,124
Lake trout	606	818	977	1,292	2,079	1,975
Mackerel (except Spanish)	4,708	6,383	6,279	5,621	4,710	3,616
Pike:						
Blue and sauger	511	297	222	199	575	652
Yellow or wall-eyed	200	177	194	177	205	292
Pike (including pickerel, jacks, and yellow jack)	1,027	975	863	1,050	1,239	922
Sablefish (black cod)	492	608	1,315	2,329	2,882	2,571
Salmon:						
Chinook	1,193	1,645	1,788	2,049	1,722	1,358
Silver	1,110	1,678	2,314	3,542	3,428	3,241
Fall and pink	165	346	462	530	1,177	1,161
Steelhead trout	195	547	749	801	589	405
All other	1,692	1,562	1,721	2,029	2,004	2,024
Scup (porgies)	351	380	404	480	452	384
Shad and shad roe	569	607	580	564	540	534
Shellfish	632	772	981	1,296	1,666	2,110
Smelts, eulachon, etc	485	474	459	434	358	252
Squid	1,077	1,447	1,425	1,531	1,465	1,394
Sturgeon and spoonbill cat	1,109	1,069	1,248	1,239	1,241	1,420
Suckers	46	52	45	55	93	89
Weakfish (including southern "sea trout")	633	928	914	1,105	1,163	1,009
Whitefish	702	740	718	592	891	1,104
Whiting	2,620	4,445	4,713	4,461	4,620	3,980
Miscellaneous frozen fish	4,274	5,137	5,573	4,946	6,219	6,939
Total frozen fish	42,116	54,063	60,328	65,958	66,791	64,788
5-year average, 1922-1926	34,988	45,092	54,216	62,611	65,052	61,839

FOREIGN FISHERY TRADE

The foreign trade in fishery products of the United States during 1927 amounted to $74,350,515, of which $55,633,612 represents the value of those imported for consumption and $18,716,903 the value of exports of domestic fishery products. Compared with the previous year, this is an increase of 6 per cent in total trade, an increase of 11 per cent in the value of fishery products imported for consumption, and a decrease of 8 per cent in the value of the exports of domestic fishery products.

Imports consisted of 311,857,599 pounds of edible products (including fresh, frozen, cured, and canned fish), valued at $34,854,246, and nonedible products (comprised mainly of fish and marine-animal oils, pearls, and imitation pearls), valued at $20,779,366. Compared with 1926, this is an increase of 1 per cent in the quantity and 7 per cent in the value of edible products imported and an increase of 18 per cent in the value of nonedible products imported. The increase in the quantity and value of the edible products imported was due chiefly to large imports of cured fish and canned shellfish. Other edible groups showed little change from a year ago. The increase in the value of nonedible products imported is due almost entirely to the

greater value of the fish and marine-animal oil group and the value of pearls and imitation pearls. Fishery exports consisted of edible products, amounting to 158,427,507 pounds, valued at $18,340,624, and nonedible products valued at $376,279. Compared with the previous year, there is a decrease of 3 per cent in the quantity and 8 per cent in the value of the edible products exported and a decrease of 11 per cent in the value of the nonedible products exported.

The decline in edible export products is attributed chiefly to a decrease in both the amount and value of canned salmon. On the other hand, exports of canned sardines (the chief competitor of canned salmon in foreign markets) show a fair increase in both amount and value compared with a year ago and represent the largest individual export item. Exports of the other groups of edible fishery products show little change in 1927 compared with the previous year.

Considering only the amount of fishery products on which we usually have an unfavorable trade balance, the imports of fresh and frozen fish were about seventeen times as great as the exports in 1927, which is a somewhat lower ratio than in the year previous. In 1927, the imports of cured fish were about seven times as great as the exports, which is a slightly higher ratio than a year ago. Imports of fresh and canned shellfish were about two times as great as the exports in 1927, which is about the same ratio as for 1926. Imports of fish and marine-animal oils were about one hundred and ninety-two times the amount of the exports in 1927, compared with one hundred and fifteen times in 1926. While this unfavorable trade balance exists for fish and marine-animal oils, the fishery trade in the United States continues to discard large quantities of fish waste and offal that are suitable for manufacture into oil and meal.

Contrasting these products with those on which we usually have a favorable trade balance, the exports of canned fish (which is the most important export group) were almost four times as great as the imports in 1927, which is about the same ratio as in 1926. Exports of miscellaneous edible fishery products were over two and one-half times the quantity of imports in 1927, or about the same ratio as the previous year.

Imports for consumption and domestic exports of fishery products, 1927, and ratio comparisons

Item	Imports		Exports		Ratio of imports to exports	
	Pounds	*Value*	*Pounds*	*Value*	*Quantity*	*Value*
Edible fishery products:						
Fish, fresh, frozen, or packed in ice	135,048,461	$10,384,575	8,079,455	$911,420	167:10	$114:10
Fish, salted, dried, smoked, or pickled	117,594,895	9,285,674	17,381,590	2,242,449	68:10	41:10
Fish, canned or packed in oil	32,177,681	6,525,266	119,702,162	13,157,388	10:37	10:20
Shellfish, canned or fresh	26,312,491	8,003,027	11,346,186	1,878,438	23:10	43:10
Other fish products, roe, caviar, etc	724,071	655,704	1,918,114	150,929	10:26	43:10
Total	311,857,599	34,854,246	158,427,507	18,340,624	20:10	19:10
Nonedible fishery products:						
Fish and marine-animal oil [1]	133,430,378	8,582,976	692,128	80,051	1,927:10	1,072:10
All other		12,196,390		296,228		412:10
Total		20,779,366		376,279		552:10
Grand total		55,633,612		18,716,903		30:10

[1] Gallon of fish or marine-animal oil calculated at 7.5 pounds.

Exports of domestic fishery products, 1926 and 1927

Items	1926		1927	
	Quantity	*Value*	*Quantity*	*Value*
Fish, fresh, frozen, or packed in ice:				
Salmon—pounds	3,062,307	$487,542	3,079,251	$471,764
Other fresh fish—do	3,766,406	382,468	5,000,204	439,656
Total—do	6,828,713	870,010	8,079,455	911,420
Fish, salted, or dry-cured:				
Cod—do	3,954,342	423,937	3,820,178	374,347
Haddock, hake, and pollock—do	2,703,613	196,782	2,189,403	158,279
Herring—do	2,350,883	155,471	2,342,391	136,531
Salmon—do	2,169,595	455,270	2,356,291	510,406
Other—do	1,652,651	190,506	2,203,527	182,123
Total—do	12,831,084	1,421,966	12,911,790	1,361,686
Fish, pickled:				
Salmon—do	3,356,200	803,051	2,947,400	787,371
Other—do	2,444,400	136,303	1,522,400	93,392
Total—do	5,800,600	939,354	4,469,800	880,763
Fish, canned:				
Salmon—do	53,511,098	8,578,221	38,247,932	6,028,960
Sardines—do	71,285,456	6,126,476	79,439,503	6,817,662
Other—do	1,993,003	308,355	2,014,727	310,766
Total—do	126,789,557	15,013,052	119,702,162	13,157,388
Shellfish:				
Canned—do	3,443,164	691,131	3,863,323	825,636
Not canned—do	6,320,012	829,516	7,482,863	1,052,802
Total—do	9,763,176	1,520,647	11,346,186	1,878,438
Other fish products—do	1,493,922	138,808	1,918,114	150,929
Total edible products—do	163,507,052	19,903,837	158,427,507	18,340,624
Fish oils—do	808,827	118,986	692,128	80,051
Buttons, pearl or shell—gross	350,886	141,379	395,605	128,400
Sponges—pounds	105,550	164,805	100,389	167,828
Total		306,184		296,228
Total nonedible products		425,170		376,279
Grand total		20,329,007		18,716,903

Imports of fishery products entered for consumption, 1926 and 1927

Items	1926		1927	
	Quantity	*Value*	*Quantity*	*Value*
Edible fishery products:				
Fish, fresh, frozen, or packed in ice—				
Cod, haddock, hake, and pollock—pounds	976,473	$48,526	727,786	$35,484
Eels—do	901,262	125,186	492,522	54,685
Fresh-water fishes—do	47,985,060	4,680,585	52,562,778	4,993,917
Halibut—do	5,719,206	747,310	4,014,279	478,685
Herring (frozen)—do	1,438,905	68,032	2,120,701	108,306
Herring (fresh sea)—do	46,252,918	429,052	16,959,583	132,786
Mackerel—do	2,858,612	160,212	2,187,412	155,925
Salmon—do	5,348,725	636,391	6,002,487	664,090
Smelts—do	9,099,087	1,185,948	6,716,378	930,845
Swordfish—do	1,175,014	170,844	713,987	106,422
Tuna—do	9,898,985	525,575	32,485,097	1,640,230
Other dutiable—do	7,195,187	993,155	10,065,451	1,083,200
Total—do	138,849,434	9,770,816	135,048,461	10,384,575
Fish, salted, dried, smoked, or pickled—				
Cod, dried—pounds	33,196,832	2,541,117	28,989,347	2,018,798
Finnan haddie—do	1,637,197	141,912	1,144,817	102,202
Hake and pollock, dried—do	1,386,220	77,573	755,414	44,756
Herring—				
Dried—do	994,859	57,920	1,210,687	75,525
Pickled or salted—do	31,524,616	1,951,628	39,291,828	2,541,124
Smoked, skinned, or boned—do	655,014	78,451	296,406	38,562

Imports of fishery products entered for consumption, 1926 and 1927—Continued

Items	1926		1927	
	Quantity	*Value*	*Quantity*	*Value*
Edible fishery products—Continued.				
Fish, salted, dried, smoked, or pickled—Con.				
Mackerel, pickled or salted—pounds	10,721,327	$652,617	12,071,146	$789,004
Salmon, dried—do	130,568	13,330	226,037	26,287
Salmon, kippered, smoked, salted, pickled or otherwise prepared—pounds	1,066,653	183,045	618,875	75,762
Other kippered, smoked, salted, pickled, or otherwise prepared, not elsewhere specified—pounds	19,769,295	2,003,369	5,133,696	567,916
Other dried fish—do	5,621,252	765,498	3,756,014	576,005
Others, in bulk or packages—do	4,702,918	562,959	24,100,628	2,429,733
Total—do	111,406,751	9,029,419	117,594,895	9,285,674
Fish packed in oil or other substances—				
Sardines—pounds	25,529,032	$4,358,219	26,255,351	$5,094,583
All others—do	9,115,018	1,784,067	5,922,330	1,430,683
Total—do	34,644,050	6,142,286	32,177,681	6,525,266
Fish roe, frozen, prepared, or preserved—				
Caviar—do	358,903	505,765	413,658	579,021
Other fish roe, preserved—do	283,557	60,368	310,413	76,683
Total—do	642,460	566,133	724,071	655,704
Shellfish—				
Crabs—do	102,644	8,609	56,708	4,568
Crab meat packed in ice, frozen, or otherwise prepared or preserved—pounds	7,243,455	3,188,154	9,300,219	4,052,750
Lobsters, canned—do	1,792,038	1,135,921	1,773,413	1,016,706
Lobsters (other than canned), fresh, frozen, packed in ice, or prepared or preserved in any manner not specially provided for—pounds	6,537,088	1,555,875	6,369,392	1,660,356
Turtles—do	465,009	25,746	745,030	40,503
Other shellfish and shrimp—do	6,994,338	1,095,020	8,067,729	1,228,144
Total—do	23,134,572	7,009,325	26,312,491	8,003,027
Total edible fishery products—do	308,677,267	32,517,979	311,857,599	34,854,246
Nonedible fishery products:				
Fish and marine-animal oils—				
Cod oil—gallons	2,425,599	1,250,836	2,114,264	1,064,228
Cod-liver oil—do	1,921,422	1,615,967	2,375,297	2,231,032
Herring, menhaden, and cod oil—do	1,942,846	755,316	5,228,789	1,733,782
Other fish oils—do	108,263	41,565	93,097	28,643
Seal oil—do	650,775	315,203	629,160	250,969
Whale oil, sperm—do	137,309	51,272	265,983	95,597
Whale oil, other—do	5,233,220	2,664,147	7,084,127	3,178,725
Total—do	12,419,434	6,694,306	17,790,717	8,582,976
Pearls and imitation pearl—				
Pearls and parts, not strung or set		5,322,140		6,043,162
Imitation half pearls and hollow or filled pearls, without holes or with holes partly through—number	17,755,752	93,654	21,019,130	108,832
Imitation solid pearls, wholly or partly pierced, mounted or unmounted—number	1,061,640	40,528	208,426	34,189
Imitation-pearl beads		1,180,070		2,012,727
Total		6,636,392		8,198,910
Shells and buttons of pearl or shell—				
Shells, not manufactured—				
Green snail shell—pounds	182,509	24,409	169,830	24,909
Mother-of-pearl—do	7,049,992	2,040,517	6,516,562	1,708,675
All others—do	4,329,950	133,440	4,353,837	230,432
Shells, manufactured		100,112		101,581
Shell pearl buttons—				
Fresh-water—gross	7,864	2,600	1,419	963
Ocean or trochus—do	103,900	41,735	106,946	35,282
Button blanks, not turned, faced, or drilled—gross	638	735	48	20
Buttons (from Philippine Islands)—gross	992,169	455,619	715,913	350,770
Total		2,799,167		2,452,632

Imports of fishery products entered for consumption, 1926 and 1927—Continued

Items	1926		1927	
	Quantity	*Value*	*Quantity*	*Value*
Nonedible fishery products—Continued.				
Sponges.....pounds..	244,540	$243,437	174,770	$242,390
From Cuba.....do....	700,831	664,804	628,154	818,927
From Philippine Islands.....do....	1,130	3,514	3,170	7,580
Manufactures of, not specially provided for.....pounds..	704	645	3,014	3,303
From Cuba.....do....	2,631	3,904	2,348	3,198
From Philippine Islands.....do....	53	138	----------	----------
Total.....do....	949,889	916,442	811,456	1,075,398
Agar-agar.....do....	465,832	320,559	383,250	243,168
Ambergris.....do....	134	14,551	491	95,412
Cuttlefish bone.....do....	264,471	31,250	281,261	36,510
Fish for purposes other than human consumption.....pounds..	3,851,060	72,967	1,226,163	29,182
Fishskins, raw or salted.....do....	367,643	11,715	435,723	19,864
Fish sounds, crude, dried, or salted for preservation only.....pounds..	116,654	31,218	58,210	8,835
Sea grass, eelgrass, and seaweed, dyed or manufactured.....	----------	43,891	----------	34,470
Whalebone, unmanufactured.....pounds..	5,148	3,878	3,441	1,761
Whalebone, manufactures of.....do....	173	471	231	248
Total.....	----------	530,500	----------	469,450
Total nonedible fishery products.....	----------	17,576,807	----------	20,779,366
Grand total.....	----------	50,094,786	----------	55,633,612

COD FISHERY ON THE EAST COAST OF NORTH AMERICA

The fishery for cod on the east coast of North America is probably our most international fishery, five nations participating in it. Named in order of the size of their catches, these are Newfoundland, France, Canada, the United States, and Portugal. During the last 30 years the total annual catch of cod by these nations averaged over 1,000,000,000 pounds. There have been fluctuations over this period, but on the whole the catch appears to have neither increased nor decreased.

The full report on this fishery, which was compiled by the bureau's representative on the North American Committee on Atlantic Fishery Investigations, is published as Bureau of Fisheries Document No. 1034. This may be purchased from the superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents.

MACKEREL FISHERY ON THE EAST COAST OF THE UNITED STATES

The 1927 mackerel fishery was marked by unusually heavy runs in the south, a slack summer in the Gulf of Maine, and very little activity on Cape Shore. There were 211 vessels in the fishery at one time or another during the year though very few fished regularly throughout the season. The total catch [4] amounted to 41,634,000 pounds. Of this amount 39,821,000 pounds were caught by seiners, and 1,813,000 pounds by drift netters. The season opened in the south on April 18, when first catches were made by both netters and seiners. Then followed a very heavy run from south of the Delaware Capes, which glutted the New York market and caused mackerel to move at very low prices. So great was the glut that at certain times

[4] Figures on the miscellaneous shore fisheries are not included herein.

catches were limited to about 30,000 pounds by agreement among vessel captains. Though the effect of such limitations can not be estimated accurately, there was a definite restriction of the fishery during at least a 10-day period early in May. In June another heavy run took place in the offing of Block Island and east to Nantucket Shoals. This continued until July 5. Altogether during the period between April 18 and July 5, 20,623,000 pounds of mackerel were caught in the region south and west of Nantucket Shoals. Of this amount, 19,459,000 pounds were caught by seiners and 1,164,000 pounds by netters.

Mackerel appeared in the Gulf of Maine as early as June 1, when a number of small catches were made by netters sailing from Portland, Me.; but the season did not begin in earnest until July 3, when seine catches of some size were made off Chatham. The season for seiners lasted until November 2, but never at any time was marked by very good runs of fish. The netters continued to make small catches until December 22, when the season finally closed. Altogether, the seiners caught 20,228,000 pounds and the netters 649,000 pounds, a total of 20,877,000 pounds for the Gulf of Maine. As remarked above, there was little mackerel fishing on the Cape Shore. Only three vessels made trips to these waters, but their catches were good, on the average, totaling 134,000 pounds.

Mackerel fishery, 1927

Items	Vessels	Net tonnage	Crew	Catch [1]
South and west of Cape Cod:				
Seiners	81	2,820	886	19,459
Netters	38	475	166	1,164
Total				20,623
Gulf of Maine:				
Seiners	105	3,439	1,089	20,228
Netters	72	1,060	308	649
Total				20,877
Cape Shore: Seiners	3	167	40	134
Grand total (exclusive of duplication)	211	4,972	1,291	41,634

[1] In thousands of pounds.

FISHERIES OF THE NEW ENGLAND STATES

The latest statistical canvass made by this division of the fisheries and fishery industries of New England (Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut) was for the calendar year 1924, and complete statistics were published in the report of the division of fishery industries for 1925 and in condensed form in Statistical Bulletin No. 703. During 1924 the fisheries and fishery industries of New England gave employment to 24,513 persons, of whom 15,983 were employed in fishing operations, 1,922 in the wholesale fishery trade, and 6,608 in the canning, salting, smoking, and by-products industries. The yield of the fisheries aggregated 406,822,165 pounds, valued at $18,818,132, while the output of the canning, salting, smoking, and by-products industries was valued at $14,253,831.

In addition to those above mentioned, statistics on the fisheries of Connecticut are available for the years 1925 and 1926. These were collected by a representative of the State of Connecticut and were published in detail in the report of the division of fishery industries for 1926.

Annual statistics are collected on the vessel fisheries that center at Boston and Gloucester, Mass., and Portland, Me. A discussion of those for the year 1927 follows.

VESSEL FISHERIES AT PRINCIPAL NEW ENGLAND PORTS

Landings of fishery products by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me. (the principal New England ports), during 1927 amounted to 263,849,573 pounds, valued at $9,404,511, and exceeded the amount landed for any year for which statistics are available, while the value of the products was greater than for any year except 1918.

Continuing the steady increase since 1920, the landings at Boston in 1927 amounted to 194,940,789 pounds, or 74 per cent of the total, and were valued at $7,371,542. This is an increase over 1926 of 17 per cent in amount and 5 per cent in value. Landings at Gloucester amounted to 52,522,540 pounds, or 20 per cent of the total, and were valued at $1,493,935. Gloucester landings decreased 4 per cent in amount and increased slightly in value, compared to a year ago. Landings at Gloucester have become rather less during late years, due chiefly to fewer landings of salt fish. Landings at Portland amounted to 16,356,244 pounds, valued at $539,034, which was 6 per cent of the total landings for 1927 and is a slight increase in amount but a decrease in value compared with a year ago.

Species landed.—Among the fresh fish, haddock was by far the most important. The landings of this species amounted to 128,542,583 pounds, or 50 per cent of the total fresh fish, which is an increase over 1926 of 37 per cent. The larger landings of haddock are due in a large measure to the use of this species for filleting purposes. Of the total haddock landed, 74 per cent were taken from the South Channel and the remainder chiefly from Browns Bank, Georges Bank, and the shore grounds.

Cod, of next importance, formerly was the most important species landed, when they were used mainly in the salt-fish trade. The landings of fresh cod in 1927 amounted to 61,367,445 pounds, or 24 per cent of the total amount of fresh fish landed, and represent a decrease of 17 per cent from those for 1926. Cod were taken mainly on Georges Bank, South Channel, Browns Bank, Western Bank, and the shore grounds.

The landings of fresh mackerel at Boston, Gloucester, and Portland amounted to 31,354,236 pounds, or 12 per cent of the total fresh fish, a decrease of 11 per cent from 1926.

Flounders ranked fourth in importance among the fresh fish with landings of 8,359,131 pounds, an increase of 23 per cent over a year ago. Inclusion of flounders landed by vessels of under 5 net tons would increase this amount considerably. Formerly, flounders ranked as one of the unimportant species of fish landed at New England ports, and prior to 1913 statistics on the landings of this fish were not separated from the miscellaneous fish. In 1913, the land-

ings amounted to 400,000 pounds, and since that year they have increased each year over the landings for the previous year, with but two exceptions. Flounders are taken largely by small vessels that operate a gear known as a flounder drag. This is merely a small otter trawl adapted to fit a vessel of small tonnage. Flounders are taken mainly on South Channel and shore grounds. They are becoming of increasing importance in the package-fish trade.

Pollock, with landings of 7,651,711 pounds, ranked fifth in importance and increased 14 per cent over a year ago. Quantities of these fish are filleted.

The landings of all other varieties of fresh fish at these ports were greater than a year ago, except those of swordfish and cusk, which were slightly smaller.

Among the salt fish, herring ranked first in importance with landings of 4,410,436 pounds, or about 14 times as much as for 1926. The landings of salt groundfish (cod, haddock, hake, cusk, pollock, and halibut) amounted to 2,105,048 pounds, or 56 per cent less than those for the previous year. Landings of salt mackerel amounted to 175,655 pounds, a decrease from a year ago of 84 per cent.

Fishing grounds.—Fishery products landed at Boston, Gloucester, and Portland by American fishing vessels are taken from the fishing grounds off the United States, Newfoundland, and the Canadian Maritime Provinces. The fishing banks off the United States include all those west of 66° west longitude. Those off Newfoundland on which fishing was prosecuted during 1927 include Green Bank, Grand Bank, St. Peters Bank, Straits of Belle Isle, and off Newfoundland. Those off the Canadian Maritime Provinces include all the fishing banks east of 66° west longitude not already listed in the group off Newfoundland.

During 1927, vessels that land at the principal New England ports obtained 240,083,000 pounds from fishing grounds off the United States, or 91 per cent of the total landings. This is an increase of 21 per cent over the amount obtained from these grounds in 1926 and shows a tendency on the part of fishermen to obtain fish nearer to port.

The more important banks in this group were South Channel, where 121,688,000 pounds were obtained; Georges Bank, where 38,154,000 pounds were obtained; shore grounds, where 32,022,000 pounds were obtained; and Browns Bank, where 12,091,000 pounds were taken. South Channel abounds with haddock, and, since it has a comparatively smooth bottom, it has become a desirable ground upon which to prosecute on otter-trawl fishery.

Landings from banks off the Canadian Maritime Provinces amounted to 17,378,000 pounds, or 7 per cent of the total landings. This represents a decrease under a year ago of 55 per cent. Virtually the entire amount was obtained from La Have Bank and Western Bank. All the fish caught by American fishing vessels off the coasts of the Canadian Maritime Provinces were from offshore fishing grounds.

Landings obtained from banks off Newfoundland accounted for only 2 per cent of the total and amounted to 6,388,000 pounds. This is an increase of 291 per cent over a year ago. Virtually the entire amount from these grounds consisted of salt herring, which was used chiefly for bait and was taken from the treaty coast of Newfoundland. The other species were obtained from fishing banks on the high seas.

Fishing fleet, trips, and days' absence.—During 1927, the fishing fleet at the three ports numbered 359 sail, steam, and gasoline vessels,

including 26 steam otter-trawl vessels. This is an increase of 9 vessels over the previous year.

As indicative of the increasing popularity of fresh fish in preference to salted fish, there were but 4 vessels engaged in the salt-bank fishery in 1927, or 2 less than a year ago. In contrast with this, there were 166 vessels in the market fishery and 181 in the shore fishery, which is considerably more than a year ago. The mackerel fishery was prosecuted by 124 vessels, the swordfish fishery by 79 vessels, and the herring fishery by 10 vessels.

All vessels fishing made a total of 10,162 trips to the grounds, or 17 per cent more than in 1926. In making these trips, including the date of departure and date of arrival, these vessels were absent from port 47,258 days, or on the average about 4½ days per trip. The average length of trips made in March, 1927 (which was about 3½ days) was less than for any other month in the year. The longest trips were made during July and August, when the average trip consumed about 6 days. Generally, the number of days' absence per trip was 5 in the summer months and 4 in the winter months. This undoubtedly is due to the influence of mackerel and swordfish vessels, which generally make longer trips than vessels engaged in other fisheries.

Fishery by months.—Total landings of fish at these ports during the month of August, which amounted to 28,950,309 pounds, exceeded those for any other month during the year, although March, with 28,092,327 pounds, ranked a close second. Landings made during the other months ranged between about 16,000,000 and 24,000,000 pounds, those made during the summer months being generally greater.

Otter-trawl fishery.—In 1927, 26 otter-trawl vessels in 794 trips landed 77,577,439 pounds of fishery products at Boston, Gloucester, and Portland, valued at $2,208,602. This is a decrease of 4 in the number of vessels under 1926 and an increase of 19 per cent in the number of trips, 27 per cent in amount of products, and 10 per cent in value.

In making the trips (including the date of departure and date of arrival), these vessels were absent from port 5,954 days, making the average trip of about 7½ days' duration. This is 12 per cent longer than in 1926, when the trips averaged about 8 days. Of the total catch by otter trawls, 89 per cent consisted of haddock, 5 per cent of cod, and the remainder of hake, pollock, cusk, halibut, and various miscellaneous species. Almost the entire catch was taken from South Channel, but lesser quantities came from Nantucket Shoals and Georges Bank, which are near by, and an almost negligible quantity from Western Bank and off Chatham.

In 1927, March was the best individual month for fishing by these otter trawlers, and 11,503,841 pounds, or 15 per cent of their total catch, was taken in that month. Landings during the other months ranged between 4,000,000 and 8,000,000 pounds, those during the winter months being generally greater.

The following table gives the statistics obtained on the vessel fisheries centering at Boston, Gloucester, and Portland for 1927, for vessels of 5 net tons and upward, as measured by the United States Customs Service. The weights of fresh and salted fish given in these statistics represent the fish as landed from the vessels, and the values are those received by the fishermen. The grades, or sizes, given for certain species are those recognized in the trade.

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927

BY BANKS

Fishing grounds	Number of trips	Cod							
		Large (10 pounds and over)				Market (under 10 and over 2½ pounds)			
		Fresh		Salted		Fresh		Salted	
		Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
LANDED AT BOSTON									
East of 66° W. longitude:									
La Have Bank	81	1,630,665	$80,045			386,915	$12,313		
Western Bank	42	777,765	26,074			32,600	629		
Quereau Bank	33	32,325	1,127			700	18		
Green Bank	3	12,000	480			1,000	23		
Grand Bank	19	7,700	539						
St. Peters Bank	13	4,000	120						
Off Newfoundland	2								
Cape Shore	34	164,195	10,009			142,575	4,158		
St. Anns Bank	1								
The Gully	1								
Labrador Coast	1								
Roseway Bank	1								
West of 66° W. longitude:									
Browns Bank	183	3,697,315	143,467			1,205,258	31,199		
Georges Bank	786	15,661,564	550,866			2,872,237	68,911		
Cashes Bank	8	55,705	4,433			19,720	716		
Tillies Bank	10	270	27			130	8		
Middle Bank	69	49,770	2,955			35,265	1,519		
Jeffreys Ledge	99	68,451	4,171			63,105	2,184		
South Channel	1,918	6,889,802	335,293			4,948,699	125,212		
Nantucket Shoals	189	315,925	15,691			541,915	13,388		
Off Highland Light	55	1,325	83			1,245	40		
Off Chatham	229	53,438	2,270			46,527	1,476		
Seal Island	2	26,440	2,012			25,825	824		
South	300								
Shore, general	605	229,583	10,042			166,404	4,695		
Total	4,684	29,678,238	1,189,704			10,490,120	267,313		
LANDED AT GLOUCESTER									
East of 66° W. longitude:									
La Have Bank	36	1,576,340	31,365	4,490	$168	506,515	8,719	13,045	$359
Western Bank	49	4,088,470	76,795	452,550	17,639	617,727	8,940	61,375	1,680
Quereau Bank	24	105,185	2,318	189,712	7,575	16,195	259	21,249	600
Green Bank	2	4,200	105	8,655	365	1,040	23	145	6
Grand Bank	18	19,200	432	150,475	6,049	600	11	8,215	257
St. Peters Bank	7	27,915	547	25,610	1,012	3,395	57	2,520	76
Off Newfoundland	14			3,685	129			1,510	42
Strait of Belle Isle	1			3,960	149			3,540	97
Roseway Bank	1			2,700	108			1,760	53
West of 66° W. longitude:									
Browns Bank	37	1,008,785	19,427	73,100	2,917	287,190	4,433	12,344	382
Georges Bank	164	4,449,535	90,612	743,653	29,794	292,530	5,182	90,800	2,750
Middle Bank	5								
South Channel	102	75,270	1,559			218,880	4,529		
Nantucket Shoals	24								
South	6								
Shore, general	3,282	5,046,320	246,043			14,270	796		
Total	3,772	16,401,220	469,203	1,658,590	65,905	1,958,342	32,949	216,503	6,302
LANDED AT PORTLAND									
East of 66° W. longitude:									
La Have Bank	2			25,430	846				
Western Bank	4								
Quereau Bank	6	410	8	17,180	783			1,750	63
Green Bank	1			6,595	297			815	29
Grand Bank	3	270	3	18,925	860	160	8	3,650	129
St. Peters Bank	2	925	53	4,060	162			250	10
Off Newfoundland	1								
Cape Shore	14								
Gulf of St. Lawrence	2								
The Gully	1	3,981	129						
Labrador Coast	1			345	14			50	2
West of 66° W. longitude:									
Browns Bank	6	28,215	540	10,920	492			636	27
Georges Bank	13	135,255	3,726	425	10				
Cashes Bank	55	142,205	3,952	14,700	661	40,999	1,273	670	24
Fippenies Bank	24	21,265	1,241			12,520	454		
Platts Bank	123	113,410	6,376			53,575	1,927		
Jeffreys Ledge	553	716,900	33,549	552	22	124,546	3,995	195	5
South Channel	16	31,670	609			54	2		
Nantucket Shoals	3					60	1		
Shore, general	876	1,043,234	45,785	120	6	130,275	3,981	890	39
Total	1,706	2,237,740	95,971	99,252	4,153	362,189	11,641	8,906	328
Grand total	10,162	48,317,198	1,754,878	1,757,842	70,058	12,810,651	311,903	225,409	6,630

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY BANKS—Continued

Fishing grounds	Cod—Continued				Haddock			
	Scrod (1 to 2½ pounds)				Large (over 2½ pounds)			
	Fresh		Salted		Fresh		Salted	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
LANDED AT BOSTON								
East of 66° W. longitude:								
La Have Bank	3,500	$43			1,396,425	$48,705		
Western Bank					114,950	2,191		
Quereau Bank					33,250	665		
Cape Shore	2,000	20			115,285	4,572		
West of 66° W. longitude:								
Browns Bank	9,900	159			3,382,070	110,771		
Georges Bank	23,915	245			7,321,675	206,809		
Cashes Bank	680	7			85,125	3,904		
Tillies Bank	100	3			6,000	480		
Middle Bank	5,875	109			554,900	27,308		
Jeffreys Ledge	8,990	182			885,185	43,779		
South Channel	68,120	869			73,656,619	2,144,954		
Nantucket Shoals	10,380	148			4,858,015	158,939		
Off Highland Light	200	4			41,140	1,793		
Off Chatham	4,905	79			1,614,100	56,302		
Seal Island					34,640	1,495		
Shore, general	2,750	45			2,019,195	65,669		
Total	141,315	1,913			96,118,574	2,878,336		
LANDED AT GLOUCESTER								
East of 66° W. longitude:								
La Have Bank	861	9	1,090	$22	776,226	8,193		
Western Bank	200	2	2,003	39	563,040	5,690	710	$14
Green Bank					200	2		
West of 66° W. longitude:								
Browns Bank	480	4			572,865	5,827		
Georges Bank	3,015	30	740	15	941,085	10,186		
South Channel	6,030	60			5,564,915	78,344		
Nantucket Shoals					534,240	11,047		
Shore, general					1,580,620	61,792	48,870	611
Total	10,586	105	3,833	76	10,533,191	181,081	49,580	625
LANDED AT PORTLAND								
East of 66° W. longitude:								
Western Bank					704,700	10,981		
Quereau Bank							100	2
Grand Bank							100	2
The Gully							320	6
West of 66° W. longitude:								
Browns Bank					199,500	3,532		
Georges Bank			200	4	13,465	277		
Cashes Bank	9,525	124			164,308	7,358		
Fippenies Bank	3,770	56			123,319	7,004		
Platts Bank	20,530	244			573,658	30,499		
Jeffreys Ledge	24,277	232			1,295,692	51,100		
South Channel					2,927,025	44,909		
Nantucket Shoals					212,240	3,184		
Shore, general	29,593	280			1,059,804	34,185		
Total	87,695	936	200	4	7,273,711	193,029	520	10
Grand total	239,596	2,954	4,033	80	113,925,476	3,252,446	50,100	635

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY BANKS—Continued

Fishing grounds	Haddock—Continued		Hake			
	Scrod (1 to 2½ pounds)		Large (6 pounds and over)			
	Fresh		Fresh		Salted	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
LANDED AT BOSTON						
East of 66° W. longitude:						
La Have Bank	12,820	$171	55,750	$1,114		
Western Bank			10,175	330		
Quereau Bank	1,000	8	4,445	89		
Cape Shore	7,600	107	6,370	235		
West of 66° W. longitude:						
Browns Bank	13,600	328	31,950	992		
Georges Bank	519,645	12,308	83,840	2,218		
Cashes Bank	8,800	88	15,040	760		
Tillies Bank	220	11	2,800	168		
Middle Bank	12,390	348	99,155	3,580		
Jeffreys Ledge	20,580	609	189,410	6,951		
South Channel	12,106,834	234,934	3,919,751	106,406		
Nantucket Shoals	641,785	12,292	71,205	1,832		
Off Highland Light	6,650	198	880	44		
Off Chatham	205,080	4,959	39,940	1,601		
Seal Island	800	16	1,200	12		
Shore, general	183,975	4,356	193,005	4,254		
Total	13,741,779	270,733	4,724,916	130,586		
LANDED AT GLOUCESTER						
East of 66° W. longitude:						
La Have Bank			43,975	477		
Western Bank			22,930	250	4,955	$99
Quereau Bank			7,775	78	5,585	112
Green Bank			5,435	54		
Grand Bank			3,520	39	2,230	45
St. Peters Bank			2,515	28		
West of 66° W. longitude:						
Browns Bank			16,300	178	1,200	24
Georges Bank	5,510	55	3,195	33	535	11
South Channel	723,230	6,190	25,980	263		
Nantucket Shoals			1,340	13		
Shore, general	1,260	38	80,050	1,564		
Total	730,000	6,283	213,015	2,977	14,505	291
LANDED AT PORTLAND						
East of 66° W. longitude:						
Green Bank					280	7
The Gully			2,300	92		
West of 66° W. longitude:						
Cashes Bank	10,085	129	1,670	31		
Fippenies Bank	6,360	82				
Platts Bank	27,363	352	3,350	115		
Jeffreys Ledge	59,493	710	5,585	128		
Shore, general	42,027	343	2,560	81		
Total	145,328	1,616	15,465	447	280	7
Grand total	14,617,107	278,632	4,953,396	134,010	14,785	298

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY BANKS—Continued

Fishing grounds	Hake—Continued				Pollock			
	Small (under 6 pounds)							
	Fresh		Salted		Fresh		Salted	
LANDED AT BOSTON								
East of 66° W. longitude:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
La Have Bank					58,915	$1,502		
Western Bank					6,380	148		
Cape Shore					9,745	206		
West of 66° W. longitude:								
Browns Bank					153,580	3,213		
Georges Bank					925,100	21,088		
Cashes Bank					2,860	111		
Tillies Bank					135	5		
Middle Bank					19,930	597		
Jeffreys Ledge	7,100	$77			51,935	1,057		
South Channel	47,425	622			1,877,547	56,079		
Nantucket Shoals					50,885	1,002		
Off Highland Light					110	3		
Off Chatham					12,565	346		
Seal Island					875	14		
Shore, general					30,963	741		
Total	54,525	699			3,201,525	86,112		
LANDED AT GLOUCESTER								
East of 66° W. longitude:								
La Have Bank					26,330	265	260	$5
Western Bank					45,770	459	2,055	41
Quereau Bank					195	3	1,445	28
Grand Bank			250	$5			275	6
St. Peters Bank							40	1
Roseway Bank			510	10				
West of 66° W. longitude:								
Browns Bank					18,475	186	1,150	23
Georges Bank					53,565	545	4,345	87
South Channel					9,830	99		
Shore, general					3,481,835	70,510		
Total			760	15	3,636,000	72,067	9,570	191
LANDED AT PORTLAND								
East of 66° W. longitude:								
La Have Bank	4,330	43					130	3
Western Bank	5,325	107						
Quereau Bank	85	2	1,170	23				
Grand Bank			200	3				
St. Peters Bank	770	17					880	35
The Gully					360	14		
West of 66° W. longitude:								
Browns Bank	930	9			2,130	21		
Georges Bank					1,000	26		
Cashes Bank	94,153	3,697			16,305	280	70	1
Fippenies Bank	16,154	564			11,200	203		
Platts Bank	207,590	6,181			87,480	1,382		
Jeffreys Ledge	348,342	7,461			407,791	7,138		
South Channel	520	5			1,255	15		
Nantucket Shoals	210	5						
Shore, general	159,071	3,395	310	11	286,665	4,361		
Total	837,480	21,486	1,680	37	814,186	13,440	1,080	39
Grand total	892,005	22,185	2,440	52	7,651,711	171,619	10,650	230

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY BANKS—Continued

Fishing grounds	Cusk				Halibut			
	Fresh		Salted		Fresh		Salted	
LANDED AT BOSTON								
East of 66° W. longitude:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
La Have Bank	166,070	$4,390			195,449	$36,317		
Western Bank	6,980	151			129,362	21,240		
Quereau Bank	6,500	228			800,667	129,926		
Green Bank	4,300	97			98,738	17,998		
Grand Bank	800	20			675,200	116,421		
St. Peters Bank	1,400	28			609,196	105,351		
Off Newfoundland					105,024	11,176		
Cape Shore	10,545	149			1,142	338		
St. Anns Bank					32,958	4,817		
The Gully					42,767	7,665		
Labrador Coast					81,303	8,295		
Roseway Bank					29,388	3,333		
West of 66° W. longitude:								
Browns Bank	567,635	11,786			155,155	32,958		
Georges Bank	168,395	3,686			1,066,760	204,361		
Cashes Bank	66,715	2,674			204	77		
Tillies Bank	250	10						
Middle Bank	34,220	1,234			1,204	442		
Jeffreys Ledge	106,635	3,350			687	221		
South Channel	459,515	14,621			267,095	58,336		
Nantucket Shoals	1,150	40			14,634	2,022		
Off Highland Light	750	23			35	18		
Off Chatham	10,400	316			1,329	256		
Seal Island	7,400	204			130	39		
Shore, general	60,464	1,898			11,609	2,472		
Total	1,680,124	44,905			4,320,036	764,079		
LANDED AT GLOUCESTER								
East of 66° W. longitude:								
La Have Bank	66,605	833						
Western Bank	18,875	237	140	$3			105	$8
Quereau Bank	32,685	457	7,522	157	31,955	2,556	150	21
Grand Bank	570	9	2,110	56	5,130	381	5,542	526
St. Peters Bank	280	4						
West of 66° W. longitude:								
Browns Bank	86,810	1,045	13,265	332				
Georges Bank	118,675	1,590	8,695	183				
Total	324,500	4,175	31,732	731	37,085	2,937	5,797	555
LANDED AT PORTLAND								
East of 66° W. longitude:								
La Have Bank	10,000	125	400	8	20,566	2,651		
Western Bank	730	11			13,431	1,776		
Quereau Bank	11,325	170	1,860	47	77,066	16,569		
Green Bank					29,702	5,573		
Grand Bank					47,882	8,164		
St. Peters Bank	2,100	26			34,143	6,312		
Off Newfoundland					12,629	1,879		
Gulf of St. Lawrence					63,261	8,810		
The Gully					19,198	4,899		
Labrador Coast					19,569	2,294		
West of 66° W. longitude:								
Browns Bank	16,960	299			49,082	7,784		
Cashes Bank	265,199	8,057			15,556	2,865		
Fippenies Bank	14,870	687			2,461	527		
Platts Bank	86,542	3,249			2,057	491		
Jeffreys Ledge	124,930	3,841			3,960	684		
South Channel					1,904	257		
Nantucket Shoals					255	70		
Shore, general	155,945	5,043			3,643	769		
Total	688,601	21,508	2,260	55	416,365	72,374		
Grand total	2,693,225	70,588	33,992	786	4,773,486	839,390	5,797	555

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY BANKS—Continued

Fishing grounds	Mackerel				Miscellaneous			
	Fresh		Salted		Fresh		Salted	
LANDED AT BOSTON								
East of 66° W. longitude:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
La Have Bank					72,909	$8,272		
Western Bank					5,048	290		
Quereau Bank					12,307	781		
Grand Bank					713	169		
St. Peters Bank					178	45		
Cape Shore	92,550	$2,050			180,485	43,465		
West of 66° W. longitude:								
Browns Bank					457,228	77,245		
Georges Bank	777,010	82,644	4,000	$200	1,580,478	324,028		
Cashes Bank					1,755	56		
Tillies Bank	138,975	12,185			115	19		
Middle Bank	785,228	29,741	3,400	151	14,965	988		
Jeffreys Ledge	81,685	3,278			31,623	1,890		
South Channel	4,045,390	175,176	32,000	1,580	3,776,643	216,173		
Nantucket Shoals	57,850	1,831			1,042,468	69,255		
Off Highland Light	757,707	76,984			2,755	287		
Off Chatham	3,701,534	160,072	12,400	581	202,768	11,245		
South	9,743,906	295,968	12,000	590	23,010	880		
Shore, general	198,445	20,154			2,940,109	118,889		
Total	20,380,280	860,083	63,800	3,102	10,345,557	873,977		
LANDED AT GLOUCESTER								
East of 66° W. longitude:								
Off Newfoundland							4,410,436	$163,825
West of 66° W. longitude:								
Georges Bank	105,210	12,021			34,420	9,534		
Middle Bank	212,960	5,287			6,000	60		
South Channel	1,070	21						
Nantucket Shoals	92,740	3,366			12,240	2,570		
South	183,970	4,109						
Shore, general	9,863,055	387,009	95,390	5,157	1,700,240	54,508		
Total	10,459,005	411,813	95,390	5,157	1,752,900	66,672	4,410,436	163,825
LANDED AT PORTLAND								
East of 66° W. longitude:								
Cape Shore	104,850	2,331			74,092	14,859		
Labrador Coast					19	3		
West of 66° W. longitude:								
Browns Bank					16,193	2,670		
Georges Bank	46,000	1,150	2,200	99	94,114	20,517		
Cashes Bank					9,836	291		
Fippenies Bank					2,725	122		
Platts Bank					76,788	1,396		
Jeffreys Ledge	162,107	5,208			1,592,265	23,872		
South Channel					5,620	241		
Nantucket Shoals	17,880	358						
Shore, general	184,114	5,887	14,265	359	960,238	22,590		
Total	514,951	14,934	16,465	458	2,831,890	86,561		
Grand total	31,354,236	1,286,830	175,655	8,717	14,930,347	1,027,210	4,410,436	163,825

Fishing grounds	Total				Grand total	
	Fresh		Salted			
LANDED AT BOSTON						
East of 66° W. longitude:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
La Have Bank	3,979,418	$192,872			3,979,418	$192,872
Western Bank	1,083,260	51,053			1,083,260	51,053
Quereau Bank	891,194	132,842			891,194	132,842
Green Bank	116,038	18,598			116,038	18,598
Grand Bank	684,413	117,149			684,413	117,149
St. Peters Bank	614,774	105,544			614,774	105,544
Off Newfoundland	105,024	11,176			105,024	11,176
Cape Shore	732,492	65,309			732,492	65,309
St. Anns Bank	32,958	4,817			32,958	4,817

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY BANKS—Continued

Fishing grounds	Total				Grand total	
	Fresh		Salted			
LANDED AT BOSTON—continued						
East of 60° W. longitude—Continued.	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
The Gully	42,767	$7,665			42,767	$7,665
Labrador coast	81,303	8,295			81,303	8,295
Roseway Bank	29,388	3,333			29,388	3,333
West of 66° W. longitude:						
Browns Bank	9,673,691	412,118			9,673,691	412,118
Georges Bank	31,000,619	1,477,164	4,000	$200	31,004,619	1,477,364
Cashes Bank	256,604	12,826			256,604	12,826
Tillies Bank	148,995	12,916			148,995	12,916
Middle Bank	1,612,902	68,821	3,400	151	1,616,302	68,972
Jeffreys Ledge	1,515,386	67,749			1,515,386	67,749
South Channel	112,063,440	3,468,675	32,000	1,580	112,095,440	3,470,255
Nantucket Shoals	7,606,212	276,440			7,606,212	276,440
Off Highland Light	812,797	79,477			812,797	79,477
Off Chatham	5,892,586	238,922	12,400	581	5,904,986	239,503
Seal Island	97,310	4,616			97,310	4,616
South	9,766,916	296,848	12,000	590	9,778,916	297,438
Shore, general	6,036,502	233,215			6,036,502	233,215
Total	194,876,989	7,368,440	63,800	3,102	194,940,789	7,371,542
LANDED AT GLOUCESTER						
East of 66° W. longitude:						
La Have Bank	2,996,852	49,861	18,885	554	3,015,737	50,415
Western Bank	5,357,012	92,373	523,893	19,523	5,880,905	111,896
Quereau Bank	193,990	5,671	225,663	8,493	419,653	14,164
Green Bank	10,875	184	8,800	371	19,675	555
Grand Bank	29,020	872	169,097	6,944	198,117	7,816
St. Peters Bank	34,105	636	28,170	1,089	62,275	1,725
Off Newfoundland			4,415,631	163,996	4,415,631	163,996
Strait of Belle Isle			7,500	246	7,500	246
Roseway Bank			4,970	171	4,970	171
West of 66° W. longitude:						
Browns Bank	1,990,905	31,100	101,059	3,678	2,091,964	34,778
Georges Bank	6,006,740	129,788	848,768	32,840	6,855,508	162,628
Middle Bank	218,960	5,347			218,960	5,347
South Channel	6,625,205	91,065			6,625,205	91,065
Nantucket Shoals	640,560	16,996			640,560	16,996
South	183,970	4,109			183,970	4,109
Shore, general	21,767,650	822,260	144,260	5,768	21,911,910	828,028
Total	46,055,844	1,250,262	6,496,696	243,673	52,552,540	1,493,935
LANDED AT PORTLAND						
East of 66° W. longitude:						
La Have Bank	34,896	2,819	25,960	857	60,856	3,676
Western Bank	724,186	12,875			724,186	12,875
Quereau Bank	88,886	16,749	22,060	918	110,946	17,667
Green Bank	29,702	5,573	7,690	333	37,392	5,906
Grand Bank	48,312	8,175	22,875	994	71,187	9,169
St. Peters Bank	37,938	6,408	5,190	207	43,128	6,615
Off Newfoundland	12,629	1,879			12,629	1,879
Cape Shore	178,942	17,190			178,942	17,190
Gulf of St. Lawrence	63,261	8,810			63,261	8,810
The Gully	25,839	5,134	320	6	26,159	5,140
Labrador coast	19,588	2,297	395	16	19,983	2,313
West of 66° W. longitude:						
Browns Bank	313,010	14,855	11,556	519	324,566	15,374
Georges Bank	289,834	25,696	2,825	113	292,659	25,809
Cashes Bank	769,841	28,057	15,440	686	785,281	28,743
Fippenies Bank	214,644	10,940			214,644	10,940
Platts Bank	1,252,343	52,212			1,252,343	52,212
Jeffreys Ledge	4,865,888	137,918	747	27	4,866,635	137,945
South Channel	2,968,048	46,038			2,968,048	46,038
Nantucket Shoals	230,645	3,618			230,645	3,618
Shore, general	4,057,169	126,700	15,585	415	4,072,754	127,115
Total	16,225,601	533,943	130,643	5,091	16,356,244	539,034
Grand total	257,158,434	9,152,645	6,691,139	251,866	263,849,573	9,404,511

NOTE.—The items under "Miscellaneous" include bluebacks, 297,395 pounds, value $4,085; butterfish 28,359 pounds, value $4,460; eels, 298 pounds, value $32; flounders, 8,359,131 pounds, value $419,744; herring, fresh, 2,735,000 pounds, value $36,911; herring, salted, 4,410,436 pounds, value $163,825; rosefish, 66,266 pounds value $1,261; salmon, 19 pounds, value $3; shad, 76,542 pounds, value $2,734; sharks, 61,111 pounds, value $1,253; skates, 31,710 pounds, value $544; sturgeon, 834 pounds, value $179; swordfish, 2,245,493 pounds, value $513,582; whiting, 15,715 pounds, value $529; wolffish, 481,265 pounds, value $16,385; squid, 3,280 pounds, value $50; lobster, 151 pounds, value $49; scallops, 4,263 pounds, value $345; livers, 347,222 pounds, value $8,253; spawn, 128,921 pounds, value $12,092; tongues, 458 pounds, value $11; sounds, 460 pounds, value $10; and oil 46,454 pounds, value $4,698.

