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R. P. LAMONT, Secretary

BUREAU OF FISHERIES

HENRY O'MALLEY, Commissioner

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# FISHERY INDUSTRIES OF THE UNITED STATES

1931

By R. H. FIEDLER

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# FISHERY INDUSTRIES OF THE UNITED STATES, 1931<sup>1</sup>

By R. H. FIEDLER

Chief, Division of Fishery Industries

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<sup>1</sup> Appendix II to the Report of the U. S. Commissioner of Fisheries, 1932. Approved for publication May 19, 1932.

## FOREWORD

This report constitutes a summary of the activities of the division of fishery industries as well as an annual review on fishery statistics of the United States. As its name indicates, this division of the bureau is concerned with the activities and welfare of the fishery industries, including the commercial fisheries, the trade in fishery products, and the fish canning and preserving industries. Its functions include the collection and publication of fishery statistics, the conducting of market surveys, the prosecution of research designed 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 the issuance of the previous report,<sup>2</sup> together with such summarized statements and interpretations of the statistics as are deemed significant and useful. In the preparation of this report, members of the division's staff have taken part and their assistance is appreciatively acknowledged.

### Part 1. OPERATIONS OF THE DIVISION

#### COLLECTION OF STATISTICS

The statistical work of the division in 1931, as in former years, included the collection and dissemination of statistics on the catch of fishery products and the gear employed in making the catch, and statistics of related fishery industries. In the former group are statistics that are intended for the use of the fishery biologist, upon which to base conservation measures. They are also valuable for economic purposes. This is especially true of statistics of the landings of fish at principal fishing ports, which are published monthly. In the second group are statistics that are of use mainly for economic or trade purposes. These include statistics of the manufactured fishery products and by-products of the United States, cold-storage holdings of fish and amounts of fish frozen in the United States, marine-animal oil production, and similar statistics.

Continuing with the plan of making annual general statistical surveys of the fisheries of various geographical sections, the division in 1931 under the direction of F. F. Johnson canvassed the fisheries prosecuted in our entire coastal and lake sections, obtaining catch figures for 1930. The fisheries of the Mississippi River and its tributaries were not canvassed for 1930, but a survey is now in progress in which figures for 1931 are being obtained. Continuous annual catch figures are now available for the Great Lakes from 1913, Pacific Coast States from 1922, South Atlantic and Gulf States from 1927, New England States from 1928, and the Middle Atlantic and Chesapeake Bay States from 1929. While a complete canvass has not been made for the fisheries of the Mississippi River and tributaries since 1922, annual figures have been obtained on the catch of fresh-water mussels

<sup>2</sup> Fishery Industries of the United States, 1930. By R. H. Fiedler, Appendix II to the Report of the U. S. Commissioner of Fisheries for 1931, pp. 109-552.

in this area since 1929 (about 50 per cent of the total yield of fishery products in the Mississippi Valley consists of mussel shells) and for Lakes Pepin and Keokuk since 1927.

In addition to the general catch statistics, the collection and (or) publication of statistics on special subjects was continued during 1931, as follows: The landings of fish by American fishing vessels at the ports of Boston and Gloucester, Mass., Portland, Me., and Seattle, Wash.; landings of halibut at North Pacific coast ports (published monthly, and annual bulletins summarizing these landings for the year); catch of mackerel in the North Atlantic fishery; cold-storage holdings of frozen and cured fish and amount of fish frozen, which are furnished by the Bureau of Agricultural Economics (published monthly); production, consumption, and holdings of marine-animal oils of the United States and Alaska (published quarterly by the Bureau of the Census); production of manufactured fishery products and by-products of the United States and Alaska during 1931; the catch of shad in the Potomac and Hudson Rivers, and the catch of alewives in the Potomac River during 1931; transactions on the sponge exchange at Tarpon Springs, Fla., during 1931; volume of fishery products handled at the municipal fish wharf and market, Washington, D. C., during 1931; and the volume of United States imports and exports of fishery products during 1931, furnished by the Bureau of Foreign and Domestic Commerce.

In the above surveys the division continued to receive cooperation from many of the State fishery agencies, which aided materially in the work. This, together with the use of automobiles by the agents for travel, has enabled the bureau to canvass the territory more expeditiously, efficiently, and economically.

### STATISTICAL CONFERENCE

On February 19, 20, and 21, 1931, the division held its second conference with its statistical agents from all sections of the country at the headquarters of the bureau in Washington, D. C. This was for the purpose of acquainting the agents with new methods for collecting fishery statistics which are intended to show the scope of the diversified interests in the industry, and also to give the agents an opportunity to discuss and solve various perplexing problems relating to the work.

The morning session of the first day Commissioner O'Malley delivered an address of welcome, which was followed by an address on statistical research in the fisheries by the writer. The program for the remainder of that day and the next two days was devoted to general discussion of the work with Fred F. Johnson as chairman.

### CATCH ANALYSIS, COLUMBIA RIVER CHINOOK-SALMON FISHERY

The statistical analysis of the records of daily catches of chinook salmon made by individual fishermen on the Columbia River was continued during 1931 by Joe A. Craig, director of the Seattle (Wash.) Laboratory. The data were treated statistically in order to determine the average catch per constant unit of effort and gear of chinook salmon on the Columbia River during the period from 1905 to 1930, inclusive.

From these data indices of abundance have been made, which indicates the relative abundance of chinook salmon in this river system from year to year and during short periods of time for each individual year. In this way not only the fluctuations in abundance of the entire population of chinook of the Columbia River have been followed from one year to the next, but also indices of abundance for portions of the migrating salmon population called "runs," which are probably biologically distinct and self-maintaining, have been computed.

The investigations of 1931 consisted of a detailed consideration of the data available, and show that from 1909 to 1925, inclusive, the chinook salmon of the Columbia River appeared to withstand the strain of fishing to which they were subjected without any noticeable decline in total numbers. However, from 1926 to 1930, the catch per unit of effort and gear, which is a measure of abundance, has declined noticeably. Also, it appears that certain of the "runs" or races are suffering a more pronounced decline in numbers than others.

### TECHNOLOGICAL INVESTIGATIONS

It has been said that the application of science is useful to industry during booms, is indispensable when times are normal, and vital when they become hard. Possibly this applies to the fishing industry with greater force than to any other of our basic food industries. During the past year the fisheries have passed through a most trying period. Producers and wholesalers experienced difficulty in marketing fresh and canned fishery products. The market for fish meals and oils was depressed. Some of the important fisheries have shown signs of depletion, and competition with other food products has become keener. At times like these, in order to operate successfully, it is important that losses be minimized, and that the products available be utilized to the fullest extent. The technological research of the bureau has been aimed toward this end, and where the industry has applied the results of this research to its commercial procedure it has been benefited according to the effort expended. As a result, research by the bureau has shown ways for lengthening the life of certain types of textile fishing gear; various types of fishing gear have been developed which have a greater selectivity, thereby allowing small and immature fish to escape; methods have been developed for preventing rusting and shrinkage of frozen fish in cold storage, and undue losses and food value of fresh fish shipped with ice as a refrigerant; methods also have been developed for manufacturing fish meals and oils of higher nutritional value, and chemical and biochemical studies have demonstrated the richness of some fish, shellfish, and their products in protein, minerals, and vitamins. This work has had a stabilizing influence on the fisheries, and has enabled them to carry on in a more efficient and successful manner than would otherwise have been possible.

### RESEARCH ASSOCIATE

In the above lines of technological research the bureau has attacked those fundamental problems which promise to be of greatest value to the largest number and which are possible with the funds and per-

sonnel available for the purpose. For this reason, the division has not been able to study special problems affecting certain products, processes, or methods. In order to serve the industry in this connection, the bureau by congressional authorization has provided research associate facilities whereby firms or groups having special technological problems to solve will furnish the investigator and pay his salary and expenses. The investigation is carried out in cooperation with the bureau's staff in its laboratories and under its control. This makes available to the industry laboratory, consultation, and library facilities which they are unable to obtain elsewhere.

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

#### LABORATORIES

During the past year the division carried on its technological research work under the direction of John Ruel Manning at laboratories in Washington, D. C., and Gloucester, Mass., and has provided equipment for a laboratory in the bureau's new building in Seattle, Wash. In addition, work was conducted in other laboratories as conditions warranted. For instance, certain cooperative biochemical studies were conducted at the laboratories of the South Carolina Food Research Commission, Charleston, S. C.; at the laboratory of the Bureau of Chemistry and Soils, United States Department of Agriculture, Washington, D. C.; and at experimental farms of the Department of Agriculture and the Ohio Agricultural Experiment Station. Research on the refrigerating, salting, and smoking of fish was conducted in the Virgin Islands and in Puerto Rico, and other investigations were conducted in the field where optimum working conditions obtained.

#### WASHINGTON, D. C.

With the transfer of the bureau's headquarters from Sixth and B Streets SW., to the new Department of Commerce Building, Washington, D. C., the division's technological laboratories in the old quarters were dismantled and moved to the new building. Chemical, nutritional, and mechanical investigations relative to fishery products are now being carried on in these laboratories.

#### GLOUCESTER, MASS.

During the year, the division completed the establishment of its technological research laboratory at Fort Square, Gloucester, Mass. This has been equipped to conduct various phases of fishery technological research, including refrigeration, smoking, bacteriology, by-products, and production methods.

The laboratory is located on the second floor of a building, along the water front facing Gloucester Harbor, and has wharf facilities on two sides. This is convenient as it enables the technologists to come into close contact with the fishing fleet operating out of this port. It also enables them to obtain laboratory samples, with which to experiment, directly from vessels as a large number of them land their fares at this wharf.

The laboratory was designed and equipped by the bureau's technologists and is particularly well adapted for fishery research. Practically all of the equipment was designed for specific purposes and is particularly adapted for the study of the problems for which it is intended.

In June of 1931, two of the technologists, from the Washington staff, were transferred to Gloucester to continue their activities in this laboratory. In addition to these, and the one previously assigned there, three new technologists were appointed, for assignment to this laboratory, to assist in the studies being conducted there. The staff of this laboratory also includes a clerk and an expert mechanic.

During this transfer of activities, from Washington to Gloucester, it was necessary for the study of some of the problems to be suspended for a period. These were resumed the latter part of the year, when the laboratory had been completely equipped with the necessary apparatus.

SEATTLE, WASH.

During 1931 the division provided equipment for a technological laboratory on the second floor of the bureau's new fisheries station on Lake Union in Seattle, Wash. It is planned to begin technological investigations there in 1932, when studies will be made on the manufacture of salmon body and liver oils.

## NUTRITIVE VALUE OF MARINE PRODUCTS

### NUTRITION LABORATORY

In the course of the bureau's investigative work it is necessary to determine the comparative food values of various fishery products, the relative efficiency of different processes of manufacture, methods for evaluating and comparing the products experimented with by its technologists, and the effects or changes on food values resulting from manufacturing by canning, curing, smoking, and freezing. Without means for accomplishing these things there would be no standard of comparison of results or means for evaluating products produced in different ways. Thus it became essential for the proper conduct of its work to make provisions for nutrition work. Co-operative arrangements with other agencies temporarily enabled the bureau to care for some of the more pressing problems having to do with commercial products. To promote the efficiency of the program of research of its own technologists and to standardize the products of industry the bureau has provided nutrition laboratory facilities and began experimental work in its own laboratory in Washington, D. C., in July, 1931. This has been one of the most important contributions made in recent years to the effectiveness of its own work and productive of beneficial results to industry.

### BURBOT-LIVER OIL

Under a working arrangement with the Bureau of Chemistry and Soils, United States Department of Agriculture, as described in the 1929 and 1930 reports of this division, Dr. Chester D. Tolle, of the bureau, and Dr. E. M. Nelson and Dr. G. S. Jamieson, of the Bureau

of Chemistry and Soils, completed an investigation concerning the chemical and physical properties and vitamin content of burbot-liver oil, in which it was shown that commercially produced burbot-liver oils were from four to ten times as potent in vitamin A and from three to four times as potent in vitamin D as medicinal cod-liver oil. It was also shown that these oils meet the United States Pharmacopœia X requirements for cod-liver oil with respect to specific gravity, iodine number, acid value, and unsaponifiable matter. The saponification values were approximately equal to the maximum permitted for cod-liver oil.

#### ANTI-ANEMIC PROPERTIES OF OYSTERS

Through a cooperative arrangement with the South Carolina Food Research Commission, Charleston, S. C., E. Jack Coulson, of the bureau has made a study in the laboratories of this commission of the anti-anemic properties of oysters. Samples of oysters were gathered from the most important oyster beds of the Atlantic and Gulf waters and analyzed for iron, copper, and manganese.

From this study it is possible to group the samples into three distinct groups: (1) North Atlantic, with high copper, low iron, and low manganese, (2) South Atlantic, with high iron, low copper, and low manganese, and (3) Gulf, with high iron, low copper, and high manganese. When the oysters from different localities were fed to anemic animals they all induced regeneration of hemoglobin. The response of hemoglobin regeneration was directly proportional to the amount of iron present, thus indicating that copper was not the controlling factor. This investigation demonstrates the importance of oysters as a source of iron in addition to their other food factors. It also was demonstrated that the ether-soluble material in oysters saponified with alcoholic potash carries appreciable quantities of vitamin D.

A great deal of interest has been shown in fish flour as a result of cooperative investigations in which this product forms a part of the diet for children. These investigations which started about May, 1931, are still in progress and, therefore, no definite report can be made at this time.

To correlate its laboratory studies on the nutritive value of fishery products with the actual feeding of these products to farm animals, the bureau is cooperating with the United States Department of Agriculture, Bureau of Animal Industry, Experimental Farm, Beltsville, Md., and the Ohio Agricultural Experiment Station, Wooster, Ohio, in extending its nutrition studies to farm animals, such as poultry, sheep, swine, cattle, etc.

#### KELP-MEAL EXPERIMENTS

A series of cooperative experiments with a producer of kelp meal have been conducted by Dr. H. P. Morris, a research associate, in the Washington laboratory to determine the nutritive value of kelp meal. One experiment of this series was conducted to learn the optimum level at which kelp meal can be fed as an addition to an otherwise complete diet composed of natural foodstuffs.

The additions of kelp meal were made to the diets of albino rats at levels of 3, 6, and 10 per cent. As a result it was found that no



essential difference in response was observed for the rats at any of the levels studied. The amount of kelp meal included in the ration, therefore, is dependent upon the cost of this product. Another group of animals was fed kelp meal at levels of 15, 22½, and 30 per cent. These animals showed no ill effects from the injection of diets containing these levels of kelp meal, and the rats were not affected by the large quantities of salt that would be contained in these amounts of kelp meal.

Another experiment was conducted to determine the ability of kelp meal to stimulate appetite. According to results obtained it appears that kelp meal has a beneficial effect in increasing both growth and food consumption. If it can be shown that kelp meal will be an aid to production of animals for early market maturity it will make this product of considerable value in the field of animal industry especially in the production of such products as hothouse lambs, broilers, etc.

Another experiment was conducted to determine the vitamin A content of kelp meal. It was shown that this product contains about one-fourth as much of vitamin A as alfalfa hay, approximately the same amount of vitamin A as fresh eggs, and one and one-half times as much of this vitamin as yellow corn. It is thus seen that kelp meal is a fairly good vegetable source of vitamin A, but could not compete with cod-liver oil and other fish oils as a source of vitamin A for animal feeding.