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY MONTHS—Continued

Months	Haddock—Continued				Hake			
	Scrod (1 to 2½ pounds)				Large (6 pounds and over)			
	Fresh		Salted		Fresh		Salted	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
LANDED AT BOSTON								
January	1,323,755	$34,523			330,415	$13,503		
February	1,463,310	33,058			174,955	10,159		
March	1,412,515	42,409			242,030	10,584		
April	1,256,565	33,532			45,400	2,013		
May	924,485	10,416			48,460	1,657		
June	1,087,670	8,180			123,670	2,943		
July	711,225	6,105			147,680	2,708		
August	956,394	11,015			377,631	5,798		
September	1,169,025	11,667			472,150	7,765		
October	1,934,225	31,395			1,035,320	21,849		
November	1,005,195	24,364			1,134,218	20,862		
December	497,415	24,069			592,987	30,745		
Total	13,741,779	270,733			4,724,916	130,586		
LANDED AT GLOUCESTER								
February	37,260	373						
March	112,745	853			970	10		
April	124,910	965			3,465	36	400	$8
May	78,580	589			2,780	28		
June	122,490	904			3,650	36	1,000	20
July	60,565	454			35,575	372	5,455	109
August	43,175	324			32,430	342	6,025	121
September	78,385	593			67,110	908	140	3
October	7,630	63			46,620	766	445	9
November	54,240	674			20,415	479	1,040	21
December	10,020	491						
Total	730,000	6,283			213,015	2,977	14,505	291
LANDED AT PORTLAND								
January	15,625	305			35	2		
February	6,945	138			2,300	92		
March	22,877	346			935	65		
April	10,410	120			2,205	53		
May	2,820	22			1,980	73		
June	5,765	54			210	4		
July	5,993	36			360	6		
August	12,165	84						
September	11,180	72					280	7
October	17,383	141			4,800	86		
November	20,801	169			2,210	44		
December	13,364	129			430	22		
Total	145,328	1,616			15,465	447	280	7
Grand total	14,617,107	278,632			4,953,396	134,010	14,785	298
Grounds east of 66° west longitude	21,420	286			165,190	2,786	13,050	263
Grounds west of 66° west longitude	14,595,687	278,346			4,788,206	131,224	1,735	35
Landed at Boston in 1926	10,407,893	236,409			4,256,347	102,444	3,420	71
Landed at Gloucester in 1926	710,510	6,194			174,805	2,482	17,065	351
Landed at Portland in 1926	132,391	1,524	800	$16	14,895	442	1,500	45

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY MONTHS—Continued

Months	Hake—Continued				Pollock			
	Small (under 6 pounds)							
	Fresh		Salted		Fresh		Salted	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
LANDED AT BOSTON								
January	2,875	$86			453,775	$11,644		
February	600	24			143,880	6,412		
March					127,365	6,293		
April					132,965	5,219		
May					89,588	2,027		
June					149,360	3,580		
July					161,050	3,764		
August					418,962	8,085		
September					353,135	7,095		
October					436,285	7,895		
November	51,050	589			355,375	6,050		
December					379,785	18,048		
Total	54,525	699			3,201,525	86,112		
LANDED AT GLOUCESTER								
January					399,270	9,683		
February					13,420	134		
March					15,205	152	40	$1
April			760	$15	13,990	144	1,185	23
May					15,900	175	865	17
June					20,315	405	1,420	29
July					31,440	478	2,640	52
August					24,965	254	2,595	52
September					29,995	529	630	13
October					477,860	10,402	195	4
November					2,143,330	32,691		
December					450,310	17,020		
Total			760	15	3,636,000	72,067	9,570	191
LANDED AT PORTLAND								
January	39,815	1,659			36,511	773		
February	31,250	1,553			8,660	270		
March	42,851	1,643			33,218	1,148		
April	10,060	323			28,225	1,089	880	35
May	30,907	1,064			25,530	417	70	1
June	11,015	231	310	11	87,920	1,421		
July	18,869	330			111,903	1,243		
August	50,162	802			86,093	1,108	130	3
September	218,525	3,004			142,290	1,708		
October	178,604	4,280	1,370	26	118,266	1,605		
November	134,605	3,012			86,890	1,072		
December	70,817	3,585			48,680	1,586		
Total	837,480	21,486	1,680	37	814,186	13,440	1,080	39
Grand total	892,005	22,185	2,440	52	7,651,711	171,619	10,650	230
Grounds east of 66° west longitude	10,510	169	2,130	41	147,695	2,597	5,085	119
Grounds west of 66° west longitude	881,495	22,016	310	11	7,504,016	169,022	5,565	111
Landed at Boston in 1926	413,927	22,942			3,103,723	85,773		
Landed at Gloucester in 1926					2,835,415	53,810	23,635	483
Landed at Portland in 1926	622,190	17,456	470	9	766,037	13,356	10,704	263

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY MONTHS—Continued

Months	Cusk				Halibut			
	Fresh		Salted		Fresh		Salted	
LANDED AT BOSTON	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
January	103,670	$3,291			16,662	$6,486		
February	145,560	5,321			122,458	29,972		
March	211,975	6,475			554,713	101,729		
April	197,135	4,365			601,480	106,118		
May	106,295	1,520			624,586	101,369		
June	25,930	715			524,087	97,970		
July	116,315	1,852			491,328	76,677		
August	117,495	2,102			640,855	93,646		
September	73,645	1,323			226,018	50,727		
October	89,985	1,668			425,075	73,248		
November	237,435	6,070			65,797	15,640		
December	254,684	10,203			26,977	10,497		
Total	1,680,124	44,905			4,320,036	764,079		
LANDED AT GLOUCESTER								
January	75	1						
March	3,080	46						
April	60,965	707	1,165	$23	5,130	381		
May	49,805	598	1,370	22	31,955	2,556	150	$21
June	18,925	238	4,237	85			105	8
July	65,625	876	1,480	37				
August	51,335	706	20,855	497			325	39
September	34,410	452	2,100	52			5,217	487
October	30,010	413	525	15				
November	10,270	138						
Total	324,500	4,175	31,732	731	37,085	2,937	5,797	555
LANDED AT PORTLAND								
January	105,400	4,418			1,012	260		
February	81,293	3,667			19,464	4,963		
March	217,968	5,994			31,293	6,217		
April	78,827	1,912			39,074	7,065		
May	39,225	1,065			26,395	3,914		
June	9,050	221			19,462	3,336		
July	1,355	44			23,491	2,222		
August	15,109	225	400	8	107,880	13,997		
September	41,508	755	1,860	47	91,798	17,371		
October	35,277	857			18,286	4,637		
November	31,116	666			35,800	7,807		
December	32,473	1,684			2,410	585		
Total	688,601	21,508	2,260	55	416,365	72,374		
Grand total	2,693,225	70,588	33,992	786	4,773,486	839,390	5,797	555
Grounds east of 66° west long	339,765	6,935	12,032	271	3,175,726	524,741	5,797	555
Grounds west of 66° west long	2,353,460	63,653	21,960	515	1,597,760	314,649		
Landed at Boston in 1926	1,432,410	38,657			2,967,402	584,702		
Landed at Gloucester in 1926	432,110	5,584	34,255	906	9,860	2,958	4,730	580
Landed at Portland in 1926	829,002	24,431	170	5	448,965	82,910		

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY MONTHS—Continued

Months	Mackerel				Miscellaneous [1]			
	Fresh		Salted		Fresh		Salted	
LANDED AT BOSTON	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
January					764,258	$50,680		
February					573,485	33,988		
March					820,071	37,271		
April					851,521	32,366		
May	4,176,251	$110,701	8,000	$390	866,214	17,300		
June	5,535,720	177,944	4,000	200	683,190	69,471		
July	4,373,829	168,040	32,400	1,456	945,621	174,395		
August	4,251,690	187,017	19,400	1,056	1,332,353	207,938		
September	1,749,880	168,966			965,536	91,476		
October	259,875	41,128			745,390	46,912		
November	6,775	1,298			970,067	51,841		
December	26,260	4,989			827,851	60,339		
Total	20,380,280	860,083	63,800	3,102	10,345,557	873,977		
LANDED AT GLOUCESTER								
January					144,450	5,818	1,696,480	$61,420
February					235,180	12,186		
March					235,820	13,625	330,600	12,325
April					16,940	701		
May	366,040	7,697			163,680	2,481		
June	638,940	14,665			292,910	4,218		
July	2,509,520	62,590	16,400	984	54,470	10,132		
August	5,778,170	153,620	77,790	4,101	141,380	4,213		
September	481,140	51,364	1,200	72	292,290	3,392		
October	330,005	55,226			22,970	988		
November	75,910	12,545			47,220	1,812		
December	279,280	54,106			105,590	7,106	2,383,356	90,080
Total	10,459,005	411,813	95,390	5,157	1,752,900	66,672	4,410,436	163,825
LANDED AT PORTLAND								
January					52,111	2,560		
February					30,579	1,270		
March					46,402	1,392		
April					47,240	1,485		
May	43,730	1,325	350	11	123,709	1,496		
June	153,580	3,873			329,738	4,535		
July	45,495	1,362	13,915	348	509,847	20,517		
August	268,770	7,974	2,200	99	419,980	24,597		
September	2,981	332			868,761	18,232		
October					316,968	5,513		
November	395	68			38,292	1,989		
December					48,263	2,975		
Total	514,951	14,934	16,465	458	2,831,890	86,561		
Grand total	31,354,236	1,286,830	175,655	8,717	14,930,347	1,027,210	4,410,436	163,825
Grounds east of 66° west long.	197,400	4,381			345,751	67,884	4,410,436	163,825
Grounds west of 66° west long.	31,156,836	1,282,449	175,655	8,717	14,584,596	959,326		
Landed at Boston in 1926	23,252,725	962,604	236,000	10,501	8,687,521	750,683		
Landed at Gloucester in 1926	9,940,778	329,845	850,060	44,423	1,250,300	55,662	315,280	12,110
Landed at Portland in 1926	1,929,852	58,382	23,240	730	1,257,993	72,570		

[1] Includes herring from Newfoundland, 4,410,436 pounds salted, value $163,825.

Fishery products landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

BY MONTHS—Continued

Months	Total				Grand total	
	Fresh		Salted			
LANDED AT BOSTON	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
January	15,760,931	$581,195			15,760,931	$581,195
February	16,732,362	550,548			16,732,362	550,548
March	19,859,179	690,957			19,859,179	690,957
April	12,443,463	489,618			12,443,463	489,618
May	15,528,116	448,984	8,000	$390	15,536,116	449,374
June	17,732,302	580,727	4,000	200	17,737,302	580,927
July	15,176,211	628,497	32,400	1,456	15,208,611	629,953
August	19,197,510	815,383	19,400	1,056	19,216,910	816,439
September	18,189,319	637,253			18,189,319	637,253
October	18,835,373	673,279			18,835,373	673,279
November	14,114,617	531,703			14,114,617	531,703
December	11,306,606	740,296			11,306,606	740,296
Total	194,876,989	7,368,440	63,800	3,102	194,940,789	7,371,542
LANDED AT GLOUCESTER						
January	1,391,540	42,587	1,696,480	61,420	3,088,020	104,007
February	1,755,345	49,382	385	16	1,755,730	49,398
March	6,548,000	145,929	341,395	12,762	6,889,395	158,691
April	4,923,195	138,149	298,008	10,029	5,221,203	148,178
May	3,978,079	75,882	417,040	15,640	4,395,119	91,522
June	3,742,935	63,447	635,642	23,873	4,378,577	87,320
July	6,513,856	140,487	239,850	9,065	6,753,706	149,552
August	7,670,980	187,888	313,645	12,662	7,984,625	200,550
September	2,945,538	97,504	102,752	4,924	3,048,290	102,428
October	2,106,140	103,080	53,733	2,520	2,159,873	105,600
November	2,919,086	64,817	14,410	682	2,933,496	65,499
December	1,561,150	141,110	2,383,356	90,080	3,944,506	231,190
Total	46,055,844	1,250,262	6,496,696	243,673	52,552,540	1,493,935
LANDED AT PORTLAND						
January	621,969	30,807			621,969	30,807
February	484,143	25,459	745	16	484,888	25,475
March	1,341,123	44,367	2,630	83	1,343,753	44,450
April	1,661,918	44,516	8,890	373	1,670,808	44,889
May	2,553,151	48,520	18,965	806	2,572,116	49,326
June	1,856,378	43,858	1,320	56	1,857,698	43,914
July	1,092,078	41,052	29,907	1,013	1,121,985	42,065
August	1,724,483	73,709	24,291	808	1,748,774	74,517
September	1,866,309	58,449	25,405	1,083	1,891,714	59,532
October	1,307,303	39,219	15,985	729	1,323,288	39,948
November	993,397	39,227	2,505	124	995,902	39,351
December	723,349	44,760			723,349	44,760
Total	16,225,601	533,943	130,643	5,091	16,356,244	539,034
Grand total	257,158,434	9,152,645	6,691,139	251,866	263,849,573	9,404,511
Grounds east of 66° west longitude	18,279,062	956,159	5,487,099	204,718	23,766,161	1,160,877
Ground west of 66° west longitude	238,879,372	8,196,486	1,204,040	47,148	240,083,412	8,243,634
Landed at Boston in 1926	167,061,136	6,991,291	256,690	11,311	167,317,826	7,002,602
Landed at Gloucester in 1926	49,221,545	1,234,087	5,679,279	256,124	54,900,824	1,490,211
Landed at Portland in 1926	15,963,914	567,574	243,659	8,186	16,207,573	575,760

Fishery products landed by American otter trawlers at Boston and Gloucester, Mass., and Portland, Me., 1927

Items	Trips	Days absent	Cod		Haddock	
BY FISHING GROUNDS						
East of 66° W. longitude:			*Pounds*	*Value*	*Pounds*	*Value*
Western Bank	1	9			272,800	$3,410
West of 66° W. longitude:						
Georges Bank	17	139	178,987	$6,435	1,350,685	42,933
South Channel	736	5,504	3,709,688	144,123	63,593,777	1,651,498
Nantucket Shoals	39	296	88,230	3,275	3,908,690	119,757
Off Chatham	1	6	6,000	240	111,700	6,612
Total	794	5,954	3,982,905	154,073	69,237,652	1,824,210
BY MONTHS						
January	77	618	469,166	22,166	6,382,881	211,044
February	74	589	401,209	14,063	7,747,420	221,307
March	98	711	433,720	13,840	10,777,599	278,537
April	70	550	600,034	20,417	4,946,070	147,848
May	50	388	218,999	4,913	5,030,545	85,992
June	50	350	134,730	5,512	5,643,225	77,869
July	38	271	84,510	2,191	3,844,225	55,847
August	39	259	159,030	1,662	4,107,593	79,288
September	53	372	355,458	9,356	5,531,677	83,929
October	75	539	427,035	15,132	6,765,208	177,294
November	86	657	353,830	18,028	4,790,489	166,310
December	84	650	345,184	26,793	3,670,720	238,945
Total	794	5,954	3,982,905	154,073	69,237,652	1,824,210

Items	Hake		Pollock		Cusk	
BY FISHING GROUNDS						
East of 66° W. longitude:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Western Bank						
West of 66° W. longitude:						
Georges Bank	1,895	$49	15,840	$727		
South Channel	947,110	27,543	1,077,545	38,987	11,440	$440
Nantucket Shoals	45,225	1,045	14,100	443	175	6
Off Chatham	500	40	240	17		
Total	994,730	28,677	1,107,725	40,174	11,615	446
BY MONTHS						
January	115,465	4,604	340,675	9,252	5,080	207
February	37,455	2,180	73,210	4,199	2,620	109
March	29,185	1,261	69,985	4,091	165	5
April	33,845	1,510	52,450	2,592	325	10
May	31,840	1,178	13,725	381		
June	70,935	1,780	6,275	174	50	1
July	62,400	1,031	2,820	74		
August	78,445	981	2,130	49		
September	71,035	840	46,300	1,056		
October	128,530	2,255	86,375	1,824	70	1
November	189,450	3,089	138,975	2,672	1,085	22
December	146,145	7,968	274,805	13,810	2,220	91
Total	994,730	28,677	1,107,725	40,174	11,615	446

Fishery products landed by American otter trawlers at Boston and Gloucester, Mass., and Portland, Me., 1927—Continued

Items	Halibut		Miscellaneous		Total	
BY FISHING GROUNDS						
East of 66° W. longitude:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Western Bank					272,800	$3,410
West of 66° W. longitude:						
Georges Bank	2,405	$712	34,720	$2,612	1,584,532	53,468
South Channel	94,796	23,542	2,000,773	127,196	71,435,129	2,013,329
Nantucket Shoals	1,556	380	86,982	5,142	4,144,958	130,048
Off Chatham	10	2	21,570	1,436	140,020	8,347
Total	98,767	24,636	2,144,045	136,386	77,577,439	2,208,602
BY MONTHS						
January	4,437	1,676	338,548	25,760	7,656,252	274,709
February	13,258	3,807	249,059	16,784	8,524,231	262,449
March	17,754	4,036	175,433	10,322	11,503,841	312,092
April	17,490	3,223	298,932	12,040	5,949,146	187,640
May	5,453	809	129,075	2,216	5,429,637	95,489
June	4,817	898	124,005	4,231	5,984,037	90,465
July	1,873	350	63,489	2,927	4,059,317	62,420
August	1,778	340	80,530	4,848	4,429,506	87,168
September	2,808	562	85,270	5,504	6,092,548	101,247
October	8,794	1,955	106,455	10,008	7,522,467	208,469
November	12,169	3,900	242,944	18,070	5,728,942	212,091
December	8,136	3,080	250,305	23,676	4,697,515	314,363
Total	98,767	24,636	2,144,045	136,386	77,577,439	2,208,602

NOTE.—All fish landed by these vessels were fresh.

Cod, haddock, and hake landed at Boston and Gloucester, Mass., and Portland, Me., by otter trawlers in various years

Year	Trips	Cod	Haddock	Hake	Year	Trips	Cod	Haddock	Hake
		Pounds	*Pounds*	*Pounds*			*Pounds*	*Pounds*	*Pounds*
1908	44	209,800	1,542,000	46,600	1921	346	2,482,833	26,734,893	241,650
1909	47	159,800	1,719,000	74,400	1922	578	11,161,947	35,878,524	576,370
1910	59	125,850	2,775,000	46,600	1923	665	14,961,590	35,527,297	471,600
1911	178	564,500	7,367,100	151,700	1924	543	8,231,430	35,197,940	616,853
1912	295	1,952,950	12,966,700	105,500	1925	607	7,309,930	44,034,281	711,212
1913	326	1,667,806	12,488,992	209,485	1926	667	5,203,911	52,405,653	894,885
1914	387	1,149,595	15,383,550	259,913	1927	794	3,982,905	69,237,652	994,730
1920	646	6,311,389	51,962,457						

Fish landed by American fishing vessels at Boston and Gloucester, Mass., and Portland, Me., 1927, from fishing grounds off the coasts specified

Species	United States		Newfoundland		Canadian Provinces		Total	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Cod:								
Fresh	51,195,916	$1,804,354	82,405	$2,401	10,089,124	$262,980	61,367,445	$2,069,735
Salted	949,945	37,148	242,610	9,669	794,729	29,951	1,987,284	76,768
Haddock:								
Fresh	124,817,087	3,449,793	200	2	3,725,296	81,283	128,542,583	3,531,078
Salted	48,870	611	100	2	1,130	22	50,100	635
Hake:								
Fresh	5,669,701	153,240	12,240	138	163,460	2,817	5,845,401	156,195
Salted	2,045	46	2,960	60	12,220	244	17,225	350
Pollock:								
Fresh	7,504,016	169,022			147,695	2,597	7,651,711	171,619
Salted	5,565	111	1,195	42	3,890	77	10,650	230
Cusk:								
Fresh	2,353,460	63,653	9,450	184	330,315	6,751	2,693,225	70,588
Salted	21,960	515	2,110	56	9,922	215	33,992	786
Halibut:								
Fresh	1,597,760	314,649	1,617,644	273,255	1,558,082	251,486	4,773,486	839,390
Salted			5,542	526	255	29	5,797	555
Mackerel:								
Fresh	31,156,836	1,282,449			197,400	4,381	31,354,236	1,286,830
Salted	175,655	8,717					175,655	8,717
Herring:								
Fresh	2,735,000	36,911					2,735,000	36,911
Salted			4,410,436	163,825			4,410,436	163,825
Swordfish, fresh	1,947,504	447,497	891	214	297,098	65,871	2,245,493	513,582
Miscellaneous, fresh	9,902,092	474,918			47,762	1,799	9,949,854	476,717
Total	240,083,412	8,243,634	6,387,783	450,374	17,378,378	710,503	263,849,573	9,404,511

Days' absence from port of American fishing vessels landing fish at Boston and Gloucester, Mass., and Portland, Me., 1927

Fishing grounds	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
BOSTON													
East of 66° W. longitude:													
La Have Bank	53		25	125	101	59	72	133	41	129	104	143	985
Western Bank				35	100	122	240	84	49		16		646
Quereau Bank			41	50	58	191	52	66	36	182	29		705
Green Bank							29			21	8		58
Grand Bank			29	67		27	107	148	29	29			436
St. Peters Bank		56	135	47	22				29	18			307
Off Newfoundland						26	28						54
Cape Shore	46					26	7	102	439		42	36	698
St. Anns						15							15
The Gully			36										36
Labrador coast								29					29
Roseway Bank				29									29
West of 66° W. longitude:													
Browns Bank	286	35	65	255	186	34	81	472	102	86	54	222	1,878
Georges Bank	485	835	480	466	595	858	1,585	994	555	426	165	150	7,594
Cashes Bank			6	5	8						7	14	40
Tillies Bank									18			3	21
Middle Bank	33	42	23	10			40	3	22	3	10	39	225
Jeffreys Ledge	77	31	31	19			8	8	9	32	69	64	348
South Channel	762	772	988	862	691	763	655	1,090	1,099	1,297	1,320	1,153	11,452
Nantucket Shoals	52	28	32	50	80	27	134	216	131	128	230	121	1,229
Off Highland Light	24						14	56	30	7			131
Off Chatham	143	151	41	57	27		210	148	52	9	23	18	879
Seal Island											11	10	21
South					357	569	15						941
Shore, general	201	236	242	115	228	156	97	96	195	171	255	169	2,161
Total	2,162	2,186	2,174	2,192	2,453	2,873	3,374	3,645	2,836	2,538	2,343	2,142	30,918
GLOUCESTER													
East of 66° W. longitude:													
La Have Bank				55	107	57	93	94	26	110	48		590
Western Bank				38	151	292	343	71	65		17		977
Quereau Bank				37	50	176	53	50	55	197			618
Green Bank								22			27		49
Grand Bank				73	24	52	58	156	68		162		593
St. Peters Bank			43	43	18					29			133
Off Newfoundland	341		62			31						324	758
Strait of Belle Isle							57						57
West of 66° W. longitude:													
Browns Bank	14		8	140	168	91		128	45	29	16		639
Georges Bank	131	245	269	327	376	212	223	163	160	6	32		2,144
Middle Bank							12						12
South Channel		11	133	60	36	108	96	15	100	58	57	63	737
Nantucket Shoals					9	42	12	50	26	19			158
South					25								25
Shore, general	221	355	599	506	266	184	412	705	509	389	537	613	5,296
Total	707	611	1,114	1,279	1,230	1,245	1,359	1,454	1,054	837	896	1,000	12,786
PORTLAND													
East of 66° W. longitude:													
La Have Bank					17			22					39
Western Bank					22	8		9					39
Quereau Bank							13		52	25	34		124
Green Bank									22				22
Grand Bank			17				35			25			77
St. Peters Bank				53									53
Off Newfoundland						24							24
Cape Shore						29		140	63				232
Gulf of St. Lawrence								29	22				51
The Gully		26											26
Labrador coast								29					29
West of 66° W. longitude:													
Browns Bank				9	17			36	18				80
Georges Bank		12					133	63					208
Cashes Bank	19	35	36	28	25	12			14	12	3		184
Fippenies Bank	18	2	2							10	7	13	52
Platts Bank	41	12	17				3			61	52	52	238
Jeffreys Ledge	28	20	101	76	49	20	49	80	124	71	113	57	788
South Channel			15	44	48	16							123
Nantucket Shoals					15	3							18
Shore, general	61	34	49	126	114	210	142	139	97	58	44	73	1,147
Total	167	141	237	336	307	322	375	547	412	262	253	195	3,554
Grand total	3,036	2,938	3,525	3,807	3,990	4,440	5,108	5,646	4,302	3,637	3,492	3,337	47,258

Days' absence from port of American otter trawlers landing fish at Boston and Gloucester, Mass., and Portland, Me., 1927

Fishing grounds	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
BOSTON													
West of 66° W. longitude:													
Georges Bank	36	25	20	-----	9	-----	-----	-----	16	9	17	7	139
South Channel	543	534	557	436	253	246	149	235	317	523	586	608	4,987
Nantucket Shoals	39	22	9	11	23	21	50	-----	-----	7	47	35	264
Off Chatham	-----	-----	-----	6	-----	-----	-----	-----	-----	-----	-----	-----	6
Total	618	581	586	453	285	267	199	235	333	539	650	650	5,396
GLOUCESTER													
West of 66° W. longitude:													
South Channel	-----	8	110	60	31	59	72	15	39	-----	7	-----	401
Nantucket Shoals	-----	-----	-----	-----	9	8	-----	-----	-----	-----	-----	-----	17
Total	-----	8	110	60	40	67	72	15	39	-----	7	-----	418
PORTLAND													
East of 66° W. longitude:													
Western Bank	-----	-----	-----	-----	-----	-----	-----	9	-----	-----	-----	-----	9
West of 66° W. longitude:													
South Channel	-----	-----	15	37	48	16	-----	-----	-----	-----	-----	-----	116
Nantucket Shoals	-----	-----	-----	-----	15	-----	-----	-----	-----	-----	-----	-----	15
Total	-----	-----	15	37	63	16	-----	9	-----	-----	-----	-----	140
Grand total	618	589	711	550	388	350	271	259	372	539	657	650	5,954

Annual statistics on the landings of fish by vessels at Boston and Gloucester, Mass., are available for the years 1893 to 1927, and at Portland, Me., for the years 1916 to 1927. Analysis of the landings reveals an almost steady increase in the landings of fresh fish and a steady downward trend in the landings of salt fish. Beginning with landings of about 46,000,000 pounds in 1893, salt-fish landings in 1927 diminished to about 6,700,000 pounds, or only a fraction of the amount landed in former years. This decrease is attributed mainly to the fewer landings of salt cod. Whereas in 1893 the landings of salt cod amounted to over 34,000,000 pounds, or about 14,000,000 more pounds than the amount landed fresh, in 1927, they amounted to only about 2,000,000 pounds, or 59,000,000 less than the landings of fresh cod. In contrast to the total landings of all salt fish, the landings of all fresh fish at the principal New England ports in 1893 (which amounted to about 96,000,000 pounds, or a little over twice the landings of all salt fish) increased to 257,000,000 pounds in 1927, or about 38 times the landings of all salt fish for the same year.

The change in character of the landings at the New England ports is due to consumer preference for fresh and frozen fish, to improved boats and methods of catching fish, and to improved methods of handling fish aboard vessels. Formerly, because of the lack of refrigerants aboard vessels, it was necessary to preserve the fish with salt. At that time, also, many sailboats were in operation, and the common mode of fishing was with hand lines. Thus, with the slower means of catching and conveying to market and the fishing on banks farther from ports, sufficient ice to preserve the fish could not be carried, hence they were salted.

With the introduction of otter-trawl vessels in the early part of the century, which were adapted to fishing on grounds nearer the home port, more fish were landed fresh. In 1921, finding that the supply of fresh fish was increasing and realizing that the consumer's taste had changed from salt to fresh fish, producers and wholesalers

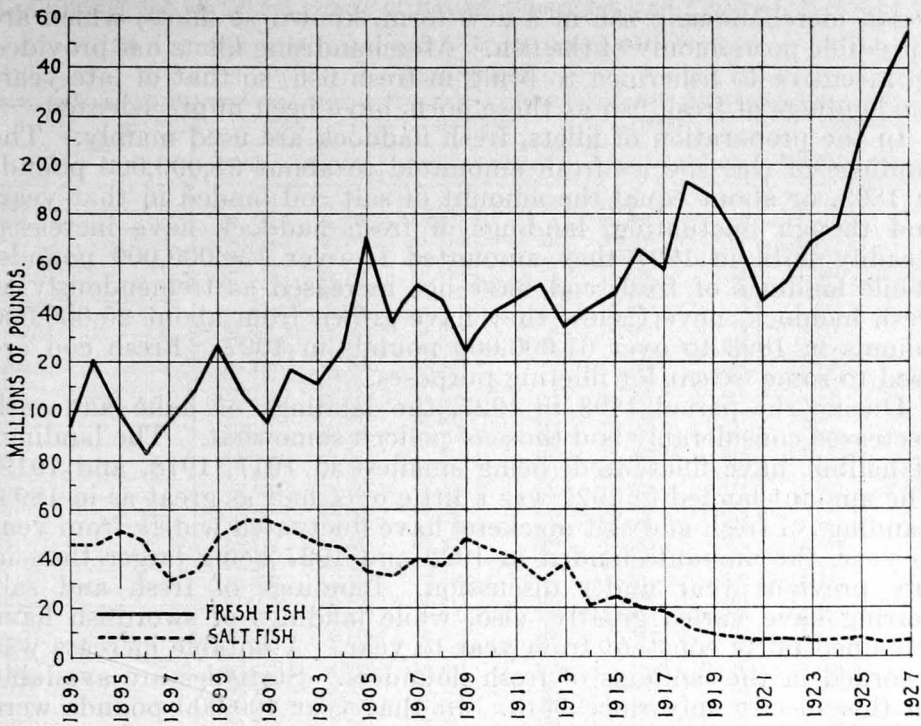

FIGURE 1.—Landings, by vessels, of all fresh and salt fish at the principal New England ports, 1893–1927

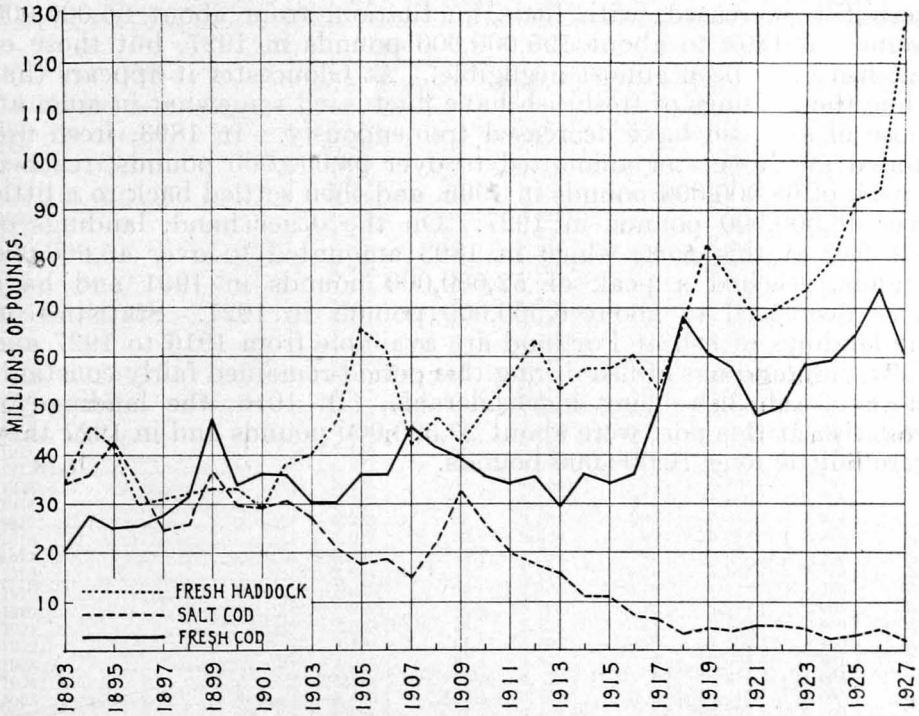

FIGURE 2.—Landings, by vessels, of cod and haddock at the principal New England ports, 1893–1927 (landings of salt haddock never reached over 650,000 pounds in any year and therefore have been omitted)

began merchandising fish in a new form, known as fillets, which are the edible portion only of the fish. Merchandising fillets has provided an incentive to fishermen to bring in fresh fish, so that of late years the landings of fresh fish at these ports have been unprecedented

In the preparation of fillets, fresh haddock are used mainly. The landings of this species fresh amounted to about 34,000,000 pounds in 1893, or about equal the amount of salt cod landed in that year; and though fluctuating, landings of fresh haddock have increased steadily until in 1927 they amounted to over 128,000,000 pounds. While landings of fresh cod have not increased as tremendously as fresh haddock, nevertheless they have grown from about 20,000,000 pounds in 1893 to over 61,000,000 pounds in 1927. Fresh cod are used to some extent for filleting purposes.

During the period 1893 to 1927, the landings of hake and cusk decreased considerably and those of pollock somewhat. The landings of halibut have fluctuated, being smallest in 1917, 1918, and 1919. The amount landed in 1927 was a little over half as great as in 1893. Landings of fresh and salt mackerel have fluctuated widely from year to year, the amounts landed in 1926 and 1927 being larger than in any previous year under discussion. Landings of fresh and salt herring have varied greatly, also, while landings of swordfish have remained fairly constant from year to year. A notable increase was recorded in the landings of fresh flounders. Statistics are available on this species only since 1913. In that year 400,000 pounds were landed, whereas in 1927 over 8,000,000 pounds were brought in.

Comparison between landings at various ports reveals that the greatest increase occurred at Boston. At this port, the landings of fresh fish increased, with little fluctuation, from about 66,000,000 pounds in 1893 to about 195,000,000 pounds in 1927, but those of salt fish have been almost negligible. At Gloucester it appears that while the landings of fresh fish have fluctuated somewhat in amount, those of salt fish have decreased tremendously. In 1893, fresh fish landed at Gloucester amounted to over 29,000,000 pounds, reached a peak of 68,000,000 pounds in 1905, and then settled back to a little over 46,000,000 pounds in 1927. On the other hand, landings of salt fish at this port, which in 1893 amounted to over 45,000,000 pounds, reached a peak of 52,000,000 pounds in 1901 and have since decreased to about 6,500,000 pounds in 1927. Statistics on the landings of fish at Portland are available from 1916 to 1927 and show that landings of fish during this period remained fairly constant, those of salt fish being inconsiderable. In 1916, the landings of fresh fish at this port were about 20,500,000 pounds and in 1927 they were a little over 16,000,000 pounds.

Landings of fish by fishing vessels at Boston, Gloucester, and Portland, 1893 to 1927

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

BY SPECIES

Year	Cod		Haddock		Hake		Pollock	
	Fresh	Salted	Fresh	Salted	Fresh	Salted	Fresh	Salted
1893	20,254	34,373	33,865	44	19,754	238	3,453	161
1894	27,762	35,829	45,608	4	23,305	39	2,175	6
1895	24,071	43,228	41,578	28	15,176	165	2,356	122
1896	25,448	34,040	30,167	----------	10,526	18	1,908	255
1897	27,238	24,757	30,978	----------	14,679	18	1,891	----------
1898	31,674	26,485	32,482	37	17,502	19	4,464	20
1899	48,294	36,906	33,291	15	16,657	53	7,343	144
1900	34,051	29,969	33,043	6	11,445	78	5,278	41
1901	35,972	29,719	28,930	46	11,121	148	7,345	98
1902	36,373	30,248	38,395	2	14,264	134	12,580	16
1903	30,557	27,195	40,339	4	14,769	78	11,290	154
1904	30,636	21,443	47,509	532	21,887	237	10,521	637
1905	36,137	17,852	65,897	423	22,781	457	20,409	1,646
1906	36,196	18,323	61,195	400	13,027	260	8,522	988
1907	45,953	15,368	41,815	463	19,580	214	20,428	776
1908	41,615	21,832	47,418	641	20,434	122	12,429	1,090
1909	38,590	32,744	42,401	425	13,163	113	12,502	1,381
1910	35,549	25,790	49,227	340	19,759	189	18,808	816
1911	33,977	19,729	55,711	464	18,097	355	14,747	879
1912	35,519	18,186	63,225	323	15,289	270	14,359	307
1913	29,177	15,688	53,436	237	13,740	345	15,031	236
1914	36,080	11,450	57,599	155	12,531	222	12,243	211
1915	34,088	10,968	57,813	131	14,589	301	12,961	235
1916	35,993	7,629	60,371	184	13,029	143	15,502	101
1917	49,873	6,574	53,395	160	7,839	75	14,467	40
1918	68,338	3,487	66,603	68	5,246	35	26,507	53
1919	60,651	4,723	82,561	155	4,300	40	18,696	56
1920	58,407	3,858	75,235	45	4,666	55	8,539	22
1921	48,106	5,409	67,397	15	4,494	42	6,893	52
1922	50,174	5,006	70,065	131	5,341	33	5,048	49
1923	58,232	4,443	73,718	44	6,315	22	4,766	39
1924	58,656	2,793	79,897	5	7,263	22	5,067	18
1925	64,097	3,153	91,861	25	5,789	17	5,243	47
1926	73,637	4,582	93,983	77	5,482	23	6,705	34
1927	61,367	1,987	128,543	50	5,845	17	7,652	11

Year	Cusk		Halibut		Mackerel		Flounders
	Fresh	Salted	Fresh	Salted	Fresh	Salted	Fresh
1893	9,110	174	7,964	1,829	552	8,744	----------
1894	10,454	191	9,378	1,527	936	7,077	----------
1895	5,566	255	8,660	1,062	553	4,033	----------
1896	3,322	305	9,689	1,207	1,136	10,484	----------
1897	3,049	144	8,329	1,572	1,146	1,784	----------
1898	4,918	107	8,381	1,997	874	2,222	----------
1899	3,411	228	8,236	789	1,230	3,862	----------
1900	2,018	131	7,275	1,569	8,889	15,966	----------
1901	2,029	52	5,065	463	2,783	12,013	----------
1902	1,785	21	6,326	753	2,772	8,139	----------
1903	2,881	78	3,622	832	2,040	8,032	----------
1904	5,414	236	2,437	853	2,182	5,184	----------
1905	8,797	231	2,952	515	3,499	5,645	----------
1906	5,101	230	4,019	636	1,740	2,100	----------
1907	7,027	72	3,293	904	4,091	6,386	----------
1908	5,067	141	3,179	947	5,508	3,467	----------
1909	3,148	185	3,589	860	4,121	3,458	----------
1910	4,504	191	2,988	1,036	583	610	----------
1911	6,433	248	3,091	411	3,099	1,439	----------
1912	6,317	163	3,060	481	2,660	1,548	----------
1913	5,816	144	4,756	532	4,293	1,383	400
1914	5,747	112	3,063	317	3,980	2,708	863
1915	6,236	95	3,584	286	7,345	3,574	652
1916	6,017	52	3,364	95	10,832	5,075	1,298
1917	3,525	24	1,724	42	12,032	5,410	1,280
1918	2,644	14	1,770	11	7,583	2,576	2,270
1919	2,025	38	2,100	15	4,315	1,398	2,452
1920	1,849	6	3,768	22	6,284	1,008	3,638
1921	2,060	38	5,618	48	2,735	650	2,605
1922	2,194	54	5,608	16	4,266	460	3,281
1923	2,911	87	4,873	2	10,684	881	3,437
1924	3,344	62	4,422	1	8,474	1,283	4,335
1925	3,606	107	3,553	8	24,115	2,095	6,638
1926	2,694	34	3,426	5	35,123	1,109	6,779
1927	2,693	34	4,773	6	31,354	176	8,359

NOTE.—Prior to 1916, Portland landings are lacking.