Further experiments were designed to test the supplementary value of kelp meal when added to rations containing various protein supplements. The results obtained showed that kelp meal has a very favorable effect on growth when fed in diets composed principally of ground yellow corn and cottonseed meal. The extra growth resulting from the addition of kelp meal was not due to the sodium and potassium salts contained in the kelp since quantities of these salts similar to the amounts contained in kelp meal were added to the control diet. These experiments indicate that kelp meal has a very definite supplementing effect on diets composed of corn and cottonseed meal thereby increasing the rate of growth with less food consumption per unit gain in weight.

#### PRESERVATION OF FISHERY PRODUCTS FOR FOOD

##### IMPROVED METHODS FOR HANDLING OF FRESH AND FROZEN FISH

It is known that fish begins to deteriorate immediately following death and that certain definite chemical changes occur during this decomposition. These chemical changes are the same whether the fish is preserved by ice, in a frozen state, or without preservation. Studies of these chemical changes by James M. Lemon show that the rate of decomposition is determined by the degree of preservation, this being retarded by icing or freezing. With this in mind research was directed toward developing a chemical means for determining the condition of the flesh as to freshness, age, or stage of decomposition. The method developed proved successful in the laboratory but is quite complicated and requires technical skill for operation. However, this method is being simplified so that it may have commercial application.

## IMPROVED METHODS FOR SMOKING FISH

In general commercial procedure it has been difficult to produce a uniform smoked fish product for the reason that no standards have been established for the methods involved or for the finished product.

In order to assist the industry in this respect the division is conducting a study of the smoking of fish.

During the past year James M. Lemon designed and had constructed at the Gloucester Laboratory an experimental smokehouse and with the assistance of Maurice E. Stansby, conducted studies on the smoking of fish. The smokehouse is portable and is constructed to reduce the fire hazard to a minimum. The smoke is produced in the lower section by feeding sawdust onto an electric hot plate. This sawdust is fed automatically from a hopper onto the electric burner, where it is mechanically distributed over the surface to produce an even smoke. The volume of smoke can be controlled by adjusting the speed with which the sawdust is fed into the burner. A blower forces the smoke from the burner, through the upper section or smoking compartment, thence to an exhaust to the air outside. A draught regulator is attached to this system which makes it possible to produce as rapid circulation as may be desired.

The smoking compartment in which the fish are hung is heated by an electric heater, the temperature of which can be accurately controlled. This makes it possible to study the effect of different temperatures on the fish.

The humidity in the smoking compartment is controlled by means of a water spray. This may be employed to increase the amount of moisture present in the smoke. Circulation of the smoke in this compartment is accomplished by an agitator. A continuous record of the temperature and humidity of the smoking compartment can be kept by means of recording instruments.

It is possible to duplicate previous results by manipulating the controls regulating the volume of the smoke, temperature, and humidity. Application of this method to commercial procedure should remove much of the guesswork from the art of smoking and enable producers to manufacture a uniform product.

## BACTERIOLOGICAL STUDIES

In the marketing of fresh fishery products and in their preservation by freezing, drying, salting, smoking, or canning various bacteriological changes take place which may hasten decomposition, contribute to preservation, or otherwise influence the manufacture of the finished product. These changes have received little attention by research workers with the result that losses in the fisheries, due to lack of knowledge of bacterial action, are enormous. In an effort to improve those processes or methods affected by bacteria the division established a bacteriological laboratory at its technological station in Gloucester, Mass. This research work during the past year was conducted by Francis P. Griffiths and has been concentrated upon determining the germicidal effect of smoke on fish and the nature of molds on smoked fish and their prevention. The bacteriology of fresh and frozen fish also has received attention. In this connection, it has been definitely shown that wounds produced in forking fish are fertile breeding grounds for bacteria.

PRESERVATION OF FISHERY PRODUCTS IN THE VIRGIN ISLANDS AND  
PUERTO RICO

The fisheries of the Virgin Islands and Puerto Rico are only slightly developed, and the inhabitants import considerable quantities of cured fishery products. After comprehensive economic surveys of these islands by Norman D. Jarvis and the writer it was determined that the quantity of fish caught locally could be increased, and that the market could be expanded (1) by building up the market for fresh fish through the introduction of improved methods of handling and the use of ice; (2) by the establishment of a local fish-curing industry to provide a home product to replace imported cured fish.

It was found that methods of handling were primitive and unsanitary and that the use of ice was almost unknown. For these reasons fish less than a day old are believed to have caused food poisoning and considerable quantities of fish have had to be thrown away through spoilage. Experimental studies by N. D. Jarvis on icing and handling fish indicated that fresh fish products superior to any then marketed could be prepared, with a greatly extended period of preservation, and that local fish could be cured successfully.

Series of experimental packs of dry-salt fish were prepared in both St. Thomas and Puerto Rico. A method was developed, based on previous studies by the bureau on the salting of fish, by which a product equal to any imported dry-salt fish can be prepared from fish caught locally around these islands. Data obtained indicate that this fish will not spoil readily. It was found possible to utilize almost all of the larger food fish in the preparation of dry-salt fish, but dry-salt barracuda was found to be the best all-around product.

The disposal of smaller food fish is a problem to the local fishermen and dealers. The study indicated that smoking might be utilized for the curing of these smaller fish, and a product prepared for which there would be more demand. Several lots of fish were smoked by a method suited to local conditions.

Instruction was given to fishermen and others in the islands for the proper handling and icing of fresh fish, the preparation of dry-salt fish, the construction of a smokehouse and the preparation of smoked fish, all of which should lead to placing the fishing industry on a sounder basis.

## PRESERVATION OF FISHERY BY-PRODUCTS

In the fall of 1930, the bureau discontinued operation of its by-products laboratory at Reedville, Va., and installed larger and more complete equipment for by-products' studies as a part of the technological laboratory established at Gloucester, Mass. This move entailed the shipping of all equipment to Gloucester, the renovation of the new quarters, and the assembly and installation of the equipment shipped from Reedville as well as the assembly and installation of additional equipment for use in the new laboratory.

With the installation of the equipment in the Gloucester Laboratory, Roger W. Harrison assisted by Andrew W. Anderson and Samuel R. Pottinger initiated four major by-products investigations. These were: (1) A study of improved methods of manufacturing fish meal from nonoily fish waste, (2) a study designed to develop, from fillet waste, a fish flour which would be suitable for human consumption,

(3) a study of the chemical, physical, and biological constants of haddock-liver oil and, (4) a study designed to improve the technical usefulness of fish oils. Inasmuch as these investigations are studies of major importance and entail a great amount of experimental work over an extended period of time, it was not possible to bring any of them to completion during the few remaining months of the past year. Accordingly, the following may be considered only as a progress report of the work accomplished at the time of this writing.

#### IMPROVED METHODS FOR MANUFACTURING FISH MEAL FROM NONOILY FISH WASTE

The increasing interest in the use of fish meal as an animal feedstuff makes it highly desirable for the industry to manufacture fish meal of high quality. Fish offal or waste is a perishable material composed of complex inorganic and organic compounds. These latter materials are subject to change during the process of manufacture, and it is, therefore, essential to understand such changes so that those which tend to lower the quality of the products as an animal feed can be eliminated. For this reason, the scope of the investigations on methods of manufacturing fish meal includes studies to determine effect of: (1) Temperature, (2) length of drying time, (3) type of heating medium, and (4) method of applying heat on, (a) the nutritive value, (b) the chemical composition, and (c) the appearance of the product.

In order to carry on the work it has been necessary to: (1) Develop experimental apparatus, (2) conduct tests on such apparatus, (3) test samples for biological value, and (4) make chemical analysis of the finished products.

The preliminary results obtained to date, while not sufficient to warrant conclusions, indicate that both temperature and length of drying time have a noticeable effect upon the quality of the product. That is, high drying temperatures and long drying periods, within certain limits, detract from the nutritional value of the meal. Inasmuch as the elimination of one ordinarily results in the magnification of the other much remains to be done in determining optimum operating conditions. The study of type of heating mediums and methods of applying heat may be expected to aid in the solution of this problem. The biological tests are being carried on in cooperation with the Ohio Agricultural Experiment Station at Wooster, Ohio.

#### DEVELOPMENT OF FISH FLOUR SUITABLE FOR HUMAN CONSUMPTION

In the preparation of certain fish for market, as packaged products, a considerable quantity of material is accumulated which is suitable for human consumption. This material consists essentially of the backbones and the flesh adhering to them.

In view of recent studies in nutrition, this material constitutes an extremely valuable supplement to the human diet. Nutrition experts are showing the importance of certain mineral elements in the diet; and analysis of fish waste shows that these elements are found in relatively abundant proportion in this material ranging from 6 to 28 per cent of minerals. A flour prepared from the edible portion of fish trimmings, therefore, should prove a valuable food product.

The scope of the studies being made on the manufacture of this product include the development of a method of manufacture whereby: (1) The original nutritional value will be altered as little as possible, (2) the resultant product will stand up in color and taste during storage, and (3) the flour will lend itself to satisfactory inclusion in food recipes. Preliminary data indicate that these requisites can be realized more closely by an extremely rapid removal of moisture at relatively low temperatures.

The work accomplished during the latter part of the past year has consisted in the design and construction of an apparatus which will disperse the fish material in a drying medium in such a manner that extremely rapid drying can be effected. Preliminary studies on the nutritional value of this material have shown that different portions of the waste are more nutritious than others.

#### HADDOCK-LIVER OIL

The increasing catch of haddock in the New England ground-fish fishery has made it imperative that more be known concerning the chemical nature and biological value of haddock-liver oil. This is especially true since it is believed by some that the present specifications for cod-liver oil, as stated in the United States Pharmacopœia, place the producers of haddock-liver oil at a distinct disadvantage; although the intention of the Pharmacopœia is to permit the use of haddock-liver oil along with cod-liver oil. At the present time but a very small portion of the domestic supply of fish livers is converted into oil, and any stimulation toward increased production of domestic liver oil would be of considerable service to the fishing industry.

The scope of the investigation now under way includes a study of the oil rendered from livers removed from haddock taken on all the important fishing grounds during an entire year. The data which are being correlated consist of: (1) Date of catch, (2) location of fishing ground, (3) color of oil, (4) specific gravity, (5) refractive index, (6) free fatty acid content, (7) unsaponifiable matter, (8) saponification number, (9) iodine number, and (10) vitamin potency.

The data obtained up to the present writing show that haddock-liver oil is subject to considerable variation with regard to some of its physical and chemical properties. Further, on the basis of the trend of these data, which includes the period from September to December, some of these properties during the warmer seasons may be expected to fall beyond the limits of the Pharmacopœia.

#### IMPROVING THE TECHNICAL USEFULNESS OF DOMESTIC FISH OILS

One of the important problems facing the fish oil industry in this country is to find a better market for its output. In order to be of assistance to the fish oil industry in this connection, the bureau has undertaken a study to relieve this situation. The work on this problem at the present time is concerned with the natural variations in the properties of the oils from different sources; since one of the principal objections made by consumers of fish oils is their apparent lack of uniformity. On the basis of the data obtained it is hoped, as the first step, to be able to recommend when the various oils are most nearly fitted for the many uses which can be made of them.

## NET PRESERVATION

As a result of the bureau's work on net preservation conducted by W. T. Conn a method of protecting heavy nets, such as traps, pounds, fykes, and seines, from deterioration has been developed. This makes use of toxic dyes applied to the thread or net. When these are used in connection with a specification coal tar, the tensile strength of exposed cable cotton has been extended beyond a degree previously thought possible. Specifically, tensile strength of 15-thread cable cotton, so preserved, increased constantly in all tests, during the season of greatest deterioration, between June and December. Crystal violet is considered the best dye for this service, but malachite green and thioflavine-S have proven only slightly inferior. Sources of supply of this dyed twine are now established and are available for prospective buyers.

A study of tars used for preserving nets has shown that many tars are of an inferior quality for net preservation. With the aid of the above test and through developmental work with tar it has been possible to prepare a tar which has maximum preservative qualities. Specifications for this net preservative tar have been drawn up, for the first time as far as known, and supplies of this specification coal tar certified for quality by the manufacturer are now available to fishermen.

While the above application prevents deterioration and preserves tensile strength, it does not entirely eliminate weed growth on the net. It is possible to retard this weed growth or fouling by adding certain copper compounds to the coal tar dip applied to dyed twine. The reduction of fouling, however, is effected at some sacrifice to tensile strength.

Studies also were continued on developing formulæ for preserving light nets such as gill nets, trammel nets, and the like. As a result of this the value of copper oleate and chicle as preservatives, as previously reported, were confirmed. In addition, tung and pine oils were found to have value as preservatives for light nets.

While certain preservatives have been efficacious in prolonging the life of light nets, an investigation on gill nets fished by a vessel out of Portland, Me., during the summer of 1931, has shown that many nets in this type of fishery deteriorate because of improper cleansing and storage. This deterioration can be retarded to a great extent by washing the net with lime water as soon as possible after each fish haul, and rinsing with clear water. The net should be removed from the reel as soon as dry, as direct sun rays injure the dry fabrics. A boxed damp net should never be covered, and when nets are to be stored they should be thoroughly cleansed, dried, and suspended in dry, well-ventilated shade.

Information obtained during research upon the preservation of fish nets indicates that the useful life of rope may be extended with comparatively little expenditure of time and money. It is possible that the toxic dye treatment described above for fish nets may be of value in this connection. However, it has been demonstrated by laboratory test that the dye must be applied to the hemp before the yarn is laid. Experiments in this direction have been made possible through cooperative research between this bureau and the Bureau of Construction and Repair, Navy Department. Preparation of test material is in progress at the naval rope factory at Boston, Mass., under personal direction of a technologist from this bureau.

## MARKET AND INDUSTRIAL SURVEYS

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

### SOME UNUSUAL MARKETS FOR FISH AND SHELLFISH

During 1931 surveys were made of the methods of several unusual markets for fish and shellfish by F. F. Johnson. These included commercial sport fishing in privately stocked waters, hot-fish shops, clambakes, oyster roasts, oyster suppers, fish fries, etc.

The survey of commercial sport fishing covered 40 firms which it is estimated comprise 80 per cent of such firms in the United States. In addition, it covered 19 hatchery firms who indicated their intentions of opening commercial pools. Some of these latter firms already have pools under construction. The investment in sport fishing waters and in hatcheries operated by sport fishing concerns exceeded \$500,000 during the fiscal year ended September 30, 1931. The species used in these enterprises were usually rainbow and brook trout although some firms reported that cutthroat trout, black bass, and bullheads were used. About 322,000 pounds of fish were taken by some 29,000 sport fishermen during the year. Customary charges for fishing varied from 65 cents to \$1 per pound of fish taken.

It is estimated that sales through the hot-fish shops of Great Britain account for nearly 70 per cent of the fish landed in the country. The closest semblance to this type of trade in the United States is the hot-fish business in and around St. Louis, Mo. More than one-fourth of the total supply of whiting taken in the fisheries of the Middle and North Atlantic coasts are used in this trade. They are frozen shortly after capture near the fishing centers and usually reach the St. Louis markets in carload lots. The study of the development of the hot-fish trade in the St. Louis area has suggested the possibility of similar activities in other cities.