Landings of fish by fishing vessels at Boston, Gloucester, and Portland, 1893 to 1927—Continued

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

BY SPECIES—Continued

Year	Herring		Swordfish		Other		Total	
	Fresh	Salted	Fresh	Salted	Fresh	Salted	Fresh	Salted
1893					1,045	837	95,996	46,400
1894	799	1,224	417		285	99	121,119	45,996
1895					1,717	1,869	99,677	50,762
1896					1,549	620	83,745	46,929
1897					8,354	2,926	95,664	31,201
1898	6,138	4,244			1,448	392	107,881	35,523
1899	6,082	7,412			2,730	91	127,274	49,500
1900					5,184	7,276	107,183	55,036
1901	1,719	10,030			1,475	2,157	96,439	54,726
1902	2,637	10,023			2,091	1,395	117,223	50,731
1903	3,097	7,887			2,847	1,790	111,442	46,050
1904	2,917	16,270	2,151	3	117		125,771	45,395
1905	6,882	8,569	2,009		172	14	169,535	35,352
1906	5,273	10,935	928		517	12	136,518	33,884
1907	5,402	15,614	2,044		2,142		151,775	39,797
1908	6,708	8,629	1,358		880		144,596	36,869
1909	4,421	9,278	1,637		1,059	27	124,631	48,471
1910	4,994	14,720	1,039		592		138,043	43,692
1911	6,399	16,752	1,503		1,807	11	144,864	40,288
1912	5,885	10,005	1,810		3,297		151,421	31,283
1913	2,070	9,677	2,376	5	2,875		133,970	28,247
1914	4,910	5,839	1,500		3,059		141,575	21,014
1915	4,346	8,931	2,239		3,222	(1)	147,075	24,521
1916	11,410	7,223	1,773		5,732	1	165,321	20,503
1917	6,817	6,322	1,973		3,858		156,783	18,647
1918	8,764	6,233	1,034		2,265		193,024	12,477
1919	6,858	3,502	883		1,702	11	186,543	9,938
1920	3,901	3,097	2,532		1,348		170,167	8,113
1921	2,262	351	1,598		491	1	144,259	6,606
1922	752	1,892	3,282		2,178	44	152,189	7,685
1923	264	1,219	2,455		561	9	168,216	6,746
1924	1,467	2,943	2,023		873		175,821	7,127
1925	1,542	2,400	1,527		1,046		209,017	7,852
1926	1,266	315	2,442		710		232,247	6,179
1927	2,735	4,410	2,246		1,591		257,158	6,691

BY PORTS

Year	Boston		Gloucester		Portland		Total	
	Fresh	Salted	Fresh	Salted	Fresh	Salted	Fresh	Salted
1893	66,518	1,077	29,478	45,323			95,996	46,400
1894	86,129	1,335	34,990	44,661			121,119	45,996
1895	73,612	195	26,065	50,567			99,677	50,762
1896	61,820	1,256	21,925	45,673			83,745	46,929
1897	62,704	199	32,960	31,002			95,664	31,201
1898	53,494	1,186	54,387	34,337			107,881	35,523
1899	63,450	1,274	63,824	48,226			127,274	49,500
1900	63,648	3,173	43,535	51,863			107,183	55,036
1901	56,855	2,137	39,584	52,589			96,439	54,726
1902	77,608	1,365	39,615	49,366			117,223	50,731
1903	78,383	1,883	33,059	44,167			111,442	46,050
1904	81,183	911	44,588	44,484			125,771	45,395
1905	101,085	222	68,450	35,130			169,535	35,352
1906	89,610	83	46,908	33,801			136,518	33,884
1907	87,717	394	64,058	39,403			151,775	39,797
1908	94,713	947	49,883	35,922			144,596	36,869
1909	92,085	491	32,546	47,980			124,631	48,471
1910	102,059	31	35,984	43,661			138,043	43,692
1911	93,629	131	51,235	40,157			144,864	40,288
1912	100,157	143	51,264	31,140			151,421	31,283
1913	92,202	149	41,768	28,098			133,970	28,247
1914	92,231	113	49,344	20,901			141,575	21,014
1915	97,397	502	49,678	24,019			147,075	24,521
1916	98,255	76	46,515	20,165	20,551	262	165,321	20,503
1917	98,155	495	40,062	18,073	18,566	79	156,783	18,647
1918	109,227	249	62,002	12,173	21,795	55	193,024	12,477
1919	103,209	183	61,621	9,749	21,713	6	186,543	9,938
1920	118,302	257	39,113	7,627	12,752	229	170,167	8,113
1921	104,277	91	26,747	6,269	13,235	246	144,259	6,606
1922	106,032	158	30,395	7,355	15,762	172	152,189	7,685
1923	123,982	253	29,012	6,018	15,222	475	168,216	6,746
1924	130,631	335	29,263	6,583	15,927	209	175,821	7,127
1925	148,723	315	42,161	7,311	18,133	226	209,017	7,852
1926	167,061	257	49,222	5,679	15,964	243	232,247	6,179
1927	194,877	64	46,056	6,497	16,225	130	257,150	6,691

[1] Less than 500 pounds.

NOTE.—Prior to 1916, Portland landings are lacking.

FISHERIES OF THE MIDDLE ATLANTIC STATES

The last previous statistical canvass of the fisheries of the Middle Atlantic States (New York, New Jersey, Pennsylvania, and Delaware) was for the calendar year 1926. The complete statistics for this canvass have already been published in condensed form and distributed as Statistical Bulletin No. 786, and the detailed statistics are published herewith. Statistics for the oyster product are for the season beginning in 1925, and the statistics for New York and Pennsylvania do not include any fisheries of the Great Lakes or other inland waters of these States. In addition to the above, there are published herewith statistics on the shad fishery of the Hudson River for 1927.

Earlier publications.—Some of the earlier publications relating to the fisheries of New York, New Jersey, Pennsylvania, and Delaware, published in Washington, D. C., follow:

1887. New York and its fisheries. By Fred. Mather. *In* The Fisheries and Fishery Industries of the United States, by George Brown Goode and associates, 1880 (1887), Sec. II, Pt. VI, pp. 341–377.
New Jersey and its fisheries. By R. Edward Earll. *Ibid.*, Pt. VII, pp. 379–400.
Pennsylvania and its fisheries. By R. Edward Earll. *Ibid.*, Pt. VIII, pp. 401–405.
Delaware and its fisheries. By Joseph W. Collins. *Ibid.*, Pt. IX, pp. 407–419.

1890. The sturgeons and sturgeon industries of the eastern coast of the United States, with an account of experiments bearing upon sturgeon culture. By John A. Ryder. Bulletin, U. S. Fish Commission, Vol. VIII, for 1888 (1890), pp. 231–328.

1892. IV. Fisheries of the Middle Atlantic States (1887 and 1888). *In* Statistical review of the coast fisheries of the United States, prepared under the direction of J. W. Collins. Report, U. S. Commission of Fish and Fisheries, 1888 (1892), pp. 323–351.

1894. Notes on the oyster industry of New Jersey. By Ansley Hall. Report of the Commissioner of Fish and Fisheries for 1892 (1894), pp. 463–528.

1895. A statistical report on the fisheries of the Middle Atlantic States (1889–1893). By Hugh M. Smith. Bulletin, U. S. Fish Commission, Vol. XIV, 1894 (1895), pp. 339–467.

1898. Shad and alewife fisheries (1896–1897). *In* Report of the Division of Statistics and Methods of the Fisheries. By Hugh M. Smith. Report of the Commissioner of Fish and Fisheries for 1897 (1898), pp. CXXV–CXXX.

1899. Statistics of certain fisheries of the New England and Middle Atlantic States and the Great Lakes (1897). *In* Report of the Division of Statistics and Methods of the Fisheries. By C. H. Townsend. Report of the Commissioner of Fish and Fisheries for 1898 (1899), pp. CLXVI–CLXXV.
Notes on the extent and condition of the alewife fisheries of the United States in 1896. By Hugh M. Smith. Appendix to the Report of the Commissioner of Fish and Fisheries for 1898 (1899), pp. 31–43.

1899. The shad fisheries of the Atlantic Coast of the United States. By Charles H. Stevenson. Appendix to the Report of the Commissioner of Fish and Fisheries for 1898 (1899), pp. 101–269.

1900. The sturgeon fishery of Delaware River and Bay (1890–1898). By John N. Cobb. Report of the Commissioner of Fish and Fisheries for 1899 (1900), pp. 369–380.

1901. Statistics of the fisheries of the Middle Atlantic States (1897). By C. H. Townsend. Appendix to the Report of the Commissioner of Fish and Fisheries for 1900 (1901), pp. 195–310.

1904. The lobster fishery (1900). *In* Report of the Division of Statistics and Methods of the Fisheries. By C. H. Townsend. Report of the Commissioner of Fish and Fisheries for 1902 (1904), pp. 156–158.
Statistics of the Fisheries of the Middle Atlantic States (1901). By Barton W. Evermann. Report of the Commissioner of Fish and Fisheries for 1902 (1904), pp. 433–540.

1905. Statistics of the Fisheries of the Middle Atlantic States for 1904. Report, U. S. Commissioner of Fisheries, 1905, 122 pp. Bureau of Fisheries Doc. No. 609.
1911. Shad and alewife fisheries (1909). Report, U. S. Commissioner of Fisheries, 1910 (1911), pp. 27–28.
1913. Shad fisheries (1910). Report, U. S. Commissioner of Fisheries, 1911 (1913), pp. 35–37.
1914. The oyster industry (1911). Report, U. S. Commissioner of Fisheries, 1912 (1914). pp. 7–23.
1915. The menhaden industry (1912). Report, U. S. Commissioner of Fisheries, 1914 (1915), pp. 18–22.
The sturgeon industry of Delaware River (1914). *Ibid.*, p. 23.
1917. The lobster fishery (1913). Report, U. S. Commissioner of Fisheries, 1915 (1917), pp. 37–43.
Coastal fisheries of New York and New Jersey (1915). Report, U. S. Commissioner of Fisheries, 1916 (1917), pp. 72–75.
Shad fishery of the Hudson River (1915–1916). *Ibid.*, pp. 76–77.
1920. Coastal fisheries of New York and New Jersey (1917). Report, U. S. Commissioner of Fisheries, 1918 (1920), pp. 66–70.
Shad fishery of the Hudson River (1917–1918). *Ibid.*, p. 72.
Statistics of the wholesale fish trade of New York City (1918). *Ibid.*, pp. 73–76.
1921. Shad fishery of the Hudson River (1919). *In* Fishery Industries of the United States. Report of the Division of Statistics and Methods of the Fisheries for 1919. By Lewis Radcliffe. Appendix X to the Report of the U. S. Commissioner of Fisheries for 1919 (1921), pp. 49–50. Bureau of Fisheries Doc. No. 892.
Shad fishery of the Hudson River (1920). *In* Fishery Industries of the United States. Report of the Division of Statistics and Methods of the Fisheries for 1920. By Lewis Radcliffe. Appendix V to the Report of the U. S. Commissioner of Fisheries for 1921 (1922), p. 51. Bureau of Fisheries Doc. No. 908.
1923. Fisheries of New York, New Jersey, Pennsylvania and Delaware in 1921. *In* Fishery Industries of the United States. Report of the Division of Fishery Industries for 1922. By Harden F. Taylor. Appendix V to the Report of the U. S. Commissioner of Fisheries for 1923 (1924), pp. 63–111. Bureau of Fisheries Doc. No. 954.
1923. Shad fishery of the Hudson River (1921–1922). *In* Fishery Industries of the United States. Report of the Division of Fishery Industries for 1922. By Harden F. Taylor. Appendix V to the Report of the U. S. Commissioner of Fisheries for 1923 (1924), pp. 69–70. Bureau of Fisheries Doc. No. 954.
1926. Wholesale trade in fresh and frozen fishery products and related marketing considerations in New York City. By R. H. Fiedler and J. H. Matthews. Appendix VI to the Report of the U. S. Commissioner of Fisheries for 1925 (1926), pp. 183–217. Bureau of Fisheries Doc. No. 996.
1926. Shad fishery of the Hudson River (1923–1924). *In* Fishery Industries of the United States. Report of the Division of Fishery Industries for 1925. By Oscar E. Sette. Appendix V to the Report of the U. S. Commissioner of Fisheries for 1926 (1927), pp. 261–262. Bureau of Fisheries Doc. No. 1010.
1928. Shad fishery of the Hudson River (1925–1926). *In* Fishery Industries of the United States. Report of the Division of Fishery Industries for 1926. By Oscar E. Sette. Appendix V to the Report of the U. S. Commissioner of Fisheries for 1927 (1928) pp. 395–396.

GENERAL STATISTICS

The Middle Atlantic States, with a coast line of over 1,700 miles, rank as one of our important fishery sections for the production of oysters, squeteague, butterfish, bonito, sea bass, shad, and menhaden. In 1926, the fisheries of these States employed 9,953 fishermen, which is 3 per cent less than the number employed in 1921. The catch of these fishermen amounted to 168,012,495 pounds, valued at

$12,456,256. Of this catch, 128,121,258 pounds, valued at $12,292,932, were principally food fish and shellfish, and 39,891,237 pounds, valued at $162,324, were menhaden. Compared with the amount and value of the 1921 catch of food fish and menhaden, respectively, the food-fish group increased 22 per cent in amount and 19 per cent in value, while menhaden decreased 82 per cent in amount and 88 per cent in value.

Of the total products, those of fish account for 71 per cent of the amount and only 37 per cent of the value, while those of shellfish account for only 29 per cent of the amount and but 63 per cent of the value. This high value for shellfish products is due chiefly to that for oysters. On the basis of the computed value to the fishermen of the total fishery products taken, the annual earning power of persons engaged in catching fish in this section was about $1,250 during 1926. This must not be taken to represent the total average earning power of these fishermen, for in many cases fishing is a seasonal occupation with them, and when the fish are out of season they turn to other pursuits. Possibly $1,250 represents more nearly one-half to two-thirds of their annual earning power.

The industries related to the fisheries of these States in 1926 employed 4,382 persons, of whom 107 were engaged in transporting fishery products, 3,412 were in the wholesale trade, 510 in the prepared-fish and by-products industries, and 353 in menhaden reduction factories. Those employed in the related fishery industries (exclusive of the 107 persons employed in transporting and the 343 connected with the wholesale trade but not employed in these establishments) received $5,133,949 in wages during 1926. This constitued an average earning from this class of work of about $1,300. As with the fishermen, persons employed in the related fishery industries generally do not confine their entire time to the work, so that $1,300 can not be taken as representing the entire annual earnings of these persons. In all probability it constitutes between one-half and two-thirds of their annual income.

Fisheries of the Middle Atlantic States, 1926

OPERATING UNITS: BY STATES

Items	New York	New Jersey	Pennsylvania	Delaware	Total
Fishermen:					
On vessels	1,026	2,581	111	646	4,364
In shore or boat fisheries	2,087	2,553	87	862	5,589
Total	3,113	5,134	198	1,508	9,953
Vessels:					
Steam	13			11	24
Tonnage	1,519			1,519	3,038
Motor	202	255	12	23	492
Tonnage	2,464	3,160	220	477	6,321
Sail	3	93		5	101
Tonnage	62	1,704		55	1,821
Motor boats	737	1,195	5	160	2,097
Sailboats	15	6			21
Rowboats, etc	947	986	35	403	2,371
Apparatus:					
Purse seines	23	14	1	14	52
Yards	9,610	5,250	350	4,722	19,932
Haul seines	135	158	19	100	412
Yards	20,247	20,970	2,028	26,340	69,585

Fisheries of the Middle Atlantic States, 1926—Continued

OPERATING UNITS: BY STATES—Continued

Items	New York	New Jersey	Pennsylvania	Delaware	Total
Apparatus—Continued.					
Gill nets	487	3,495	107	259	4,348
Yards	80,932	346,569	9,400	71,419	508,320
Pound nets, floating traps and weirs	422	198		30	650
Stop nets		64	1	19	84
Yards		22,085	200	6,290	28,575
Fyke nets	2,306	2,129	175	520	5,130
Bag nets		36			36
Dip nets and scap nets	183				183
Otter trawls	5				5
Scallop trawls	26				26
Flounder drags	115	50			165
Eelpots	3,696	3,189		1,106	7,991
Lobster pots	13,432	15,168		300	28,900
Dredges	1,464	534	16	50	2,064
Tongs	743	777		94	1,614
Rakes, hoes, and forks	420	507		12	939
Other apparatus	84	58		207	349

NOTE.—In addition to the operating units listed, lines and harpoons were used, the number of which was not determined.

CATCH: BY STATES

Products	New York		New Jersey		Pennsylvania	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore	16,800	$668	18,268	$665		
Alewives	1,564,415	25,594	379,550	12,584	5,300	$165
Bluefish	261,740	60,381	628,241	148,147	21,400	4,850
Bonito	90,205	4,910	507,660	40,756	400	40
Butterfish	998,135	84,313	3,078,247	235,293	6,000	300
Carp	207,100	27,636	279,039	50,024	3,875	800
Catfish and bullheads	23,567	3,981	136,226	10,935	5,600	505
Cod	2,642,961	123,555	2,216,691	109,065	14,287	817
Cod roe	40	4				
Croaker	4,000	120	2,455,867	104,827	1,000	40
Drum:						
Black	200	2	31,100	909		
Red	100	2	14,300	412		
Eels	516,394	70,543	251,671	25,392	2,500	375
Flounders	7,532,138	396,707	2,921,714	209,314	400	26
Grayfish	2,115	69	4,640	278		
Haddock	17,019,780	597,276	3,450	156		
Hake	175,845	6,966	451,320	9,497		
Halibut	10,381	3,489				
Herring	2,407	40	235,665	7,030		
Hickory shad	13,147	586	5,439	219		
King whiting or "kingfish"	63,861	10,599	33,125	4,664		
Mackerel	740,299	52,579	2,165,752	141,147	39,847	2,284
Menhaden	11,224,870	44,759	5,378,807	20,945	36,000	240
Minnows	8,033	4,598				
Mullet	750	21	6,000	500		
Mummichog	9,075	620				
Pike or pickerel	327	98				
Pilotfish	225	10	3,900	125		
Pollock	102,463	5,057	23,310	1,244		
Pompano	116	12	625	243		
Scup or porgy	927,493	88,553	2,452,079	126,397	122,400	5,520
Sea bass	231,125	29,385	2,095,857	171,606	42,800	3,574
Sea robin	30,084	572	23,100	684		
Shad	231,392	49,212	552,480	139,564	20,766	5,322
Sharks	15,763	408	48,710	1,365		
Silversides or spearing	61,200	2,715	2,000	2,000		
Skates	40,240	1,207	47,446	1,331		
Smelt	180	44				
Spanish mackerel	37	9	13,992	1,804		
Spot	436,484	26,084	1,217,704	75,972		
Squeteagues or weakfish	1,073,211	98,544	7,172,685	448,198	383,000	15,440
Striped bass	86,550	20,984	64,159	18,470		
Sturgeon	8,946	1,682	7,400	2,248		
Sturgeon roe	80	22	490	740		
Suckers	72,493	9,505	92,675	14,975	26,000	2,858
Swellfish	12,900	390				
Swordfish	60,809	11,391				
Tautog	48,312	4,393	21,729	1,700	200	16

Fisheries of the Middle Atlantic States, 1926—Continued

CATCH: BY STATES—Continued

Products	New York		New Jersey		Pennsylvania	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Thimble-eyed mackerel	16,890	$1,166	105,038	$3,498		
Tilefish	1,801,750	111,500				
Tomcod or frostfish	53,512	2,387	1,100	72		
Tomcod roe	3,000	250				
Tuna or horse mackerel	11,942	1,959	132,420	9,544		
Whitebait	18,100	1,200				
White perch	20,061	2,570	113,035	15,885		
Whiting	583,054	13,600	6,935,124	142,243	2,500	$15
Yellow perch	14,328	1,926	27,000	5,075		
Miscellaneous fish	560,751	4,798	68,206	5,888		
Total	49,652,176	2,011,651	42,425,036	2,323,630	734,275	43,187
Crabs:						
Hard	2,000	100	61,566	5,825		
Soft	979	535	6,400	4,100		
King			2,248,000	10,856		
Lobsters	455,218	130,716	643,286	193,649		
Shrimp	6,400	2,400	36,276	1,758		
Squid	539,563	35,310	1,036,264	64,627		
Clams, hard:						
Public	518,152	248,912	613,864	297,470		
Private	68,888	42,484	23,384	12,000		
Clams, soft	264,220	56,046	144,600	25,350		
Skimmers or surf clams	59,112	15,436				
Mussels	210,000	10,200	47,000	560		
Oysters, market:						
Public	5,950	1,025	67,424	12,563		
Private	7,119,315	2,110,697	11,137,721	2,033,991		
Oysters, seed:						
Public	214,550	39,125	14,650,447	1,243,918		
Private	224,000	49,600	93,100	6,740		
Scallops:						
Bay	299,892	92,253				
Sea	1,067,964	267,938	47,436	15,688		
Turtles	490	15	17,319	1,539	500	100
Miscellaneous products (for bait)	12,000	14,300				
Total	11,068,693	3,117,092	30,874,087	3,930,634	500	100
Grand total	60,720,869	5,128,743	73,299,123	6,254,264	734,775	43,287

Products	Delaware		Total	
	Pounds	*Value*	*Pounds*	*Value*
Albacore			35,068	$1,333
Alewives	546,050	$8,704	2,495,315	47,047
Bluefish	10,300	2,952	921,681	216,330
Bonito			598,265	45,706
Butterfish	6,320	344	4,088,702	320,250
Carp	109,548	15,168	599,562	93,628
Catfish and bullheads	55,617	3,525	221,010	18,946
Cod			4,873,939	233,437
Cod roe			40	4
Croaker	897,100	24,256	3,357,967	129,243
Drum:				
Black	4,240	73	35,540	984
Red	3,310	60	17,710	474
Eels	52,040	8,043	822,605	104,353
Flounders	66,040	3,439	10,520,292	609,486
Grayfish			6,755	347
Haddock			17,023,230	597,432
Hake			627,165	16,463
Halibut			10,381	3,489
Herring			238,072	7,070
Hickory shad			18,586	805
King whiting or "kingfish"	4,250	406	101,236	15,669
Mackerel			2,945,898	196,010
Menhaden	23,251,560	96,380	39,891,237	162,324
Minnows			8,033	4,598
Mullet	22,250	972	29,000	1,493
Mummichog			9,075	620
Pike or pickerel	500	75	827	173
Pilotfish			4,125	135
Pollock			125,773	6,301
Pompano			741	255

Fisheries of the Middle Atlantic States, 1926—Continued

CATCH: BY STATES—Continued

Products	Delaware		Total	
	Pounds	*Value*	*Pounds*	*Value*
Scup or porgy	2,000	$160	3,503,972	$220,630
Sea bass			2,369,782	204,565
Sea robin			53,184	1,256
Shad	147,095	39,621	951,733	233,719
Sharks			64,473	1,773
Silversides or spearing			63,200	4,715
Skates			87,686	2,538
Smelt			180	44
Spanish mackerel			14,029	1,813
Spot	103,900	6,439	1,758,088	108,495
Squeteagues or weakfish	771,880	38,812	9,400,776	600,994
Striped bass	46,347	8,916	197,056	48,370
Sturgeon	5,580	2,561	21,926	6,491
Sturgeon roe	891	922	1,461	1,684
Suckers	2,600	118	193,768	27,456
Swellfish			12,900	390
Swordfish			60,809	11,391
Tautog	12,000	600	82,241	6,709
Thimble-eyed mackerel			121,928	4,664
Tilefish			1,801,750	111,500
Tomcod or frostfish			54,612	2,459
Tomcod roe			3,000	250
Tuna or horse mackerel			144,362	11,503
Whitebait			18,100	1,200
White perch	64,944	5,313	198,040	23,768
Whiting			7,520,678	155,858
Yellow perch	23,106	2,111	64,434	9,112
Miscellaneous fish	156	10	629,113	10,696
Total	26,209,624	269,980	119,021,111	4,648,448
Crabs:				
Hard	166,842	7,702	230,408	13,627
Soft	155,820	43,950	163,199	48,585
King	640,000	1,600	2,888,000	12,456
Lobsters	20,640	6,202	1,119,144	330,567
Shrimp			[1] 42,676	4,158
Squid			1,575,827	99,937
Clams, hard:				
Public	4,736	2,860	1,136,752	549,242
Private	48,256	21,864	140,528	76,348
Clams, soft			408,820	81,396
Skimmers or surf clams			59,112	15,436
Mussels			257,000	10,760
Oysters, market:				
Public	826,560	41,010	899,934	54,598
Private	2,585,205	435,020	20,842,241	4,579,708
Oysters, seed:				
Public	2,586,920	197,740	17,451,917	1,480,783
Private			317,100	56,340
Scallops:				
Bay			299,892	92,253
Sea			1,115,400	283,626
Frogs	1,800	450	1,800	450
Terrapin	1,080	750	1,080	750
Turtles	10,245	834	28,554	2,488
Miscellaneous products (for bait)			12,000	14,300
Total	7,048,104	759,982	48,991,384	7,807,808
Grand total	33,257,728	1,029,962	168,012,495	12,456,256

[1] Taken mostly off the coast of Florida.

NOTE.—The above statistics do not include any fisheries of the Great Lakes or other inland waters.

Fisheries of the Middle Atlantic States, 1926—Continued

CATCH OF SHELLFISH: IN NUMBERS AND BUSHELS

Products	New York		New Jersey		Delaware		Total	
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
Crabs:								
Hard ..... number	6,000	$100	184,698	$5,825	500,526	$7,702	691,224	$13,627
Soft ..... do	2,937	535	19,200	4,100	467,460	43,950	489,597	48,585
King ..... do	.....	.....	1,124,000	10,856	320,000	1,600	1,444,000	12,456
Clams, hard:								
Public ..... bushels	64,769	248,912	76,733	297,470	592	2,860	142,094	549,242
Private ..... do	8,611	42,484	2,923	12,000	6,032	21,864	17,566	76,348
Clams, soft ..... do	26,422	56,046	14,460	25,350	.....	.....	40,882	81,396
Skimmers or surf clams ..... do	7,389	15,436	.....	.....	.....	.....	7,389	15,436
Mussels ..... do	21,000	10,200	4,700	560	.....	.....	25,700	10,760
Oysters, market:								
Public ..... do	850	1,025	9,632	12,563	118,080	41,010	128,562	54,598
Private ..... do	1,017,045	2,110,697	1,591,103	2,033,991	369,315	435,020	2,977,463	4,579,708
Oysters, seed:								
Public ..... do	30,650	39,125	2,092,921	1,243,918	369,560	197,740	2,493,131	1,480,783
Private ..... do	32,000	49,600	13,300	6,740	.....	.....	45,300	56,340
Scallops:								
Bay ..... do	49,982	92,253	.....	.....	.....	.....	49,982	92,253
Sea ..... do	177,994	267,938	7,906	15,688	.....	.....	185,900	283,626

NOTE.—The statistics for New York include 105,500 bushels of market oysters from private grounds, valued at $158,250, taken by vessels owned and operated mainly in Connecticut. The statistics for New Jersey include 50,153 bushels of market oysters from private beds, valued at $63,904, and 97,000 bushels of seed oysters from public beds, valued at $58,200, taken by vessels owned in Pennsylvania. The statistics for Delaware include 214,400 bushels of market oysters from private grounds, valued at $268,000, 66,300 bushels of seed oysters from public beds, valued at $39,780, and 1,500 bushels of hard clams from private beds, valued at $6,000 taken by vessels owned in New Jersey, and 19,000 bushels of market oysters from private beds, valued at $23,750, by vessels owned in Pennsylvania.

MENHADEN INDUSTRY

During 1926, one menhaden factory was operated in New York, two in New Jersey, and three in Delaware. These factories represented an investment of $1,058,994 and employed a cash or working capital of $235,000. There were 353 persons employed, who received $241,481 in wages. These factories utilized 64,644,000 menhaden, valued at $156,280. The products prepared included 7,031 tons of acidulated scrap, valued at $178,435, and 576,487 gallons of oil, valued at $252,420.

Industries related to the fisheries of the Middle Atlantic States, 1926

Items	New York	New Jersey	Pennsylvania	Delaware	Total
Transporting:					
Persons engaged	82	23	2	.....	107
Boats, motor	15	.....	.....	.....	15
Vessels—					
Steam	1	.....	.....	.....	1
Tonnage	36	.....	.....	.....	36
Motor	42	18	2	.....	62
Tonnage	738	171	15	.....	924
Wholesale trade:					
Establishments	156	52	41	12	261
Persons engaged—					
In establishments	1,886	602	336	245	3,069
Others [1]	295	38	.....	10	343
Wages paid in establishments	$3,462,507	$363,607	$357,348	$79,886	$4,263,348
Prepared products and by-products industries:					
Establishments	21	9	8	.....	38
Persons engaged	235	164	111	.....	510
Wages paid	$390,332	$86,509	$152,279	.....	$629,120
Products ..... value	$2,288,997	$744,086	$947,285	.....	$3,980,368

[1] Includes commission men, scallop shuckers, oyster shuckers, etc.

Industries related to the fisheries of the Middle Atlantic States, 1926—Continued

Items	New York and New Jersey	Pennsylvania	Delaware	Total
Menhaden industry:				
Factories	3	----------	3	6
Persons engaged	195	----------	158	353
Wages paid	$188,464	----------	$53,017	$241,481
Menhaden utilized ---------- number	25,187,000	----------	39,457,000	[2] 64,644,000
Products—				
Acid scrap ---------- tons	2,898	----------	4,133	[3] 7,031
Oil ---------- gallons	185,800	----------	390,687	[4] 576,487

[2] 38,714,200 pounds. [3] Value, $178,435. [4] Value, $252,420.

NEW YORK

The fisheries and industries related to the fisheries of New York employed 5,767 persons in 1926, which is 19 per cent less than in 1921. Of these, 3,113 were employed in fishing, 82 were engaged on transporting boats and vessels, 2,181 were employed in the wholesale trade, and 391 were employed in the canning or prepared products trades and in menhaden-reduction plants.

The products of the fisheries amounted to 60,720,869 pounds, valued at $5,128,743. This represents a decrease of 71 per cent in amount and an increase of 3 per cent in value compared with the amount and value of the fisheries in 1921. The decrease in amount is due mainly to the smaller catch of menhaden.

Of the total value, oysters accounted for 43 per cent; haddock, 12 per cent; flounders, 8 per cent; clams, 7 per cent; scallops, 7 per cent; lobsters, 3 per cent; cod, 2 per cent; and tilefish, 2 per cent. Of the total production, haddock accounted for 28 per cent; oysters, 12 per cent; flounders, 12 per cent; cod, 4 per cent; tilefish, 3 per cent; scallops, 2 per cent; clams, 2 per cent; and lobsters, less than 1 per cent.

Operating units.—The catch of fishery products in New York during 1926 was taken by 1,699 motor, sail, and row boats, 13 steam vessels, 202 motor vessels, 3 sailing vessels, 20 types of apparatus, and by hand. The following table shows in detail the statistics of the boats and vessels and types of apparatus used during 1926:

Fisheries of New York, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets	Pound nets, floating trap nets, and weirs	Fyke nets	Otter trawls	Flounder drags	Lines	Scap nets and dip nets	Minor nets	Harpoons
Fishermen:											
On boats or shore	-------	289	360	248	157	-------	85	172	209	13	10
On vessels	305	-------	16	2	3	110	117	116	2	-------	13
Total	305	289	376	250	160	110	202	288	211	13	23
Fishing boats:											
Motor	-------	50	85	60	41	-------	54	87	19	5	5
Other	-------	121	146	157	98	-------	-------	23	179	7	-------
Fishing vessels:											
Steam—											
61 to 70 tons	2	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
71 to 80 tons	1	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
91 to 100 tons	1	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
121 to 130 tons	-------	-------	-------	-------	-------	2	-------	-------	-------	-------	-------
141 to 150 tons	1	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
171 to 180 tons	-------	-------	-------	-------	-------	2	-------	-------	-------	-------	-------
201 to 210 tons	1	-------	-------	-------	-------	1	-------	-------	-------	-------	-------
Total	6	-------	-------	-------	-------	5	-------	-------	-------	-------	-------
Net tonnage	663	-------	-------	-------	-------	806	-------	-------	-------	-------	-------
Motor:											
5 to 10 tons	-------	-------	6	1	2	-------	34	8	1	-------	5
11 to 20 tons	2	-------	-------	-------	-------	-------	9	-------	-------	-------	-------
21 to 30 tons	2	-------	-------	-------	-------	-------	-------	2	-------	-------	-------
41 to 50 tons	2	-------	-------	-------	-------	-------	1	2	-------	-------	1
51 to 60 tons	-------	-------	-------	-------	-------	-------	-------	1	-------	-------	-------
61 to 70 tons	2	-------	-------	-------	-------	-------	-------	2	-------	-------	-------
Total	8	-------	6	1	2	-------	44	15	1	-------	6
Net tonnage	351	-------	46	5	11	-------	426	319	7	-------	86
Grand total	14	-------	6	1	2	5	44	15	1	-------	6
Net tonnage	1,014	-------	46	5	11	806	426	319	7	-------	86
Apparatus: Number	23	135	487	427	2,306	5	115	(1)	215	12	(1)
Length, yards	9,610	20,247	80,932	-------	-------	-------	-------	-------	-------	-------	-------

(1) Number undetermined.

Fisheries of New York, 1926—Continued

OPERATING UNITS: By GEAR--Continued

Items	Spears	Eel-pots	Lobster pots	Scallop trawls	Mussel dredges	Oyster dredges	Scallop dredges	Tongs	Rakes, forks, and hoes	By hand	Total exclusive of duplication
Fishermen:											
On boats or shore	48	105	175	3	-------	14	207	422	405	120	2,087
On vessels	-------	2	6	94	7	225	108	97	4	-------	1,026
Total	48	107	181	97	7	239	315	519	409	120	3,113
Fishing boats:											
Motor	8	45	109	1	-------	5	125	187	48	8	737
Other	37	50	6	-------	-------	-------	27	220	120	91	962
Fishing vessels:											
Steam—											
11 to 20 tons	-------	-------	-------	-------	-------	1	-------	-------	-------	-------	1
31 to 40 tons	-------	-------	-------	-------	-------	1	-------	-------	-------	-------	1
61 to 70 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2
71 to 80 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	1
91 to 100 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	1
121 to 130 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2
141 to 150 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	1
171 to 180 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2
201 to 210 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2
Total	-------	-------	-------	-------	-------	2	-------	-------	-------	-------	13
Net tonnage	-------	-------	-------	-------	-------	50	-------	-------	-------	-------	1,519
Motor—											
5 to 10 tons	-------	2	4	20	-------	13	30	42	3	-------	133
11 to 20 tons	-------	-------	-------	4	3	26	9	1	-------	-------	47
21 to 30 tons	-------	-------	-------	-------	-------	5	2	-------	-------	-------	10
31 to 40 tons	-------	-------	-------	-------	1	2	-------	-------	-------	-------	3
41 to 50 tons	-------	-------	-------	-------	-------	1	-------	-------	-------	-------	4
51 to 60 tons	-------	-------	-------	-------	-------	1	-------	-------	-------	-------	2
61 to 70 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	2
71 to 80 tons	-------	-------	-------	-------	-------	-------	1	-------	-------	-------	1
Total	-------	2	4	24	4	48	42	43	3	-------	202
Net tonnage	-------	10	27	211	77	786	453	276	17	-------	2,464
Sail—											
1 to 10 tons	-------	-------	-------	-------	-------	-------	1	1	-------	-------	2
41 to 50 tons	-------	-------	-------	1	-------	-------	-------	-------	-------	-------	1
Total	-------	-------	-------	1	-------	-------	1	1	-------	-------	3
Net tonnage	-------	-------	-------	50	-------	-------	6	6	-------	-------	62
Grand total	-------	2	4	25	4	50	43	44	3	-------	218
Net tonnage	-------	10	27	261	77	836	459	282	17	-------	4,045
Apparatus: Number	40	3,696	13,432	26	6	113	1,345	743	420	-------	-------

Catch by gear.—Four types of gear caught 85 per cent of the catch. Listed in order of importance, they were otter trawls and flounder drags, which accounted for 41 per cent of the catch; purse seines, 19 per cent; dredges, 14 per cent; and pound nets, trap nets, and weirs, 11 per cent.

The catch by otter trawls and flounder drags was made up largely of haddock and flounders; that of purse seines consisted chiefly of menhaden; that of dredges consisted entirely of oysters, scallops, and mussels; while that of pound nets, traps, and weirs consisted of virtually every species of fish represented in the catch. The following table shows the amounts and species of fishery products taken and their mode of capture:

Fisheries of New York, 1926

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets		Pound nets, trap nets, and weirs	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore							16,800	$668
Alewives			1,256,950	$18,958	23,720	$1,155	259,756	4,014
Bluefish	9,250	$2,661	1,005	250	42,345	8,541	39,820	7,317
Bonito							90,205	4,910
Butterfish	22	2			350	53	997,763	84,258
Carp			95,152	12,107	36,092	5,082		
Catfish and bullheads			6,920	840				
Cod							51,107	3,555
Cod roe							40	4
Eels			38,160	2,522			193,154	30,168
Flounders			64,700	2,290	6,000	400	689,033	47,132
Grayfish							2,115	69
Hake							1,715	86
Herring	107	5					2,300	35
Hickory shad							13,147	586
King whiting or "kingfish"			1,775	468	3,050	458	58,936	9,653
Mackerel	5,061	456			50,400	1,655	634,538	45,968
Menhaden	10,779,800	41,175	65,000	1,000			380,070	2,584
Minnows			6,073	2,562				
Mummichog			8,875	575				
Pollock							7,853	301
Round herring							5,600	325
Scup or porgy	485,482	56,283	1,600	107	2,775	425	385,421	25,103
Sea bass	7,023	1,513					162,767	17,737
Sea robin							30,084	572
Shad			18,672	3,911	202,661	43,560	10,059	1,741
Sharks							15,763	408
Silversides or spearing			58,700	2,615			2,500	100
Skates							40,240	1,207
Spot			2,020	94	56,075	3,687	378,389	22,303
Squeteague or weakfish	101,564	4,496	38,925	5,031	160,265	24,528	658,217	62,354
Striped bass			36,443	9,448	13,883	3,687	29,942	6,625
Sturgeon					7,274	1,404	1,672	278
Sturgeon roe							80	22
Suckers			17,242	1,962	1,238	201		
Sunfish			20	2				
Swellfish							12,900	390
Tautog			100	15	300	15	40,862	3,293
Thimble-eyed mackerel							16,890	1,166
Tomcod or frostfish							5,100	207
Tuna or horse mackerel							11,942	1,959
Whitebait			18,100	1,200				
White perch			5,295	810	13,416	1,535	1,250	200
Whiting							581,764	13,510
Yellow perch			627	96	1,878	231	100	25
Mixed and scrap fish			1,055	58			539,281	3,906
Lobsters							10	5
Squid			100	15			539,463	35,295
Turtles							490	15
Total	11,388,309	106,591	1,743,509	66,936	721,722	96,617	6,909,138	440,054

Fisheries of New York, 1926—Continued

CATCH: BY GEAR—Continued

Species	Fyke nets		Otter trawls		Flounder drags		Lines	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Alewives	2,715	$104						
Bluefish							169,320	$41,612
Carp	20,903	2,810						
Catfish and bullheads	14,482	2,813					449	94
Cod			598,660	$34,041	829,670	$24,194	1,163,524	61,765
Croaker					4,000	120		
Eels	13,552	3,072					8,993	1,380
Flounders	741,620	13,640	122,051	9,555	5,871,380	320,630	37,354	3,060
Haddock			15,873,000	564,836	1,015,680	26,670	131,100	5,770
Hake			154,350	5,939	12,500	440	7,280	501
Halibut			7,651	2,639	2,730	850		
King whiting or "kingfish"							100	20
Mackerel							50,300	4,500
Mummichog	100	25						
Pollock			59,760	3,581	1,350	25	33,500	1,150
Scup or porgy							52,215	6,635
Sea bass							35,335	6,535
Squeteague or weakfish							14,240	2,135
Striped bass	52	16					6,230	1,208
Suckers	34,799	5,116						
Sunfish	2,095	243						
Tautog	1,100	105			100	10	5,850	955
Tilefish							1,801,750	111,500
Tomcod or frostfish	48,360	2,165						
Tomcod roe	3,000	250						
White perch	100	25						
Whiting							1,290	90
Yellow perch	10,407	1,386						
Mixed and scrap fish	13,502	306						
Lobsters					100	25		
Crabs, hard							2,000	100
Scallops, sea					16,914	4,310		
Total	906,787	32,076	16,815,472	620,591	7,754,424	377,274	3,520,830	249,010

Species	Scap, dip, and minor nets		Harpoons and spears		Eel pots		Lobster pots	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Alewives	21,274	$1,363						
Carp	54,953	7,637						
Catfish and bullheads	1,716	234						
Eels	55	12	33,720	$5,210	228,760	$28,179		
Minnows	1,960	2,036						
Mummichog					100	20		
Sea bass							26,000	$3,600
Suckers	19,214	2,226						
Sunfish	983	126						
Swordfish			60,809	11,391				
Tomcod or frostfish	52	15						
Yellow perch	1,316	188						
Mixed and scrap fish	150	30						
Lobsters							455,108	130,686
Shrimp	6,400	2,400						
Crabs, soft	979	535						
Clams, soft	33,400	5,555						
Scallops, bay	4,404	1,810						
Total	146,856	24,167	94,529	16,601	228,860	28,199	481,108	134,286

Species	Scallop trawls		Dredges		Tongs		Rakes, hoes, forks, and by hand	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Clams, hard:								
Public					360,960	$173,962	157,192	$74,950
Private					68,888	42,484		
Clams, soft							230,820	50,491
Skimmers or surf clams					59,112	15,436		
Mussels			210,000	$10,200				
Oysters, market:								
Public			700	175	1,750	350	3,500	500
Private			6,994,365	2,066,947	124,950	43,750		
Oysters, seed:								
Public					214,550	39,125		
Private			224,000	49,600				
Scallops:								
Bay			295,488	90,443				
Sea	494,472	$126,367	556,578	137,261				
Miscellaneous products (for bait)							12,000	14,300
Total	494,472	126,367	8,281,131	2,354,626	830,210	315,107	403,512	140,241

Fisheries by counties.—Fishing was prosecuted in the waters of 20 counties of New York State in 1926. In value, the fisheries of Suffolk County were most important and accounted for 58 per cent of the total catch and 66 per cent of the total value. New York County followed, accounting for 31 per cent of the total catch and 16 per cent of the total value. Nassau County ranked third, Kings County fourth, and Ulster County fifth in value of catch. The following table shows a summary of the fisheries of New York by counties:

Fisheries of New York, 1926

OPERATING UNITS AND CATCH: BY COUNTIES

County	Fishermen	Vessels		Motor boats	Other boats	Products	
	Number	*Number*	*Net tonnage*	*Number*	*Number*	*Pounds*	*Value*
Albany	21				13	17,095	$1,985
Bronx	13			3	5	3,400	1,700
Columbia	41			1	21	46,919	4,688
Dutchess	83			15	32	129,969	22,220
Greene	36			2	29	30,205	3,507
Kings	295	29	379	84	41	3,460,692	329,471
Montgomery	4				3	1,329	138
Nassau	331	21	284	62	178	1,900,871	421,754
New York	230	16	1,121	11	2	19,017,743	835,229
Orange	51			4	26	87,663	14,695
Putnam	3				3	1,875	260
Queens	19	3	41	1	5	148,410	16,470
Rensselaer	31			1	16	27,092	3,581
Richmond	12	1	10	6	2	74,300	10,300
Rockland	48			5	23	32,299	6,319
Saratoga	10				5	17,712	2,456
Schenectady	8				6	11,629	1,902
Suffolk	1,643	148	2,210	524	404	35,451,433	3,408,478
Ulster	192			22	126	192,964	31,317
Westchester	60			11	22	67,269	12,273
Total	3,131	218	4,045	752	962	60,720,869	5,128,743

INDUSTRIES RELATED TO THE FISHERIES

Transporting.—In 1926 there were 82 persons engaged primarily in transporting the catch of fishery products from the fishing grounds to market, of which 18 were employed on boats of less than 5 net tons and 64 on vessels of over 5 net tons. There were 15 motor boats in use, which were under 5 net tons in size, and 43 registered vessels with a total net tonnage of 774.