Clambakes and oyster roasts are old American institutions which have been borrowed from our aboriginal predecessors and celebrated by all our generations much after the traditional fashion. A discussion of the methods of these functions has been deemed advisable due to the general lack of detailed information concerning them.

The full report of these marketing phases as well as of other unusual markets is contained in Fishery Circular No. 11 entitled "Some Unusual Markets for Fish and Shellfish." It may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C.

### PUERTO RICO

Believing that the fishery resources of Puerto Rico were largely undeveloped and that methods for preserving and marketing fishery products in the island were inefficient, Gov. Theodore Roosevelt requested the Bureau of Fisheries to make an economic survey of the situation and to suggest procedures leading toward fuller development. In order to aid in this respect the bureau detailed N. D. Jarvis to undertake this work in cooperation with the Bureau of Commerce and Industry of Puerto Rico. The survey began on July 15 and was completed on November 19, 1931.

The results of the survey indicated that this belief was well founded. It was found that 87 per cent of all fishery products used was imported from other countries. The greater part of this was cod and other dry salt fish mostly from Nova Scotia and Newfoundland. The annual per capita consumption of fish is low as compared with near-by islands. This is about 14 pounds in the edible portion, as compared with a per capita consumption of 32 pounds in the near-by Virgin Islands. Fish are iced for shipment in only three localities. It is not the custom to use ice when retailing fish either while on display at retail stores and fish markets or in peddling in the streets and around the country.

Fish are not gutted, cleaned, or given anything approaching careful handling either by the fisherman or dealer. In addition, the native retail trade is reluctant to accept dressed fish. Gutting is believed to be a method of concealing inferiority. As a result much of the fish is stale, fresh fish is not sold in inland towns, and in comparatively small amounts along the coast. Consumption is decreased even where fish is available through fear of "fish poisoning." This is thought to be caused principally by eating stale or tainted fish.

While the catch may be increased somewhat on all sections of the coast, only two areas are believed capable of producing catches much larger than those now taken. These are the grounds around the eastern and western ends of the island with Fajardo and Puerto Real as central points. These towns are even now the largest source of supply for San Juan, the principal market. Fish is shipped in metal-lined boxes by motor truck and is from four to nine hours on the road. Sufficient supplies of raw material are apparently not available for the operation of a fish-reduction plant on a profitable basis.

Having concluded the market survey, the bureau's technologist remained on the island to develop methods for handling the catch. A résumé of this work is discussed on page 106 of this report.

### PUBLICATIONS OF THE DIVISION

During the calendar year 1931 the following publications were prepared by members of the division. This list does not include the monthly statistical bulletins of the landings of fishery products at Boston and Gloucester, Mass., Portland, Me., and Seattle, Wash., nor the monthly reports on cold-storage holdings of frozen fish and quantities of fish frozen. The fishery documents, reports, and circulars may be purchased at the prices shown from the Superintendent of Documents, Government Printing Office, Washington, D. C. The statistical bulletins and special or S-memoranda are distributed free of charge upon request to the bureau. The special articles may be obtained from the sources of publication.

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



## DOCUMENTS, REPORTS, AND CIRCULARS.

- COBB, JOHN N.  
Pacific salmon fisheries. 8°, 293 pp., 48 figs. Fishery Document No. 1092. 65 cents.
- CONN, W. T.  
Application of preservatives to fishing nets. 8°, 6 pp., 5 figs. Fishery Economic Circular No. 74. 5 cents.
- DANIEL, ESTHER PETERSON, and E. V. McCOLLUM.  
Studies on the nutritive value of fish meals. 8°, 19 pp., 6 figs. Fishery Investigational Report No. 2. 5 cents.
- FIEDLER, R. H.  
Fishery industries of the United States, 1930. Appendix II, Report of Commissioner, 1931. 8°, 444 pp., 21 figs. 80 cents.
- HARRISON, ROGER W.  
The menhaden industry. 8°, 113 pp., 30 figs. Fishery Investigational Report No. 1. 25 cents.  
Market for marine animal oils in the United States. 8°, 78 pp., 17 figs. Fishery Investigational Report No. 7. 15 cents.
- HARRISON, ROGER W., and S. R. POTTINGER.  
Commercial production of menhaden fish oil for animal feeding. 8°, 11 pp., 1 table. Fishery Investigational Report No. 4. 5 cents.
- LEMON, J. M.  
Market for fresh oysters in fourteen cities of the United States. 8°, 25 pp., 6 figs. Fishery Circular No. 3. 10 cents.
- LUCAS, CLARENCE R.  
Review of the fish-farming industries of the United States. 8°, 16 pp., 7 figs. Fishery Circular No. 2. 5 cents.
- MANNING, JOHN RUEL, E. M. NELSON, and CHESTER D. TOLLE.  
Vitamin D in menhaden fish oil. 8°, 5 pp., 1 fig. Fishery Investigational Report No. 3. 5 cents.

## SPECIAL ARTICLES

- CONN, W. T.  
Standard preservatives for fish nets. Commercial Standards Monthly. February, 1931. Washington.  
Application of preservatives to fishing nets. Fish and Oyster Reporter. June, 1931. Tampa, Fla.  
Net preservative research, 1926-1929. Technological Report No. 1, 1931. Available for reference only at the United States Bureau of Fisheries Library, Department of Commerce, Washington.  
Net preservative research, 1930. Technological Report No. 2, 1931. Available for reference only at the United States Bureau of Fisheries Library, Department of Commerce, Washington.
- FIEDLER, R. H.  
Statistical research in the fisheries. Address before second statistical conference of the division of fishery industries. Washington, February 19, 1931. Published in United States Daily, March 26 and 27, 1931. Washington; Bureau of Fisheries Memorandum S-325, 1931. Washington.  
Trade in fresh and frozen fishery products. Fish and Oyster Reporter. March, 1931. Tampa, Fla.  
Fish supply of nation subject to investigation. Louisiana Conservation Review. May, 1931. New Orleans.  
Progress in commercial fisheries. Address before Southern Fisheries Association. Jacksonville, Fla., June 10, 1930. Published in Fish and Oyster Reporter, June, 1930. Tampa, Fla.  
The package fish trade. Fishing Gazette Annual Review number, June 15, 1931. New York.  
How Federal bureau aids fishing industry. United States Daily, June 24, 1931. Washington. Louisiana Conservation Review, November, 1931. New Orleans.  
Problems connected with freezing fish. United States Daily, June 25, 1931. Washington. Louisiana Conservation Review, October, 1931. New Orleans.  
The growth of the packaged fish trade. Maryland Fisheries, No. 11, July, 1931. Baltimore.

**FOGELBERG, JOHN M.**

Deterioration of fish nets in fresh water. Technological Report No. 3, 1931. Available for reference only at the United States Bureau of Fisheries Library, Department of Commerce. Washington.

**HARRISON, ROGER W.**

Standards in the manufacture of fish meal. Commercial Standards Monthly, November, 1930. Washington.

Suggestions for storing fish oil. Fishing Gazette, January, 1931. New York.

Significance of recent rapid growth in whale oil production. Address before American Oil Chemists Society in Chicago, Ill., October 30, 1931. Published in Soap, November, 1931. New York. Bureau of Fisheries Special Memorandum 1721-23. Washington.

**JARVIS, N. D.**

The following articles were published in the Daily News at St. Thomas, Virgin Islands, 1931. Preservation of fish, June 19 and 22. Value of fish as food, June 24. Salting of fish, June 25. Smoking fish, June 27. Processes recommended for dry-salting fish in the Virgin Islands, July 13. Recommendations for handling fresh fish in the Virgin Islands, July 15.

The following articles were published in the Puerto Rico Progress, San Juan, Puerto Rico, 1931. Fisheries of Puerto Rico, August 27. Food value of fish, September 3.