Wholesale trade.—In 1926 there were 138 wholesale establishments in New York City and 18 in localities outside the city engaged chiefly in handling primary fishery products. The total investment in these establishments amounted to $4,573,747 and the cash or working capital to $1,034,400. There were 1,886 persons employed, who received $3,462,507 in wages. In addition, there were 295 commission men, oyster shuckers, etc., employed. These were not connected directly with the wholesale trade, and therefore the amount of their wages was not obtained.

Prepared-fish and by-products trades.—In 1926 there were 21 establishments engaged in preparing smoked fish, miscellaneous canned fishery products, and scrap and oil from waste fish. All were located in New York City. The value of these establishments was $763,156, and the cash or working capital amounted to $176,867. There were 235 persons employed who received $390,332 in wages. The products

prepared included 6,259,360 pounds of smoked fish, valued at $2,217,039, and miscellaneous products valued at $110,078.

Following are tables showing the statistics of the industries related to the fisheries of New York for 1926.

Industries related to the fisheries of New York, 1926

TRANSPORTING

Items	Number	Items	Number
Persons engaged:		Transporting vessels—Continued.	
On boats	18	Motor—Continued.	
On vessels	64	21 to 30 tons	8
		31 to 40 tons	3
Total	82	41 to 50 tons	3
		51 to 60 tons	1
Transporting boats (motor)	15		
		Total	42
Transporting vessels:			
Steam	1	Net tonnage	738
Net tonnage	36		
		Grand total	43
Motor—			
5 to 10 tons	22	Net tonnage	774
11 to 20 tons	5		

WHOLESALE FISHERY TRADE

Items	Greater New York City	Outside of Greater New York City	Total
Establishments	138	18	156
Persons engaged:			
In establishments	1,534	352	1,886
Not directly connected with establishments	23	272	295
Wages paid in establishments	$3,205,845	$256,662	$3,462,507

PREPARED FISHERY PRODUCTS AND BY-PRODUCTS TRADE

Items	Number	
Establishments	21	
Persons engaged	235	
Wages paid	$390,332	
	Pounds	*Value*
Smoked fish:		
Butterfish	250,400	$88,600
Carp	387,000	148,020
Ciscoes	1,088,500	383,035
Eels	40,700	16,280
Finnan haddies (haddock)	1,412,000	167,085
Herring	160,000	34,410
Mackerel	101,720	23,130
Salmon	2,256,540	820,622
Spoonbill cat	50,000	42,500
Sturgeon	511,900	493,167
Other fish	600	190
Total	6,259,360	2,217,039
Miscellaneous products [1]		110,078

[1] Includes the following canned products: Whitefish caviar, sturgeon caviar, cisco caviar, cisco roe, salmon roe, smoked salmon, smoked eels, pickled eels, canned (pickled) mussels, turtle soup, turtle meat, terrapin stew, terrapin meat; and dry scrap from waste fish and oil from livers and waste fish.

NEW JERSEY

The fisheries and industries related to the fisheries of New Jersey employed 6,000 persons in 1926, which is 4 per cent more than in 1921. Of the total, 5,134 were employed in fishing, 23 on transporting boats and vessels, 640 in the wholesale trade, and 203 in the canning or prepared-products trade and in menhaden-reduction plants.

The products of the fisheries amounted to 73,299,123 pounds, valued at $6,254,264. This represents a decrease of 24 per cent in amount and an increase of about 5 per cent in value, compared with the amount and value of the fisheries in 1921. The decrease in amount is due mainly to the smaller catches of menhaden and squeteagues or weakfish.

Of the total value, oysters accounted for 53 per cent; squeteagues or sea trout, 7 per cent; clams, 5 per cent; butterfish, 4 per cent; flounders, 3 per cent; lobsters, 3 per cent; sea bass, 3 per cent; and bluefish, 2 per cent. Of the total production, oysters accounted for 35 per cent; squeteagues or sea trout, 10 per cent; whiting, 10 per cent; butterfish, 4 per cent; flounders, 4 per cent; croakers, 3 per cent; scup or porgy, 3 per cent; and cod, 3 per cent.

Operating units.—The catch of fishery products in New Jersey during 1926 was taken by 2,187 motor, sail, and row boats, 255 motor vessels, 93 sail vessels, 16 types of apparatus, and by hand. The following table shows in detail the vessels, boats, and types of apparatus used in 1926.

Fisheries of New Jersey, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets	Pound nets and weirs	Fyke nets	Flounder drags	Lines	Bag nets	Stop nets	Dip nets	Cast nets
Fishermen:											
On boats or shore	13	329	621	163	156	50	559	24	128	13	3
On vessels	118	-------	37	334	-------	98	53	-------	-------	-------	-------
Total	131	329	658	497	156	148	612	24	128	13	3
Fishing boats:											
Motor	3	46	177	32	37	-------	325	10	29	-------	-------
Other	-------	156	113	43	82	-------	24	6	74	13	-------
Fishing vessels:											
Motor—											
5 to 10 tons	1	-------	7	57	-------	13	8	-------	-------	-------	-------
11 to 20 tons	4	-------	4	-------	-------	15	8	-------	-------	-------	-------
21 to 30 tons	5	-------	-------	-------	-------	2	-------	-------	-------	-------	-------
31 to 40 tons	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
41 to 50 tons	1	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Total	11	-------	11	57	-------	30	16	-------	-------	-------	-------
Net tonnage	246	-------	113	356	-------	350	161	-------	-------	-------	-------
Apparatus: Number	14	158	3,495	198	2,129	45	(1)	36	64	13	3
Length, yards	5,250	20,970	346,569	-------	-------	-------	-------	-------	22,085	-------	-------

[1] Number undetermined.

Fisheries of New Jersey, 1926—Continued

OPERATING UNITS: BY GEAR—Continued

Items	Spears and gaffs	Eel pots	Lobster pots	Crab dredges	Oyster dredges	Scallop dredges	Tongs	Rakes, hoes, and forks	By hand	Total exclusive of duplication
Fishermen:										
On boats or shore	42	51	178		46	2	841	455	7	2,553
On vessels		2		6	1,991	9		20		2,581
Total	42	53	178	6	2,037	11	841	475	7	5,134
Fishing boats:										
Motor	4	35	111		17	1	469	253		1,195
Other	33	24	29		5		488	291		992
Fishing vessels:										
Motor—										
5 to 10 tons		1		1	58	2		6		122
11 to 20 tons				1	78	1		2		102
21 to 30 tons					19					24
31 to 40 tons					6					6
41 to 50 tons										1
Total		1		2	161	3		8		255
Net tonnage		6		27	2,101	31		72		3,160
Sail—										
5 to 10 tons					28					28
11 to 20 tons					37					37
21 to 30 tons					15					15
31 to 40 tons					6					6
41 to 50 tons					6					6
51 to 60 tons					1					1
Total					93					93
Net tonnage					1,704					1,704
Grand total		1		2	253	3		8		348
Net tonnage		6		27	3,805	31		72		4,864
Apparatus: Number	42	3,189	15,168	12	512	10	777	507		
Length, yards										

Catch by gear.—Pound nets, weirs, and dredges were the most important types of apparatus used. The first two accounted for 40 per cent and the last for 34 per cent of the catch, or approximately three-fourths of the total catch made in New Jersey. The catch by pound nets and weirs consisted of virtually every species of fish represented in the fisheries, while that of dredges consisted almost entirely of oysters, with a few crabs, scallops, and clams. The following table shows the species of fishery products taken and their mode of capture:

Fisheries of New Jersey, 1926

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets		Pound nets and weirs	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore							18,268	$665
Alewives			251,900	$7,230	89,000	$4,182	38,650	1,172
Bluefish	158,600	$33,120	2,400	600	141,010	35,220	85,201	16,453
Bonito	17,400	1,400			20,000	1,640	171,860	15,709
Butterfish	77,200	5,490			40,998	2,746	2,956,049	226,797
Carp			148,195	24,231	300	45		
Catfish			26,488	1,981				
Cero or kingfish					[1] 2,600	208	[1] 100	8
Cod	64,400	2,945					385,691	24,674
Crevalle							[2] 2,000	90
Croaker	325,000	12,490	51,250	2,840	489,597	14,625	596,774	34,038
Drum:								
Black							31,100	909
Red							12,700	380
Eels			7,600	760			12,031	1,138
Flounders	18,800	1,424	44,100	4,300	1,666	137	611,371	50,720
Goosefish							800	16
Grayfish							4,640	278
Hake							444,220	9,298
Herring							235,665	7,030
Hickory shad							5,439	219
King whiting or "kingfish"			4,000	550	100	15	25,894	3,738
Mackerel	186,000	11,564			558,100	31,184	1,421,652	98,399
Menhaden	239,400	1,794			92,000	920	5,047,407	18,231
Mullet			6,000	500				
Pilotfish							3,900	125
Pollock							22,860	1,230
Pompano					400	160	225	83
Scup or porgy	1,652,400	81,620			600	30	531,343	32,376
Sea bass	131,800	10,600	800	80	200	16	726,298	72,066
Sea robin							23,100	684
Shad			27,793	7,949	460,857	116,943	63,830	14,672
Sharks							47,110	1,323
Silversides or spearing			2,000	2,000				
Skates							45,246	1,293
Spanish mackerel					[2] 10,000	1,000	[2] 3,492	754
Spot	6,200	322	9,100	410	110,402	5,975	1,058,326	66,421
Squeteagues	2,043,200	99,448	55,000	4,730	700,330	52,111	4,254,157	278,929
Striped bass			22,550	6,077	17,500	6,050	2,384	586
Sturgeon					2,142	547	3,309	921
Sturgeon roe					380	580	110	160
Suckers			89,925	14,575				
Tautog	1,500	96					13,889	1,089
Thimble-eyed mackerel							105,038	3,498
Tuna or horse mackerel							30,450	2,942
White perch			33,350	4,550	7,500	1,475	2,885	215
Whiting					6,000	180	6,929,124	142,063
Yellow perch			10,000	2,000	10,750	2,150		
Crabs:								
Hard							1,000	25
Soft			2,000	1,000				
King							2,248,000	10,856
Squid							1,035,264	64,577
Turtles							4,618	117
Total	4,921,900	262,313	794,451	86,363	2,762,432	278,139	29,263,470	1,206,967

[1] All taken in Florida waters.

[2] Taken mostly in Florida waters.

Fisheries of New Jersey, 1926—Continued

CATCH: BY GEAR—Continued

Species	Fyke nets and bag nets		Flounder drags		Lines		Minor apparatus	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Barracuda					[3] 1,400	$84		
Bluefish					241,030	62,754		
Bonito					298,400	22,007		
Butterfish			4,000	$260				
Carp							[4] 130,544	$25,748
Catfish	108,138	$8,844					[5] 1,000	50
Cero, or kingfish					[3] 49,856	4,788		
Cod					1,766,600	81,446		
Crevalle					[6] 3,000	90		
Croaker			744,046	27,302	249,200	13,532		
Drum, red			1,600	32				
Eels	24,160	3,049			600	30	[7] 9,000	1,020
Flounders	141,170	10,010	2,022,007	136,105	82,600	6,618		
Groupers					[3] 2,600	120		
Haddock					3,450	156		
Hake					7,100	199		
King whiting, or "king-fish"			2,261	230	870	131		
Pollock					450	14		
Red snapper					[3] 5,850	484		
Scup or porgy			23,311	1,153	244,425	11,218		
Sea bass			126,559	11,767	1,104,850	76,542		
Sharks					1,600	42		
Skates					2,200	38		
Spanish mackerel					[6] 500	50		
Spot			8,076	418	25,600	2,426		
Squeteagues	1,300	100	2,418	146	116,280	12,734		
Striped bass	13,825	3,757			7,900	2,000		
Sturgeon			1,949	780				
Suckers	1,000	50					[8] 1,750	350
Tautog					6,340	515		
Tomcod or frostfish	500	30						
Tuna or horse mackerel					101,970	6,602		
White perch	69,300	9,645						
Yellow perch	6,250	925						
Lobsters			13,481	3,175				
Shrimp			[9] 36,276	1,758				
Crabs:								
Hard					11,000	1,200	[10] 12,000	1,500
Soft							[10] 4,400	3,100
Squid			1,000	50				
Turtles	7,951	844			1,200	149	[11] 3,550	429
Total	373,594	37,254	2,986,984	183,176	4,336,871	305,969	162,244	32,197

Species	Eel pots		Lobster pots		Dredges		Tongs, rakes, hoes, forks, and by hand	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Catfish	600	$60						
Eels	198,280	19,395						
Sea bass			5,350	$535				
Tomcod or frostfish	600	42						
Lobsters			629,805	190,474				
Crabs, hard			6,666	600	30,900	$2,500		
Clams, hard:								
Public					11,200	5,600	602,664	$291,870
Private					9,144	5,000	14,240	7,000
Clams, soft							144,600	25,350
Mussels							47,000	560
Oysters, market:								
Public							67,424	12,563
Private					10,686,032	1,926,460	451,689	107,531
Oysters, seed:								
Public					13,827,947	1,188,470	822,500	55,448
Private							93,100	6,740
Scallops, sea					47,436	15,688		
Total	199,480	19,497	641,821	191,609	24,612,659	3,143,718	2,243,217	507,062

[3] All taken off the coast of Florida.
[4] All taken by stop nets, except 4,800 pounds, valued at $972, which were taken by cast nets.
[5] All taken by cast nets.
[6] Taken mostly off the coast of Florida.
[7] All taken by spears.
[8] All taken by stop nets.
[9] All taken by a shrimp trawl off the coast of Florida.
[10] All taken by dip nets.
[11] All taken by gaffs.

Fisheries by counties.—Fishing was prosecuted in the waters of 14 counties in the State of New Jersey in 1926. The fisheries of Cumberland County were most important and accounted for 35 per cent of the total catch and 51 per cent of the total value. Ocean County followed in value of catch, accounting for 18 per cent of the total catch and 14 per cent of the total value. In value of catch, Cape May County ranked third, Monmouth County fourth, and Atlantic County fifth. The following table is a summary of the fisheries of New Jersey by counties.

Fisheries of New Jersey, 1926

OPERATING UNITS AND CATCH: BY COUNTIES

County	Fishermen	Vessels		Motor boats	Other boats	Products	
	Number	*Number*	*Net tonnage*	*Number*	*Number*	*Pounds*	*Value*
Atlantic	432	10	134	145	252	4,454,143	$443,946
Bergen	9			3	3	46,237	6,300
Burlington	152	1	11	74	85	458,619	101,719
Camden	8			1	2	25,690	1,760
Cape May	703	54	582	231	132	14,490,947	795,197
Cumberland	2,359	229	3,760	103	145	25,794,302	3,174,775
Gloucester	55			22	27	73,767	14,410
Hudson	1			1		13,680	1,505
Hunterdon	18				6	8,345	1,397
Mercer	34				12	32,540	5,116
Middlesex	7	1	8	3	4	31,470	5,616
Monmouth	532	15	129	232	114	14,389,938	704,562
Ocean	590	38	240	311	121	12,942,745	884,194
Salem	234			69	89	536,700	113,767
Total	5,134	348	4,864	1,195	992	73,299,123	6,254,264

INDUSTRIES RELATED TO THE FISHERIES

Transporting.—In 1926, there were 23 persons engaged primarily in transporting the catch of fishery products from the fishing grounds to market. For the conduct of this trade 18 motor vessels were used, having an aggregate of 171 net tons.

Wholesale trade.—In 1926, there were 52 wholesale establishments in New Jersey engaged chiefly in handling primary fishery products. The total investment in these establishments amounted to $845,187 and the cash or working capital amounted to $316,000. There were 602 persons employed, who received $363,607 in wages. In addition, 38 commission men, oyster shuckers, etc., were employed. These were not connected directly with the wholesale trade, and therefore the amount of their wages was not obtained.

Prepared and by-products trade.—In 1926, there were 9 establishments engaged in preparing smoked fish and miscellaneous canned products and by-products. The value of these establishments was $236,066, and the cash or working capital amounted to $84,000. There were 164 persons employed who received $86,509 in wages. The products included 1,052,800 pounds of smoked fish, valued at $496,015, and miscellaneous products and by-products valued at $248,071.

Following are tables showing the statistics of the industries related to the fisheries of New Jersey for 1926.

Industries related to the fisheries of New Jersey, 1929

TRANSPORTING

Items	Number
Men on transporting vessels	23
Transporting vessels (motor):	
5 to 10 tons	14
11 to 20 tons	2
21 to 30 tons	2
Total	18
Net tonnage	171

WHOLESALE FISHERY TRADE

Items	Atlantic	Burlington and Cape May	Cumberland	Essex and Monmouth	Ocean	Total
Establishments	6	5	25	3	13	52
Persons engaged:						
In establishments	23	18	465	70	26	602
Not directly connected with establishments				15	23	38
Wages paid in establishments	$11,400	$20,040	$256,301	$70,366	$5,500	$363,607

PREPARED PRODUCTS AND BY-PRODUCTS TRADE

Items	Number	
Establishments	9	
Persons engaged	164	
Wages paid	$86,509	
	Pounds	*Value*
Smoked fish:		
Butterfish	62,500	$25,000
Carp	47,000	21,500
Ciscoes	186,000	80,500
Eels	2,100	630
Herring	12,000	3,000
Mackerel	2,000	500
Salmon	545,000	239,010
Shad	500	180
Sturgeon	47,500	59,375
Whitefish	143,000	64,350
Other fish	5,200	1,880
Total	1,052,800	496,015
	Tons	
Miscellaneous products:		
Poultry feed (from oyster shells)	3,493	41,318
Lime (from oyster shells)	1,122	4,583
Other products [1]		202,170
Total		248,071

[1] Includes canned clam chowder and dry scrap from king crabs.

PENNSYLVANIA

The fisheries and industries related to the fisheries of Pennsylvania employed 647 persons in 1926, which is 9 per cent greater than in 1921. Of the total, 198 persons were employed in fishing, 2 on transporting vessels, 336 in the wholesale trade, and 111 in the canning or prepared-products trade.

The products of the fisheries amounted to 734,775 pounds, valued at $43,287. This represents an increase of 24 per cent in amount and a decrease of 3 per cent in value compared with the amount and value of the fisheries in 1921. The increase in amount is due chiefly to the larger production of squeteagues.

Of the total value, squeteagues accounted for 36 per cent; scup or porgy, 13 per cent; shad, 12 per cent; bluefish, 11 per cent; and suckers about 7 per cent. Of the total production, squeteagues accounted for 52 per cent; scup or porgy, 17 per cent; suckers, 4 per cent; and shad and bluefish, each 3 per cent.

Operating units.—The catch of fishery products in Pennsylvania during 1926 was taken by 40 motor and row boats, 12 motor vessels, and 6 types of apparatus. The following table shows in detail the statistics of the boats, vessels, and types of apparatus used in the fisheries of Pennsylvania during 1926:

Fisheries of Pennsylvania, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Lines	Haul seines	Gill nets	Stop nets	Fyke nets	Oyster dredges [1]	Total, exclusive of duplication
Fishermen:								
On boats or shore			58	24	2	8		87
On vessels	11	10		10			90	111
Total	11	10	58	34	2	8	90	198
Fishing boats:								
Motor				4	1	1		5
Row			21	12	1	4		35
Fishing vessels (motor):								
5 to 10 tons		2		2				2
11 to 20 tons		1		1			4	5
21 to 30 tons	1						4	5
Total	1	3		3			8	12
Net tonnage	28	31		31			161	220
Apparatus: Number	1	[2]	19	107	1	175	16	
Length, yards	350		2,028	9,400	200			

[1] Catch of these dredges included with catch of New Jersey and Delaware.
[2] Number undetermined.

Catch by gear.—Purse seines caught 79 per cent of the total production; lines, 8 per cent; gill nets, 6 per cent; and haul seines, 6 per cent, while the remainder was taken by fyke nets and stop nets. The catch by purse seines consisted of virtually every species of fish represented in the commercial catch, squeteagues and scup predominating. Lines caught chiefly sea bass; haul seines, suckers; and gill nets, mackerel and shad.

Fisheries of Pennsylvania, 1926

CATCH: BY GEAR

Species	Purse seines		Lines		Haul seines		Gill, fyke, and stop nets	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Alewives					4,000	$100	[1] 1,300	$65
Bluefish	10,000	$2,000	11,400	$2,850				
Bonito	400	40						
Butterfish	6,000	300						
Carp					2,875	600	[2] 1,000	200
Catfish					300	30	[2] 5,300	475
Cod	10,287	617	4,000	200				
Croaker	600	24	400	16				
Eels							[2] 2,500	375
Flounders	200	12	200	14				
Mackerel	9,847	984					[1] 30,000	1,300
Menhaden	36,000	240						
Scup or porgy	120,000	5,400	2,400	120				
Sea bass	200	16	42,600	3,558				
Shad					7,489	2,301	[1] 13,277	3,021
Squeteagues	380,000	15,200					[1] 3,000	240
Suckers					26,000	2,858		
Tautog	200	16						
Whiting	2,500	15						
Turtles							[3] 500	100
Total	576,234	24,864	61,000	6,758	40,664	5,889	56,877	5,776

[1] Taken by gill nets. [2] Taken by stop nets. [3] Taken by fyke nets.

Fisheries by counties.—Marine fisheries were prosecuted in Bucks, Delaware, and Philadelphia Counties in Pennsylvania in 1926. Almost the entire catch was made in Philadelphia County, Bucks County ranking second and Delaware County following next. The following table is a summary of the fisheries of Pennsylvania by counties.

Fisheries of Pennsylvania, 1926

OPERATING UNITS AND CATCH: BY COUNTIES

County	Fishermen	Vessels		Motor boats	Other boats	Products	
	Number	*Number*	*Net tonnage*	*Number*	*Number*	*Pounds*	*Value*
Bucks	67				26	37,941	$5,670
Delaware	12			5	6	16,000	3,020
Philadelphia	119	12	220		3	680,834	34,597
Total	198	12	220	5	35	734,775	43,287

INDUSTRIES RELATED TO THE FISHERIES

Transporting.—In 1926, there were 2 men and 2 motor vessels, having an aggregate of 15 net tons, engaged primarily in transporting the catch of fishery products from the fishing grounds to market.

Wholesale trade.—In 1926, there were 41 wholesale establishments in Pennsylvania, all in Philadelphia, engaged chiefly in handling primary fishery products. The total investment in these establishments amounted to $908,300, and the cash or working capital amounted to $420,000. There were 336 persons engaged in this trade, who received $357,348 in wages.

Prepared and by-products trade.—In 1926, there were 8 establishments in Pennsylvania engaged in preparing smoked fish, salted herring, and miscellaneous fishery by-products. All were located in Philadelphia. The value of these establishments was $485,300, and their cash or working capital amounted to $130,000. There were 111 persons employed, who received $152,279 in wages. The products prepared included 2,719,073 pounds of smoked fish, largely salmon, herring, and ciscoes, valued at $860,890, and miscellaneous fishery products and by-products valued at $86,395.

Industries related to the fisheries of Pennsylvania, 1926

TRANSPORTING

Items	Number
Men on transporting vessels	2
Transporting vessels (motor)	2
Net tonnage	15

WHOLESALE FISHERY TRADE OF PHILADELPHIA

Items	Number
Establishments	41
Persons engaged	336
Wages paid	$357,348

PREPARED FISHERY PRODUCTS AND BY-PRODUCTS TRADE OF PHILADELPHIA

Items	Number	
Establishments	8	
Persons engaged	111	
Wages paid	$152,279	
	Pounds	*Value*
Smoked fish:		
Alewives	1,000	$120
Butterfish	25,500	8,823
Carp	23,400	9,300
Ciscoes	277,500	87,375
Ciscoes ("tullibee")	139,160	34,915
Finnan haddie (haddock)	97,500	17,700
Herring, sea	493,000	68,810
Lake trout	108,750	43,125
Mackerel	32,625	6,525
Salmon	992,063	416,574
Salmon, kippered	38,500	15,820
Shad	55,125	11,042
Sturgeon	13,550	16,563
Miscellaneous fish	421,400	124,198
Total	2,719,073	860,890
Miscellaneous products [1]		86,395

[1] Includes salted herring and poultry feed and lime from oyster shells.

DELAWARE

The fisheries and industries related to the fisheries of Delaware employed 1,921 persons in 1926, which is 97 per cent more than in 1921. Of the total, 1,508 were employed in fishing, 255 in the wholesale trade, and 158 in menhaden-reduction plants.

The product of the fisheries amounted to 33,257,728 pounds, valued at $1,029,962. This represents an increase of 33 per cent in amount and 58 per cent in value compared with the amount and value of the fisheries for 1921. The increase in amount is due chiefly to the large production of menhaden, while oysters, crabs, and croakers also contributed. Of the total value, oysters accounted for 65 per cent; menhaden, 9 per cent; hard and soft blue crabs, 5 per cent; and shad and squeteagues, each 4 per cent. Of the total production, menhaden accounted for 70 per cent; oysters, 18 per cent; squeteagues, 2 per cent; crabs, 1 per cent; and shad, less than 1 per cent.

Operating units.—The catch of fishery products in Delaware during 1926 was taken by 563 motor and row boats, 11 steam vessels, 23 motor vessels, 5 sail vessels, 15 types of apparatus and by hand. The following table shows in detail the statistics of the boats, vessels, and types of apparatus used during 1926.

Fisheries of Delaware, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets	Pound nets	Fyke nets	Lines	Stop nets	Dip nets	Cast nets
Fishermen:									
On boat or shore		374	233	17	103	47	27	190	17
On vessels	482								
Total	482	374	233	17	103	47	27	190	17
Fishing boats:									
Motor		29	84	5	20	19	12	19	5
Row		114	45	8	51	2	13	128	9
Fishing vessels:									
Steam—									
81 to 90 tons	1								
91 to 100 tons	1								
101 to 110 tons	1								
111 to 120 tons	2								
121 to 130 tons	1								
161 to 170 tons	2								
171 to 180 tons	2								
181 to 190 tons	1								
Total	11								
Net tonnage	1,519								
Motor—									
61 to 70 tons	1								
71 to 80 tons	2								
Total	3								
Net tonnage	220								
Grand total	14								
Net tonnage	1,739								
Apparatus: Number	14	100	259	30	520	(1)	19	190	9
Length, yards	4,722	26,340	71,419				6,290		

Fisheries of Delaware, 1926—Continued

OPERATING UNITS: By GEAR—Continued

Items	Wire baskets	Spears	Eel pots	Lobster pots	Oyster dredges	Tongs	Rakes	By hand	Total, exclusive of duplication
Fishermen:									
On boat or shore	1	3	56	14	----	110	14	13	862
On vessels	----	----	----	----	164	----	----	----	646
Total	1	3	56	14	164	110	14	13	1,508
Fishing boats:									
Motor	1	----	20	5	----	18	7	----	160
Row	----	3	22	6	----	85	4	11	403
Fishing vessels:									
Steam—									
81 to 90 tons	----	----	----	----	----	----	----	----	1
91 to 100 tons	----	----	----	----	----	----	----	----	1
101 to 110 tons	----	----	----	----	----	----	----	----	1
111 to 120 tons	----	----	----	----	----	----	----	----	2
121 to 130 tons	----	----	----	----	----	----	----	----	1
161 to 170 tons	----	----	----	----	----	----	----	----	2
171 to 180 tons	----	----	----	----	----	----	----	----	2
181 to 190 tons	----	----	----	----	----	----	----	----	1
Total	----	----	----	----	----	----	----	----	11
Net tonnage	----	----	----	----	----	----	----	----	1,519
Motor—									
5 to 10 tons	----	----	----	----	7	----	----	----	7
11 to 20 tons	----	----	----	----	11	----	----	----	11
21 to 30 tons	----	----	----	----	2	----	----	----	2
61 to 70 tons	----	----	----	----	----	----	----	----	1
71 to 80 tons	----	----	----	----	----	----	----	----	2
Total	----	----	----	----	20	----	----	----	23
Net tonnage	----	----	----	----	257	----	----	----	477
Sail—									
5 to 10 tons	----	----	----	----	4	----	----	----	4
21 to 30 tons	----	----	----	----	1	----	----	----	1
Total	----	----	----	----	5	----	----	----	5
Net tonnage	----	----	----	----	55	----	----	----	55
Grand total	----	----	----	----	25	----	----	----	39
Net tonnage	----	----	----	----	312	----	----	----	2,051
Apparatus: Number	5	3	1,106	300	50	94	12	----	----

[1] Number undetermined.

Catch by gear.—Two types of gear caught 86 per cent of the catch, of which purse seines took 70 per cent and dredges took 16 per cent. The catch of purse seines consisted entirely of menhaden and that of dredges mostly of oysters and a few clams. In addition, haul seines (which took 6 per cent of the catch) and gill nets (which took 2 per cent) accounted for quantities of virtually every species of fish represented in the catch. The following table shows the amount of the species of fishery products taken and their mode of capture:

Fisheries of Delaware, 1926

CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets		Pound nets	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Alewives			361,000	$5,773	16,850	$299	34,500	$557
Bluefish			5,800	1,602	4,100	1,230	400	120
Butterfish			920	44	4,400	220	1,000	80
Carp			64,183	6,929	1,000	150	1,800	230
Catfish			25,400	1,543	350	23	5,750	402
Croaker			439,800	10,044	422,900	13,180	22,800	684
Drum:								
Black			4,240	73				
Red			3,310	60				
Eels			400	72			400	74
Flounders			33,300	1,560	2,240	131	200	20
King whiting or "kingfish"			3,900	371	350	35		
Menhaden	23,251,560	$96,380						
Mullet			20,500	834	1,750	138		
Pike			500	75				
Scup or porgy							2,000	160
Shad			13,606	2,799	133,446	36,807	43	15
Spot			90,200	5,403	11,400	892	2,000	120
Squeteagues			750,880	37,029	14,300	1,193	4,000	320
Striped bass			37,540	6,976	6,007	1,280		
Sturgeon					5,580	2,561		
Sturgeon roe					891	922		
Suckers			1,800	78			800	40
White perch			48,500	2,406	10,945	2,195	1,100	192
Yellow perch			10,300	928			6,400	572
Crabs, king							320,000	800
Terrapin			1,080	750				
Turtles			750	60				
Total	23,251,560	96,380	1,917,909	85,409	636,509	61,256	403,193	4,386

Species	Fyke nets		Lines		Minor apparatus and by hand		Eel pots and spears	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Alewives	133,700	$2,075						
Carp	7,951	1,198			34,614	$6,661		
Catfish	23,117	1,457			1,000	100		
Croaker			11,600	$348				
Eels	13,090	1,874					[1] 38,150	$6,023
Flounders	30,300	1,728						
Spot	300	24						
Squeteagues	300	30	2,400	240				
Striped bass	2,800	660						
Sunfish	156	10						
Tautog			12,000	600				
White perch	4,399	520						
Yellow perch	6,406	611						
Crabs:								
Hard	1,536	97	159,933	6,945	573	60		
King					[2] 320,000	800		
Frogs					[2] 1,800	450		
Turtles	6,995	549	2,500	225				
Total	231,050	10,833	188,433	8,358	357,987	8,071	38,150	6,023

Species	Lobster pots		Dredges		Tongs and rakes		Dip nets	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Crabs:								
Hard	4,800	$600						
Soft							155,820	$43,950
Lobsters	20,640	6,202						
Clams, hard:								
Public					4,736	$2,860		
Private			48,256	$21,864				
Oysters, market:								
Public					826,560	41,010		
Private			2,585,205	435,020				
Oysters, seed, public			2,586,920	197,740				
Total	25,440	6,802	5,220,381	654,624	831,296	43,870	155,820	43,950

[1] Of this amount, 600 pounds, valued at $90, were taken by spears.
[2] Taken by hand.

Fisheries by counties.—In 1926, fishing was prosecuted in the counties of Kent, New Castle, and Sussex in the State of Delaware. In value, the fisheries of Kent County ranked foremost and accounted for 19 per cent of the total production and 66 per cent of the total value. Sussex County followed, accounting for 80 per cent of the total catch and 30 per cent of the total value. New Castle County ranked third in importance and accounted for the remainder of the catch.

Fisheries of Delaware, 1926

OPERATING UNITS AND CATCH: BY COUNTIES

County	Fishermen	Vessels		Motor boats	Other boats	Products	
	Number	*Number*	*Net tonnage*	*Number*	*Number*	*Pounds*	*Value*
Kent	344	21	276	36	72	6,430,714	$682,768
New Castle	120	1	5	49	29	214,948	41,258
Sussex	1,044	17	1,770	75	302	26,612,066	305,936
Total	1,508	39	2,051	160	403	33,257,728	1,029,962

INDUSTRIES RELATED TO THE FISHERIES

During 1926, there were no vessels or boats in Delaware engaged in transporting fishery products from the fishing grounds to market. Three menhaden factories operated in 1926, the statistics for which are given on page 468.

Wholesale trade.—In 1926 there were 12 wholesale establishments engaged chiefly in handling primary fishery products. Eleven of these handled oysters and one handled fresh fish. The total investment in these establishments amounted to $57,200 and the cash or working capital to $22,400. There were 245 persons employed, who received $79,886 in wages. In addition, 10 commission men, oyster shuckers, etc., were employed. These were not connected directly with the wholesale trade, and therefore the amount of their wages was not obtained. The following table shows the statistics of the wholesale fish trade of Delaware for 1926.

Industries related to the fisheries of Delaware, 1926

WHOLESALE FISHERY TRADE

Items	Kent	Sussex	Total
Establishments	5	7	12
Persons engaged:			
In establishments	104	141	245
Not directly connected with establishments	10		10
Wages paid in establishments	$31,866	$48,020	$79,886

NOTE.—Of the above firms, 11 handled oysters and 1 fresh fish.

HISTORICAL REVIEW

The Bureau of Fisheries has made 12 statistical canvasses of the fisheries of New York, New Jersey, Pennsylvania, and Delaware during the 47 years from 1880 to 1926. While the frequency of these canvasses is not all that might be desired, nevertheless, it is

believed they offer a fair statistical picture of the trend of our fisheries in this section. On the other hand, it may have been that during one of the years for which a canvass was not made the catch may have been greater or smaller than during any year for which statistics were taken. It must be remembered that a true picture can be obtained only by having annual statistics. In spite of the intervals between canvasses, sufficient data are available to afford comparisons, and the statistics of the more important species of fish and shellfish of these States have been assembled in comparable form and are published herewith. In the following discussion the phrase "year upon which statistics are available" has been omitted, as the reader is to understand that only 12 canvasses, in most cases, are under consideration.

Total catch.—Production of fishery products in the Middle Atlantic States has shown a decline from 1880. In that year, 408,202,000 pounds of fishery products were taken, which is the largest catch on record. Since then the annual production has fluctuated, that for 1926 (the last year for which statistics were collected) amounting to 168,013,000 pounds.

Bluefish.—The production of the highly-prized bluefish in 1926 was but a fraction of what it has been in former years. Beginning with a production of 6,711,000 pounds in 1880, the catch increased to the high point of 16,323,000 pounds in 1897. Since that time it has declined, at first slightly and then at an alarming rate, until in 1926 the catch amounted to only 922,000 pounds.

Bonito.—The production of bonito never attained very large proportions, and the catch for 1926, while only about one-third that for 1921 (the high point), nevertheless is about the average for the years 1880 to 1926.

Butterfish.—The catches of this well-liked pan fish have increased in size during late years. Statistics were not shown in the reports until 1889, when 602,000 pounds were produced. Since then the catch has fluctuated, although there was a steady upward trend until 1926, when the production was the greatest on record and amounted to 4,089,000 pounds.

Cod.—The amount of this staple fish caught has remained fairly constant over the period under discussion. In 1880, 5,247,000 pounds were taken. Slight fluctuations occurred through the years. The peak was reached in 1908, with 6,823,000 pounds, and the low year was 1920, with 1,355,000 pounds. In 1926 the production amounted to 4,874,000 pounds, which is nearly four times the amount taken in 1921.

Croaker.—This species of fish, which formerly was given little consideration, now is esteemed highly. Statistics for the catch of croakers for this section were not reported until 1897, when 578,000 pounds were taken. During late years the catch has increased, 4,237,000 pounds having been taken in 1921. The catch then decreased somewhat, and reports showed 3,358,000 pounds as the production for 1926.

Scup or porgy.—This species appears in the catch in 1889, when 360,000 pounds were taken. Since then there has been a general upward trend in catch until 1921, when 5,555,000 pounds were taken. The catch in 1926 was smaller (3,504,000 pounds), although this year ranks second in size of catch.

Sea bass.—The production of sea bass reached its highest level in 1891, when 5,358,000 pounds were taken. Since then the catch has fluctuated, that of 1926 amounting to 2,370,000 pounds.

Shad.—The production of this fish, which is considered by some to be the choice fish of the Atlantic seaboard, suffered the severest decline of any in this region. The peak catch was taken in 1901, when 21,814,000 pounds were caught. In 1904 the production dropped to 6,623,000 pounds, or slightly more than in 1880. A further decline was recorded for 1908, and in 1921 only 390,000 pounds were reported, or about 2 per cent of the amount taken in 1901. In 1926 there was a recovery and 952,000 pounds were produced.

Squeteague or weakfish.—The production of this fish during the period under discussion has varied between the low mark of 6,259,000 pounds in 1887 and the high one of 25,567,000 pounds in 1908. Since 1908 the catch has declined considerably, although that for 1926 amounted to 9,401,000 pounds, which greatly exceeded the production of any of the species of fish under discussion.

Striped bass.—During late years the production of this game and commercial fish has declined, the catch in 1926 amounting to 197,000 pounds and being only about one-fifth as large as the greatest catch recorded—in 1888.

Lobsters.—The production of lobsters, one of our most desirable crustaceans, has increased considerably in late years, the peak having been reached in 1921, when 1,446,000 pounds were taken. In 1926 there was a slight decline, the catch amounting to 1,119,000 pounds, which is still greatly in excess of the production prior to 1921, however.

Crabs.—The catch of this species of crustacean has shown an almost uninterrupted decline from 1880, the most productive year on record, to 1926, the poorest year. In 1880 there were 3,180,000 pounds of crabs taken in this locality and in 1926 only 394,000 pounds.

Oysters.—This sea food, our most important mollusk, has yielded almost uniform catches in these States from 1887 to date, which have varied between about 4,595,000 bushels and 6,179,000 bushels. The catch in 1926 was a little over 5,644,000 bushels.

Hard clams.—The production of hard clams reached its peak in 1891, when 1,000,000 bushels were taken. However, since that year the records indicate a constant decline, the catch for 1926 having amounted to only 160,000 bushels.

Scallops.—While the amount of this popular mollusk taken never has reached large proportions in this section, it has grown fairly steadily in late years, the catch for 1926 amounting to 236,000 bushels. This is the largest catch on record.

Considered in general terms, the catches of butterfish, croaker, scup or porgy, lobsters, and scallops have increased in size, while those of bonito, cod, sea bass, and oysters have remained fairly constant, and the bluefish, shad, squeteague, striped bass, crab, and clam catches have decreased. The following table shows the comparative statistics of the catches of fish and shellfish.

Fisheries of the Middle Atlantic States, 1880 to 1926

CATCH OF CERTAIN SPECIES: BY STATES

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

Year	Bluefish					Bonito		
	New York	New Jersey	Pennsylvania	Delaware	Total	New York	New Jersey	Total
1880	3,000	3,635	30	46	6,711			
1887	2,853	4,789	30	(1)	7,672	21	(1)	21
1888	3,454	4,661		(1)	8,115			
1889	5,027	8,565	(1)	(1)	13,592	3	178	181
1890	5,740	9,291	(1)	(1)	15,031	2	145	147
1891	5,507	7,228	(1)	(1)	12,735	2	150	152
1897	11,146	5,164	13		16,323	43	359	402
1901	9,351	6,110	1		15,462	195	1,459	1,654
1904	11,414	2,723			14,137	310	598	908
1908	3,191	1,850	8		5,049	102	578	680
1921	1,083	2,243	1	1	3,328	256	1,503	1,759
1926	262	628	22	10	922	90	508	598

Year	Butterfish					Cod				
	New York	New Jersey	Pennsylvania	Delaware	Total	New York	New Jersey	Pennsylvania	Delaware	Total
1880						3,580	1,667	(1)		5,247
1887						3,455	788	30		4,273
1888						3,195	726	21	(1)	3,942
1889	365	237	(1)	(1)	602	1,880	982	148	(1)	3,010
1890	423	239	(1)	(1)	662	1,939	730	142	(1)	2,811
1891	837	231	(1)	(1)	1,068	2,277	841	133	(1)	3,251
1897	729	217			946	2,116	3,482			5,598
1901	591	3,008			3,599	1,172	2,301		1	3,474
1904	579	1,357			1,936	1,170	1,262		1	2,433
1908	1,229	2,054			3,283	2,999	3,767	50	7	6,823
1921	630	2,863			3,493	668	687			1,355
1926	998	3,078	6	7	4,089	2,643	2,217	14		4,874

Year	Croaker					Scup or porgy				
	New York	New Jersey	Pennsylvania	Delaware	Total	New York	New Jersey	Pennsylvania	Delaware	Total
1889						348	12	(1)	(1)	360
1890						369	16	(1)	(1)	385
1891						351	26	(1)	(1)	377
1897	(1)	281		297	578	746	758	29		1,533
1901		226	6	29	261	804	607	23		1,434
1904		342		25	367	1,494	1,055			2,549
1908	8	790	14	79	891	1,294	1,196	11		2,501
1921	(1)	3,816	2	419	4,237	1,297	4,116	142		5,555
1926	4	2,456	1	897	3,358	928	2,452	122	2	3,504

[1] Not specified.

Fisheries of the Middle Atlantic States, 1880 to 1926—Continued

CATCH OF CERTAIN SPECIES: BY STATES—Continued

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

Year	Sea bass					Shad				
	New York	New Jersey	Pennsylvania	Delaware	Total	New York	New Jersey	Pennsylvania	Delaware	Total
1880						2,734	750	559	1,050	5,093
1887	319	819	666	4	1,808	3,586	6,495	1,424	1,270	12,775
1888	309	816	738	2	1,865	3,446	6,523	1,387	1,389	12,745
1889	558	2,968	615	(1)	4,141	4,332	10,424	2,753	1,498	19,007
1890	751	3,560	803	(1)	5,114	3,777	10,623	2,898	1,797	19,095
1891	679	3,732	947	(1)	5,358	3,045	10,225	2,693	1,500	17,463
1897	354	2,132	900	2	3,388	1,884	13,001	2,007	1,621	18,513
1901	232	1,495	687	1	2,415	3,432	14,031	2,983	1,368	21,814
1904	320	2,572		1	2,893	498	4,338	836	951	6,623
1908	723	3,161	860		4,744	360	3,004	593	870	4,827
1921	149	1,378	135		1,662	116	168	19	87	390
1926	231	2,096	43		2,370	231	553	21	147	952

Year	Squeteague or weakfish					Striped bass				
	New York	New Jersey	Pennsylvania	Delaware	Total	New York	New Jersey	Pennsylvania	Delaware	Total
1880	4,000	4,430	15	2,619	11,064					
1887	1,505	2,377		2,377	6,259	115	615	15	116	861
1888	1,435	2,845		2,452	6,732	98	739	59	116	1,012
1889	2,802	4,716	(1)	3,212	10,730	212	306	24	110	652
1890						208	328	23	107	666
1891						205	298	25	95	623
1897	2,562	8,679		1,441	12,682	116	287	10	129	542
1901	2,347	11,973	4	722	15,046	72	354	13	48	487
1904	6,340	10,699		773	17,812	53	66	6	40	165
1908	11,151	11,814	12	2,590	25,567	45	53	7	53	158
1921	1,921	11,652	240	886	14,699	95	70		5	170
1926	1,073	7,173	383	772	9,401	87	64		46	197

Year	Lobsters				Crabs			
	New York	New Jersey	Delaware	Total	New York	New Jersey	Delaware	Total
1880	135	157		292	1,625	1,470	85	3,180
1887	114	102	39	255	983	1,489	205	2,677
1888	248	182	39	469	1,287	1,431	152	2,870
1889	124	188	10	322	531	354	124	1,009
1890	151	185	7	343	519	418	108	1,045
1891	165	166	8	339	529	520	86	1,135
1897	381	99	5	485	413	795	169	1,377
1901	183	66	3	252	832	1,138	151	2,121
1904	230	141	3	374	826	350	135	1,311
1908	423	115	6	544	602	345	199	1,146
1921	1,037	398	11	1,446	483	136	5	624
1926	455	643	21	1,119	3	68	323	394

[1] Not specified.