The following articles were published in El Mundo (Spanish) San Juan, Puerto Rico, 1931. Problems affecting fisheries development in Puerto Rico, September 6. How to salt fish in Puerto Rico, October 29. How to build a smokehouse and smoke fish, November 1.

Observations on the fisheries of Puerto Rico. El Imparcial (Spanish), September, 1931. San Juan, Puerto Rico.

**JOHNSON, F. F.**

Compiling data on scope of fishing industry. United States Daily, September 12, 1931. Washington.

Statistics on production of canned fish. United States Daily, November 12, 1931. Washington.

**LEMON, J. M.**

Standards for refrigeration of fish. Commercial Standards Monthly, March, 1931. Washington. Ice and Refrigeration, April, 1931. Chicago. United States Daily, May 5, 1931. Washington.

Development of processes for preserving foods. United States Daily, November 13, 1931. Washington.

**MANNING, JOHN RUEL.**

Fish meal for poultry feeding. Poultry Success, January, 1931. Springfield, Ohio.

Seafoods yield iodine essential to balanced diet. Louisiana Conservation Review, January, 1931. New Orleans.

New dietary standards developed. Commercial Standards Monthly, January, 1931. Washington. Flour and Feed, February, 1931. Milwaukee.

Marine products in our national dietary. Address before District of Columbia Medical Society, Washington, D. C., March 11, 1931. Published in Bulletin of Medical Society of the District of Columbia, July, 1931. Washington. Bureau of Fisheries Special Memorandum 2468, Washington. Fish and Oyster Reporter, May, 1931. Tampa, Fla.

Seafood more important in diet as soil minerals are depleted. United States Daily, March 17, 1931. Washington.

Seafood said to furnish iodine in palatable form. United States Daily, March 21, 1931. Washington.

Discussion on diet and dentition. Address before the District of Columbia Dental Society, Washington, D. C. Published in the Dental Cosmos, April, 1931. Philadelphia.

Marine products a source of iodine. Flour and Feed, May, 1931. Milwaukee. The place of marine products in animal nutrition. Feedstuffs, May 30, 1931. Minneapolis.

Manufacture and uses of marine products with relation to animal nutrition. Address before American Feed Manufacturers' Association, French Lick Springs, Ind., June 5, 1931. Published in Feed Bag, June, 1931. Milwaukee. Feedstuffs, June 6, 1931. Minneapolis. Flour and Feed, July, 1931. Milwaukee. Bureau of Fisheries Special Memorandum 2255A. 1931. Washington.

MANNING, JOHN RUEL—Continued.

Analyzing food value of fishery products. United States Daily, September 14, 1931. Washington.

The relation of public institutions to public health and child welfare. Radio address over station WRC, Washington, D. C., October 12, 1931. Bureau of Fisheries Special Memorandum 2482, 1931. Washington.

TOLLE, CHESTER D.

Discussion on diet and dentition. Address before District of Columbia Dental Society, Washington, D. C. Published in The Dental Cosmos, April, 1931. Philadelphia.

TOLLE, CHESTER D., and E. M. NELSON.

Salmon oil and canned salmon as sources of vitamins A and D. Address before Division of Biological Chemistry, American Chemical Society, Indianapolis, Ind., April 1, 1931. Published in Industrial and Engineering Chemistry, September, 1931. Washington.

### STATISTICAL BULLETINS

Fisheries of the New England States, 1929. Statistical Bulletin No. 926.

Fisheries of the Middle Atlantic States, 1929. Statistical Bulletin No. 923.

Fisheries of the Chesapeake Bay States, 1929. Statistical Bulletin No. 908.

Fisheries of the South Atlantic and Gulf States, 1929. Statistical Bulletin No. 925.

Fisheries of the Pacific Coast States, 1929. Statistical Bulletin No. 930.

Lake fisheries, 1929. Statistical Bulletin No. 933.

Fisheries of the United States and Alaska, 1929. Statistical Bulletin No. 928.

Production of cured fishery products in the marine and lake sections of the United States and Alaska, 1929. Statistical Bulletin No. 932.

Canned fishery products and by-products of the United States and Alaska, 1930. Statistical Bulletin No. 927.

Production of fresh, frozen, and smoked packaged fishery products in the United States, 1930. Statistical Bulletin No. 924.

Fishery products frozen and cold-storage holdings of frozen and cured fishery products in the United States and Alaska, 1930. Statistical Bulletin No. 920.

Fisheries of Alaska, 1930. Statistical Bulletin No. 922.

Landings by fishing vessels at principal New England ports, 1930. By months. Statistical Bulletin No. 911.

Landings by fishing vessels at the three principal New England ports, 1930. By gear and fishing grounds. Statistical Bulletin No. 912.

Fishery products landed by United States vessels at Seattle, Wash., 1930. By banks. Statistical Bulletin No. 913.

## Part 2. FISHERY STATISTICS <sup>3</sup>

### REVIEW, 1930

#### GENERAL

The catch of fishery products in the United States and Alaska during 1930 was slightly less than in the previous year. The value of the catch also decreased as compared with 1929. The value of the output of canned fishery products and by-products in 1930 decreased as did the production of packaged fish. The output of cured fishery products increased slightly in quantity in 1930 as compared with the previous year but decreased in value. The production of frozen fish increased over 1929, and both imports and exports of fishery products decreased as compared with 1929.

During 1930, the domestic fisheries employed about 120,000 persons as fishermen, 4,500 on transporting craft, and about 86,000 were en-

<sup>3</sup> With reference to the figures published in part 2 the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure" which gives in detail methods for collecting statistics, compilation practices and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

gaged in the wholesale and manufacturing industries, a total of 204,000 persons, exclusive of duplication. The catch amounted to 3,286,580,000 pounds, valued at \$109,349,000.

In 1930, in the marine and lake sections of the United States and Alaska, the production of canned fishery products amounted to 577,783,000 pounds, valued at \$83,015,000; and the output of by-products was valued at \$19,560,000. The production of fresh and frozen packaged fishery products amounted to 157,378,000 pounds, valued at \$28,996,000. The production of cured fishery products amounted to 124,497,000 pounds, valued at \$16,837,000. The pack of frozen fishery products in the entire United States and Alaska amounted to 139,297,000 pounds, estimated to be valued at \$16,500,000. In addition, it is estimated that \$5,000,000 worth of fishery products were cured or manufactured into by-products in the Mississippi River and tributaries section during 1930—making the total value of all manufactured products in the entire United States and Alaska in 1930 about \$170,000,000.

Fishery products imported for consumption were valued at \$50,830,000, while domestic exports were valued at \$17,276,000.

#### NEW ENGLAND STATES

The most recent general statistics of these States, which are for 1930, show that the catch exceeded that in any year for which there are records, although the value of the catch was exceeded in 1929. The catch increased 1 per cent in quantity and decreased 5 per cent in value as compared with the catch and its value in the previous year. Larger catches of ground fish offset the considerable decrease in sea herring and mackerel. Landings of fish at Boston, Gloucester, and Portland were the largest on record during 1930, although the value of these fish was somewhat less than in the previous year.

The output of packaged fish registered a decline of 7 per cent as compared with that in 1929. The frozen fish trade shows a considerable increase in 1930 over the previous year. The production of sardines, which is the principal fish-canning industry in this section and is centered in Maine, showed a large decrease as compared with the previous year. The cured-fish industry decreased in volume as compared with 1929.

#### MIDDLE ATLANTIC STATES

The catch of fishery products of the Middle Atlantic States in 1930 exceeded that in any year for which there are records. The value of the catch was slightly less than in 1929, the largest on record. The increased catch is due largely to the increase in volume of menhaden and alewives, while the decrease in value is due mainly to a smaller production in the oyster industry.