Fisheries of the Middle Atlantic States, 1880 to 1926—Continued

CATCH OF CERTAIN SPECIES: BY STATES—Continued

[Expressed in thousands of bushels; that is, 000 omitted]

Year	Oysters					Hard clams				Scallops		
	New York	New Jersey	Pennsylvania	Delaware	Total	New York	New Jersey	Delaware	Total	New York	New Jersey	Total
1880	1,043	1,975	(1)	300	------	349	392	1	742	------	------	------
1887	1,986	2,620	224	39	4,869	------	------	------	------	91	------	91
1888	1,901	2,525	227	42	4,695	------	------	------	------	57	------	57
1889	2,090	2,166	191	148	4,595	520	427	2	949	102	------	102
1890	2,351	2,259	178	169	4,957	525	425	3	953	132	------	132
1891	2,611	2,302	169	157	5,239	565	432	3	1,000	70	------	70
1897	2,127	3,005	266	164	5,562	184	591	1	776	148	12	160
1901	2,313	3,609	84	173	6,179	185	531	1	717	185	7	192
1904	3,329	2,135	118	242	5,824	167	271	1	439	149	------	149
1908	2,463	2,586	277	348	5,674	101	273	1	375	108	------	108
1921	1,357	3,285	(2)	617	5,259	96	98	1	195	206	------	206
1926	1,080	3,707	(2)	857	5,644	73	80	7	160	228	8	236

[1] Not specified.

[2] From 1880 to 1908, inclusive, oysters taken from Delaware and New Jersey beds by vessels owned in Pennsylvania were credited to the latter State, but after 1908 they have been credited to the States in which the beds are located.

TOTAL CATCH: BY STATES

Year	New York		New Jersey		Pennsylvania		Delaware		Total	
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
1880	329,453	$4,226	65,151	$3,176	1,680	$277	11,918	$998	408,202	$8,677
1887	130,288	3,387	65,246	4,168	7,895	333	10,396	211	213,825	8,099
1888	192,513	3,466	61,115	4,199	12,901	344	10,226	209	276,755	8,218
1889	175,936	4,182	82,362	3,170	7,166	325	9,859	257	275,323	7,934
1890	192,471	4,602	88,730	3,447	7,849	328	10,054	267	299,104	8,644
1891	170,885	4,817	79,116	3,520	7,584	322	7,698	255	265,283	8,914
1892	(3)	(3)	73,267	3,646	6,324	284	7,195	251	------	------
1897	109,556	3,392	103,782	3,614	5,604	269	8,648	252	227,590	7,527
1898	210,497	3,545	90,297	3,564	(3)	(3)	(3)	(3)	------	------
1901	228,092	3,894	117,931	4,756	6,030	251	5,835	203	357,888	9,104
1904	277,650	6,231	90,108	3,385	2,046	167	5,608	260	375,412	10,043
1908	71,474	4,390	74,827	3,069	4,380	280	70,769	541	221,450	8,280
1921	210,377	4,987	96,937	5,983	595	45	25,023	652	332,932	11,667
1926	60,721	5,129	73,299	6,254	735	43	33,258	1,030	168,013	12,456

[3] Statistics not available.

SHAD OF THE HUDSON RIVER

In 1927, the fishery for shad was carried on by 268 fishermen. It yielded 110,284 fish that weighed 358,055 pounds and were valued at $63,650. Of this number, 82 per cent were taken by New York fishermen and the remaining 18 per cent by New Jersey fishermen. Compared with the yield in 1926, there is an increase of 31 per cent in number, 35 per cent in weight, and 19 per cent in value. The yield in 1927 represents the largest catch in any year for which statistics are available, from 1910 to the present, but is less than half as large as the yield for that year. The most successful year of any for which statistics are available, from 1896 to the present, was 1901, when 973,927 were caught. While the catch of 1927 is considerably less than that for 1901, nevertheless it is gratifying to note that the yield has been increasing during late years.

Shad fishery of the Hudson River in 1927

Items	New York			New Jersey			Total		
	Number	*Pounds*	*Value*	*Number*	*Pounds*	*Value*	*Number*	*Pounds*	*Value*
Fishermen	252			16			268		
Rowboats and scows	100		$5,330	5		$1,200	105		$6,530
Gasoline boats	46		8,975	4		3,000	50		11,975
Gill nets	123		14,050	7		700	130		14,750
Haul seines	5		535				5		535
Shore and accessory property			3,725			2,000			5,725
Total			32,615			6,900			39,515
Shad caught:									
With gill nets	85,174	283,041	53,977	20,300	58,362	6,700	105,474	341,403	60,677
With seines	4,337	15,023	2,586				4,337	15,023	2,586
With other apparatus incidentally	473	1,629	387				473	1,629	387
Total	89,984	299,693	56,950	20,300	58,362	6,700	110,284	358,055	63,650

Catch of shad in the Hudson River, 1896 to 1927

Year	New York			New Jersey			Total		
	Number	*Pounds*	*Value*	*Number*	*Pounds*	*Value*	*Number*	*Pounds*	*Value*
1896	420,098	1,681,371	$58,921	168,800	675,595	$24,316	588,898	2,356,966	$83,237
1897	404,877	1,506,142	49,353	115,200	529,920	17,934	520,077	2,036,062	67,287
1898	410,395	1,534,877	50,875	129,855	606,423	18,510	540,250	2,141,300	69,385
1901	829,612	3,202,302	100,762	144,315	577,260	21,647	973,927	3,779,562	122,409
1904	100,624	402,496	28,896	57,657	201,800	17,758	158,281	604,296	46,654
1910 [1]	126,534	506,136	51,715	101,720	406,880	49,109	228,254	913,016	100,824
1915	11,606	48,564	5,969	4,249	20,104	2,674	15,855	68,668	8,643
1916	7,787	32,923	4,540	1,500	7,250	925	9,287	40,173	5,465
1917	10,615	38,344	5,810	1,400	5,040	720	12,015	43,384	6,530
1918	63,404	220,602	44,784	3,999	14,000	3,400	67,403	234,602	48,184
1919	76,501	301,306	60,690	13,800	73,668	23,034	90,301	374,974	83,724
1920	39,692	157,715	43,882	9,623	42,129	12,427	49,315	199,844	56,309
1921	28,948	104,883	24,329	6,500	25,920	6,294	35,448	130,803	30,623
1922	36,111	128,324	27,451	12,225	46,862	12,255	48,336	175,186	39,706
1923	28,636	97,863	22,644	6,450	23,865	6,000	35,086	121,728	28,644
1924	22,814	72,519	17,619	5,980	21,850	5,485	28,794	94,369	23,104
1925	34,568	110,359	24,030	4,300	13,975	2,400	38,868	124,334	26,430
1926	73,312	219,183	47,175	11,150	46,237	6,300	84,462	265,420	53,475
1927	89,984	299,693	56,950	20,300	58,362	6,700	110,284	358,055	63,650

[1] Includes catch in lower New York Bay and Raritan Bay and tributaries, but this was inconsiderable.

FISHERIES OF THE CHESAPEAKE BAY STATES

The latest statistical canvass of the fisheries and fishery industries of the Chesapeake Bay States (Maryland and Virginia) was for the calendar year 1925. Complete statistics are published in the report of the division of fishery industries for 1926 and in condensed form in Statistical Bulletin No. 745.

During 1925, the fisheries and fishery industries of Maryland and Virginia gave employment to 39,091 persons, of whom 25,856 were engaged in fishing operations, 9,671 in the wholesale fishery trade, and 3,564 in the canning, salting, smoking, and by-products industries. The products of the fisheries of the two States amounted to 333,205,769 pounds, valued at $13,948,060. The products of the canning and other fishery industries had a value of $4,936,664.

In addition to the above general canvass, annual statistics are collected on the production of the shad and alewife fisheries of the Potomac River and on the fishery products received at the municipal fish wharf and market in Washington, D. C. Statistics for 1927 on these subjects are discussed on the following pages.

SHAD AND ALEWIFE OF THE POTOMAC RIVER

In 1927, this fishery was prosecuted by 682 fishermen. It yielded 222,321 shad that weighed 686,581 pounds, valued at $113,825 to the fishermen. Compared with the yield for 1926, this is a decrease of 34 per cent in number, 34 per cent in weight, and 48 per cent in value. Of the total number, 86 per cent were taken by Virginia fishermen and the remaining 14 per cent by Maryland fishermen.

The catch of alewives amounted to 11,608,067 fish with a weight of 4,645,365 pounds, valued at $50,588 to the fishermen. This is a decrease of 16 per cent in number, 16 per cent in weight, and 9 per cent in value, compared with the yield in 1926. Of the total number, 89 per cent were taken by Virginia fishermen and the remaining 11 per cent by Maryland fishermen.

Shad and alewife fisheries of the Potomac River, 1927

Items	Maryland			Virginia			Total		
	Number	*Pounds*	*Value*	*Number*	*Pounds*	*Value*	*Number*	*Pounds*	*Value*
Fishermen	218			464			682		
Rowboats	81		$3,280	184		$6,325	265		$9,605
Gasoline boats	57		16,265	183		65,085	240		81,350
Pound nets	99		16,250	352		120,375	451		136,625
Gill nets [1]	72		7,790	331		8,013	403		15,803
Total			43,585			199,798			243,383
Shad caught:									
With pound nets	7,219	21,523	3,690	165,703	489,367	79,704	172,922	510,890	83,394
With gill nets [1]	23,501	82,205	14,204	25,898	93,486	16,227	49,399	175,691	30,431
Total	30,720	103,728	17,894	191,601	582,853	95,931	222,321	686,581	113,825
Alewives caught:									
With pound nets	1,222,000	488,699	5,541	10,196,067	4,080,666	43,122	11,418,067	4,569,365	48,663
With gill nets [1]	50,000	20,000	200	140,000	56,000	1,725	190,000	76,000	1,925
Total	1,272,000	508,699	5,741	10,336,067	4,136,666	44,847	11,608,067	4,645,365	50,588

[1] Includes the statistics on one small haul seine in Maryland.

Catch of shad in the Potomac River, 1896 to 1927

Year	Maryland			Virginia			Total		
	Number	*Pounds*	*Value*	*Number*	*Pounds*	*Value*	*Number*	*Pounds*	*Value*
1927	30,720	103,728	$17,894	191,601	582,853	$95,931	222,321	686,581	$113,825
1926	51,601	162,861	34,808	285,061	871,345	182,653	336,662	1,034,206	217,461
1925	46,008	157,786	35,310	158,574	538,846	128,088	204,582	696,632	163,398
1924	37,505	127,285	20,469	134,805	450,925	67,981	172,310	578,210	88,450
1923	93,619	308,729	52,917	257,927	878,653	145,702	351,546	1,187,382	198,619
1922	203,682	706,501	95,140	680,494	2,409,070	324,882	884,176	3,115,571	420,022
1921	49,681	138,207	25,191	356,191	1,022,231	182,179	405,872	1,160,438	207,370
1920	80,944	302,237	55,963	448,414	1,677,543	278,501	529,358	1,979,780	334,464
1919	94,512	354,420	56,833	449,957	1,687,339	275,564	544,469	2,041,759	332,397
1915	17,196	64,485	6,827	165,206	619,523	65,300	182,402	684,008	72,127
1909	31,158	116,843	9,232	172,813	648,049	44,500	203,971	764,892	53,732
1904	83,147	311,801	16,343	289,500	1,085,625	51,709	372,647	1,397,426	68,052
1901	146,000	547,500	14,800	648,462	2,431,733	104,566	794,462	2,979,233	119,366
1896	233,238	874,643	20,524	450,825	1,690,594	43,084	684,063	2,565,237	63,608

Catch of alewives in the Potomac River, 1909 to 1927

Year	Maryland			Virginia			Total		
	Number	*Pounds*	*Value*	*Number*	*Pounds*	*Value*	*Number*	*Pounds*	*Value*
1927	1,272,000	508,699	$5,741	10,336,067	4,136,666	$44,847	11,608,067	4,645,365	$50,588
1926	1,295,020	518,600	6,518	12,500,828	5,000,330	48,848	13,795,848	5,518,930	55,366
1925	415,000	166,000	2,070	7,420,380	2,968,152	35,271	7,835,380	3,134,152	37,341
1924	1,834,000	733,600	6,855	13,299,388	5,319,156	49,667	15,133,388	6,052,756	56,552
1923	2,119,787	847,916	8,764	9,308,782	3,722,912	40,657	11,428,569	4,570,828	49,421
1922	1,292,500	517,000	3,700	10,074,500	4,029,800	34,642	11,367,000	4,546,800	38,342
1921	1,395,000	558,000	9,010	8,908,510	3,563,404	35,031	10,303,510	4,121,404	44,041
1920	1,077,775	538,888	13,940	7,681,561	3,813,780	41,197	8,759,336	4,352,668	55,137
1919	1,488,583	772,867	15,508	7,379,319	2,904,054	45,508	8,867,902	3,676,921	61,016
1915	335,000	----------	1,420	7,276,428	----------	30,741	7,611,428	----------	32,161
1909	4,883,000	----------	10,369	24,601,040	----------	42,854	29,484,040	----------	53,223

PRODUCTS RECEIVED AT MUNICIPAL FISH WHARF AND MARKET, WASHINGTON, D. C.

Receipts of fresh and frozen fishery products at the municipal fish wharf and market, Washington, D. C., in 1927 amounted to 7,997,673 pounds, which is an increase of 6 per cent over the previous year and 15 per cent above the 5-year average. These products are taken chiefly in Chesapeake Bay, but quantities are taken at other points along the Atlantic Ocean, also, with lesser quantities originating in the Great Lakes and Pacific coast regions.

The great bulk of the Chesapeake Bay products is conveyed by boat and unloaded at the wharf of the market. Products originating at other points are transported by rail and are unloaded at the freight and express terminals in the city. Some products originating at points along the Chesapeake Bay not on a railroad and in close proximity to Washington are conveyed to the market by motor truck.

According to the amount of fishery products handled at this wharf and market, nine salt-water products are of commercial importance and constitute 75 per cent of the trade. Named in order of importance, these are squeteagues or "sea trout," croaker, river herring, oysters, haddock, shad, striped bass, butterfish, and mackerel (including Spanish mackerel). Except for the haddock and mackerels, the majority of the fish in this group are taken in local waters. Thirteen fishery products (10 salt-water and 3 fresh-water) are of moderate importance, constitute 20 per cent of the trade, and are taken chiefly in local or near-by waters.

In the group of slight importance are 32 products that constitute only 5 per cent of the trade. Some of these originate in distant sections of the country, and most of them are salt-water products.

It is estimated that 2,000,000 pounds of fresh and frozen fishery products are received by retail dealers, hotels, and restaurants direct from producers, which with the amount received at the municipal wharf would make a total of about 10,000,000 pounds of fresh and frozen fishery products that were handled in the District of Columbia during 1927. Virtually the entire amount was consumed in the District. According to the Bureau of the Census, the estimated population of the District of Columbia was 540,000 on July 1, 1927, making the per capita consumption of fresh and frozen fishery products during 1927 about 19 pounds.

Fishery products received at municipal fish wharf and market, Washington, D. C., 1927, in pounds

Species	January	February	March	April	May	June	July
Bass, black or sea	3,800	4,600	300		3,300	5,900	2,000
Bluefish	500		200		6,200	11,300	1,300
Butterfish	1,200	1,200	3,600	1,500	53,500	64,600	68,400
Carp	12,300	11,300	11,450	11,203	12,900	10,600	9,800
Catfish	4,600	19,500	26,070	16,600	9,300	16,000	17,200
Cod	2,500	4,300	7,900	6,300	2,500	3,300	2,900
Crappie	100						
Croaker	20,200	9,400	24,600	266,050	267,700	149,400	216,000
Eels	1,000		1,445	1,095	200	770	200
Flounders	21,900	28,300	26,300	19,600	15,200	7,500	1,900
Gizzard shad	3,200						
Haddock	38,980	50,460	57,380	31,100	23,260	43,830	26,800
Hake	9,200						
Halibut	4,100	7,400	10,900	8,200	8,000	9,900	7,900
Herring, river	24,700	79,900	274,650	459,340	189,600	3,500	
Hickory shad or "jacks"	6,000	4,400	3,000	3,200	2,100		
Kingfish	3,500	200	1,000	7,400	1,000	200	
Mackerel (including Spanish)	13,300	7,000	11,100	10,800	39,100	46,200	35,600
Menhaden			1,200				
Mullet	100	600	2,200			100	400
Perch	11,400	23,400	47,000	27,160	9,650	3,800	4,000
Pike or pickerel	1,100	2,700	700				100
Pollock	200	1,800		400	600	600	2,200
Pompano						100	
Redfish or red drum	400	200			550		
Red snapper	200	700		400	1,200	2,000	400
Salmon	2,800	2,100	2,700	100		800	1,300
Scup or porgy					2,100	4,800	200
Shad	31,300	23,000	72,400	138,601	121,750	100	
Sheepshead	1,300	1,300		400			
Smelt	1,800	1,060	700				
Spot	4,800	1,200	200	2,200	14,800	15,100	24,200
Squeteagues or "sea trout"	19,400	16,600	27,500	15,400	240,100	158,000	148,200
Squid					600	2,000	200
Striped bass	17,900	18,100	57,900	92,275	17,925	9,700	18,050
Sturgeon				200	650	525	
Swordfish							650
Tilefish	400	1,200	1,900	700	200	400	800
Whitefish							200
Whiting	14,300		3,000		800		
Clams, hard	3,232	2,624	3,776	4,960	6,336	7,168	6,432
Oysters:							
In the shell	21,826	34,335	17,668	5,005	140	168	
Opened	58,262	30,995	25,930	5,833	165		
Scallops	1,120		480	480	1,120	640	480
Crabs			150	1,695	8,040	25,380	44,421
Crab meat	780	760	575	3,550	8,485	12,900	14,900
Lobsters		50	250	250	450	550	250
Shrimp	1,050	4,400	2,400	4,400	9,600	7,000	3,200
Turtles	958	154	38	160	1,420	444	708
Frogs			6		86	42	
Total	365,708	395,238	728,568	1,146,557	1,080,627	625,317	661,291

Fishery products received at municipal fish wharf and market, Washington, D. C., 1927, in pounds—Continued

Species	August	September	October	November	December	Total
Angelfish			200			200
Bass, black or sea	1,700	500	100	4,200	800	27,200
Bluefish	3,000	10,800	5,600	400		39,300
Butterfish	54,200	52,300	4,600	1,250	600	306,950
Carp	6,500	7,800	7,100	9,300	2,900	113,153
Catfish	4,775	16,700	25,500	25,600	10,420	192,265
Cod	3,000	1,900	1,400	7,700	600	44,300
Crappie						100
Croaker	229,600	88,000	36,000	68,600	44,500	1,420,050
Eels	200	600	3,380	1,800	300	10,990
Flounders	6,400	9,800	16,500	30,600	10,550	194,550
Gizzard shad					2,400	5,600
Haddock	22,500	47,240	43,300	33,550	24,820	443,220
Hake		600	9,200	66,600	37,200	122,800
Halibut	6,000	5,600	10,400	8,000	3,600	90,000
Herring, river	200					1,031,890
Hickory shad or "jacks"						18,700
Kingfish	800	100	9,200	7,100	6,350	36,850
Mackerel (including Spanish)	38,500	34,000	16,000	9,300	8,800	269,700
Menhaden						1,200
Mullet	1,200	9,200	4,900	4,900	300	23,900
Perch	2,325	3,300	9,300	20,400	9,000	170,735
Pigfish				400		400
Pike or pickerel	300	200	300	800	1,080	7,280
Pollock	2,000	4,400	3,200	5,400	2,200	23,000
Pompano			300			400
Redfish or red drum		400	800	400		2,750
Red snapper		800		800	400	6,900
Salmon	2,000	5,000	4,300	1,700	700	23,500
Scup or porgy	400	1,400	200			9,100
Shad		200	400	1,000	1,000	389,751
Shark					100	100
Sheepshead			400			3,400
Skates					400	400
Smelt					200	3,760
Spot	34,400	47,100	74,800	8,600	2,700	230,100
Squeteagues or "sea trout"	173,800	284,600	220,800	103,900	65,050	1,473,350
Squid						2,800
Striped bass	10,200	14,700	21,680	23,000	6,085	307,515
Sturgeon			500	100	100	2,075
Swordfish	100					750
Tilefish	800	1,800	600	1,100	400	10,300
Whitefish	400					600
Whiting			200	7,000	1,200	26,500
Clams, hard	6,304	7,232	4,448	3,584	1,216	[1] 57,312
Oysters:						
In the shell	56	6,069	32,655	52,794	12,397	[2] 183,113
Opened		14,157	46,588	66,479	59,557	[3] 307,966
Scallops	480	1,600			320	6,720
Crabs	57,603	52,650	10,725	75		200,739
Crab meat	14,860	13,895	9,545	4,350	1,355	85,955
Lobsters		162	50	50	150	2,212
Lobster meat	25	55				80
Shrimp	9,200	5,800	5,100	4,400	4,025	60,575
Turtles	170	290	72	22	32	4,468
Frogs	15					149
Total	694,013	750,950	640,343	585,254	323,807	7,997,673

[1] 7,164 bushels. [2] 26,159 bushels. [3] 37,329 gallons.

NOTE.—The clams have been reduced to pounds on the basis of 8 pounds of meat to a bushel; the oysters, on the basis of 7 pounds of meat to a bushel and 8¼ pounds to a gallon.

FISHERIES OF THE SOUTH ATLANTIC STATES

The latest statistical canvass of the fisheries and fishery industries of the South Atlantic States (North Carolina, South Carolina, Georgia, and east coast of Florida) was made for the calendar year 1923. Complete statistics are published in the report of the division of fishery industries for 1924 and in condensed form in Statistical Bulletin No. 652.

During 1923, the fisheries and fishery industries of the South Atlantic States employed 16,298 persons, of whom 10,274 were employed in fishery operations and 6,024 in the wholesale fishery trade and the canning, salting, smoking, and by-products industries. The products of the fisheries of these States amounted to 228,747,930 pounds, valued at $5,087,340.

FISHERIES OF THE GULF STATES

The latest statistical canvass of the fisheries and fishery industries of the Gulf States (west coast of Florida, Alabama, Mississippi, Louisiana, and Texas) was made for the calendar year 1923. Complete statistics are published in the report of the division of fishery industries for 1925 and in Statistical Bulletin No. 670.

During 1923, the fisheries and fishery industries of the Gulf States employed 17,793 persons, of whom 11,132 were engaged in fishing operations, 1,785 in the wholesale fishery trade, and 4,876 in the fish-canning and by-products industries. The yield of the fisheries aggregated 160,324,042 pounds, valued at $8,096,650. The products of the canning and by-products industries were valued at $6,264,913.

In addition to the above general canvass, annual statistics are collected on the quantity of sponges sold on the exchange at Tarpon Springs, Fla. The statistics for 1927 are discussed below.

FLORIDA SPONGES

In 1927, the quantity of sponges sold on the sponge exchange, Tarpon Springs, Fla., was 414,417 pounds, valued at $865,510. Of this amount 252,463 pounds, valued at $752,435, were large wool; 35,413 pounds, valued at $61,973, were small wool; 65,429 pounds, valued at $32,714, were yellow; 50,495 pounds, valued at $14,139, were grass; and 10,617 pounds, valued at $4,249, were wire. It is estimated that sponges to the value of $50,000 were sold outside of the exchange at Tarpon Springs. Compared with the number of sponges sold on the exchange in 1926, the quantity sold in 1927 is 13 per cent greater, while the value was 30 per cent greater. The quantity of each grade of sponge handled in 1927 also increased over the previous year. Greater production was due, in a large measure, to the favorable weather conditions during the first six months of the year.

Sponges sold at the exchange, Tarpon Springs, Fla., 1919 to 1927

Year	Total		Large wool	Small wool	Yellow	Grass	Wire
	Pounds	*Value*	*Pounds*	*Pounds*	*Pounds*	*Pounds*	*Pounds*
1927	414,417	$865,510	252,463	35,413	65,429	50,495	10,617
1926	367,745	666,093	235,143	26,073	55,205	49,233	2,091
1925	434,672	715,097	242,020	29,968	120,748	28,622	13,314
1924	425,305	714,760	265,392	58,021	81,420	14,898	5,574
1923	490,200	734,391	243,230	54,292	87,878	88,772	16,028
1922	526,885	699,089	248,475	70,478	115,455	84,892	7,585
1921	386,390	540,093	173,723	63,786	70,218	65,745	12,918
1920	409,746	678,209	176,722	60,902	72,648	92,880	6,594
1919	424,075	707,964	205,462	76,309	73,051	62,547	6,706

FISHERIES OF THE PACIFIC COAST STATES

The latest statistical canvass of the fisheries and fishery industries of the Pacific Coast States (Washington, Oregon, and California) was for the calendar year 1926. The complete statistics are published herewith. In addition to these, statistics also are collected monthly of the landings of fishery products at Seattle, Wash., and of the halibut landings at the principal Pacific ports. A summary of these for 1927 is published herein.

GENERAL STATISTICS

The bureau's program of utilizing statistics collected by State agencies on the Pacific coast, in compiling the statistics in that region, has been continued.[5] In the statistics for 1926, for the first time under the present system of collecting statistics, the catch by each kind of fishing apparatus has been itemized separately in all of the State tables. This feature, continued in the future, should make possible a more accurate appraisal of trends in fishing effort and the resultant yield than has been possible heretofore. For purposes of comparison, the statistics for all available previous years are given in summarized form.

There were 18,597 fishermen engaged in the fisheries in 1926. These operated 703 vessels, 6,326 motor boats, and 803 other boats. This is a marked increase of fishermen, vessels, and boats over previous years. Virtually all of the vessels are motor driven, and it is this class that shows the greatest increase.

The total catch in 1926 was more than 521,000,000 pounds, with a value in first hands of nearly $19,000,000. The species used in the preparation of fishery products dominated in the Pacific coast fisheries. Their total weight was nearly 428,000,000 pounds, and they had a value of more than $11,000,000. This is 82 per cent of the total yield and 60 per cent of the total value. The species included in this category fall in five groups: The salmons, tuna and tunalike fishes, pilchard or sardine, Alaska cod, and whales. Of these, the salmons had the greatest value, being worth $7,000,000. Pilchards were most important from the standpoint of quantity, the catch amounting to nearly 287,000,000 pounds. The tuna group, which embraces albacore, bluefin and yellowfin tuna, skipjack, and bonito, provided raw material aggregating nearly 46,000,000 pounds and valued at more than $2,000,000, which placed the group third in quantity and second in value among the cannery fishes. The salt-cod fishery and the whaling industries accounted for the remainder, each having products valued at less than half a million dollars. Among the species used in the fresh and frozen fish trade, halibut dominated in Washington and Oregon, while sablefish, lingcod, shad, smelt, and minor species constituted the remainder. In California, the flounder group is important, as are also the rockfishes, barracuda, yellowtail, and white sea bass. Other fish are of minor importance, though their aggregate quantity is considerable.

[5] The method of collecting statistics in the various States and the items covered vary considerably. In compiling the data, it has been necessary for the bureau's Pacific coast agent, C. B. Tendick, to supplement those provided by the State by canvassing the industries for items omitted in State returns. In most cases the value of the catch was derived from dealers' records and estimates of prices. In Washington and Oregon the offshore fisheries were canvassed separately for units of operation, catch, and value of the catch. In almost all other respects the statistics are as collected by the States.

The shellfish yield was of considerable importance, aggregating 15,000,000 pounds and a value exceeding $1,500,000. Crabs accounted for nearly a third of this total. Clams and oysters also were outstanding, the former having provided raw material for a considerable canning industry. The sea crawfish, or spiny lobster, and the shrimp fisheries of California also made important contributions.

WASHINGTON

In 1926, the fisheries of Washington employed more than 7,700 fishermen, who manned nearly 2,500 boats and 333 fishing vessels. Their catches aggregated nearly 90,000,000 pounds, valued at about $8,000,000. Salmon made up over half this catch, while halibut and cod were of importance. In the shellfish fisheries, oysters, clams, and crabs were the most valuable products, in the order named.

The statistics for the last five years show a constantly increasing number of fishermen, though there are not yet as many as were reported in 1915. The increase is more regular and pronounced in the shore or boat fisheries. The vessels are increasing in number, though the total tonnage appears to be declining. The principal losses to the vessel fleet in 1926 were three steamers in the whaling fleet and one sailing vessel of the Alaska cod fleet. The motor vessels increased.

The total catch declined 31 per cent as compared with 1925. Most of this loss was in humpback or pink salmon, 1926 being one of their biennial "off" years. Severe decreases occurred in the chinook and blueback, or sockeye, catches, also. The amount of carp, shad, and flounders caught seems to be increasing. The sturgeon yield, which had been increasing in recent years, though still far below the large catches of early years, suffered a sharp decline in 1926. The whaling station, which has operated with declining output for a number of years, ceased operations at the end of the 1925 season, hence whale products are absent from the 1926 report. Among the shellfishes, native oysters and razor clams have shown decidedly larger yields in recent years. The octopus fishery has grown in the last five years to be an item of some importance.

OREGON

The fisheries of Oregon in 1926 employed over 4,900 fishermen, nearly 2,700 boats, and 8 fishing vessels. The total catch was about 33,000,000 pounds, valued at more than $3,000,000. The salmons accounted for more than three-fourths of this total, chinooks predominating. Of the remaining fishes, the shad and halibut yields were of the greatest value; among the shellfishes, crabs, freshwater crawfish, and clams were most important.

The number of fishermen was virtually the same as in 1925 and considerably higher than in previous years. The number of motor boats also increased steadily throughout the period covered by the statistics. The catch in 1926 was smaller than that of 1925 by more than 17 per cent, due principally to the smaller amounts of chinook, chum, and silver salmon taken. The catch of blueback, or sockeye, more than doubled, and the shad catch was 60 per cent larger. In fact, the latter has been growing for a number of years.

CALIFORNIA

In 1926, the fisheries of California employed nearly 6,000 fishermen, 2,000 boats, and 362 fishing vessels having a total net tonnage of 6,675. The catch amounted to nearly 400,000,000 pounds, valued at nearly $8,000,000. Pilchards, or sardines, were of greatest importance and accounted for nearly three-fourths of the weight and about one-fifth of the value. The tunas and tunalike fishes were next and together were of considerably greater value, though, of course, of smaller quantity than the sardine. Among the other fish taken, flounders, barracuda, yellowtail, rockfishes, and white sea bass were the most important. Of the shellfishes, crabs, spiny lobster, shrimp, clams, and abalone were important. The number of fishermen employed was the largest on record, as was also the number of motor boats. The number of vessels was the same as in 1925. The increase in number of vessels was rapid and continuous up to that year.

The total catch was about 10 per cent smaller than in 1925, due chiefly to the reduced catch of pilchards, or sardines. It should be remarked that, though the catch of sardines was smaller, the output of canned sardines increased, the decrease in catch being due mainly to restrictions imposed by the State on the use of sardines for reduction to fish meal and oil. The catch of albacore, choicest of the tunas, was only one-ninth as large as in 1925. The deficiency in this item was partially offset by the greater catch of skipjack or striped tuna. The catch of "California halibut" has been declining consistently for a number of years, and the catches of other flounders, which have been increasing, seem to have reached their maximum in 1925 and declined in 1926. The shad and salmon catches declined sharply in 1926. The catches of most of the shellfishes was about normal as compared with those of previous recent years.

Fisheries of the Pacific Coast States, 1926

OPERATING UNITS: BY STATES

Items	Washington	Oregon	California	Total
Fishermen:				
On boats and shore	5,429	4,899	3,665	13,993
On vessels	2,288	37	2,279	4,604
Total	7,717	4,936	5,936	18,597
Boats:				
Motor	2,120	2,487	1,719	6,326
Other	344	204	255	803
Vessels:				
Steam	2	----	5	7
Net tonnage	16	----	196	212
Motor	326	8	351	685
Net tonnage	6,247	32	4,588	10,867
Sail	5	----	6	11
Net tonnage	1,618	----	1,891	3,509
Total	333	8	362	703
Total net tonnage	7,881	32	6,675	14,588

Fisheries of the Pacific Coast States, 1926—Continued

CATCH: BY STATES

Species	Washington		Oregon		California		Total	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore					2,469,385	$232,399	2,469,385	$232,399
Anchovies					60,127	631	60,127	631
Barracuda					5,022,494	449,610	5,022,494	449,610
Bonito					3,078,666	93,256	3,078,666	93,256
Carp	659,288	$19,780			72,178	2,092	731,466	21,872
Catfish					257,377	36,130	257,377	36,130
Cod, dry salted	3,976,615	173,035			3,712,070	235,055	7,688,685	408,090
Cod tongues	14,000	1,400					14,000	1,400
Dolly Varden trout	545	82					545	82
Dolphins					3,145	94	3,145	94
Eels					238	7	238	7
Flounders:								
"California halibut"					1,431,000	209,710	1,431,000	209,710
"Sole"	205,104	8,157	1,500	$50	8,649,870	357,405	8,856,474	365,612
Other	140,076	2,843	3,500	75	1,813,011	84,366	1,956,587	87,284
Grayfish	290,395	1,452			506,723	3,115	797,118	4,567
Hake					58,335	1,458	58,335	1,458
Halibut	17,850,452	2,596,753	362,609	58,132	256,720	28,413	18,469,781	2,683,298
Hardhead					43,625	4,409	43,625	4,409
Herring	2,821,692	28,218			453,607	9,130	3,275,299	37,348
Horse mackerel					239,164	12,604	239,164	12,604
Kingfish					484,921	13,573	484,921	13,573
"Lingcod"	823,013	31,916	16,322	631	645,000	22,231	1,484,335	54,778
Mackerel					3,623,290	96,103	3,623,290	96,103
Mullet					51,753	7,048	51,753	7,048
Perch	70,468	3,524			208,910	11,641	279,378	15,165
Pike, Sacramento					2,990	139	2,990	139
Pilchard or sardine					286,741,250	1,527,186	286,741,250	1,527,186
Pompano					8,125	3,908	8,125	3,908
Rock bass					636,335	50,104	636,335	50,104
Rockfishes	443,222	19,406	66,711	2,282	7,538,448	348,069	8,048,381	369,757
Sablefish	2,211,574	116,973	386,653	18,762	183,065	9,802	2,781,292	145,537
Salmon	51,656,389	3,864,520	26,821,843	2,657,708	6,084,079	610,218	84,562,311	7,132,446
Sculpin					108,068	9,727	108,068	9,727
Sea bass:								
Black					377,934	12,503	377,934	12,503
White, or squeteague					2,216,402	238,590	2,216,402	238,590
Shad	380,458	7,610	1,654,789	39,650	902,202	23,800	2,937,449	71,060
Sheepshead					138,927	5,083	138,927	5,083
Skates	4,105	83			232,993	4,551	237,098	4,634
Skipjack or striped tuna					20,994,822	873,932	20,994,822	873,932
Smelt:								
Silver	360,790	43,295			883,123	79,158	1,243,913	122,453
Eulachon	466,109	7,372	72,900	2,187			539,009	9,559
Splittail					5,322	206	5,322	206
Steelhead trout	2,561,524	187,556	2,657,470	196,592			5,218,994	384,148
Striped bass					750,801	110,118	750,801	110,118
Sturgeon	84,600	6,045	138,416	9,066			223,016	15,111
Suckers					1,988	40	1,988	40
Swordfish					45,543	3,763	45,543	3,763
Tomcod	1,492	86	300	18	4,325	130	6,117	234
Tuna:								
Bluefin					6,526,533	343,412	6,526,533	343,412
Yellowfin					12,565,085	590,860	12,565,085	590,860
Mixed					260,756	18,110	260,756	18,110
Whitebait					85,557	7,185	85,557	7,185
Whitefish					368,064	28,217	368,064	28,217
Yellowtail					5,023,114	266,045	5,023,114	266,045
Other fish	11,445	467			230,124	10,578	241,569	11,045
Total	85,033,356	7,120,573	32,183,013	2,985,153	386,057,584	7,085,914	503,273,953	17,191,640
SHELLFISH, ETC.								
Crabs	1,937,741	133,506	532,884	36,333	3,296,280	241,117	5,766,905	410,956
Crawfish			105,706	13,214			105,706	13,214
Sea crawfish or spiny lobster					1,175,223	163,182	1,175,223	163,182
Shrimp	50,624	7,087			1,431,511	60,755	1,482,135	67,842
Clams:								
Cockle					2,377	2,137	2,377	2,137
Hard	215,279	40,365	4,837	2,177			220,116	42,542
Mixed					5,302	2,585	5,302	2,585
Pismo					68,579	27,432	68,579	27,432
Razor	1,288,139	214,690	154,543	23,611			1,442,682	238,301
Soft			14,519	5,227	40,993	21,905	55,512	27,132
Mussels					1,461	498	1,461	498

Fisheries of the Pacific Coast States—Continued

CATCH: BY STATES—Continued

Species	Washington		Oregon		California		Total	
SHELLFISH, ETC.—con.								
Oysters:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Eastern, market	20, 280	$21, 181			61, 042	$26, 161	81, 322	$47, 342
Native, market	697, 920	358, 631	2, 616	$2, 325	36	20	700, 572	360, 976
Japanese, market	60, 000	30, 000					60, 000	30, 000
Scallops	210, 395	8, 901					210, 395	8, 901
Abalone					412, 154	84, 827	412, 154	84, 827
Octopus	123, 581	7, 414			63, 304	6, 260	186, 885	13, 674
Squid					3, 135, 561	45, 806	3, 135, 561	45, 806
Total	4, 603, 959	821, 775	815, 105	82, 887	9, 693, 823	682, 685	15, 112, 887	1, 587, 347
WHALE PRODUCTS								
Sperm oil					36, 750	1, 927	36, 750	1, 927
Whale oil					1, 980, 068	112, 917	1, 980, 068	112, 917
Other whale products					882, 760	20, 902	882, 760	20, 902
Total					2, 899, 578	135, 746	2, 899, 578	135, 746
Grand total	89, 637, 315	7, 942, 348	32, 998, 118	3, 068, 040	398, 650, 985	7, 904, 345	521, 286, 418	18, 914, 733

Fisheries of the Pacific Coast States, 1888 to 1926

OPERATING UNITS

Items	1888	1892	1895	1899	1904	1908	1915	1922	1923	1924	1925	1926
Fishermen:												
On boats or shore	8, 804	8, 755	11, 439	11, 342	12, 483	11, 626	14, 235	10, 244	10, 309	11, 762	12, 438	13, 993
On vessels	1, 663	2, 216	1, 927	1, 561	1, 205	1, 754	4, 229	3, 162	3, 932	3, 597	4, 418	4, 604
Total	10, 467	10, 971	13, 366	12, 903	13, 688	13, 380	18, 464	13, 406	14, 241	15, 359	16, 856	18, 597
Fishing boats:												
Motor	(1)	(1)	(1)	(1)	313	868	4, 378	4, 173	5, 100	5, 727	5, 424	6, 326
Other	4, 101	4, 575	6, 110	5, 751	7, 066	6, 363	5, 024	1, 041	657	676	1, 019	548
Fishing vessels:												
Steam	(2)	(2)	(2)	(2)	(2)	[3] 107	(2)	10	(2)	10	12	7
Net tonnage	(2)	(2)	(2)	(2)	(2)	[3] 4, 582	(2)	514	(2)	382	220	212
Motor	(2)	(2)	(2)	(2)	(2)	(3)	(2)	510	(2)	534	643	677
Net tonnage	(2)	(2)	(2)	(2)	(2)	(3)	(2)	7, 732	(2)	4, 345	5, 873	10, 835
Sail	(2)	(2)	(2)	(2)	(2)	31	(2)	6	(2)	10	10	11
Net tonnage	(2)	(2)	(2)	(2)	(2)	3, 889	(2)	2, 019	(2)	1, 448	1, 838	3, 509
Total	82	121	99	66	87	138	550	526	555	560	673	703
Total net tonnage	10, 226	13, 693	10, 602	6, 900	7, 637	8, 471	14, 635	10, 265	11, 095	12, 064	13, 361	14, 638

[1] Motor boats were not designated separately prior to 1904.
[2] Steam, motor, and sailing vessels not designated separately.
[3] Steam and motor vessels not designated separately.

Fisheries of the Pacific Coast States, 1888 to 1926—Continued

CATCH

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish, except cod, have been converted to the equivalent of fresh fish]

Species	1888	1892	1895	1899	1904	1908
FISH						
Albacore			299	179	210	
Anchovies		150	460	7		220
Barracuda		436	1,245	1,425	2,375	3,205
Bonito		421	301	189	212	329
Carp		66	46	284	90	457
Catfish			376	626	923	1,270
Cod:						
Fresh	239		40			
Dry salted		2,814	3,228	6,847	7,695	7,946
Flounders:						
"Sole"				32	3,883	190
Other		4,465	3,415	4,747	4,560	6,988
Hake						32
Halibut	1,520	1,429	1,849	6,878	12,091	30,088
Hardhead				186	65	
Herring		5,104	3,526	2,096	1,976	3,346
Kingfish		40	148	127	174	682
"Lingcod"		616	368	239	437	249
Mackerel		350	95	168	135	197
Mullet				22	13	4
Pilchard or sardine		753	732	2,383	1,036	4,638
Pompano			11	13	34	89
Rockfishes		2,088	1,614	1,260	1,924	2,456
Sablefish		15	37	164	334	203
Salmon:						
Chinook	40,935	29,251	38,488	31,779	50,150	39,358
Silver		8,986	22,011	25,863	30,548	19,144
Blueback		5,654	7,879	42,672	12,120	13,051
Chum		3,310	7,597	7,357	14,651	13,960
Humpback			2,270	21,112		
Sculpin				3	3	
Sea bass:						
Black		263	37	96	63	161
White, or squeteague			640	952	983	1,337
Shad	10	738	372	1,255	489	1,700
Skates					198	124
Smelt	180	2,242	2,299	2,280	2,757	3,645
Steelhead trout		5,316	8,652	2,725	3,018	4,884
Striped bass		56	252	1,234	1,570	1,776
Sturgeon	1,157	3,775	3,140	296	138	309
Surf fishes		400	436	165	272	885
Swordfish						8
Tomcod			74	376	69	49
Tuna:						
Yellowfin			32	24	15	12
Whitefish			263	58	270	466
Yellowtail		546	316	334	358	571
Other fish	29,947	2,257	613	723	1,354	1,214
Total	73,988	81,541	113,161	167,176	157,193	165,243
SHELLFISH						
Crabs	232	2,945	2,752	4,063	6,080	4,081
Crawfish	14	20	59	116	187	178
Sea crawfish or spiny lobster	231	303	558	607	1,078	573
Shrimp	4,907	5,315	5,461	6,515	3,006	505
Clams:						
Hard					775	156
Mixed	2,771	3,231	3,269	6,281	96	132
Razor					164	234
Soft					140	498
Mussels		2,880	512	383	28	68
Oysters:						
Eastern			14,727	25,200	1,389	729
Native	5,251	25,141	6,573	9,560	1,377	1,328
Scallops				4		
Abalone	3,606	405	126	369	825	1,005
Octopus	244	375	2			
Squid			30	1,869	754	110
Total	17,256	40,615	34,069	54,967	15,899	9,597
WHALE PRODUCTS						
Sperm oil						169
Whale oil		1,575	550	522	325	13
Other whale products		197	99	207	95	32
Total		1,772	649	729	420	214
Grand total	91,244	123,928	147,879	222,872	173,512	175,054

Fisheries of the Pacific Coast States, 1888 to 1926—Continued

CATCH—Continued

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish, except cod, have been converted to the equivalent of fresh fish]

Species	1915	1922	1923	1924	1925	1926
FISH						
Albacore	21,074	13,232	12,515	17,695	22,207	2,469
Anchovies	113	653	307	347	124	60
Barracuda	3,923	6,250	7,201	7,129	8,006	5,022
Bonito	448	929	1,115	1,038	867	3,079
Carp	601	442	533	455	444	731
Catfish	517	126	130	352	366	257
Cod:						
Fresh	22				1	
Dry salted	10,451	2,856	5,079	6,585	7,542	7,689
Flounders:						
"California halibut"		[1] 3,403	[1] 2,427	2,576	2,452	1,431
"Sole"	5,830	7,174	7,206	9,101	8,996	8,856
Other	6,962	1,797	2,075	2,269	2,812	1,957
Hake	269	75	79	61	22	58
Halibut	40,826	18,706	25,015	15,974	19,256	18,470
Hardhead	73	18	10	19	24	44
Herring	3,005	602	903	619	1,536	3,276
Kingfish	656	582	412	384	537	485
"Lingcod"	1,428	589	545	929	1,437	1,484
Mackerel	266	2,496	3,592	3,241	3,522	3,623
Mullet	3	31	74	62	37	52
Pilchard or sardine	4,390	93,400	159,197	242,686	315,295	286,741
Pompano	19	16	33	18	11	8
Rock bass	901	316	357	466	330	636
Rockfishes	4,465	4,626	5,592	5,051	5,928	8,048
Sablefish	657	1,348	3,014	2,989	3,512	2,782
Salmon:						
Chinook	48,994	30,855	37,668	54,319	54,702	41,590
Silver	23,890	19,196	19,667	26,437	25,442	24,217
Blueback	5,380	6,040	5,729	5,489	10,565	4,531
Chum	19,176	6,448	9,927	15,217	13,831	14,096
Humpback	29,998	145	33,097	498	35,309	128
Sculpin	9	42	60	109	226	108
Sea bass:						
Black	392	97	227	231	189	378
White, or squeteague	1,221	2,982	2,520	1,516	1,920	2,216
Shad	7,478	1,736	1,778	2,715	3,712	2,938
Shark	7,561	288	419	490	414	797
Sheepshead		18	32	24	49	139
Skates	1,012	125	141	141	184	237
Skipjack or striped tuna		11,862	11,463	3,781	14,235	20,995
Smelt	3,299	2,439	2,261	2,390	2,536	1,783
Steelhead trout	4,512	2,300	4,260	4,835	4,026	5,219
Striped bass	1,784	684	910	662	844	751
Sturgeon	160	485	208	262	281	223
Surf fishes	155	289	395	333	348	279
Swordfish		23	12	32	27	46
Tomcod	64	32	48	43	15	6
Tuna:						
Bluefin		2,838	3,301	3,241	3,804	6,527
Yellowfin		7,337	10,837	3,063	13,238	12,565
Mixed		692	662	547	427	261
Whitebait	56	84	68	122	71	86
Whitefish		30	40	273	222	368
Yellowtail	1,343	3,414	3,980	4,714	3,180	5,023
Other fish	689	287	237	377	253	509
Total	264,072	260,435	387,358	451,907	595,314	503,274
SHELLFISH						
Crabs	3,563	2,763	2,589	3,086	4,708	5,767
Crawfish	184	69	142	12	128	106
Sea crawfish or spiny lobster	892	1,017	1,093	1,027	1,486	1,175
Shrimp	684	1,052	1,148	1,589	1,496	1,482
Clams:						
Cockle		4	5	1		2
Hard	176	92	80	204	222	220
Mixed	66	5	4	7	9	5
Pismo		49	59	73	81	69
Razor	450	1,008	430	557	982	1,443
Soft	90	71	52	56	64	56
Mussels	20	7	10	8	4	1

[1] Includes halibut caught in California.

Fisheries of the Pacific Coast States, 1888 to 1926—Continued

CATCH—Continued

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish, except cod, have been converted to the equivalent of fresh fish]

Species	1915	1922	1923	1924	1925	1926
SHELLFISH—Continued						
Oysters:						
Eastern	641	119	114	89	67	81
Native	460	566	696	662	673	701
Japanese		35	10	16	28	60
Scallops				4	6	210
Abalone	731	312	318	449	471	412
Octopus	32	119	162	271	239	187
Squid	6,226	210	1,180	6,831	1,891	3,136
Other shellfish		13	1		4	
Total	14,215	7,511	8,093	14,942	12,559	15,113
WHALE PRODUCTS						
Sperm oil		299	363	68	136	37
Whale oil	2,635	8,626	6,020	4,404	1,668	1,980
Other whale products	1,298	4,266	3,114	2,374	1,319	883
Total	3,933	13,191	9,497	6,846	3,123	2,900
Grand total	282,220	281,137	404,948	473,695	610,996	521,287

Fisheries of Washington, 1926

OPERATING UNITS: BY DISTRICTS

Items	Puget Sound	Washington coast	Columbia River	Total
Fishermen:				
On boats and shore	1,916	1,702	1,811	5,429
On vessels	2,280	8		2,288
Total	4,196	1,710	1,811	7,717
Boats:				
Motor	902	237	981	2,120
Other	183	131	30	344
Vessels:				
Steam	2			2
Net tonnage	16			16
Motor	322	4		326
Net tonnage	6,214	33		6,247
Sail	5			5
Net tonnage	1,618			1,618
Total	329	4		333
Total net tonnage	7,848	33		7,881

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets, drift	Gill nets, set	Pound nets	Brush weirs	Beam trawls	Trawl lines	Troll lines
Fishermen:									
On boats and shore		598	1,323	274	774	12	12		730
On vessels	1,059	34	12	4			48	1,124	115
Total	1,059	632	1,335	278	774	12	60	1,124	845
Boats:									
Motor		105	944	173	375	6	6		428
Other		46		101	12				
Vessels:									
Steam							2		
Net tonnage							16		
Motor	134	12	6	2			15	127	55
Net tonnage	2,901	155	42	41			203	2,893	428
Sail								5	
Net tonnage								1,618	
Total	134	12	6	2			17	132	55
Total net tonnage	2,901	155	42	41			219	4,511	428

Fisheries of Washington, 1926—Continued

OPERATING UNITS: BY GEAR—Continued

Items	Set lines	Fish wheels	Drag bag nets	Dip bag nets	Reef nets	Crab traps	Oyster tongs	Clam forks	Total [1]
Fishermen:									
On boats and shore	42	28	102	146	8	147	109	1,511	5,429
On vessels			23			24			2,288
Total	42	28	125	146	8	171	109	1,511	7,717
Boats:									
Motor	35		40	74	4	124	18		2,120
Other	7		11				169		344
Vessels:									
Steam									2
Net tonnage									16
Motor			8			12			326
Net tonnage			134			147			6,247
Sail									5
Net tonnage									1,618
Total			8			12			333
Total net tonnage			134			147			7,881

CATCH: BY DISTRICTS

Species	Puget Sound District		Coastal District		Columbia River District		Total	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Carp	25	$2			659,263	$19,778	659,288	$19,780
Cod, dry salted	3,976,615	173,035					3,976,615	173,035
Cod, tongues	14,000	1,400					14,000	1,400
Dolly Varden trout	499	75	46	$7			545	82
Flounders:								
"Sole"	205,104	8,157					205,104	8,157
Other	140,076	2,843					140,076	2,843
Grayfish	290,395	1,452					290,395	1,452
Halibut	17,850,452	2,596,753					17,850,452	2,596,753
Herring	2,821,692	28,218					2,821,692	28,218
"Lingcod"	823,013	31,916					823,013	31,916
Perch	68,991	3,450	1,477	74			70,468	3,524
Rockfishes	443,222	19,406					443,222	19,406
Sablefish	2,211,574	116,973					2,211,574	116,973
Salmon:								
Blueback or sockeye	3,122,369	359,706	78,978	6,582	524,345	70,787	3,725,692	437,075
Chinook	9,731,368	1,029,399	1,103,402	49,826	8,273,677	857,610	19,108,447	1,936,835
Chum	10,636,950	372,293	2,085,312	24,946	561,222	5,612	13,283,484	402,851
Humpback	128,445	4,608					128,445	4,608
Silver	11,226,336	829,639	1,243,250	57,359	2,940,735	196,153	15,410,321	1,083,151
Shad					380,458	7,610	380,458	7,610
Skates	4,105	83					4,105	83
Smelt:								
Silver	360,790	43,295					360,790	43,295
Eulachon					466,109	7,372	466,109	7,372
Steelhead trout	91,791	11,014	366,060	29,285	2,103,673	147,257	2,561,524	187,556
Sturgeon	1,120	168	6,600	880	76,880	4,997	84,600	6,045
Tomcod	1,492	86					1,492	86
Other fish	11,445	467					11,445	467
Total	64,161,869	5,634,438	4,885,125	168,959	15,986,362	1,317,176	85,033,356	7,120,573
SHELLFISH, ETC.								
Crabs	650,359	36,952	1,287,382	96,554			1,937,741	133,506
Shrimp	50,624	7,087					50,624	7,087
Clams:								
Hard	215,279	40,365					215,279	40,365
Razor			1,288,139	214,690			1,288,139	214,690
Oysters:								
Eastern, market			20,280	21,181			20,280	21,181
Native, market	666,792	349,341	31,128	9,290			697,920	358,631
Japanese, market	60,000	30,000					60,000	30,000
Scallops	210,395	8,901					210,395	8,901
Octopus	123,581	7,414					123,581	7,414
Total	1,977,030	480,060	2,626,929	341,715			4,603,959	821,775
Grand total	66,138,899	6,114,498	7,512,054	510,674	15,986,362	1,317,176	89,637,315	7,942,348

[1] Exclusive of duplication.

Fisheries of the Puget Sound district of Washington, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets, drift	Gill nets, set	Pound nets	Brush weirs	Beam trawls	Trawl lines	Troll lines
Fishermen:									
On boats and shore		162	508	3	152	12	12		576
On vessels	1,059	34	12	4			48	1,124	115
Total	1,059	196	520	7	152	12	60	1,124	691
Boats:									
Motor		65	322	3	76	6	6		315
Other		16							
Vessels:									
Steam							2		
Net tonnage							16		
Motor	134	12	6	2			15	127	55
Net tonnage	2,901	155	42	41			203	2,893	428
Sail								5	
Net tonnage								1,618	
Total	134	12	6	2			17	132	55
Total net tonnage	2,901	155	42	41			219	4,511	428

Items	Set lines	Drag bag nets	Dip bag nets	Reef nets	Crab traps	Oyster tongs	Clam forks	Total[1]
Fishermen:								
On boats and shore	24	100	2	8	110	98	268	1,916
On vessels		23			16			2,280
Total	24	123	2	8	126	98	268	4,196
Boats:								
Motor	17	39	2	4	87	14		902
Other	7	11				151		183
Vessels:								
Steam								2
Net tonnage								16
Motor		8			8			322
Net tonnage		134			114			6,214
Sail								5
Net tonnage								1,618
Total		8			8			329
Total net tonnage		134			114			7,848

CATCH: BY GEAR

Species	Lines		Pound nets		Purse seines		Drift gill nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Carp	13	$1					12	$1
Cod, dry salted	3,976,615	173,035						
Cod tongues	14,000	1,400						
Dolly Varden trout	230	35	269	$40				
Flounders:								
"Sole"	3,150	79	5	1	160	$6		
Other	700	35	3,244	65				
Grayfish	201,825	1,009	76,870	384			4,000	20
Halibut	17,850,079	2,596,697	373	56				
Herring			173	2	173,900	1,739		
"Lingcod"	809,456	31,534	1,923	77				
Perch	1,699	85	100	5	1,075	54		
Rockfishes	395,804	15,968	10,259	1,178	157	9		
Sablefish	2,211,574	116,973						
Salmon:								
Blueback or sockeye	455	59	2,319,618	265,099	733,661	86,704	16,632	1,901
Chinook	4,109,626	412,058	4,452,052	489,726	225,318	23,735	899,602	98,956
Chum	850	30	1,251,640	43,807	8,383,710	293,430	987,340	34,557
Humpback	585	21	108,365	3,901	14,820	518	2,750	99
Silver	2,778,152	176,974	3,076,800	249,990	4,861,768	361,269	459,488	37,333
Skates	340	7	3,000	60				
Smelt							324	39
Steelhead trout	1,584	190	57,411	6,889	1,845	221	30,897	3,708

[1] Exclusive of duplication.

Fisheries of the Puget Sound district of Washington, 1926—Continued

CATCH: BY GEAR—Continued

Species	Lines		Pound nets		Purse seins		Drift gill nets	
FISH—continued	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Sturgeon			1,120	$168				
Other fish			3,646	73				
Total	32,356,737	$3,526,190	11,366,868	1,061,521	14,396,414	$767,685	2,401,045	$176,614
SHELLFISH, ETC.								
Octopus	121,385	7,283	286	17	350	21		
Grand total	32,478,122	3,533,473	11,367,154	1,061,538	14,396,764	767,706	2,401,045	176,614

Species	Haul seines		Beam trawls		Drag bag nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Flounders:						
"Sole"	5,980	$239	195,659	$7,826	150	$6
Other	6,212	124	128,771	2,596	1,149	23
Grayfish	6,000	30				
Herring	538,599	5,386			293,970	2,940
"Lingcod"	1,202	48	2,962	118	4,495	20
Perch	49,804	2,490	325	16	14,352	718
Rockfishes	9,492	570	12,535	753	13,770	826
Salmon:						
Blueback or sockeye	46,858	5,355				
Chinook	43,076	4,738				
Chum	10,440	365			140	5
Humpback	1,895	68				
Silver	22,704	1,845			64	5
Skates	280	6	485	10		
Smelt	245,628	29,475			114,388	13,727
Steelhead trout	54	6				
Tomcod	1,098	66	394	20		
Other fish	1,077	30	4,922	246	1,800	118
Total	990,399	50,841	346,053	11,585	444,278	18,388
SHELLFISH, ETC.						
Shrimp			50,624	7,087		
Scallops			210,395	8,901		
Octopus	70	4	40	2	1,450	87
Total	70	4	261,059	15,990	1,450	87
Grand total	990,469	50,845	607,112	27,575	445,728	18,475

Species	Reef nets		Set gill nets		Brush weirs		Dip bag nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Grayfish			1,700	$9				
Herring					1,814,600	$18,146	450	$5
"Lingcod"			2,975	119				
Perch			1,536	77	100	5		
Rockfishes			1,205	102				
Salmon:								
Blueback or sockeye	5,145	$588						
Chinook	1,694	186						
Chum	2,410	84	420	15				
Humpback	30	1						
Silver	23,656	1,922	3,704	301				
Smelt							450	54
Total	32,935	2,781	11,540	623	1,814,700	18,151	900	59

Species	Tongs		Shovels and forks		Crab traps	
SHELLFISH, ETC.	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Crabs					650,359	$36,952
Clams, hard			215,279	$40,365		
Oysters:						
Native, market	666,792	$349,341				
Japanese, market	60,000	30,000				
Total	726,792	379,341	215,279	40,365	650,359	36,952

Fisheries of the coastal district of Washington, 1926

OPERATING UNITS: BY GEAR

Items	Gill nets, drift	Gill nets, set	Pound nets	Troll lines	Drag bag nets	Crab traps	Oyster tongs	Clam forks	Total [1]
Fishermen:									
On boats and shore	124	149	190	2	2	37	11	1,243	1,702
On vessels						8			8
Total	124	149	190	2	2	45	11	1,243	1,710
Boats:									
Motor	87	48	83	1	1	37	4		237
Other		101	12				18		131
Vessels:									
Motor						4			4
Tonnage						33			33

CATCH: BY GEAR

Fish	Pound nets		Drift gill nets		Set gill nets		Drag bag nets		Lines	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Dolly Varden trout									46	$7
Perch							1,342	$67	135	7
Salmon:										
Blueback or sockeye	43,998	$3,667			34,980	$2,915				
Chinook	615,158	27,550	336,950	$16,848	150,949	5,410	253	13	92	5
Chum	1,513,116	18,255	253,704	3,171	315,900	3,488	2,592	32		
Silver	829,350	38,789	241,540	12,077	169,800	6,365	2,560	128		
Steelhead trout	194,350	15,548	7,670	614	163,640	13,091	400	32		
Sturgeon	300	40	6,270	834	30	4				
Total	3,196,272	103,849	846,134	33,546	835,299	31,273	7,147	272	273	19

Shellfish, etc.	Shovels and forks		Traps		Tongs	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Clams, razor	1,288,139	$214,690				
Crabs			1,287,382	$96,554		
Oysters:						
Eastern, market					20,280	$21,181
Native, market					31,128	9,290
Total	1,288,139	214,690	1,287,382	96,554	51,408	30,471

[1] Exclusive of duplication.

Fisheries of the Columbia River district of Washington, 1926

OPERATING UNITS: BY GEAR

Items	Haul seines	Gill nets, drift	Gill nets, set	Pound nets	Troll lines	Set lines	Fish wheels	Dip bag nets	Total [1]
Fishermen:									
On boats and shore	436	691	122	432	152	18	28	144	1,811
Boats:									
Motor	40	535	122	216	112	18		72	981
Other	30								30

[1] Exclusive of duplication.

Fisheries of the Columbia River district of Washington, 1926—Continued

CATCH: BY GEAR

Fish	Pound nets		Drift gill nets		Lines	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Salmon:						
Chinook	3,519,782	$366,057	3,344,936	$347,873	393,969	$38,121
Chum	236,547	2,365	315,522	3,155		
Silver	1,207,760	73,190	233,510	14,151	1,482,345	107,774
Sockeye	111,740	15,085	250,070	33,759	15	2
Steelhead trout	1,149,210	80,445	366,280	25,640	183	13
Smelt			15,215	609		
Shad	105,027	2,101	106,811	2,136		
Sturgeon	10,760	699	38,920	2,530	14,040	913
Total	6,340,826	539,942	4,671,264	429,853	1,890,552	146,823

Fish	Haul seines		Set gill nets		Wheels		Dip nets	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Carp	659,263	$19,778						
Salmon:								
Chinook	879,175	91,434	89,539	$9,312	46,276	$4,813		
Chum	2,088	21	7,065	71				
Silver	8,180	496	8,360	507	580	35		
Sockeye	68,575	9,258	80,510	10,869	13,435	1,814		
Steelhead trout	342,130	23,949	224,820	15,737	21,050	1,473		
Smelt							450,894	$6,763
Shad	164,284	3,286	88	2	4,248	85		
Sturgeon	1,560	101	8,440	549	3,160	205		
Total	2,125,255	148,323	418,822	37,047	88,749	8,425	450,894	6,763

Fisheries of Washington, 1888 to 1926

OPERATING UNITS

Items	1888	1892	1895	1899	1904	1908
Fishermen:						
On boats or shore	2,571	3,082	4,493	5,073	5,467	3,636
On vessels	267	331	457	544	367	1,109
Total	2,838	3,413	4,950	5,617	5,834	4,745
Fishing boats:						
Motor	(1)	(1)	(1)	(1)	63	239
Other	[1] 1,202	[1] 1,690	[1] 2,646	[1] 2,566	3,448	2,559
Fishing vessels:						
Steam	(2)	(2)	(2)	(2)	(2)	[3] 85
Net tonnage	(2)	(2)	(2)	(2)	(2)	[3] 2,329
Motor	(2)	(2)	(2)	(2)	(2)	(3)
Net tonnage	(2)	(2)	(2)	(2)	(2)	(3)
Sail	(2)	(2)	(2)	(2)	(2)	22
Net tonnage	(2)	(2)	(2)	(2)	(2)	1,662
Total	13	33	39	32	50	107
Total net tonnage	682	1,009	1,166	889	1,541	3,991

Items	1915	1922	1923	1924	1925	1926
Fishermen:						
On boats or shore	5,481	3,109	3,454	4,551	5,055	5,429
On vessels	3,655	1,811	1,945	1,639	2,338	2,288
Total	9,136	4,920	5,399	6,190	7,393	7,717
Fishing boats:						
Motor	1,567	1,158	1,751	2,036	1,945	2,120
Other	2,591	248	289	261	330	344
Fishing vessels:						
Steam	(2)	3	(2)	4	6	2
Net tonnage	(2)	195	(2)	382	220	16
Motor	(2)	307	(2)	208	291	326
Net tonnage	(2)	5,159	(2)	4,345	5,873	6,247
Sail	(2)	3	(2)	5	6	5
Net tonnage	(2)	976	(2)	1,448	1,838	1,618
Total	472	313	267	217	303	333
Total net tonnage	11,363	6,330	6,980	6,175	7,931	7,881

[1] Motor boats were not designated separately prior to 1904.
[2] Steam, motor, and sailing vessels not designated separately.
[3] Steam and motor vessels not designated separately.

Fisheries of Washington, 1888 to 1926—Continued

CATCH

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish, except cod, have been reduced to the equivalent of fresh fish]

Species	1888	1892	1895	1899	1904	1908
FISH						
Catfish				106	6	
Cod:						
Fresh	239		40			
Dry salted		539	444	930	2,072	4,648
Flounders:						
"Sole"					9	190
Other		185	107	28	199	284
Halibut	1,520	1,410	1,844	6,861	12,066	30,072
Herring		617	345	424	532	2,506
"Lingcod"		359	223	91	144	62
Rockfishes		163	38	72	83	132
Sablefish		15	37	164	334	168
Salmon:						
Blueback or sockeye	16,454	2,514	7,313	42,071	11,507	12,501
Chinook		9,844	12,937	10,938	15,212	12,336
Chum		3,310	5,472	6,567	13,652	13,055
Humpback			2,270	21,112		
Silver		3,597	12,384	20,649	26,021	14,080
Shad		103		85	125	100
Smelt		322	528	937	1,370	2,897
Steelhead trout		2,419	4,971	1,507	1,859	2,339
Sturgeon		544	1,884	90	129	185
Surf fishes		65	169	43	149	661
Tomcod			10			
Other fish	1,135	40	30	49	78	
Total	19,348	26,046	51,046	112,724	85,547	96,212
SHELLFISH, ETC.						
Crabs	2	79	163	275	723	2,179
Shrimp	5	2	36	20	430	247
Clams:						
Hard	300	684	1,405	3,131	775	155
Razor					133	234
Oysters:						
Eastern, market	4,066	9,895	6,484	5,901	269	
Native, market					1,069	1,321
Japanese, market						
Mussels			24	19		
Total	4,373	10,660	8,112	9,346	3,399	4,136
WHALE PRODUCTS						
Whale oil				15		
Other whale products					8	
Total				15	8	
Grand total	23,721	36,706	59,158	122,085	88,954	100,352

Fisheries of Washington, 1888 to 1926—Continued

CATCH

[Expressed in thousands of pounds, that is, 000 omitted. Salt fish, except cod, have been reduced to the equivalent of fresh fish]

Species	1915	1922	1923	1924	1925	1926
FISH						
Carp	200	375	384	379	286	659
Catfish			1			
Cod:						
Fresh	22				1	
Dry salted	5,498	1,176	3,681	3,701	4,126	3,977
Flounders:						
"Sole"	68	131	120	266	231	205
Other	26	85	196	188	261	140
Halibut	40,591	18,467	24,151	15,330	18,516	17,850
Herring	2,129	260	425	183	670	2,822
"Lingcod"	837			477	695	823
Rockfishes	101	[1] 361	[1] 579	295	443	443
Sablefish	576	1,022	2,226	1,895	2,442	2,212
Salmon:						
Blueback or sockeye	5,043	5,104	3,664	5,053	10,212	3,726
Chinook	18,188	10,970	13,217	24,698	23,756	19,108
Chum	17,156	6,320	8,791	12,219	11,493	13,284
Humpback	29,998	145	33,097	498	35,309	128
Silver	18,630	14,817	12,950	16,158	15,195	15,410
Shad	96	48	89	193	255	380
Shark	7,493	6	59	97	42	290
Skates	229	4	7	10	1	4
Smelt	2,158	1,392	1,178	1,441	1,475	827
Steelhead trout	2,114	476	1,401	1,443	1,719	2,562
Sturgeon	44	268	84	86	120	85
Surf fishes	15	51	54	44	80	70
Tomcod			1			1
Other fish [2]		2				26
Total	151,212	61,480	106,355	84,354	127,328	85,033
SHELLFISH, ETC.						
Crabs	1,734	1,172	1,154	1,146	952	1,938
Shrimp	386	62	35	38	36	51
Clams:						
Hard	176	92	80	203	222	215
Razor	373	949	381	524	893	1,288
Soft	1					
Oysters:						
Eastern, market	265	45	45	36	10	20
Native, market	350	555	682	651	663	698
Japanese, market		35	10	16	28	60
Scallops				4	6	210
Octopus		20	52	105	106	124
Mussels	1					
Squid	15					
Other shellfish					4	
Total	3,401	2,930	2,439	2,723	2,920	4,604
WHALE PRODUCTS						
Sperm oil		261	347	68	87	
Whale oil	2,635	1,763	1,376	1,472	142	
Other whale products	1,298	1,130	744	606	210	
Total	3,933	3,154	2,467	2,146	439	
Grand total	158,546	67,564	111,261	89,223	130,687	89,637

[1] Includes fresh cod and "lingcod."
[2] Includes cod tongues.

Fisheries of Oregon, 1926

OPERATING UNITS: BY DISTRICTS

Items	Columbia River	Coastal	Total
Fishermen:			
On boats or shore	3,295	1,604	4,899
On vessels	37		37
Total	3,332	1,604	4,936
Boats:			
Motor	1,494	993	2,487
Other	30	174	204
Vessels:			
Motor	8		8
Net tonnage	82		82

OPERATING UNITS: BY GEAR

Items	Haul seines	Gill nets, drift	Gill nets, set	Pound nets	Trawl lines	Troll lines	Fish wheels	Dip bag nets	Crab traps	Crawfish traps	Oyster tongs	Forks and shovels	Total[1]
Fishermen:													
On boats or shore	731	2,567	693	74	11	511	20	147	214	42	3	311	4,899
On vessels					37								37
Total	731	2,567	693	74	48	511	20	147	214	42	3	311	4,936
Boats:													
Motor	54	1,632	522	37	11	317			214	42	1		2,487
Other	30		171								3		204
Vessels:													
Motor					8								8
Net tonnage					82								82

CATCH: BY DISTRICTS

Species	Columbia River district		Coastal district		Total	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Flounders:						
"Sole"	1,500	$50			1,500	$50
Other	3,500	75			3,500	75
Halibut	230,052	36,194	132,557	$21,938	362,609	58,132
"Lingcod"	12,143	474	4,179	157	16,322	631
Rockfishes	51,686	1,770	15,025	512	66,711	2,282
Sablefish	246,651	12,029	140,002	6,733	386,653	18,762
Salmon:						
Blueback or sockeye	805,334	108,720			805,334	108,720
Chinook	13,543,915	1,542,867	2,853,454	362,539	16,397,369	1,905,406
Chum	511,335	5,113	300,571	6,012	811,906	11,125
Silver	4,213,599	298,300	4,593,635	334,157	8,807,234	632,457
Shad	999,464	19,990	655,325	19,660	1,654,789	39,650
Smelt, eulachon	72,900	2,187			72,900	2,187
Steelhead trout	1,973,082	138,925	684,388	57,667	2,657,470	196,592
Sturgeon	132,262	8,864	6,154	202	138,416	9,066
Tomcod	300	18			300	18
Total	22,797,723	2,175,576	9,385,290	809,577	32,183,013	2,985,153
SHELLFISH, ETC.						
Crabs	23,980	1,635	508,904	34,698	532,884	36,333
Crawfish	95,706	11,964	10,000	1,250	105,706	13,214
Clams:						
Hard			4,837	2,177	4,837	2,177
Razor	154,543	23,611			154,543	23,611
Soft			14,519	5,227	14,519	5,227
Oysters, native, market			2,616	2,325	2,616	2,325
Total	274,229	37,210	540,876	45,677	815,105	82,887
Grand total	23,071,952	2,212,786	9,926,166	855,254	32,998,118	3,068,040

[1] Exclusive of duplication.

Fisheries of the Columbia River district of Oregon, 1926

OPERATING UNITS: BY GEAR

Items	Haul seines	Gill nets, drift	Gill nets, set	Pound nets	Trawl lines	Troll lines	Fish wheels	Dip bag nets	Crab traps	Crawfish traps	Forks and shovels	Total [1]
Fishermen:												
On boats or shore	731	1,565	137	74	11	370	20	147	35	40	242	3,295
On vessels					37							37
Total	731	1,565	137	74	48	370	20	147	35	40	242	3,332
Boats:												
Motor	54	996	137	37	11	230			35	40		1,494
Other	30											30
Vessels:												
Motor					8							8
Net tonnage					82							82

CATCH: BY GEAR

Species	Gill nets		Haul seines		Pound nets		Wheels	
FISH								
Salmon:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Chinook	8,554,165	$944,721	3,281,246	$405,857	456,575	$47,484	402,143	$54,289
Silver	307,916	19,442	81,937	5,047	208,353	12,542	7,200	360
Blueback	462,421	62,427	242,319	32,713	18,707	2,525	48,577	6,558
Chum	356,218	3,562	114,778	1,148	40,339	403		
Shad	308,539	6,171	538,143	10,763	141,478	2,830	9,647	193
Steelhead trout	634,684	48,335	781,641	54,871	269,940	17,902	161,857	10,019
Sturgeon	100,597	6,716	5,295	302	1,113	78	7,310	512
Total	10,724,540	1,091,374	5,045,359	510,701	1,136,505	83,764	636,734	71,931

Species	Lines		Dip bag nets		Traps		Shovels and forks	
FISH								
Flounders:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
"Sole"	1,500	$50						
Other	3,500	75						
Halibut	230,052	36,194						
"Lingcod"	12,143	474						
Rockfishes	51,686	1,770						
Sablefish	246,651	12,029						
Salmon:								
Chinook	769,411	79,665	80,375	$10,851				
Silver	3,608,143	260,905	50	4				
Blueback			33,310	4,497				
Shad			1,657	33				
Smelt, eulachon			72,900	2,187				
Steelhead trout			124,960	7,798				
Sturgeon	9,060	634	8,887	622				
Tomcod	300	18						
Total	4,932,446	391,814	322,139	25,992				
SHELLFISH, ETC.								
Crabs					23,980	$1,635		
Crawfish					95,706	11,964		
Clams, razor							154,543	$23,611
Total					119,686	13,599	154,543	23,611
Grand total	4,932,446	391,814	322,139	25,992	119,686	13,599	154,543	23,611

[1] Exclusive of duplication.

Fisheries of the coastal district of Oregon, 1926

OPERATING UNITS: BY GEAR

Items	Gill nets, drift	Gill nets, set	Troll lines	Crab traps	Crawfish traps	Oyster tongs	Forks and shovels	Total [1]
Fishermen:								
On boats or shore	1,002	556	141	179	2	3	69	1,604
Boats:								
Motor	636	385	87	179	2	1	----	993
Other	----	171	----	----	----	3	----	174

CATCH: BY GEAR

Fish	Gill nets		Lines	
	Pounds	*Value*	*Pounds*	*Value*
Halibut	----	----	132,557	$21,938
"Lingcod"	----	----	4,179	157
Rockfishes	----	----	15,025	512
Sablefish	----	----	140,002	6,733
Salmon:				
Chinook	2,726,677	$348,469	126,777	14,070
Silver	3,232,509	227,569	1,361,126	106,588
Chum	300,571	6,012	----	----
Shad	655,325	19,660	----	----
Steelhead trout	680,808	57,399	3,580	268
Sturgeon	6,154	202	----	----
Total	7,602,044	659,311	1,783,246	150,266

Shellfish, etc.	Traps		Shovels		Tongs	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Crabs	508,904	$34,698	----	----	----	----
Crawfish	10,000	1,250	----	----	----	----
Clams:						
Hard	----	----	4,837	$2,177	----	----
Soft	----	----	14,519	5,227	----	----
Oysters, native, market	----	----	----	----	2,616	$2,325
Total	518,904	35,948	19,356	7,404	2,616	2,325

[1] Exclusive of duplication.

Fisheries of Oregon, 1888 to 1926

OPERATING UNITS

Items	1888	1892	1895	1899	1904	1908
Fishermen:						
On boats or shore	3,045	2,705	4,230	3,731	3,525	4,670
On vessels	----	60	51	75	----	----
Total	3,045	2,765	4,281	3,806	3,525	4,670
Fishing boats:						
Motor	[1]	[1]	[1]	[1]	19	216
Other	1,545	1,494	2,022	1,830	1,820	2,096
Fishing vessels [2]	----	4	2	1	----	----
Tonnage	----	248	221	59	----	----

Items	1915	1922	1923	1924	1925	1926
Fishermen:						
On boats or shore	4,472	3,999	4,230	4,335	4,909	4,899
On vessels	23	20	15	25	36	37
Total	4,495	4,019	4,245	4,360	4,945	4,936
Fishing boats:						
Motor	1,382	1,718	2,042	2,178	2,224	2,487
Other	1,264	501	233	283	539	204
Fishing vessels [2]	5	4	3	6	8	8
Tonnage	74	48	44	68	80	82

[1] Motor vessels not designated separately prior to 1904.
[2] Probably all were motor vessels in 1915 and subsequent years.

Fisheries of Oregon, 1888 to 1926—Continued

CATCH

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish has been converted to the equivalent weight of fresh fish]

Species	1888	1892	1895	1899	1904	1908
FISH						
Carp					20	30
Catfish			99	54	180	201
Flounders:						
"Sole"						
Other		10		4		23
Halibut		19	5	17	25	16
Herring				19	18	15
"Lingcod"		26	6			20
Rockfishes		86	47		21	5
Salmon:						
Blueback or sockeye	24,481	3,140	566	579	334	403
Chinook		15,686	21,101	13,750	20,022	18,176
Chum			2,125	790	999	905
Silver		4,429	9,463	5,154	4,255	4,923
Shad	10	109	125	32	37	431
Smelt	180		31	28	25	30
Steelhead trout		2,587	3,220	1,104	1,104	2,469
Sturgeon	1,157	2,513	956		9	114
Surf fishes				6	4	26
Other fish	76				10	13
Total	25,904	28,605	37,744	21,537	27,063	27,800
SHELLFISH						
Crabs		4	24	111	246	200
Crawfish	14	20	59	116	187	178
Clams:						
Razor	75	50	281	979	31	
Hard						1
Soft						30
Oysters, native, market	275	147	89	59	7	7
Total	364	221	453	1,265	471	416
Grand total	26,268	28,826	38,197	22,802	27,534	28,216

Species	1915	1922	1923	1924	1925	1926
FISH						
Carp	50				63	
Flounders:						
"Sole"					2	1
Other	2		5			4
Halibut	235	239	864	511	578	363
Herring	12		94			
"Lingcod"	13	21	78	52	59	16
Rockfishes	12	2	63	39	31	67
Sablefish	16	57	250	161	348	387
Salmon:						
Blueback or sockeye	337	936	2,065	436	353	805
Chinook	23,482	12,650	17,361	19,606	21,420	16,398
Chum	1,982	128	1,136	2,998	2,338	812
Silver	4,845	4,379	6,717	10,279	10,247	8,807
Shad	489	578	404	983	1,017	1,655
Smelt	4	217	277	227	309	73
Steelhead trout	2,366	1,821	2,856	3,605	2,307	2,657
Striped bass					6	
Sturgeon	98	217	124	176	161	138
Surf fishes	12		15			
Tomcod	22		5			
Other fish	16	5				
Total	33,993	21,250	32,314	39,073	39,239	32,183
SHELLFISH						
Crabs	415	731	359	433	522	533
Crawfish	184	69	142	12	128	106
Clams:						
Razor	77	59	49	33	89	154
Hard				1		5
Soft	22	14	5	15	20	14
Oysters, native, market	2	11	14	11	10	3
Total	700	884	569	505	769	815
Grand total	34,693	22,134	32,883	39,578	40,008	32,998

Fisheries of California, 1926

OPERATING UNITS: BY DISTRICTS

Items	Northern	San Francisco	Monterey	Southern	Total
Fishermen:					
On boats or shore	528	987	958	1,192	3,665
On vessels	23	311	72	1,873	2,279
Total	551	1,298	1,030	3,065	5,944
Boats:					
Motor	183	590	307	639	1,719
Other	205	50			255
Vessels:					
Steam		5			5
Tonnage		196			196
Motor	10	17	10	314	351
Tonnage	79	232	107	4,170	4,588
Sail		6			6
Tonnage		1,891			1,891
Total	10	28	10	314	362
Total net tonnage	79	2,319	107	4,170	6,675

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets	Trawl lines	Troll lines	Hand lines	Lampara nets	Paranzella nets	Trammel nets	Fyke nets
Fishermen:										
On boats or shore		45	1,062	776	1,737	143	849	10	106	73
On vessels	514		97	421	1,059	77	951	65	61	
Total	514	45	1,159	1,197	2,796	220	1,800	75	167	73
Boats:										
Motor		20	456	579	1,249	103	97	4	41	32
Other		19	157	47						30
Vessels:										
Steam								2		
Tonnage								55		
Motor	58		32	47	258	22	132	14	19	
Tonnage	1,535		220	642	2,794	221	1,579	211	134	
Sail				6						
Tonnage				1,891						
Total	58		32	53	258	22	132	16	19	
Total net tonnage	1,535		220	2,533	2,794	221	1,579	266	134	

Items	Harpoons	Whaling apparatus	Octopus traps	Crab traps	Bag nets	Lobster pots	Abalone outfits	Oyster tongs	Shovels and rakes	Total [1]
Fishermen:										
On boats or shore	5		30	268	20	138	18	6	126	3,665
On vessels		34			2	13	22			2,279
Total	5	34	30	268	22	151	40	6	126	5,944
Boats:										
Motor	2		27	265	12	96	4	2	1	1,719
Other								6		255
Vessels:										
Steam		3								5
Tonnage		141								196
Motor					1	6	5			351
Tonnage					6	49	41			4,588
Sail										6
Tonnage										1,891
Total		3			1	6	5			362
Total net tonnage		141			6	49	41			6,675

[1] Exclusive of duplication.

Fisheries of California, 1926—Continued

CATCH: BY DISTRICTS

Species	Northern district		San Francisco district		Monterey district	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore					118,683	$11,903
Anchovies			3,400	$34	48,530	467
Barracuda					66,781	5,304
Bonito					58,053	1,566
Carp	13,815	$404	45,506	1,302		
Catfish	103,859	12,982	153,518	23,148		
Cod, dry, salted			3,712,070	235,055		
Eels			20	1		
Flounders:						
"California halibut"			91,218	10,125	13,480	1,621
"Sole"	195,530	6,817	6,078,453	243,315	2,270,750	102,035
Other	143,286	5,349	1,294,371	58,917	359,539	16,438
Grayfish			224,966	1,125	18,672	93
Hake			42,498	1,062	15,837	396
Halibut	254,779	28,123	1,941	290		
Hardhead			43,625	4,409		
Herring	6,801	126	432,817	8,656		
Horse mackerel					56,517	3,105
Kingfish			41,597	1,664	95,671	4,220
"Lingcod"	48,556	1,479	449,514	13,486	145,682	7,179
Mackerel	378	36	899	54	1,119,620	34,114
Perch	31,634	1,863	99,557	6,074	13,323	560
Pike, Sacramento			2,990	139		
Pilchard, or sardine			7,056,765	47,845	155,161,807	821,806
Pompano					81	40
Rockfishes	62,985	1,997	886,872	35,475	2,307,518	88,929
Sablefish	72,614	4,011	88,735	4,881	17,248	604
Salmon	3,808,135	393,797	2,224,189	210,923	51,755	5,498
Sea bass, white, or squeteague	125	15	108,794	13,056	311,251	24,680
Shad			902,202	23,800		
Skates	1,950	39	156,338	3,127	43,109	862
Skipjack, or striped tuna					43,474	709
Smelt, silver	32,017	2,501	113,449	10,211	194,484	14,171
Splittail			5,322	206		
Striped bass	17	1	750,714	110,100	70	17
Suckers	348	7	1,640	33		
Tomcod			3,950	119	375	11
Whitebait	73,242	5,514	12,027	1,654	288	17
Other fish	20,064	608	13,135	514	38,351	869
Total	4,870,135	465,669	25,043,092	1,070,800	162,570,949	1,147,214
SHELLFISH, ETC.						
Crabs	194,664	8,261	3,050,112	228,758	51,504	4,098
Shrimp			1,431,511	60,755		
Clams:						
Cockle	92	40	2,115	1,983		
Mixed	2,066	815	2,689	1,512		
Soft	269	103	40,724	21,802		
Abalone					408,605	81,720
Mussels			1,140	456	248	31
Oysters: Eastern, market			61,042	26,161		
Octopus	40	2	8,552	855	54,466	5,378
Squid					3,127,159	44,966
Total	197,131	9,221	4,597,885	342,282	3,641,982	136,193
WHALE PRODUCTS						
Sperm oil			36,750	1,927		
Whale oil			1,980,068	112,917		
Other whale products			882,760	20,902		
Total			2,899,578	135,746		
Grand total	5,067,266	474,890	32,540,555	1,548,828	166,212,931	1,283,407

Fisheries of California, 1926—Continued

CATCH: BY DISTRICTS—Continued

Species	Southern district				Total	
	Off California coast		Off Mexican coast			
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore	2,350,642	$220,492	60	$4	2,469,385	$232,399
Anchovies	8,197	130			60,127	631
Barracuda	2,878,418	228,949	2,077,295	215,357	5,022,494	449,610
Bonito	2,841,915	85,800	178,698	5,890	3,078,666	93,256
Carp	12,857	386			72,178	2,092
Catfish					257,377	36,130
Cod, dry, salted					3,712,070	235,055
Dolphin			3,145	94	3,145	94
Eels	218	6			238	7
Flounders:						
"California halibut"	893,965	134,121	432,337	63,843	1,431,000	209,710
"Sole"	105,137	5,238			8,649,870	357,405
Other	15,793	3,660	22	2	1,813,011	84,366
Grayfish	263,085	1,897			506,723	3,115
Hake					58,335	1,458
Halibut					256,720	28,413
Hardhead					43,625	4,409
Herring	13,989	348			453,607	9,130
Horse mackerel	178,634	9,291	4,013	208	239,164	12,604
Kingfish	347,508	7,682	145	7	484,921	13,573
"Lingcod"	1,248	87			645,000	22,231
Mackerel	2,489,201	61,557	13,192	342	3,623,290	96,103
Mullet	33,212	4,478	18,541	2,570	51,753	7,048
Perch	60,056	2,875	4,340	269	208,910	11,641
Pike, Sacramento					2,990	139
Pilchard, or sardine	124,522,678	657,535			286,741,250	1,527,186
Pompano	8,044	3,868			8,125	3,908
Rock bass	564,277	43,369	72,058	6,735	636,335	50,104
Rockfishes	4,267,051	221,157	14,022	511	7,538,448	348,069
Sablefish	4,468	306			183,065	9,802
Salmon					6,084,079	610,218
Sculpin	108,068	9,727			108,068	9,727
Sea bass:						
Black	120,070	4,233	257,864	8,270	377,934	12,503
White, or squeteague	1,057,619	120,667	738,613	80,172	2,216,402	238,590
Shad					902,202	23,800
Sheepshead	136,067	4,977	2,860	106	138,927	5,083
Skates	31,596	523			232,993	4,551
Skipjack, or striped tuna	14,217,018	602,497	6,734,330	270,726	20,994,822	873,932
Smelt, silver	541,191	52,140	1,982	135	883,123	79,158
Splittail					5,322	206
Striped bass					750,801	110,118
Suckers					1,988	40
Swordfish	43,968	3,641	1,575	122	45,543	3,763
Tomcod					4,325	130
Tuna:						
Mixed	260,756	18,110			260,756	18,110
Bluefin	6,526,533	343,412			6,526,533	343,412
Yellowfin	2,695,502	151,767	9,869,583	439,093	12,565,085	590,860
Whitebait					85,557	7,185
Whitefish	344,336	27,072	23,728	1,145	368,064	28,217
Yellowtail	3,173,424	156,954	1,849,690	109,091	5,023,114	266,045
Other fish	136,097	6,708	22,477	1,879	230,124	10,578
Total	171,252,838	3,195,660	22,320,570	1,206,571	386,057,584	7,085,914
SHELLFISH, ETC.						
Crabs					3,296,280	241,117
Sea crawfish, or spiny lobster	442,198	70,276	733,025	92,906	1,175,223	163,182
Shrimp					1,431,511	60,755
Clams:						
Cockle			170	114	2,377	2,137
Mixed	20	12	527	246	5,302	2,585
Pismo	68,579	27,432			68,579	27,432
Soft					40,993	21,905
Abalone	3,549	3,107			412,154	84,827
Mussels	73	11			1,461	498
Oysters:						
Eastern, market					61,042	26,161
Native, market			36	20	36	20
Octopus	246	25			63,304	6,260
Squid	8,402	840			3,135,561	45,806
Total	523,067	101,703	733,758	93,286	9,693,823	682,685
WHALE PRODUCTS						
Sperm oil					36,750	1,927
Whale oil					1,980,068	112,917
Other whale products					882,760	20,902
Total					2,899,578	135,746
Grand total	171,775,905	3,297,363	23,054,328	1,299,857	398,650,985	7,904,345

Fisheries of the northern district of California, 1926

OPERATING UNITS: BY GEAR

Items	Haul seines	Gill nets	Trawl lines	Troll lines	Hand lines	Paranzella nets	Crab traps	Shovels and rakes	Total [1]
Fishermen:									
On boats or shore	23	245	62	209	1		35	10	528
On vessels				16		7			23
Total	23	245	62	225	1	7	35	10	551
Boats:									
Motor	12		12	169	1		32		183
Other	9	152	47						205
Vessels:									
Motor				8		2			10
Net tonnage				65		14			79

CATCH: BY GEAR

Species	Lines		Gill nets		Paranzella nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Catfish	103,859	$12,982				
Flounders:						
"Sole"	1,760	35			193,770	$6,782
Other					120,420	4,249
Halibut	254,779	28,123				
"Lingcod"	35,107	1,075			13,449	404
Mackerel	378	36				
Perch					405	24
Rockfishes	46,490	1,502			16,495	495
Sablefish	72,614	4,011				
Salmon	3,040,245	334,427	767,890	$59,370		
Sea bass, white, or squeteague	125	15				
Skates					1,950	39
Other fish					19,461	584
Total	3,555,357	382,206	767,890	59,370	365,950	12,577
SHELLFISH, ETC.						
Octopus	40	2				
Grand total	3,555,397	382,208	767,890	59,370	365,950	12,577

Species	Haul seines		Crab traps		Clam shovels	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Carp	13,815	$404				
Flounders:						
"Sole"						
Other	22,866	1,100				
Herring	6,801	126				
Perch	31,229	1,839				
Smelt, silver	32,017	2,501				
Striped bass	17	1				
Suckers	348	7				
Whitebait	73,242	5,514				
Other fish	603	24				
Total	180,938	11,516				
SHELLFISH, ETC.						
Crabs			194,664	$8,261		
Clams:						
Cockle					92	$40
Mixed					2,066	815
Soft					269	103
Total			194,664	8,261	2,427	958
Grand total	180,938	11,516	194,664	8,261	2,427	958

[1] Exclusive of duplication.