Landings of fish at New York City and Groton, Conn., which consisted largely of haddock, flounders, cod, mackerel, and tilefish, decreased considerably as compared with 1929. The packaged fish-trade decreased also, as did the trade in frozen fish. The catch of shad in the Hudson River increased slightly over 1929. The production of cured fish showed a considerable increase over the previous year.

**CHESAPEAKE BAY STATES**

In 1930, the catch of fishery products of the Chesapeake Bay States exceeded that in the previous year. The value of the catch was slightly less. However, the catch was the smallest on record since 1888, with the exception of 1929. The decline in the volume of the menhaden catch has been largely responsible for this decrease in the total catch. The catch of shad in the Potomac River during 1930 was much less than that in 1929, but the catch of alewives increased slightly. The production of packaged fish was about the same as in 1929. The production of cured fish was considerably larger than during the previous year. The value of the production of menhaden products in 1930 was approximately the same as that in 1929.

**SOUTH ATLANTIC AND GULF STATES**

Statistics of the fisheries of the South Atlantic and Gulf States for 1930 show a considerable decrease in the catch of fishery products and the value of the catch as compared with the previous year. This is due largely to decreases in the volume of the catch of menhaden, oysters, and shrimp. There was a considerable increase in the production of packaged fishery products as compared with 1929. The production of cured fishery products also was greater than during the previous year.

There were decreases in the production of canned oysters and shrimp as well as menhaden products. The manufacture of each of these products is an important industry in this section.

**PACIFIC COAST STATES**

Statistics of the fisheries of the Pacific Coast States for 1930 show a decrease in the catch of fishery products and the value of the catch as compared with the previous year. This is due mainly to decreases in the volume of the catch of pilchards and salmon. The production of frozen fishery products was greater in 1930 than in 1929. The pack of cured fish decreased in 1930 as compared with the previous year. There was a decrease of 35 per cent in the pack of salmon in 1930 as compared with 1929, due to the smaller pack of humpback or pink salmon, as 1930 was the "off year" for these species. Compared with the pack in 1928, the previous "off year," there was an increase of 25 per cent in the pack. There was a decrease in the pack of sardines in 1930, but an increase of 34 per cent in the pack of tuna and tunalike fishes as compared with 1929. The landings of the halibut fleet in 1930 decreased somewhat from those in the previous year.

**LAKE FISHERIES**

The United States fisheries prosecuted in the Great Lakes and the International Lakes of northern Minnesota show an increase in the volume of the catch in 1930 as compared with the previous year, and a slight decrease in the value of the catch. A large increase in the catch of blue pike was responsible mainly for the increase in the catch. Beginning in 1929, a revised statistical procedure was used, incorporating the inclusion of certain products not canvassed in recent surveys, and a change in the methods of collecting statistics

in some of the States. The catch of cisco, although much greater than in 1929, is still far below the volume once attained as an important product of the fisheries of Lake Erie. The production of cured fishery products increased as compared with 1929.

MISSISSIPPI RIVER AND TRIBUTARIES

No general survey of the fisheries of Mississippi region has been made since 1922, and therefore no recent trend can be determined. The yield of fresh-water mussels, which contributed approximately one-half to the total weight of the catch in 1922, shows an increase in 1930, not only over the production of 1922, but also that of 1929. The fisheries of Lake Pepin and Keokuk decreased in volume and value as compared with the previous year, but the catch and its value in the Mississippi River between these two lakes increased in 1930.

ALASKA

The catch of fishery products of Alaska in 1930 was somewhat less than during the previous year, and the value of the catch was considerably less. There was a decrease in the pack of salmon amounting to 6 per cent as compared with the pack in 1929. The catch of herring as well as that of halibut was somewhat less than in the previous year. There was an increase in the frozen fish and cured fish production over 1929.

Fisheries of the United States and Alaska, 1930<sup>1</sup>

SUMMARY OF CATCH: BY SECTIONS

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

Product	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf		Pacific	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Fish.....	645,574	19,232	131,638	3,588	199,327	4,391	301,218	5,278	806,754	21,303
Shellfish, etc.....	55,777	8,261	62,230	9,476	117,066	7,081	116,541	5,787	22,790	1,594
Whale products.....									3,844	167
Total.....	701,351	27,493	193,868	13,064	316,393	11,472	417,759	11,065	833,388	23,064

Product	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Fish.....	89,612	5,875	53,466	3,310	609,305	12,178	2,836,894	75,155
Shellfish, etc.....	5,336	175	54,705	1,075	1,980	108	436,425	33,557
Whale products.....					9,417	470	13,261	637
Total.....	94,948	6,050	108,171	4,385	620,702	12,756	3,286,580	109,349

<sup>1</sup> All figures are for 1930, except those for the Mississippi River and tributaries. In this section the figures on the catch of mussels are for 1930 and other figures are for 1922.

## Fisheries of the United States and Alaska, 1930—Continued

## OPERATING UNITS: BY SECTIONS

Item	New England	Middle Atlantic	Chesapeake	South Atlantic and Gulf <sup>1</sup>
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	6, 192	4, 665	2, 579	3, 484
On boats and shore.....	10, 885	5, 940	16, 812	20, 189
Total.....	17, 077	10, 605	19, 391	23, 673
<b>Vessels:</b>				
Steam.....	64	15	25	8
Net tonnage.....	9, 033	1, 940	2, 902	195
Motor.....	649	463	87	889
Net tonnage.....	18, 583	6, 998	1, 453	9, 255
Sail.....	5	97	279	78
Net tonnage.....	50	2, 306	3, 015	1, 294
Total vessels.....	718	575	391	670
Total net tonnage.....	27, 666	11, 244	7, 370	10, 645
<b>Boats:</b>				
Motor.....	4, 688	2, 014	8, 217	5, 980
Other.....	4, 099	2, 036	5, 603	8, 565
<b>Apparatus:</b>				
Haul seines.....	147	341	375	1, 211
Purse seines.....	185	37	49	78
Other trawls (including all types and sizes).....	865	180	12	2, 308
Gill nets.....	13, 524	3, 570	19, 989	18, 100
Trammel nets.....				449
Pound nets, trap nets, and weirs.....	542	758	2, 954	2, 399
Stop nets.....		87	6	
Fyke nets.....	258	4, 534	3, 472	3, 976
Bag nets and pocket nets.....	182			
Other nets <sup>2</sup> .....	235	359	2, 108	2, 420
Hooks, baits, or snoods.....	4, 686, 790	794, 602	1, 642, 961	358, 692
Fish wheels.....				50
Eel pots and traps.....	5, 045	10, 465	13, 292	1, 592
Lobster pots.....	332, 791	51, 946		
Crab and crawfish pots, traps, drags, etc.....	3, 530	58		3, 946
Clam dredges.....	84	82		73
Crab dredges.....		53	102	80
Mussel dredges.....		8		
Oyster dredges.....	300	674	966	720
Scallop dredges and drags.....	3, 522	1, 219	924	330
Crab scrapes.....			1, 850	
Tongs, rakes, hoes, forks, grabs, etc.....	4, 443	3, 230	11, 236	3, 836
Sponge apparatus.....				338
Other apparatus <sup>3</sup> .....	2, 442	259	18	2, 942

Item	Pacific	Lakes	Mississippi River and tributaries	Alaska	Total
<b>Fishermen</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	6, 165	1, 660		10, 189	34, 904
On boats and shore.....	13, 409	5, 320	12, 310		84, 812
Total.....	19, 574	6, 980	12, 310	10, 189	119, 716
<b>Vessels</b>					
Steam.....	6	107		8	228
Net tonnage.....	182	2, 374		617	17, 214
Motor.....	849	360		682	3, 679
Net tonnage.....	21, 609	3, 725		11, 608	73, 232
Sail.....	8				467
Net tonnage.....	3, 140				9, 735
Total vessels.....	863	467		690	4, 374
Total net tonnage.....	24, 931	6, 100		12, 225	100, 181

<sup>1</sup> Includes the operating units used in the fisheries of Lake Okeechobee, Fla.<sup>2</sup> Includes persons in boat and shore fisheries.<sup>3</sup> Includes dip nets, cast nets, scap nets, reef nets, and other minor nets.<sup>4</sup> Includes box traps, wire baskets, harpoons, spears, gaffs, crab and crawfish hooks, periwinkle and cockle pots, and other apparatus not included in "Other nets."