Fisheries of the San Francisco district of California, 1926

OPERATING UNITS: BY GEAR

Items	Haul seines	Gill nets	Trawl lines	Troll lines	Hand lines	Lampara nets	Paranzella nets	Fyke nets	Whaling apparatus	Crab traps	Bag nets	Oyster tongs	Shovels and rakes	Total [1]
Fishermen:														
On boats or shore	19	496	188	292	8	134	-----	73	-----	215	20	6	24	987
On vessels	-----	-----	209	8	-----	-----	58	-----	34	-----	2	-----	-----	311
Total	19	496	397	300	8	134	58	73	34	215	22	6	24	1,298
Boats:														
Motor	7	278	184	268	7	24	-----	32	-----	215	12	2	-----	590
Other	10	5	-----	-----	-----	-----	-----	30	-----	-----	-----	6	-----	50
Vessels:														
Steam	-----	-----	-----	-----	-----	-----	2	-----	3	-----	-----	-----	-----	5
Net tonnage	-----	-----	-----	-----	-----	-----	55	-----	141	-----	-----	-----	-----	196
Motor	-----	-----	-----	4	-----	-----	12	-----	-----	-----	1	-----	-----	17
Net tonnage	-----	-----	-----	29	-----	-----	197	-----	-----	-----	6	-----	-----	232
Sail	-----	-----	6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6
Net tonnage	-----	-----	1,891	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,891
Total	-----	-----	6	4	-----	-----	14	-----	3	-----	1	-----	-----	28
Total net tonnage	-----	-----	1,891	29	-----	-----	252	-----	141	-----	6	-----	-----	2,319

CATCH: BY GEAR

Species	Lines		Paranzella nets		Gill nets		Lampara nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Anchovies	-----	-----	-----	-----	-----	-----	3,400	$34
Carp	-----	-----	-----	-----	33,893	$990	-----	-----
Cod, dry salted	3,712,070	$235,055	-----	-----	-----	-----	-----	-----
Eels	20	1	-----	-----	-----	-----	-----	-----
Flounders:								
"California halibut"	-----	-----	90,879	$10,087	-----	-----	339	38
"Sole"	17,673	884	6,060,780	242,431	-----	-----	-----	-----
Other	148	6	1,283,128	58,502	6,396	222	3,304	116
Grayfish	8,070	40	216,756	1,084	-----	-----	140	1
Hake	-----	-----	42,498	1,062	-----	-----	-----	-----
Halibut	1,941	290	-----	-----	-----	-----	-----	-----
Herring	-----	-----	-----	-----	50,060	1,001	372,679	7,453
Kingfish	21	1	39,929	1,597	-----	-----	1,647	66
"Lingcod"	309,151	9,275	140,363	4,211	-----	-----	-----	-----
Mackerel	-----	-----	-----	-----	-----	-----	899	54
Perch	-----	-----	150	9	47,315	2,839	8,182	491
Pike, Sacramento	-----	-----	-----	-----	1,903	76	-----	-----
Pilchard or sardine	-----	-----	150	3	-----	-----	7,056,465	47,839
Rockfishes	706,452	28,258	180,420	7,217	-----	-----	-----	-----
Sablefish	55,995	3,080	32,740	1,801	-----	-----	-----	-----
Salmon	957,426	98,998	-----	-----	1,266,763	111,925	-----	-----
Sea bass, white, or squeteague	-----	-----	30	4	108,654	13,033	110	19
Shad	-----	-----	-----	-----	902,202	23,800	-----	-----
Skates	-----	-----	156,338	3,127	-----	-----	-----	-----
Smelt, silver	-----	-----	-----	-----	65,806	5,920	15,252	1,357
Striped bass	-----	-----	-----	-----	750,714	110,100	-----	-----
Suckers	-----	-----	-----	-----	1,269	25	-----	-----
Tomcod	-----	-----	3,900	117	-----	-----	50	2
Whitebait	-----	-----	-----	-----	-----	-----	7,794	1,072
Other fish	2,877	115	9,067	317	1,163	81	-----	-----
Total	5,771,844	376,003	8,257,128	331,569	3,236,138	270,012	7,470,261	58,542
SHELL FISH, ETC.								
Octopus	8,427	843	125	12	-----	-----	-----	-----
Grand total	5,780,271	376,846	8,257,253	331,581	3,236,138	270,012	7,470,261	58,542

[1] Exclusive of duplication.

Fisheries of the San Francisco district of California, 1926—Continued

CATCH: BY GEAR—Continued

Species	Fyke nets		Haul seines		Traps		Shrimp bag nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Carp	11,613	$312						
Catfish	153,518	23,148						
Flounders			1,395	$71				
Hardhead	43,625	4,409						
Herring			10,078	202				
Perch			43,910	2,735				
Pike, Sacramento	1,087	63						
Pilchard or sardine			150	3				
Smelt			32,391	2,934				
Splittail	5,322	206						
Suckers	371	8						
Whitebait			4,233	582				
Other fish			28	1				
Total	215,536	28,146	92,185	6,528				
SHELLFISH, ETC.								
Crabs					3,050,112	$228,758		
Shrimp							1,431,511	$60,755
Total					3,050,112	228,758	1,431,511	60,755
Grand total	215,536	28,146	92,185	6,528	3,050,112	228,758	1,431,511	60,755

Species	Shovels and forks		Rakes		Tongs		Whaling apparatus	
SHELLFISH, ETC.								
Clams:	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Cockle	2,115	$1,983						
Mixed	2,689	1,512						
Soft	40,724	21,802						
Mussels			1,140	$456				
Oysters, eastern, market					61,042	$26,161		
Total	45,528	25,297	1,140	456	61,042	26,161		
WHALE PRODUCTS								
Sperm oil							36,750	$1,927
Whale oil							1,980,068	112,917
Other whale products							882,760	20,902
Total							2,899,578	135,746
Grand total	45,528	25,297	1,140	456	61,042	26,161	2,899,578	135,746

Fisheries of the Monterey district of California, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Gill nets	Trawl lines	Troll lines	Hand lines	Lampara nets	Octopus traps	Crab traps	Abalone outfits	Shovels and rakes	Total [1]
Fishermen:											
On boats or shore		131	287	316	51	638	30	18	18	1	958
On vessels	18	2		9		32			22		72
Total	18	133	287	325	51	670	30	18	40	1	1,030
Boats: Motor		97	234	249	42	58	27	18	4	1	307
Vessels: Motor	2	1		3		3			5		10
Net tonnage	44	6		17		22			41		107

[1] Exclusive of duplication.

Fisheries of the Monterey district of California, 1926—Continued

CATCH: BY GEAR

Species	Lines		Paranzella nets		Gill nets		Lampara nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore	118,683	$11,903						
Anchovies							48,530	$467
Barracuda					40,867	$3,250	25,914	2,054
Bonito	21,414	589					36,639	977
Flounders:								
"California halibut"	10,179	1,219	3,003	$360			298	42
"Sole"	186,952	8,264	2,083,798	93,771				
Other	9,249	342	350,290	16,096				
Grayfish	11,442	57	7,230	36				
Hake			15,837	396				
Horse mackerel	5,767	382					50,750	2,723
Kingfish			17,040	682	50,327	2,060	28,304	1,478
"Lingcod"	98,383	5,760	47,265	1,418			34	1
Mackerel	1,017,962	31,281	450	14	4,716	160	96,492	2,659
Perch			8,685	348	4,317	200	321	12
Pilchard or sardine							151,831,507	803,497
Pompano							81	40
Rockfishes	2,271,466	87,541	36,052	1,388				
Sablefish	14,273	515	2,975	89				
Salmon	51,755	5,498						
Sea bass, white or squeteague					194,033	15,599	117,218	9,081
Skates	50	1	43,059	861				
Skipjack or striped tuna	42,952	688					522	21
Smelt, silver					130,651	9,691	63,833	4,480
Striped bass	70	17						
Tomcod			375	11				
Whitebait							288	17
Other fish	30,046	606	6,450	226			1,855	37
Total	3,890,643	154,663	2,622,509	115,696	424,911	30,960	152,302,586	827,586
SHELLFISH, ETC.								
Squid							3,127,159	44,966
Grand total	3,890,643	154,663	2,622,509	115,696	424,911	30,960	155,429,745	872,552

Species	Purse Seines		Abalone outfits		Traps		Rakes	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Pilchard or sardine	3,330,300	$18,309						
SHELLFISH, ETC.								
Abalone			408,605	$81,720				
Crabs					51,504	$4,098		
Mussels							248	$31
Octopus					54,466	5,378		
Total			408,605	81,720	105,970	9,476	248	31
Grand total	3,330,300	18,309	408,605	81,720	105,970	9,476	248	31

Fisheries of the southern district of California, 1926

OPERATING UNITS: BY GEAR

Items	Purse seines	Haul seines	Gill nets	Trawl lines	Troll lines	Hand lines	Lampara nets	Paranzella nets	Trammel nets	Harpoons	Lobster pots	Shovels and rakes	Total [1]
Fishermen:													
On boats or shore		3	190	239	920	83	77	10	106	5	138	91	1,192
On vessels	496		95	212	1,026	77	919		61		13		1,873
Total	496	3	285	451	1,946	160	996	10	167	5	151	91	3,065
Boats: Motor		1	81	149	563	53	15	4	41	2	96		639
Vessels: Motor	56		31	47	243	22	129		19		6		314
Net tonnage	1,491		214	642	2,683	221	1,557		134		49		4,170

[1] Exclusive of duplication.

Fisheries of the southern district of California, 1926—Continued

CATCH OFF CALIFORNIA: BY GEAR

Species	Lines		Purse seines		Lampara nets		Gill nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore	2,342,123	$219,475	8,519	$1,017				
Anchovies			580	9	7,617	$121		
Barracuda	1,322,759	81,496	118,625	11,854	162,774	13,461	1,274,260	$122,138
Bonito	957,059	30,354	1,732,774	50,430	12,413	301	138,526	4,680
Eels	218	6						
Flounders:								
"California halibut"	31,476	4,514	251	33	2,934	524		
"Sole"	4,381	318			188	11		
Other	13,559	3,446						
Grayfish	18,058	374	3,420	22	6,825	80	2,978	79
Herring							13,989	348
Horse mackerel	76,936	4,731	78,950	3,312	14,171	724	8,577	524
Kingfish	941	38	1,496	45	320,914	6,752	6,025	185
Mackerel	1,096,831	27,014	197,084	2,978	840,496	22,454	354,790	9,111
Mullet					33,212	4,478		
Perch	2,201	186	1,744	125	43,767	1,882	12,344	682
Pilchard or sardine			54,323,415	288,789	70,199,263	368,746		
Pompano					8,044	3,868		
Rock bass	512,907	39,648	29,161	1,932	3,869	281	17,920	1,466
Rockfishes	4,265,076	221,052	445	27	1,530	78		
Sablefish	4,468	306						
Sculpin	97,081	8,689	170	16	3,673	359		
Sea bass:								
Black	103,945	3,674	3,312	118	2,638	82	7,822	274
White, or squeteague	94,340	10,690	40,411	4,562	61,054	6,958	847,695	96,836
Sheepshead	112,552	4,130	237	7	2,041	71	7,671	294
Skates	1,847	37						
Skipjack, or striped tuna	14,071,075	595,769	145,943	6,728				
Smelt, silver			2,909	189	354,910	34,670	183,372	17,281
Swordfish	10,798	324						
Tuna:								
Mixed	206,985	14,580	53,771	3,530				
Bluefin	8,944	522	6,517,589	342,890				
Yellowfin	2,567,152	146,585	128,350	5,182				
Whitefish	342,095	26,940	720	47	1,205	60		
Yellowtail	2,184,994	106,192	546,799	24,933	226,103	13,273	193,980	11,210
Other fish	79,611	3,624	1,273	81	18,065	1,219	25,660	1,156
Total	30,530,412	1,554,714	63,937,948	748,856	72,327,706	480,453	3,095,609	266,264
SHELLFISH, ETC.								
Octopus	246	25						
Squid					8,402	840		
Total	246	25			8,402	840		
Grand total	30,530,658	1,554,739	63,937,948	748,856	72,336,108	481,293	3,095,609	266,264

Species	Trammel nets		Paranzella nets		Haul seines		Harpoons	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Bonito	1,143	$35						
Carp					12,857	$386		
Flounders:								
"California halibut"	665,393	102,803	193,911	$26,247				
"Sole"	14,390	1,037	86,178	3,872				
Other	2,234	214						
Grayfish	231,804	1,342						
Kingfish	18,132	662						
"Lingcod"	1,248	87						
Rock bass	420	42						
Sculpin	7,144	663						
Sea bass:								
Black	2,353	85						
White, or squeteague	14,119	1,621						
Sheepshead	13,566	475						
Skates	29,749	486						
Swordfish							33,170	$3,317
Whitefish	316	25						
Yellowtail	21,548	1,346						
Other fish	11,488	628						
Total	1,035,047	111,551	280,089	30,119	12,857	386	33,170	3,317

Fisheries of the southern district of California, 1926—Continued

CATCH OFF CALIFORNIA: BY GEAR—Continued

Species	Traps		Abalone outfits		Forks and shovels		Rakes	
SHELLFISH, ETC.	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Sea crawfish, or spiny lobsters	442,198	$70,276						
Abalone			3,549	$3,107				
Clams:								
Mixed					20	$12		
Pismo					68,579	27,432		
Mussels							73	$11
Total	442,198	70,276	3,549	3,107	68,599	27,444	73	11

CATCH OFF MEXICO: BY GEAR

Species	Lines		Purse seines		Gill nets		Trammel nets	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Albacore	60	$4						
Barracuda	315,197	18,943	1,697,640	$192,879	64,458	$3,535		
Bonito	28,773	845	149,925	5,045				
Dolphin	3,145	94						
Flounders:								
"California halibut"	1,464	164	230	41			430,643	$63,638
Other							22	2
Horse mackerel			3,813	196	200	12		
Kingfish					20	1	125	6
Mackerel	9,454	227	1,377	47	2,361	68		
Mullet			2,025	283	16,516	2,287		
Perch			3,218	225	1,122	44		
Rock bass	66,300	6,218	5,758	517				
Rockfishes	13,228	482	335	13			459	16
Sea bass:								
Black	236,291	7,467	13,762	451	7,605	342	206	10
White or squeteague	349,404	35,264	321,439	35,518	67,770	9,390		
Sheepshead	2,860	106						
Skipjack or striped tuna	5,665,882	230,908	1,068,448	39,818				
Smelt, silver			270	14	1,712	121		
Tuna, yellowfin	7,631,741	353,655	2,237,842	85,438				
Whitefish	23,166	1,123	562	22				
Yellowtail	1,149,445	57,909	700,245	51,182				
Other fish	710	38	21,504	1,830	263	11		
Total	15,497,120	713,447	6,228,393	413,519	162,027	15,811	431,455	63,672

Species	Harpoons		Traps		Forks		Tongs	
FISH	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Swordfish	1,575	$122						
SHELLFISH, ETC.								
Sea crawfish or spiny lobsters			733,025	$92,906				
Clams:								
Cockle					170	$114		
Mixed					527	246		
Oysters, native, market							36	$20
Total	1,575	122	733,025	92,906	697	360	36	20

Fisheries of California, 1888 to 1926

OPERATING UNITS

Items	1888	1892	1895	1899	1904	1908
Fishermen:						
On boats or shore	3,188	2,968	2,716	2,538	3,491	3,320
On vessels	1,396	1,825	1,419	942	838	645
Total	4,584	4,793	4,135	3,480	4,329	3,965
Fishing boats:						
Motor	1,354	1,391	1,442	1,355	231	413
Other					1,798	1,708
Fishing vessels:						
Steam	(1)	(1)	(1)	(1)	(1)	[2] 22
Net tonnage	(1)	(1)	(1)	(1)	(1)	[2] 2,253
Motor	(1)	(1)	(1)	(1)	(1)	(2)
Net tonnage	(1)	(1)	(1)	(1)	(1)	(2)
Sail	(1)	(1)	(1)	(1)	(1)	9
Net tonnage	(1)	(1)	(1)	(1)	(1)	2,227
Total	69	84	58	33	37	31
Total net tonnage	9,544	12,436	9,215	5,952	6,096	4,480

Items	1915	1922	1923	1924	1925	1926
Fishermen:						
On boats or shore	4,282	3,136	2,625	2,876	2,474	3,665
On vessels	551	1,331	1,972	1,933	2,044	2,279
Total	4,833	4,467	4,597	4,809	4,518	5,944
Fishing boats:						
Motor	1,429	1,297	1,307	1,513	1,255	1,719
Other	1,169	292	135	132	150	----------
Fishing vessels:						
Steam	(1)	7	(1)	6	6	5
Net tonnage	(1)	319	(1)	(3)	(3)	196
Motor	(1)	199	(1)	326	352	351
Net tonnage	(1)	2,525	(1)	(3)	(3)	4,588
Sail	(1)	3	(1)	5	4	6
Net tonnage	(1)	1,043	(1)	(3)	(3)	1,891
Total	73	209	285	337	362	362
Total net tonnage	3,198	3,887	4,071	5,821	5,350	6,675

CATCH

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish, except cod, have been converted to the equivalent of fresh fish]

Species	1888	1892	1895	1899	1904	1908	1915	1918
FISH								
Albacore	----------	----------	299	179	210	----------	21,074	7,265
Anchovies	----------	150	460	7	----------	220	113	868
Barracuda	----------	436	1,245	1,425	2,375	3,205	3,923	4,838
Bonito	----------	421	301	189	212	329	448	2,441
Carp	----------	66	46	284	70	427	351	313
Catfish	----------	----------	277	466	737	1,069	517	205
Cod, salted	----------	2,275	2,784	5,917	5,623	3,298	4,953	4,713
Flounders:								
"California halibut"	----------	----------	----------	----------	----------	----------	----------	[4] 4,754
"Sole"	----------	----------	----------	32	3,874	----------	5,762	7,028
Other	----------	4,270	3,308	4,715	4,361	[5] 6,681	6,934	2,574
Hake	----------	----------	----------	----------	----------	32	269	219
Halibut	----------	----------	----------	----------	----------	----------	----------	[4] ----------
Hardhead	----------	----------	----------	186	65	----------	73	28
Herring	----------	4,487	3,181	1,653	1,426	825	864	7,938

[1] Steam, motor, and sailing vessels not designated separately prior to 1922 and in 1923.
[2] Motor and steam vessels not designated separately prior to 1922.
[3] Steam, motor, and sailing vessel tonnages not designated separately in 1924 and 1925.
[4] Includes halibut.
[5] Includes "soles."

Fisheries of California, 1888 to 1926—Continued

CATCH—Continued

[Expressed in thousands of pounds; that is, 000 omitted. Salt ffsh, except cod, have bean converted to the equivalent of fresh fish]

Species	1888	1892	1895	1899	1904	1908	1915	1918
FISH—continued								
Kingfish	-------	40	148	127	174	682	656	975
"Lingcod"	-------	231	139	148	293	167	578	916
Mackerel	-------	350	95	168	135	197	266	4,076
Mullet	-------	-------	-------	22	13	4	3	91
Pilchard or sardine	-------	753	732	2,383	1,036	4,638	4,390	157,653
Pompano	-------	-------	11	13	34	89	19	24
Rock bass	-------	-------	-------	-------	-------	-------	901	784
Rockfishes	-------	1,839	1,529	1,188	1,820	2,319	4,352	7,890
Sablefish	-------	-------	-------	-------	-------	35	65	499
Salmon:								
Chinook	-------	3,721	4,450	7,091	14,916	8,846	7,324	13,026
Silver	-------	960	164	60	272	141	415	-------
Blueback	-------	-------	-------	22	279	147	-------	-------
Chum	-------	-------	-------	-------	-------	-------	38	-------
Sculpin	-------	-------	-------	3	3	-------	9	28
Sea bass:								
Black	-------	263	37	96	63	161	392	249
White, squeteague	-------		640	952	983	1,337	1,221	1,684
Shad	-------	526	247	1,138	327	1,169	6,893	2,384
Sharks	-------	-------	-------	-------	-------	-------	68	403
Sheepshead	-------	-------	-------	-------	-------	-------	-------	23
Skates	-------	-------	-------	-------	198	124	783	246
Skipjack, or striped tuna	-------	-------	-------	-------	-------	-------	-------	3,024
Smelt	-------	1,920	1,740	1,315	1,362	718	1,137	797
Steelhead trout	-------	310	461	114	55	76	32	22
Striped bass	-------	56	252	1,234	1,570	1,776	1,784	1,408
Sturgeon	-------	718	300	206	-------	10	18	-------
Surf fishes	-------	[6] 335	[6] 267	116	119	198	128	198
Swordfish	-------	-------	-------	-------	-------	8	-------	18
Tomcod	-------	-------	64	376	69	49	42	49
Tuna:								
Yellowfin	-------	-------	32	24	15	12	-------	-------
Mixed	-------	-------	-------	-------	-------	-------	-------	6,241
Whitebait	-------	-------	-------	-------	-------	-------	56	136
Whitefish	-------	-------	263	58	270	466	-------	-------
Yellowtail	-------	546	316	334	358	571	1,343	11,798
Other fish	28,736	2,217	583	674	1,266	1,201	673	859
Total	28,736	26,890	24,371	32,915	44,583	41,227	78,867	258,685
SHELLFISH, ETC.								
Crabs	230	2,862	2,565	3,677	5,111	1,702	1,414	1,619
Sea crawfish or spiny lobster	231	303	558	607	1,078	573	892	931
Shrimp	4,902	5,313	5,425	6,495	2,576	258	298	722
Clams:								
Cockle	-------	-------	-------	-------	-------	-------	-------	6
Pismo	-------	-------	-------	-------	-------	-------	-------	166
Soft	-------	-------	-------	-------	140	468	67	52
Mixed	2,396	2,497	1,583	2,171	96	132	66	19
Mussels	-------	2,880	488	364	28	68	19	8
Oysters:								
Eastern, market	-------	-------	-------	25,200	1,120	729	376	136
Native, market	910	15,099	14,727	3,600	301	-------	8	6
Abalone	[7] 3,606	[7] 405	[8] 126	369	[7] 825	1,005	731	121
Octopus	[9] 244	[9] 375	2	-------	-------	-------	32	33
Scallops	-------	-------	-------	4	-------	-------	-------	-------
Squid	-------	-------	30	1,869	754	110	6,211	362
Other shellfish	-------	-------	-------	-------	-------	-------	-------	21
Total	12,519	29,[illegible]4	25,504	44,356	12,029	5,045	10,114	4,202
WHALE PRODUCTS								
Sperm oil	-------	-------	-------	-------	-------	169	-------	-------
Whale oil	-------	1,575	550	507	325	13	-------	23
Other whale products	-------	197	99	207	87	32	-------	-------
Total	-------	1,772	649	714	412	214	-------	23
Grand total	41,255	58,396	50,524	77,985	57,024	46,486	88,981	262,910

[6] Includes Sacramento perch.
[7] Includes shells.
[8] Dried.
[9] Includes squid.

Fisheries of California, 1888 to 1926—Continued

CATCH—Continued

[Expressed in thousands of pounds; that is, 000 omitted. Salt fish, except cod, have been converted to the equivalent of fresh fish]

Species	1919	1920	1921	1922	1923	1924	1925	1926
FISH								
Albacore	13,631	18,877	15,277	13,232	12,515	17,695	22,207	2,469
Anchovies	1,610	570	1,947	653	307	347	124	60
Barracuda	5,825	8,201	7,625	6,250	7,201	7,129	8,006	5,022
Bonito	3,504	873	321	929	1,115	1,038	867	3,079
Carp	261	134	102	67	149	76	95	72
Catfish	165	112	148	126	129	352	366	257
Cod, salted	2,086	2,474	805	1,680	1,398	2,884	3,416	3,712
Flounders:								
"California halibut"	[4] 4,859	[4] 4,445	[4] 3,796	[4] 3,403	[4] 2,427	2,576	2,452	1,431
"Sole"	5,529	3,822	4,871	7,043	7,086	8,835	8,763	8,650
Other	1,148	1,204	1,078	1,712	1,874	2,081	2,551	1,813
Hake	133	142	90	75	79	61	22	58
Halibut						133	162	257
Hardhead	49	13	76	18	10	19	24	44
Herring	4,290	274	542	342	384	436	866	454
Kingfish	609	461	391	582	412	384	537	485
"Lingcod"	1,063	688	426	568	467	400	683	645
Mackerel	2,703	3,048	2,975	2,496	3,592	3,241	3,522	3,623
Mullet	9	18	29	31	74	62	37	52
Pilchard or sardine	153,877	118,521	59,323	93,400	159,197	242,686	315,295	286,741
Pompano	61	30	17	16	33	18	11	8
Rock bass	450	210	364	316	357	466	330	636
Rockfishes	5,333	5,601	4,688	4,263	4,950	4,717	5,454	7,538
Sablefish	335	781	1,023	269	538	933	722	183
Salmon:								
Chinook	13,146	11,134	7,991	7,235	7,090	10,015	9,526	6,084
Sculpin	25	36	58	42	60	109	226	108
Sea bass:								
Black	185	148	127	97	227	231	189	378
White, squeteague	2,520	2,661	2,643	2,982	2,520	1,516	1,920	2,216
Shad	1,574	1,410	863	1,110	1,285	1,539	2,440	903
Sharks	613	811	539	282	360	393	372	507
Sheepshead	18	15	24	18	32	24	49	139
Skates	253	89	60	121	134	131	183	233
Skipjack, or striped tuna	6,897	7,957	1,139	11,862	11,463	3,781	14,235	20,995
Smelt	757	744	765	830	806	722	752	883
Steelhead trout	17	7	4	3	3	87		
Striped bass	762	672	602	684	910	662	838	751
Sturgeon								
Surf fishes	191	181	243	238	326	289	268	209
Swordfish	18	13	15	23	12	32	27	46
Tomcod	31	37	42	32	42	43	15	4
Tuna:								
Bluefin	14,991	10,530	2,032	2,838	3,301	3,241	3,804	6,527
Yellowfin	348	1,965	1,238	7,337	10,837	3,063	13,238	12,565
Mixed	2,461	5,483	1,553	692	662	547	427	261
Whitebait	6	1	5	84	68	122	71	86
Whitefish	27	14	29	30	40	273	222	368
Yellowtail	5,005	2,705	2,491	3,414	3,980	4,714	3,180	5,023
Other fish	655	681	1,359	280	237	377	253	482
Total	258,030	217,793	129,736	177,705	248,689	328,480	428,747	386,057
SHELLFISH, ETC.								
Crabs	1,305	1,221	801	860	1,076	1,507	3,234	3,296
Sea crawfish or spiny lobster	1,089	1,190	1,278	1,017	1,093	1,027	1,486	1,175
Shrimp	813	818	910	990	1,113	1,551	1,460	1,432
Clams:								
Cockle	3	2	2	4	5	1		2
Pismo	104	75	55	49	59	73	81	69
Soft	50	39	36	57	47	41	44	41
Mixed	10	12	9	5	4	7	9	5
Mussels	6	6	2	7	10	8	4	1
Oysters:								
Eastern, market	152	112	77	74	69	53	57	61
Native, market	14	9	1					
Abalone	152	180	298	312	318	449	471	412
Octopus	21	71	56	99	110	166	133	63
Squid	3,698	508	433	210	1,180	6,831	1,891	3,136
Other shellfish	270	97	4	13	1			
Total	7,687	4,340	3,962	3,697	5,085	11,714	8,870	9,693
WHALE PRODUCTS								
Sperm oil		13	9	38	16		49	37
Whale oil	3,120	4,425	1,561	6,863	4,644	2,932	1,526	1,980
Other whale products	1,500	2,390	696	3,136	2,370	1,768	1,109	883
Total	4,620	6,828	2,266	10,037	7,030	4,700	2,684	2,900
Grand total	270,337	228,961	135,964	191,439	260,804	344,894	440,301	398,650

VESSEL FISHERIES AT SEATTLE, WASH.

During 1927, fishing vessels of 5 net tons and over and collecting vessels landed 31,515,470 pounds of fishery products at Seattle, valued at $3,260,731. This is less than the previous year by 3 per cent in amount and 9 per cent in value.

The fishing vessels made 1,071 trips and landed 15,733,070 pounds of fish. This is an increase of 3 trips and 18 per cent in amount compared with a year ago. The increase is reflected mainly in the larger landings of halibut. During 1927, halibut was the most important species taken by these vessels and accounted for 75 per cent of the catch, while sablefish accounted for 15 per cent, and "lingcod," rockfish, and sturgeon accounted for 10 per cent.

The catch by fishing vessels was taken from fishing grounds along the coast from Oregon to Portlock Bank, Alaska. Hecate Strait ranked as the most important bank, 40 per cent of the catch being made there. Of second importance were the Flattery Banks, which provided 29 per cent of the catch; while Portlock Bank ranked third and furnished 18 per cent. The remainder of the catch was taken on the Oregon coast, Yakutat grounds, and Coronation Island grounds.

Due to the restriction on taking halibut from November 15 to February 15, the majority of the landings by fishing vessels were made at other times during the year.

Collecting vessels landed 15,782,400 pounds of fishery products at Seattle in 1927, all of which were taken in Puget Sound. This is 17 per cent less than the landings made here in the previous year, and was due mainly to the smaller quantity of salmon landed.

Of the total fishery products landed by collecting vessels, salmon accounted for 87 per cent, while sturgeon, herring, trout, smelt, perch, rockfish, "lingcod," flounders, sole, and crabs made up the rest. Collecting vessels landed their largest fares during the months from May to November, inclusive, those landed in July being the largest.

Fishery products landed at Seattle, Wash., 1927

BY AMERICAN VESSELS

Fishing grounds	Number of trips	Halibut		Sablefish		"Lingcod"	
		Fresh		Fresh		Fresh	
		Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Oregon Coast	65	363, 550	$58, 572	788, 100	$52, 023	27, 600	$802
Flattery Banks	478	2, 252, 000	378, 736	1, 203, 050	79, 842	674, 620	31, 029
Hecate Strait	443	5, 411, 900	863, 137	411, 950	25, 600	270, 950	8, 443
Coronation Island	1	57, 000	8, 550				
Yakutat Grounds	22	778, 000	92, 725	12, 800	1, 024	500	20
Portlock Bank	61	2, 845, 700	375, 525	10, 000	720		
Unspecified	1	[1] 87, 000	9, 570				
Total	1, 071	11, 795, 150	1, 786, 815	2, 425, 900	159, 209	973, 670	40, 294

Fishing grounds	Rockfishes		Sturgeon		Total	
	Fresh		Fresh		Fresh	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Oregon Coast	14, 500	$477			1, 193, 750	$111, 874
Flattery Banks	386, 500	17, 677			4, 516, 170	507, 284
Hecate Strait	129, 350	4, 462	7, 500	$450	6, 231, 650	902, 092
Coronation Island					57, 000	8, 550
Yakutat Grounds	500	20			791, 800	93, 789
Portlock Bank					2, 855, 700	376, 245
Unspecified					87, 000	9, 570
Total	530, 850	22, 636	7, 500	450	15, 733, 070	2, 009, 404

[1] Landed by the vessel Dorothy, chartered by the International Fisheries Commission.

Fishery products landed at Seattle, Wash., 1927—Continued

BY AMERICAN VESSELS—Continued

Months	Number of trips	Halibut		Sablefish		"Lingcod"	
		Fresh		Fresh		Fresh	
		Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
January	9					68,000	$5,520
February	13	19,200	$5,415			36,400	2,383
March	107	475,550	88,727	35,350	$2,842	91,300	5,849
April	139	1,063,300	191,598	94,400	7,130	143,150	4,949
May	159	1,790,450	278,529	85,250	7,173	107,820	3,385
June	135	1,774,750	264,243			153,800	3,238
July	90	1,262,150	196,490	155,250	10,963	58,000	1,165
August	112	1,449,700	209,414	512,600	31,962	68,500	1,394
September	116	1,307,550	203,549	667,350	37,566	51,850	1,127
October	95	989,450	139,766	538,700	37,156	59,000	2,626
November	82	1,576,050	199,514	334,800	24,244	46,450	2,865
December	14	87,000	9,570	2,200	173	89,400	5,793
Total	1,071	11,795,150	1,786,815	2,425,900	159,209	973,670	40,294

Months	Rockfishes		Sturgeon		Total	
	Fresh		Fresh		Fresh	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
January	29,500	$2,345			97,500	$7,865
February	20,500	1,370			76,100	9,168
March	43,300	2,325			645,500	99,743
April	86,450	3,039	7,500	$450	1,394,800	207,166
May	50,000	1,583			2,033,520	290,670
June	53,400	1,144			1,981,950	268,625
July	23,500	470			1,498,900	209,088
August	74,600	3,278			2,105,400	246,048
September	45,700	1,362			2,072,450	243,604
October	37,300	1,597			1,624,450	181,145
November	20,800	1,181			1,978,100	227,804
December	45,800	2,942			224,400	18,478
Total	530,850	22,636	7,500	450	15,733,070	2,009,404

BY COLLECTING VESSELS: IN PUGET SOUND

Species	January		February		March		April		May	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Sturgeon			800	$200						
Herring	180,000	$900	160,000	800	150,000	$750	35,000	$175	20,000	$100
Salmon:										
King or spring									940,000	94,000
Coho or silver									3,000	180
Trout: Steelhead			30,000	3,000					27,000	2,700
Smelt	8,000	720	6,000	660			4,500	600		
Perch	6,500	455	4,500	270	12,000	600	27,000	1,620	3,000	200
Rockfishes	6,500	455	10,000	700	8,000	640	4,000	240	5,000	350
"Lingcod"					5,000	150	10,500	210		
Flounders	7,000	150	6,500	130	4,000	80	6,000	120	6,000	120
Sole	35,500	1,420	56,000	2,240	6,000	240	32,000	1,280	50,000	2,000
Crabs	24,200	1,650	27,500	1,875	30,800	2,100	13,640	930	24,000	1,650
Total	267,700	5,750	301,300	9,875	215,800	4,560	132,640	5,175	1,078,000	101,300

Fishery products landed at Seattle, Wash., 1927—Continued

BY COLLECTING VESSELS: IN PUGET SOUND—Continued

Species	June		July		August		September	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Sturgeon			460	$92	2,900	$4,300	2,400	$308
Salmon:								
Humpback or pink			6,500	260	360,000	21,000	280,000	8,400
Chum or keta			16,000	640	80,000	4,000	55,000	2,200
King or spring	1,700,000	$170,000	2,800,000	280,000	1,656,000	165,000	452,000	54,240
Coho or silver			146,000	7,300	334,000	20,040	650,000	60,000
Sockeye or red	18,000	1,800			48,000	4,800	28,000	2,800
Trout: Steelhead	9,000	450	16,000	1,600	12,800	1,280	22,000	2,200
Smelt					28,000	3,080	28,000	2,800
Perch					6,500	260	8,000	560
Rockfishes	2,000	140			20,000	1,400	6,000	480
"Lingcod"	4,200	84	18,000	720			4,000	160
Flounders	6,000	120	8,400	168	9,500	665	8,500	170
Sole	18,000	720	30,000	1,200	28,000	840	15,000	600
Total	1,757,200	173,314	3,041,360	291,980	2,585,700	226,665	1,558,900	134,918

Species	October		November		December		Total	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Sturgeon	2,000	$200					8,560	$5,100
Herring			84,000	$840	75,000	$750	704,000	4,315
Salmon:								
Humpback or pink							646,500	29,660
Chum or keta	1,600,000	64,000	610,000	30,500			2,361,000	101,340
King or spring	106,000	10,600	26,400	2,640			7,680,400	776,480
Coho or silver	1,660,000	132,800	216,000	21,600			3,009,000	241,920
Sockeye or red							94,000	9,400
Trout: Steelhead							116,800	11,230
Smelt	60,000	6,600	26,000	3,900	42,000	4,200	202,500	22,560
Perch			4,000	160	5,000	400	76,500	4,525
Rockfishes	7,000	420	11,000	660	12,000	720	91,500	6,205
"Lingcod"					8,000	320	49,700	1,644
Flounders	4,000	80	5,000	100			70,900	1,903
Sole	12,000	480	38,000	1,520	50,000	2,000	370,500	14,540
Crabs	66,000	4,500	70,400	4,800	44,000	3,000	[1] 300,540	20,505
Total	3,517,000	219,680	1,090,800	66,720	236,000	11,390	15,782,400	1,251,327

[1] 13,670 dozen.

HALIBUT FISHERY OF THE PACIFIC COAST [6]

The American halibut fleet on the Pacific coast in 1927 numbered 232 vessels that fish regularly for halibut; their total tonnage was 5,581, they were manned by 1,707 fishermen, and operated 10,490 skates of lines. In addition to the regular vessels, about 40 other vessels and 170 boats landed halibut at times. The total catch amounted to 45,100,000 pounds, valued at $5,233,000. In making this catch, a few other varieties of fish were caught incidentally and landed. They were as follows: Sablefish, 3,879,000 pounds, valued at $235,000; "lingcod," 989,000 pounds, valued at $38,000; and rockfish, 473,000 pounds, valued at $19,000; making the total value of the halibut fishery's 1927 output, $5,523,000.

[6] To preclude the possibility of unwarranted comparison of figures given in this section with others for previous years, it should be explained that the figures as herein compiled differ from those published in separate reports for the Alaska fisheries and the Pacific Coast States. The difference lies principally in the fleet classifications as between Washington and Alaska, though there is reason to believe that the figures on landings also are not comparable with those previously published, due to variable practice in the inclusion of American-caught halibut landed at foreign ports as well as the possible duplication of figures.

The present compilation is a complete résumé of the landings of the American fleet for the year 1927, without omission or duplication. The fleet classification has been applied arbitrarily by including in the "Washington fleet" all vessels that land more than half of their catch in that State. All others were included in the "Alaska fleet." It has been necessary, in some cases, to use "hailing fares"; the error therefrom is estimated to be less than 2 per cent.

Recent trends in the halibut fishery may be gained from the statistics published monthly by the bureau for the last three years [7] and reproduced below. It may be seen that the catches of both the American and Canadian vessels have increased, but landings in British Columbia have declined slightly, while the landings in the Pacific Coast States and Alaska have increased, most markedly in the latter.

Halibut fishery of the Pacific coast, 1927

OPERATING UNITS: BY FLEET CLASSIFICATION

Items	Washington fleet	Alaska fleet	Total
Regular halibut vessels:			
Number	81	151	232
Net tonnage	1,674	3,907	5,581
Crew	539	1,168	1,707
Dories	81	151	232
Skates of lines	3,745	6,745	10,490
Vessels in other fisheries but landing one or more fares of halibut:			
Number	20	24	44
Net tonnage	317	247	564
Crew	104	73	177
Dories	20	19	39
Skates of lines	800	710	1,510
Regular halibut boats:			
Number	----------	28	28
Crew	----------	84	84
Skates of lines	----------	420	420
Boats in other fisheries but landing one or more fares of halibut:			
Number	2	139	141
Crew	6	258	264
Skates of lines	60	1,505	1,565

CATCH: BY FLEET CLASSIFICATION AND LANDING POINTS

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

Fleet classification	Washington		British Columbia		Alaska		Total	
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
Washington fleet:								
Regular halibut vessels	7,979	$1,105	1,134	$137	651	$64	9,764	$1,306
Other vessels and boats	811	117	32	4	1	[a]	844	121
Total	8,790	1,222	1,166	141	652	64	10,608	1,427
Alaska fleet:								
Regular halibut vessels	3,000	374	16,993	1,950	12,106	1,227	32,099	3,551
Other vessels and boats	----------	----------	99	12	2,294	243	2,393	255
Total	3,000	374	17,092	1,962	14,400	1,470	34,492	3,806
Both fleets:								
Regular halibut vessels	10,979	1,479	18,127	2,087	12,757	1,291	41,863	4,857
Other vessels and boats	811	117	131	16	2,295	243	3,237	376
Grand total	11,790	1,596	18,258	2,103	15,052	1,534	45,100	5,233

[a] Less than $500.

[7] These statistics are collected primarily for monthly trade-information purposes and are not as complete and accurate as might be desired, but probably are not significantly in error. The data on landings in British Columbia are from the American Consular Service. The data for 1927 landings by the American fleet have been revised in accordance with the most recent returns.

Halibut fishery of the Pacific coast, 1927—Continued

LANDINGS: BY NATIONALITY AND PORTS

[Figures in thousands of pounds; that is, 000 omitted]

Year	Landed in—					Total		
	Washington by American vessels	British Columbia			Alaska by American vessels	By American vessels	By Canadian vessels	Grand total
		By American vessels	By Canadian vessels	Total				
1925	9,685	22,390	7,731	30,121	10,038	42,113	7,731	49,844
1926	10,050	20,331	9,277	29,608	14,122	44,503	9,277	53,780
1927	11,789	18,258	10,076	28,334	15,052	45,099	10,076	55,175

LAKE FISHERIES

The latest complete statistical canvass made of the lake fisheries and fishery industries of the United States (Lakes Superior, Michigan, Huron, Erie, Ontario, and St. Clair, Lake of the Woods, Rainy Lake, and Lakes Kabetogama, Namakan, and Sand Point) was for the calendar year 1922. The complete statistics for this canvass are published in the report of the division of fishery industries for 1923 and in Statistical Bulletin No. 618.

In addition to the above general canvass, statistics of the lake fisheries [8] over a period of years have been secured by compiling data obtained through the various State agencies. Those for the years 1913 to 1924 were obtained in a tariff survey of the lake fisheries, while those for the years 1925 and 1926 were supplemented by the bureau in its surveys for those years. To complete these data for the various lakes, there have been included statistics of the Canadian lake fisheries, which have been secured from the Dominion official reports.

In the fall of 1927 a new system of obtaining fisheries statistics was initiated in Michigan with very satisfactory results. By this system, the commercial fisherman of the State are required to make monthly reports of catch together with a statement of the kind of gear used and the locality in which the catch was made. Because of the success of this system in Michigan, an effort was made to establish it in the other States bordering on the Great Lakes, and during the current year New York, Pennsylvania, and Illinois adopted a similar plan. Ohio, Wisconsin, and Minnesota approve of the plan, and it is believed that in the near future satisfactory statistics of monthly production for all the Great Lakes districts may be made available.

[8] Includes the fisheries of Lakes Ontario, Erie, Huron, Michigan, Superior, Namakan Lake, Rainy Lake, and Lake of the Woods.

The statistics shown for the years 1913 to 1925 do not include the production in Illinois. Indiana, as well as Illinois, has not required reports of production from fishermen under its jurisdiction in the past; but the production in Indiana (the more important of the two) has been estimated for the various years. The disparity resulting from the noninclusion of the production in Illinois is negligible, the catch in 1922 and 1926 amounting to about one-third of 1 per cent of the total lakes' catch. In 1926, a canvass of production was made in these States, which permits the publication of complete catch data for all States in that year.

Statistics are for the calendar year in each State, except that those for Lake of the Woods, Rainy Lake, and Namakan Lake in Minnesota are for two seasons. For Lake of the Woods, the seasons are from June 1 to Nov. 1 and Dec. 1 to Apr. 1; those for Rainy and Namakan Lakes are from May 15 to Nov. 1 and Dec. 1 to Apr. 1. The two seasons, in the order named, have been combined to constitute a year, as shown in the accompanying statistics. The quantity of fish taken in these lakes between Jan. 1 and Apr. 1 amounted to less than 3 per cent of the total catch in 1927.

Scientific and common names.[9]—It has been thought to be desirable to clear up the confusion in local common names of the fishes of the lake fisheries by listing the species under their most common trade classification. It will be found that the cisco of Lake Erie, due to its economic importance in this lake, has been listed separately from the herring of the other lakes. In cases where species are taken in small quantities they are included with similar varieties or in the item "miscellaneous." Following is a list of the species discussed in this report with their scientific names:

Lake trout	*Cristivomer namaycush.*
Whitefish	*Coregonus clupeaformis.*
Lake herring	*Leucichthys artedi* (Great Lakes, except Lake Erie).
Chubs	All leucichthys except *artedi* (in Great Lakes).
Cisco	*Leucichthys artedi* (Lake Erie only).
Sturgeon	*Acipenser rubicundus.*
Yellow pike	*Stizostedion vitreum.*
Blue pike [10]	*Stizostedion vitreum.*
Sauger	*Stizostedion canadense griseum.*
Sucker, "mullet"	Catostomidæ (species).
Sheepshead	*Aplodinotus grunniens.*
Yellow perch	*Perca flavescens.*
Pike (jacks)	*Esox lucius.*
Carp	*Cyprinus carpio.*
White bass	*Roccus chrysops.*
Catfish and bullheads	Ameiurus (species). *Ictalurus punctatus.*
Burbot	*Lota maculosa.*

GENERAL STATISTICS

While, from the standpoint of production, our lake fisheries are of less importance than some of our other fisheries, the value of the products is unusually high in proportion. In 1926 the total catch of the lake fisheries of the United States and Canada amounted to 102,798,000 pounds. This represents an increase of 3 per cent, compared with the previous year, and a decrease of 15 per cent, compared with the 10-year average. Of the total catch, that taken in the United States amounted to 75,300,000 pounds, valued at $6,642,000. This is an increase of 9 per cent in amount, compared with the previous year's catch and a decrease of 11 per cent in amount compared with the 10-year average of the catch. The Canadian catch, which amounted to 27,498,000 pounds, showed a decline of 12 per cent as compared with the previous year, and 24 per cent as compared with the 10-year average.

Catch by lakes.—According to the production in the United States and Canada in 1926, Lake Erie ranks as the most important lake, with a catch of 33,809,000 pounds. This represents a decrease of 10 per cent, compared with the previous year, and 40 per cent compared with the 10-year average for this lake. This decline also is reflected in the proportion this lake has contributed to the total production of all the lakes. For the 10 years previous to 1926, the catch of fish in Lake Erie averaged about one-half of the total production of all the lakes. However, in 1926 the catch declined to a point where it was barely one-third of the total production of all the lakes. Lake Huron

[9] A table of common names used in each State is given in the discussion of the fisheries of the Great Lakes in Fishery Industries of the United States, 1926, Bureau of Fisheries Document No. 1025.

[10] Described by Doctor Hubbs as a distinct species, which he named *Stizostedion glaucum.*

ranks second in importance, the catch in 1926 amounting to 20,615,000 pounds, or about one-fifth of the total production of all the lakes. This is an increase of 44 per cent over the quantity taken in 1925 and 9 per cent when compared with the 10-year average for this lake. Lake Michigan ranked third in importance in 1926, although previously it usually ranked second. The catch in 1926 about approximated that for Lake Huron and amounted to 20,495,000 pounds. This is about one-fifth of the total production of all the lakes and shows a decrease of 6 per cent in amount, compared with the previous year, and 7 per cent when compared with the 10-year average for this lake. Lake Superior was fourth in importance in production in 1926 with a catch of 17,747,000 pounds. This catch represents about one-sixth of the production of all the lakes and is 12 per cent greater than that of the previous year and 28 per cent greater than the 10-year average for this lake. Lake Ontario was next, with a production of 5,015,000 pounds in 1926, which is about the same as for the previous year, the 10-year average, and the relative importance among the lakes. The catch in Lake of the Woods, Rainy Lake, and Namakan Lake, which totaled 5,117,000 pounds, showed a small loss, compared with the previous year's total, although there has been a general upward trend in the catch in these lakes since 1918.

Catch by species.—According to the production in the United States and Canada in 1926, lake herring ranked as the most important species of fish taken in the lake fisheries. The catch in 1926 amounted to 19,329,000 pounds. This is the largest since 1920, and is 19 per cent greater than the previous year's catch, and 3 per cent greater than the 10-year average for this species. During the past 4 years, the catch of lake herring has increased steadily, which is especially noticeable with regard to the catch in United States waters, where the major part of the catch is taken. Lake trout ranks second in importance with a catch of 17,992,000 pounds. This represents a very slight increase over the previous year and an increase of 9 per cent when compared with the 10-year average for this species. The annual catch of this species has remained fairly constant during the past 10 years. Virtually two-thirds of the catch is taken in waters of the United States and one-third in Canadian waters.

Blue pike is third in importance with a catch of 12,393,000 pounds in 1926. This is a slight decrease, compared with 1925, and an increase of 26 per cent, compared with the 10-year average for this species. This latter increase is attributed to the somewhat small production of the first 5 years of the 10-year period. During each of the last 5 years of the 10-year period the catch was greater than in 1926, with the exception of 1924, which it approximately equaled. During late years about three-fourths of the annual catch of blue pike have been taken in waters of the United States and about one-fourth in Canadian waters.

Whitefish was fourth in importance with a catch of 9,948,000 pounds. This is but a small gain over the production in 1925 and a decrease of 2 per cent compared with the 10-year average. The catch in waters of the United States during 1926 was greater than that for any year since 1918, while the Canadian catch in 1926 was somewhat less than that for any year since 1917 and was less than the United States' catch for the first time in eight years.

The catch of yellow perch, which amounted to 7,363,000 pounds in 1926, showed a substantial increase compared with the production of 1925 and an increase of 15 per cent compared with the 10-year average. The increase in 1926 is due to the unusually large catch made in waters of the United States, which was the largest since 1919 and was nearly three times as large as the Canadian catch. The catch of chubs, which are taken almost entirely in waters of the United States, amounted to 7,042,000 pounds in 1926. This is a small increase over the catch for the previous year and an increase of 54 per cent compared with the 10-year average. This species of fish, which formerly was considered of inferior quality, is now esteemed more highly and is finding a good market. The catch of yellow pike, considered by some authorities to be of the same species as the blue pike, amounted to 4,451,000 pounds in 1926. This is slightly less than the catch in 1925 and a decrease of 7 per cent when compared with the 10-year average for this species.

The catch of cisco in Lake Erie (the only lake in which this species is taken) amounted to 3,022,000 pounds in 1926. The amount of this species taken has declined at an alarming rate during late years, the catch in 1926 being 47 per cent less than the amount taken in 1925 and a decrease of 88 per cent compared with the 10-year average. During the period 1913 to 1925, the catch ranged between about 14,000,000 and 49,000,000 pounds annually. From this it can be seen readily that the 1926 catch is but a fraction of that of former years. During each of the years of the 10-year period prior to 1925, the catch in the waters of the United States was usually twice as large as that taken in Canadian waters. However, in 1925 and 1926 the Canadian catch exceeded that for the United States, although it also has fallen off unprecedentedly.

Catch by States.—According to production in waters of the United States in 1926, Michigan, with frontage on Lakes Erie, Huron, Michigan, and Superior, ranked of first importance in the lake fisheries. The catch in waters of this State amounted to 26,989,000 pounds, or 36 per cent of the total production in the United States of all the lakes. Ohio, with fisheries only in Lake Erie, ranked second in importance with a catch of 15,934,000 pounds, or 21 per cent of the total catch. Third in importance was Wisconsin, with a catch (taken in Lakes Michigan and Superior) of 12,388,000 pounds, or 16 per cent of the total catch. Minnesota ranked fourth with a catch of 10,552,000 pounds, or 14 per cent of the total catch. This catch was made in Minnesota waters of Lake Superior, Lake of the Woods, Rainy Lake, and Namakan Lake. The catch in Pennsylvania, which was taken entirely in Lake Erie, amounted to 5,001,000 pounds, or 7 per cent of the total. The catch in New York, which was taken from Lakes Ontario and Erie, amounted to 3,429,000 pounds, or 5 per cent of the total. The catch in Indiana amounted to 626,000 pounds and that in Illinois to 381,000 pounds. The catch in each of these States represents less than 1 per cent of the total production in the lake fisheries.

Lake fisheries, 1926

CATCH: BY STATES

Species	New York		Pennsylvania		Ohio	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	63,521	$9,840	48	$9		
Whitefish	289,039	44,970	605,391	124,691	245,260	$49,052
Lake herring	192,069	16,536				
Cisco (Lake Erie)	215,717	20,048	1,126,321	122,237	107,267	12,872
Sturgeon	23,392	10,988	1,776	710		
Yellow pike	23,507	4,840	10,209	1,445	1,179,061	176,859
Blue pike	2,192,029	116,210	2,935,674	211,016	4,234,034	241,340
Sauger					1,544,831	103,504
Sucker, "mullet"	122,451	7,208			899,497	39,578
Sheepshead					1,168,289	35,049
Yellow perch	102,732	9,696	76,394	6,449	2,414,371	159,348
Carp	20,372	1,745	50,297	3,162	3,001,043	153,053
White bass					157,732	12,776
Catfish and bullheads	33,690	5,837	1,994	361	680,712	527,276
Burbot	68,887	5,874			274,892	5,498
Miscellaneous	81,324	9,017	193,351	14,035	26,977	538
Total	3,428,730	262,809	5,001,455	484,115	15,933,966	1,516,743

Species	Michigan		Indiana		Illinois	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	7,543,998	$957,409	250,285	$50,057	165,420	$31,430
Whitefish	3,444,987	589,050	12,094	3,024		
Lake herring	5,950,465	197,532	79,648	7,965	34,060	3,406
Chubs	3,011,141	290,029	206,685	24,806	168,265	20,192
Sturgeon	10,881	4,533				
Yellow pike	960,007	193,868				
Sauger	34,224	4,025				
Sucker, "mullet"	2,993,821	176,002	47	5		
Sheepshead	156,302	6,995				
Yellow perch	802,721	87,769	62,782	7,534	12,800	1,536
Pike (jacks)	29,995	3,425				
Carp	1,571,410	76,125				
Catfish and bullheads	150,204	19,787				
Burbot	18,788	930	9,913	991		
Miscellaneous	310,080	21,847	5,000	1,250		
Total	26,989,024	2,629,326	626,454	95,632	380,545	56,564

Species	Wisconsin		Minnesota		Total	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	3,203,022	$571,071	332,906	$46,723	11,559,200	$1,666,539
Whitefish	415,899	74,100	135,057	14,795	5,147,727	899,682
Lake herring	2,905,410	89,397	7,360,600	227,633	16,522,252	542,469
Chubs	2,061,381	205,441	621,970	35,548	6,069,442	576,016
Cisco (Lake Erie)					1,449,305	155,157
Sturgeon			2,289	907	38,338	17,138
Yellow pike	44,965	8,485	610,339	94,308	2,828,088	479,805
Blue pike					9,361,737	568,566
Sauger			54,719	3,713	1,633,774	111,242
Sucker, "mullet"			105,897	4,286	4,121,713	227,079
Sheepshead					1,324,591	42,044
Yellow perch	1,914,129	73,937	20,865	2,096	5,406,794	348,365
Pike (jacks)	29,529	3,607	242,469	12,203	301,993	19,235
Carp			6,133	44	4,649,255	234,129
White bass	300	24			158,032	12,800
Catfish and bullheads			43,755	4,862	910,355	558,123
Tullibees			990,447	54,183	990,447	54,183
Burbot					372,480	13,293
Miscellaneous	1,813,554	67,891	24,459	1,949	2,454,745	116,527
Total	12,388,189	1,093,953	10,551,905	503,250	75,300,268	6,642,392

Lake fisheries, 1926—Continued

CATCH: BY LAKES AND STATES

Species	Lake Ontario		Lake Erie			
	New York		New York		Pennsylvania	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	60,778	$9,534	2,743	$306	48	$9
Whitefish	178,613	28,701	110,426	16,269	605,391	124,691
Lake herring	192,069	16,536	215,717	20,048	1,126,321	122,237
Cisco						
Sturgeon	18,834	8,734	4,558	2,254	1,776	710
Yellow pike	21,997	4,530	1,510	310	10,209	1,445
Blue pike	22,041	2,922	2,169,988	113,288	2,935,674	211,016
Sucker, "mullet"	66,434	4,552	56,017	2,656		
Yellow perch	34,343	3,268	68,389	6,428	76,394	6,449
Carp	17,942	1,325	2,430	420	50,297	3,162
Catfish and bullheads	33,600	5,828	90	9	1,994	361
Burbot	68,887	5,874				
Miscellaneous	72,317	7,213	9,007	1,804	193,351	14,035
Total	787,855	99,017	2,640,875	163,792	5,001,455	484,115

Species	Lake Erie					
	Ohio		Michigan		Total	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout					2,791	$315
Whitefish	245,260	$49,052	80	$$20	961,157	190,032
Cisco	107,267	12,872			1,449,305	155,157
Sturgeon					6,334	2,964
Yellow pike	1,179,061	176,859	81,817	11,619	1,272,597	190,233
Blue pike	4,234,034	241,340			9,339,696	565,644
Sauger	1,544,831	103,504	6,101	520	1,550,932	104,024
Sucker, "mullet"	899,497	39,578	89,166	4,098	1,044,680	46,332
Sheepshead	1,168,289	35,049	45,406	1,842	1,213,695	36,891
Yellow perch	2,414,371	159,348	62,721	5,472	2,621,875	177,697
Pike (jacks)			3,525	409	3,525	409
Carp	3,001,043	153,053	1,150,401	55,468	4,204,171	212,103
White bass	157,732	12,776			157,732	12,776
Catfish and bullheads	680,712	527,276	30,159	1,349	712,955	528,995
Burbot	274,892	5,498	6,819	521	281,711	6,019
Miscellaneous	26,977	538	4,712	475	234,047	16,852
Total	15,933,966	1,516,743	1,480,907	81,793	25,057,203	2,246,443

Species	Lake Huron		Lake Michigan			
	Michigan		Michigan		Indiana	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	1,685,067	$248,123	3,352,439	$438,801	250,285	$50,057
Whitefish	1,722,441	327,676	1,537,709	233,412	12,094	3,024
Lake herring	4,311,277	131,540	970,471	36,259	79,648	7,965
Chubs	1,533,533	140,805	1,324,346	137,216	206,685	24,806
Sturgeon	4,040	1,438	6,368	2,931		
Yellow pike	815,721	176,284	58,144	5,027		
Sauger	28,123	3,505				
Sucker, "mullet"	1,826,963	116,572	966,543	49,037	47	5
Sheepshead	91,171	4,159	19,725	994		
Yellow perch	458,042	61,874	278,863	20,192	62,782	7,534
Pike (jacks)	15,974	1,768	8,153	922		
Carp	414,356	20,398	6,653	259		
Catfish and bullheads	119,650	18,346	395	92		
Burbot	1,022	50	10,616	349	9,913	991
Miscellaneous	104,546	8,485	191,055	12,240	5,000	1,250
Total	13,131,926	1,261,023	8,731,480	937,731	626,454	95,632

Lake fisheries, 1926—Continued

CATCH: BY LAKES AND STATES—Continued

Species	Lake Michigan					
	Illinois		Wisconsin		Total	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	165,420	$31,430	2,762,105	$513,954	6,530,249	$1,034,242
Whitefish			325,420	59,273	1,875,223	295,709
Lake herring	34,060	3,406	2,199,905	72,280	3,284,084	119,910
Chubs	168,265	20,192	2,040,570	203,924	3,739,866	386,138
Sturgeon					6,368	2,931
Yellow pike			23,930	4,933	82,074	9,960
Sucker, "mullet"					966,590	49,042
Sheepshead					19,725	994
Yellow perch	12,800	1,536	1,911,758	73,667	2,266,203	102,929
Pike (jacks)			25,092	3,060	33,245	3,982
Carp					6,653	259
White bass			300	24	300	24
Catfish and bullheads					395	92
Burbot					20,529	1,340
Miscellaneous			1,466,958	56,589	1,663,013	70,079
Total	380,545	56,564	10,756,038	987,704	20,494,517	2,077,631

Species	Lake Superior							
	Michigan		Wisconsin		Minnesota		Total	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	2,506,492	$270,485	440,917	$57,117	332,568	$46,684	3,279,977	$374,286
Whitefish	184,757	27,942	90,479	14,827	4,323	732	279,559	43,501
Lake herring	668,717	29,733	705,505	17,117	7,360,600	227,633	8,734,822	274,483
Chubs	153,262	12,008	20,811	1,517	440,053	28,872	614,126	42,397
Sturgeon	473	164					473	164
Yellow pike	4,325	938	21,035	3,552			25,360	4,490
Sucker, "mullet"	111,149	6,295			1,447	93	112,596	6,388
Yellow perch	3,095	231	2,371	270			5,466	501
Pike (jacks)	2,343	326	4,437	547			6,780	873
Burbot	331	10					331	10
Miscellaneous	9,767	647	346,596	11,302	20,489	1,470	376,852	13,419
Total	3,644,711	348,779	1,632,151	106,249	8,159,480	305,484	13,436,342	760,512

Species	Lake of the Woods, Minn.		Rainy Lake, Minn.		Namakan Lake, Minn.		Total, all lakes	
	Pounds	*Value*	*Pounds*	*Value*	*Pounds*	*Value*	*Pounds*	*Value*
Lake trout	338	$39					11,559,200	$1,666,539
Whitefish	31,393	3,282	88,898	$9,585	10,443	$1,196	5,147,727	899,682
Lake herring							16,522,252	542,469
Chubs	22,469	1,105	62,676	2,231	96,772	3,340	6,069,442	576,016
Cisco							1,449,305	155,157
Sturgeon	1,478	613	811	294			38,338	17,138
Yellow pike	508,925	82,842	79,157	9,018	22,257	2,448	2,828,088	479,805
Blue pike							9,361,737	568,566
Sauger	54,719	3,713					1,633,774	111,242
Sucker, "mullet"	98,870	4,081	696	12	4,884	100	4,121,713	227,079
Sheepshead							1,324,591	42,044
Yellow perch	17,118	1,679	2,909	319	838	98	5,406,794	348,365
Pike (jacks)	139,683	8,493	75,062	2,690	27,724	1,020	301,993	19,235
Carp	6,133	44					4,649,255	234,129
White bass							158,032	12,800
Catfish and bullheads	43,755	4,862					910,355	558,123
Tullibees	990,447	54,183					990,447	54,183
Burbot							372,480	13,293
Miscellaneous	3,970	479					2,454,745	116,527
Total	1,919,298	165,415	310,209	24,149	162,918	8,202	75,300,268	6,642,392

Lake fisheries, 1926—Continued

CATCH: BY LAKES (in pounds)

Species	Lake Ontario			Lake Erie		
	United States	Canada	Total	United States	Canada	Total
Lake trout	60,778	784,300	845,078	2,791	400	3,191
Whitefish	178,613	1,822,400	2,001,013	961,157	868,100	1,829,257
Lake herring	192,069	638,200	830,269			
Cisco				1,449,305	1,573,100	3,022,405
Sturgeon	18,834	7,020	25,854	6,334	51,417	57,751
Yellow pike	21,997	61,800	83,797	1,272,597	192,500	1,465,097
Blue pike	22,041	7,400	29,441	9,339,696	2,975,100	12,314,796
Sauger				1,550,932		1,550,932
Sucker, "mullet"	66,434		66,434	1,044,680		1,044,680
Sheepshead				1,213,695		1,213,695
Yellow perch	34,343	113,200	147,543	2,621,875	1,715,900	4,337,775
Pike (jacks)		159,000	159,000	3,525	19,600	23,125
Carp	17,942	43,200	61,142	4,204,171	196,800	4,400,971
White bass				157,732		157,732
Catfish and bullheads	33,600	140,000	173,600	712,955	26,200	739,155
Burbot	68,887		68,887	281,711		281,711
Miscellaneous	72,317	450,300	522,617	234,047	1,132,700	1,366,747
Total	787,855	4,226,820	5,014,675	25,057,203	8,751,817	33,809,020

Species	Lake Huron			Lake Michigan	Lake Superior		
	United States	Canada	Total	United States	United States	Canada	Total
Lake trout	1,685,067	3,667,400	5,352,467	6,530,249	3,279,977	1,966,000	5,245,977
Whitefish	1,722,441	1,520,500	3,242,941	1,875,223	279,559	317,000	596,559
Lake herring	4,311,277	350,800	4,662,077	3,284,084	8,734,822	1,818,500	10,553,322
Chubs	1,533,533	630,100	2,163,633	3,739,866	614,126		614,126
Sturgeon	4,040	22,935	26,975	6,368	473	1,000	1,473
Yellow pike	815,721	303,900	1,119,621	82,074	25,360	95,700	121,060
Blue pike		47,700	47,700			400	400
Sauger	28,123		28,123				
Sucker "mullet"	1,826,963		1,826,963	966,590	112,596		112,596
Sheepshead	91,171		91,171	19,725			
Yellow perch	458,042	114,800	572,842	2,266,203	5,466	300	5,766
Pike (jacks)	15,974	156,700	172,674	33,245	6,780	5,800	12,580
Carp	414,356	47,400	461,756	6,653			
White bass				300			
Catfish and bullheads	119,650	6,500	126,150	395			
Burbot	1,022		1,022	20,529	331		331
Miscellaneous	104,546	614,600	719,146	1,663,013	376,852	105,900	482,752
Total	13,131,926	7,483,335	20,615,261	20,494,517	13,436,342	4,310,600	17,746,942

Species	Namakan Lake			Rainy Lake		
	United States	Canada	Total	United States	Canada	Total
Lake trout					88	88
Whitefish	10,443	9,644	20,087	88,898	64,331	153,229
Chubs	96,772	2,854	99,626	62,676	340,534	403,210
Sturgeon		1,105	1,105	811	203	1,014
Yellow pike	22,257	7,558	29,815	79,157	318,170	397,327
Sucker, "mullet"	4,884		4,884	696		696
Yellow perch	838		838	2,909	11,644	14,553
Pike (jacks)	27,724	8,797	36,521	75,062	148,259	223,321
Miscellaneous		685	685		15,169	15,169
Total	162,918	30,643	193,561	310,209	898,398	1,208,607

Lake fisheries, 1926—Continued

CATCH: BY LAKES (in pounds)

Species	Lake of the Woods			Total all lakes		
	United States	Canada	Total	United States	Canada	Total
Lake trout	338	14,515	14,853	11,559,200	6,432,703	17,991,903
Whitefish	31,393	197,782	229,175	5,147,727	4,799,757	9,947,484
Lake herring				16,522,252	2,807,500	19,329,752
Chubs	22,469		22,469	6,069,442	973,488	7,042,930
Cisco				1,449,305	1,573,100	3,022,405
Sturgeon	1,478	314	1,792	38,338	83,994	122,332
Yellow pike	508,925	643,207	1,152,132	2,828,088	1,622,835	4,450,923
Blue pike				9,361,737	3,030,600	12,392,337
Sauger	54,719		54,719	1,633,774		1,633,774
Sucker, "mullet"	98,870		98,870	4,121,713		4,121,713
Sheepshead				1,324,591		1,324,591
Yellow perch	17,118	520	17,638	5,406,794	1,956,364	7,363,158
Pike (jacks)	139,683	454,406	594,089	301,993	952,562	1,254,555
Carp	6,133	4,408	10,541	4,649,255	291,808	4,941,063
White bass				158,032		158,032
Catfish and bullheads	43,755		43,755	910,355	172,700	1,083,055
Tullibees	990,447	163,787	1,154,234	990,447	163,787	1,154,234
Burbot				372,480		372,480
Miscellaneous	3,970	317,338	321,308	2,454,745	2,636,692	5,091,437
Total	1,919,298	1,796,277	3,715,575	75,300,268	27,497,890	102,798,158

Lake fisheries, 1913 to 1926

CATCH: BY LAKES

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

Year	Lake Ontario			Lake Erie			Lake Huron			Lake Michigan
	United States [1]	Canada [2]	Total	United States	Canada	Total	United States	Canada	Total	United States
1913	210	2,957	3,167	22,120	19,553	41,673	11,184	6,283	17,467	26,994
1914	277	3,525	3,802	53,571	19,982	73,553	8,248	6,616	14,864	28,195
1915	395	4,650	5,045	59,509	16,539	76,048	10,245	7,317	17,562	31,680
1916	317	4,927	5,244	41,223	12,623	53,846	17,145	7,289	24,434	23,023
1917	656	5,544	6,200	41,416	18,780	60,196	12,512	7,303	19,815	29,317
1918	524	5,033	5,557	51,479	19,493	70,972	14,966	6,497	21,463	26,675
1919	472	5,483	5,955	35,154	14,128	49,282	15,240	6,479	21,719	29,820
1920	314	4,979	5,293	32,192	16,791	48,983	11,250	6,229	17,479	23,053
1921	1,855	4,894	6,749	46,731	16,409	63,140	9,330	6,378	15,708	17,018
1922	889	4,526	5,415	40,912	17,684	58,596	13,481	7,162	20,643	16,605
1923	710	4,934	5,644	44,378	17,773	62,151	9,920	6,811	16,731	15,358
1924	1,049	5,184	6,233	40,264	18,977	59,241	9,074	7,260	16,334	17,694
1925	446	4,351	4,797	26,639	11,080	37,719	6,567	7,748	14,315	21,710
1926	788	4,227	5,015	25,057	8,752	33,809	13,132	7,483	20,615	20,495

Year	Lake Superior			Lake of the Woods, Rainy Lake, and Namakan Lake			Total		
	United States	Canada	Total	United States [3]	Canada [4]	Total	United States	Canada	Total
1913	6,417	2,331	8,748	1,384	3,393	4,777	68,309	34,517	102,826
1914	7,088	2,934	10,022	1,246	3,420	4,666	98,625	36,477	135,102
1915	5,694	5,698	11,392	1,425	4,635	6,060	108,948	38,839	147,787
1916	5,437	5,464	10,901	1,287	2,443	3,730	88,432	32,746	121,178
1917	9,889	4,977	14,866	2,103	3,338	5,441	95,893	39,942	135,835
1918	11,546	8,754	20,300	1,489	3,067	4,556	106,679	42,844	149,523
1919	10,500	5,971	16,471	1,277	2,714	3,991	92,463	34,775	127,238
1920	9,267	4,632	13,899	1,299	2,028	3,327	77,375	34,659	112,034
1921	7,476	3,807	11,283	1,048	2,240	3,288	83,458	33,728	117,186
1922	6,569	3,985	10,554	978	2,513	3,491	79,434	35,870	115,304
1923	7,584	4,567	12,151	1,159	2,544	3,703	79,109	36,629	115,738
1924	8,944	3,216	12,160	1,256	3,356	4,612	78,281	37,993	116,274
1925	12,307	3,567	15,874	1,463	4,411	5,874	69,132	31,157	100,289
1926	13,436	4,311	17,747	2,392	2,725	5,117	75,300	27,498	102,798

[1] Includes the catch in Lake Ontario proper and Chaumont Bay in the years from 1913 to 1924, inclusive; Lake Ontario proper in 1925; and Lake Ontario proper, Niagara River below the Falls, St. Lawrence River and Chaumont, Black River, Port, Great Sodus Bay and Little Sodus Bay in 1926.

[2] Includes the catch in Niagara River below the Falls.

[3] Does not include the catch in Namakan and Rainy Lakes prior to 1926.

[4] Includes the catch in Lac Suel, Eagle Lake, etc., in the interior of Canada prior to 1926.

NOTE.—The catches in the Detroit River, St. Clair River, and Lake St. Clair are not included in these statistics.

Lake fisheries, 1913 to 1926—Continued

CATCH: BY SPECIES

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

Year	Lake trout			Whitefish			Lake herring		
	United States	Canada	Total	United States	Canada	Total	United States	Canada	Total
1913	10,872	5,366	16,238	3,803	4,994	8,797	14,099	1,202	15,301
1914	9,899	5,212	15,111	5,451	5,036	10,487	14,412	1,984	16,396
1915	10,892	6,192	17,084	4,381	5,935	10,316	14,924	4,843	19,767
1916	9,934	5,658	15,592	4,952	4,607	9,559	16,981	5,028	22,005
1917	10,733	5,729	16,462	5,773	4,576	10,349	20,341	4,879	25,220
1918	9,784	6,619	16,403	5,695	5,710	11,405	20,727	5,809	26,536
1919	12,278	5,928	18,206	4,444	6,487	10,931	22,293	3,449	25,742
1920	10,066	4,785	14,851	3,634	6,375	10,009	16,803	2,821	19,624
1921	10,239	5,299	15,538	3,532	6,290	9,822	10,885	1,628	12,513
1922	11,101	6,451	17,552	4,325	6,025	10,350	11,731	1,189	12,920
1923	9,941	6,175	16,116	3,677	6,488	10,165	11,160	1,558	12,718
1924	10,144	6,527	16,671	3,794	5,728	9,522	12,815	1,568	14,383
1925	11,125	6,860	17,985	3,668	5,660	9,328	14,549	1,683	16,232
1926	11,559	6,433	17,992	5,148	4,800	9,948	16,522	2,807	19,329

Year	Chubs			Cisco			Sturgeon		
	United States	Canada	Total	United States	Canada	Total	United States	Canada	Total
1913	5,162	330	5,492	12,513	11,608	24,121	67	192	259
1914	3,938	486	4,424	14,108	5,982	20,090	76	213	289
1915	3,865	374	4,239	15,978	5,574	21,552	109	206	315
1916	3,247	651	3,898	8,337	5,211	13,548	60	112	172
1917	5,099	819	5,918	19,453	14,158	33,611	49	107	156
1918	7,710	384	8,094	35,291	13,532	48,823	68	118	186
1919	6,350	251	6,601	17,846	7,426	25,272	96	105	201
1920	3,847	303	4,150	12,893	9,651	22,544	40	67	107
1921	2,438	254	2,692	14,964	5,225	20,189	25	54	79
1922	2,364	207	2,571	14,022	6,306	20,328	33	92	125
1923	1,955	204	2,159	20,930	9,241	30,171	20	110	130
1924	3,041	242	3,283	21,293	10,908	32,201	30	120	150
1925	6,016	429	6,445	2,817	2,840	5,657	24	90	114
1926	6,069	973	7,042	1,449	1,573	3,022	38	84	122

Year	Yellow pike			Blue pike			Sauger	Suckers or "mullet"	Sheepshead
	United States	Canada	Total	United States	Canada	Total	United States	United States	United States
1913	1,498	2,579	4,077	1,882	488	2,370	1,248	2,995	596
1914	2,926	3,869	6,795	11,435	2,968	14,403	4,569	6,185	2,282
1915	3,750	2,624	6,374	18,811	4,882	23,693	4,533	4,517	2,212
1916	3,494	1,909	5,403	9,403	2,539	11,942	6,187	4,801	2,384
1917	3,457	1,814	5,271	1,655	565	2,220	4,336	5,699	3,013
1918	3,263	1,525	4,788	1,330	800	2,130	2,101	3,549	2,982
1919	2,540	1,647	4,187	1,710	2,391	4,101	2,655	5,008	2,150
1920	2,257	1,420	3,677	3,983	3,365	7,348	2,932	4,078	1,984
1921	2,294	1,879	4,173	8,946	6,390	15,336	5,010	4,041	2,905
1922	2,907	2,273	5,180	10,361	6,342	16,703	4,623	3,788	1,415
1923	2,761	2,565	5,326	9,686	3,244	12,930	3,321	3,187	1,521
1924	2,562	2,718	5,279	8,970	3,036	12,006	1,847	2,723	2,334
1925	2,320	2,343	4,663	10,513	3,445	13,958	2,119	2,762	2,395
1926	2,828	1,623	4,451	9,362	3,031	12,393	1,634	4,122	1,325

Lake fisheries, 1913 to 1926—Continued

CATCH: BY SPECIES—Continued

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

Year	Yellow perch			Pike (Jacks)			Carp			White bass, United States
	United States	Canada	Total	United States	Canada	Total	United States	Canada	Total	
1913	6,025	1,141	7,166	427	3,366	3,793	2,072	424	2,496	526
1914	5,771	1,651	7,422	494	4,338	4,832	12,039	1,615	13,654	478
1915	6,124	1,358	7,482	606	2,440	3,046	10,141	1,236	11,377	695
1916	5,708	1,114	6,822	323	1,378	1,701	5,861	1,097	6,958	343
1917	4,086	1,357	5,443	461	1,423	1,884	4,602	1,075	5,677	333
1918	3,978	2,249	6,227	417	1,234	1,651	4,820	880	5,700	129
1919	6,615	1,351	7,966	474	1,819	2,293	4,080	662	4,742	205
1920	4,591	1,533	6,124	606	1,008	1,614	5,828	583	6,411	514
1921	5,268	2,203	7,471	466	1,064	1,530	7,420	504	7,924	853
1922	3,555	2,346	5,901	402	1,129	1,531	5,094	435	5,529	831
1923	3,525	2,627	6,152	344	1,086	1,430	3,780	467	4,247	310
1924	3,345	2,390	5,735	400	1,145	1,545	1,780	433	2,213	192
1925	4,110	2,233	6,343	269	1,160	1,429	2,409	327	2,736	232
1926	5,407	1,956	7,363	302	952	1,254	4,649	292	4,941	158

Year	Catfish			Tullibees			Burbot, United States	Miscellaneous fish		
	United States	Canada	Total	United States	Canada	Total		United States	Canada	Total
1913	196	332	528	[1]	177	177	42	4,286	2,318	6,604
1914	801	392	1,193	[1]	127	127	108	3,663	2,604	6,257
1915	596	435	1,031	[1]	262	262	45	6,769	2,478	9,247
1916	1,281	331	1,612	[1]	139	139	247	4,889	2,972	7,861
1917	2,296	278	2,574	[1]	174	174	69	4,438	2,988	7,426
1918	514	496	1,010	[1]	240	240	380	3,941	3,248	7,189
1919	1,164	365	1,529	[1]	241	241	542	2,013	2,653	4,666
1920	776	269	1,045	[1]	129	129	499	2,044	2,350	4,394
1921	1,502	299	1,801	[1]	117	117	490	2,180	2,522	4,702
1922	805	243	1,048	[1]	131	131	323	1,756	2,701	4,457
1923	716	247	963	[1]	112	112	310	1,965	2,525	4,490
1924	366	226	592	[1]	255	255	210	2,435	2,697	5,132
1925	835	233	1,068	301	461	762	269	2,399	3,393	5,792
1926	910	173	1,083	990	164	1,154	373	2,455	2,637	5,092

[1] Included with miscellaneous fish.

FISHERIES OF THE MISSISSIPPI RIVER AND TRIBUTARIES

The latest statistical canvass made of the fisheries and fishery industries of the Mississippi River and tributaries was for the calendar year 1922. The complete statistics for the canvass were published in the report of the division of fishery industries for 1923 and in Statistical Bulletin No. 607.

During 1922 the fisheries and fishery industries of this region employed 19,122 persons, and the yield of the fisheries amounted to 105,733,734 pounds, valued at $4,503,521.

In addition to the above general canvass, periodic statistical canvasses are made of the fisheries of Lake Pepin and Lake Keokuk. A discussion of these for 1914, 1917, 1922, and 1927 follows.

LAKE PEPIN AND LAKE KEOKUK

In June, 1913, a dam was put into operation on the Mississippi River between Keokuk, Iowa, and Hamilton, Ill., which caused the formation of an artificial lake, about 42 miles long and from ½ mile

to 2½ miles or more wide, in the river behind the dam. This lake has been named Lake Keokuk. Farther up the river, about 400 miles from Lake Keokuk, the Mississippi River widens, and a natural body of water is formed, which is known as Lake Pepin. These two lakes have been subjected to extensive biological and ecological experiments and investigations during late years, and for this reason statistics of their fisheries are of more than ordinary interest. Presented herewith are detailed statistics for 1927 and comparative statistics for the years 1914, 1917, 1922, and 1927. For further data on the fisheries of Lakes Pepin and Keokuk, the reader is referred to a Bureau of Fisheries publication now in press, entitled "Keokuk Dam and the fisheries of the upper Mississippi River," by Robert E. Coker.

Fisheries of Lake Keokuk, 1927

OPERATING UNITS AND CATCH: BY GEAR

Items	Seines		Gill nets		Lines		Fish traps		Fyke nets		Total [1]	
Fishermen	9		2		20		44		72		102	
Boats:												
Motor	6				8		38		58		70	
Other	8		2		18		40		57		82	
Fishing apparatus:												
Number	3		26				815		1,594			
Length, in yards	600		1,300									
CATCH	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*
Bowfin	218	$7			1,367	$41			12,470	$374	14,055	$422
Buffalo fish	668	67	600	$108					66,604	6,413	67,872	6,588
Carp, German	3,097	186	680	82	7,680	398			279,742	15,640	291,199	16,306
Catfish	760	114			9,020	1,180	96,707	$11,821	33,856	4,241	140,343	17,356
Drum	468	33			813	50			26,257	1,726	27,538	1,809
Paddlefish	200	20	60	7	139	14			850	93	1,249	134
Quillback	480	14							9,400	319	9,880	333
Sunfish	174	10							13,389	793	13,563	803
Turtles	385	12									385	12
Total	6,450	463	1,340	197	19,019	1,683	96,707	11,821	442,568	29,599	566,084	43,763

[1] Exclusive of duplication.

Fisheries of Lake Pepin, 1927

OPERATING UNITS AND CATCH: BY GEAR

Items	Seines		Gill nets		Lines		Fyke nets		Spears		Total [1]	
Fishermen	77		22		3		56		4		139	
Boats:												
Motor	23		9				17				39	
Other	63		14		3		37		4		105	
Fishing apparatus:												
Number	23		152				280		4			
Length, in yards	14,393		7,716									
CATCH	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*	*Lbs.*	*Value*
Bowfin	717	$20					2,617	$89			3,334	$109
Buffalofish	17,172	1,479	1,903	$218			14,349	1,535	25	$2	33,449	3,234
Carp, German	507,354	22,890	33,581	2,431	163	$9	71,638	3,900	2,506	149	615,242	29,379
Catfish	7,253	1,556			228	46	45,595	10,794			53,076	12,396
Drum	43,193	3,209					70,600	5,487			113,793	8,696
Eels	24	3					294	51			318	54
Mooneye	5,500	105					3,476	81			8,976	186
Paddlefish	1,041	150	50	5			100	13			1,191	168
Quillback	3,265	125					1,570	47			4,835	172
Suckers	21,202	967					10,709	519			31,911	1,486
Total	606,721	30,504	35,534	2,654	391	55	220,948	22,516	2,531	151	866,125	55,880

[1] Exclusive of duplication.

Fisheries of Lake Keokuk, 1914, 1917, 1922, and 1927

OPERATING UNITS AND CATCH

Items	1914	1917	1922	1927
OPERATING UNITS (number)				
Fishermen	105	118	122	102
Boats:				
Motor	36	52	58	70
Other	94	80	111	82
Fishing apparatus: [1]				
Seines		1	2	3
Anchored gill nets		12	235	26
Trammel nets	14	17	17	
Fyke nets	1,378	1,368	1,301	1,594
Fish traps		81		815
Dip nets			1	
PRODUCTS (pounds)				
Black bass	15	4,163	6,200	
Bowfin		26,000		14,055
Buffalo fish	249,900	696,543	113,946	67,872
Carp, German	302,365	762,259	276,431	291,199
Catfish and bullheads	71,535	109,904	183,919	140,343
Crappie	70	17,560	13,770	
Eels	3,800	2,087		
Fresh-water drum, or sheepshead	26,860	160,554	65,040	27,538
Pike		20		
Pike perch, sauger			2,280	
Quillback, or American carp		5,936		9,880
Spoonbill cat, or paddlefish		927	27,405	1,249
Sturgeon, sand [2]	1,900	454		
Sturgeon, shovelnose			600	
Suckers	4,640	700		
Sunfish	50	13,879	11,590	13,563
Turtles				385
Total	661,135	1,800,986	701,181	566,084

[1] Trot and hand lines are omitted from this statement because data on the quantity in use are not available.

[2] Reported as lake sturgeon in 1914.

Fisheries of Lake Pepin, 1914, 1917, 1922, and 1927

OPERATING UNITS AND CATCH

Items	1914	1917	1922	1927
OPERATING UNITS (number)				
Fishermen	135	126	219	139
Boats:				
Motor	28	35	109	39
Other	54	55	136	105
Fishing apparatus: [1]				
Seines	14	17	33	23
Anchored gill nets	664	371	351	152
Fyke nets	295	262	95	280
Fish traps	8	14		
Spears			7	4
PRODUCTS (pounds)				
Bowfin	1,534	24,021	16,136	3,334
Buffalo fish	261,250	300,808	340,309	33,449
Carp, German	237,517	467,588	2,578,916	615,242
Catfish and bullheads	26,830	254,249	127,384	53,076
Eels			541	318
Fresh-water drum, or sheepshead	131,785	118,304	395,592	113,793
Mooneye, fresh	9,300	7,656		8,976
Mooneye, smoked	1,465	7,250		
Pike	50			
Quillback, or American carp	60,605	14,238	47,377	4,835
Spoonbill cat, of paddlefish	8,877	2,923	15,971	1,191
Sturgeon, lake	1,067	512	5,253	
Sturgeon, shovelnose			1,080	
Suckers	18,340	15,260	43,466	31,911
Sunfish	50			
Turtles			442	
Total	758,670	1,212,809	3,572,467	866,125

[1] Trot and hand lines are omitted from this statement because data on the quantity in use are not available.

FISHERIES OF ALASKA

The latest statistical canvass made of the fisheries and fishery industries of Alaska was for the calendar year 1927. The complete statistics for the canvass were published in the report "Alaska fishery and fur-seal industries, 1927," and in Statistical Bulletin No. 790.

During 1927 the fisheries of Alaska employed 28,872 persons, of whom 11,030 were fishermen, 16,069 were employed in the wholesale and manufacturing industries, and 1,773 in transporting fishery products. The catch in the round weight, exclusive of whales, amounted to 458,546,100 pounds, valued at $13,812,218. The round weight of whales could not be determined, but their products amounted to 11,475,950 pounds, valued at $622,412. Of the total catch, exclusive of whales, 300,565,699 pounds, valued at $8,702,494, consisted of salmon; 156,233,673 pounds, valued at $5,021,066, consisted of other fish; and 1,746,728 pounds, valued at $88,658, consisted of shellfish.

During 1927 there were 282 establishments (exclusive of duplication) in Alaska engaged in the fisheries trade. Of this number, 139 canned fish, 122 cured fish, 34 manufactured by-products, and 34 handled fresh and frozen fishery products.

The output of these extablishments amounted to 289,149,363 pounds, valued at $40,163,300. The salmon industry was by far the most important and produced 186,978,797 pounds of products, valued at $32,361,767. In value, the halibut industry was next in importance and produced 34,491,283 pounds of products, valued at $3,805,088. The comparatively new herring industry ranked third in importance and produced 52,538,572 pounds of products, valued at $2,850,823. Of the remainder, whale, shrimp, and clam products were most important in value.

In considering the wholesale and manufacturing industries separately, the canning industry ranked foremost and produced 171,779,706 pounds of fishery products, valued at $30,163,083. In value, cured fish ranked second, producing 25,324,157 pounds of products, valued at $3,312,750. The fresh-fish industry was third with products amounting to 28,524,353 pounds, valued at $2,955,128; the by-products industry fourth with an output of 42,386,161 pounds, valued at $1,964,903; and the frozen-fish industry fifth, accounting for the remainder of the products, amounting to 21,134,986 pounds, valued at $1,767,436.

○