## Fisheries of the United States and Alaska, 1930—Continued

## OPERATING UNITS: BY SECTIONS—Continued

Item	Pacific	Lakes	Mississippi River and tributaries	Alaska	Total
	Number	Number	Number	Number	Number
<b>Boats:</b>					
Motor.....	5,942	2,215	4,597	1,814	35,437
Other.....	1,614	1,664	10,941	3,439	37,961
<b>Apparatus:</b>					
Haul seines.....	212	243	708	189	3,426
Purse seines.....	395	.....	.....	703	1,447
Lampara nets.....	241	.....	.....	.....	241
Otter trawls (including all types and sizes).....	.....	.....	.....	.....	3,063
Beam trawls.....	55	.....	.....	9	64
Paranzella nets.....	16	.....	.....	.....	16
Gill nets.....	5,108	93,542	866	5,290	159,989
Trammel nets.....	61	94	459	.....	1,063
Pound nets, trap nets, and weirs.....	670	7,947	11	708	15,989
Stop nets.....	.....	.....	.....	.....	93
Fyke nets.....	2,102	2,515	49,652	.....	66,509
Bag nets and pocket nets.....	69	.....	.....	.....	251
Other nets <sup>1</sup> .....	389	27	.....	.....	5,538
Hooks, baits, or snoods.....	1,196,533	828,571	( <sup>2</sup> )	( <sup>2</sup> )	9,508,149
Fish wheels.....	39	.....	.....	266	355
Eel pots and traps.....	.....	.....	.....	.....	30,394
Lobster pots.....	.....	.....	.....	.....	384,737
Shrimp nets and traps.....	.....	.....	4,360	.....	4,360
Crab and crawfish pots, traps, drags, etc.....	18,634	5,418	.....	620	32,206
Clam dredges.....	.....	.....	.....	.....	239
Crab dredges.....	.....	.....	.....	.....	235
Mussel dredges.....	.....	.....	.....	.....	8
Oyster dredges.....	.....	.....	.....	.....	2,660
Scallop dredges and drags.....	.....	.....	.....	.....	5,995
Crab scrapes.....	.....	.....	.....	.....	1,850
Tongs, rakes, hoes, forks, grabs, etc.....	3,479	804	1,810	.....	28,838
Crowfoot bars (pairs).....	.....	285	3,490	.....	3,775
Abalone outfits.....	13	.....	.....	.....	13
Sponge apparatus.....	.....	.....	.....	.....	338
Other apparatus <sup>3</sup> .....	4,592	.....	( <sup>2</sup> )	.....	10,253

CATCH: BY SECTIONS<sup>7</sup>

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

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf <sup>8</sup>		Pacific	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>FISH</b>										
Alewives.....	4,106	37	5,292	36	21,128	268	10,207	74	.....	.....
Amberjack.....	.....	.....	.....	.....	.....	.....	21	1	.....	.....
Anchovies.....	.....	.....	.....	.....	.....	.....	.....	.....	320	4
Barracuda.....	.....	.....	.....	.....	.....	.....	.....	.....	4,764	379
Black bass.....	.....	.....	.....	.....	19	3	440	47	.....	.....
Bluefish.....	705	83	3,814	393	498	42	2,038	110	.....	.....
Blue runner or hard-tail.....	.....	.....	.....	.....	.....	.....	756	14	.....	.....
Bonito.....	140	11	417	27	49	3	20	( <sup>9</sup> )	.....	.....
Bowfin.....	.....	.....	.....	.....	.....	.....	19	1	.....	.....
Buffalofish.....	.....	.....	.....	.....	.....	.....	116	6	.....	.....
Butterfish.....	1,905	140	3,137	237	4,291	201	183	4	.....	.....
Cabio or crab-eater.....	.....	.....	.....	.....	( <sup>9</sup> )	( <sup>9</sup> )	14	1	.....	.....
Cabrilla.....	.....	.....	.....	.....	.....	.....	.....	.....	510	27
Carp.....	21	2	358	45	469	34	470	32	284	8

<sup>1</sup> Includes dip nets, cast nets, scap nets, reef nets, and other minor nets.<sup>2</sup> Number not determined.<sup>3</sup> Includes box traps, wire baskets, harpoons, spears, gaffs, crab and crawfish hooks, periwinkle and cockle pots, and other apparatus not included in "Other nets."<sup>7</sup> Salt fish have been converted to the basis of round weight.<sup>8</sup> Includes the catch of fish taken in Lake Okeechobee, Fla.<sup>9</sup> Less than 500 pounds or \$500.

NOTE.—Whaling apparatus, the number of which was not determined, was used in the Pacific Coast States and Alaska.



## Fisheries of the United States and Alaska, 1930—Continued

## CATCH: BY SECTIONS—Continued

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

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf		Pacific	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH—continued										
Catfish and bull-heads	118	3	94	10	807	35	5,376	237	433	58
Cero			20	2			19	1		
Cigarfish							58	2		
Cod	101,632	3,043	10,679	335	50	1	1	( <sup>o</sup> )	19,236	302
Crappie							900	34		
Crevalle							103	3		
Croaker	151	6	2,890	87	22,022	525	5,270	82		
Cunner	106	3								
Cusk	6,140	133	8	( <sup>o</sup> )						
Dolly Varden trout									2	( <sup>o</sup> )
Dolphin	( <sup>o</sup> )	( <sup>o</sup> )	1	( <sup>o</sup> )			5	1		
Drum:										
Black			7	( <sup>o</sup> )	64	1	1,287	43		
Red or redfish			65	12	52	2	2,616	148		
Eels	1,355	132	1,272	147	389	34	159	12	( <sup>o</sup> )	( <sup>o</sup> )
Flounders	49,166	1,863	9,559	374	662	31	696	44	13,415	846
Flyingfish									48	2
Frigate mackerel	385	18					1	( <sup>o</sup> )		
Garfish										
Gizzard shad			1	( <sup>o</sup> )	168	4	39	1		
Goldfish					13	1				
Goosefish	( <sup>o</sup> )	( <sup>o</sup> )	38	1						
Grayfish	93	3	13	( <sup>o</sup> )					1,018	13
Groupers							3,346	101		
Grunts			( <sup>o</sup> )	( <sup>o</sup> )			48	2		
Haddock	264,549	8,531	2,574	77						
Hagfish			7	( <sup>o</sup> )						
Hake	32,206	557	366	6	1	( <sup>o</sup> )			56	1
Halfmoon									37	3
Halibut	3,167	497	5	1					13,546	1,633
Hardhead									39	5
Harvestfish or "starfish"					( <sup>o</sup> )	( <sup>o</sup> )	343	10		
Herring, sea	82,901	503	692	7					1,377	13
Hickory shad	4	( <sup>o</sup> )			90	3	387	17		
Hogfish							2	( <sup>o</sup> )		
Horse mackerel									369	11
Jewish							44	1		
Kingfish (California)									457	11
Kingfish or "king mackerel"							3,689	175		
King whiting or "kingfish"	( <sup>o</sup> )	( <sup>o</sup> )	86	9	5	( <sup>o</sup> )	583	24		
Launce	183	4							2,503	98
"Lingcod"									16,531	242
Mackerel	50,701	1,768	1,120	46	49	5				
Menhaden	1,708	17	52,478	368	115,842	767	199,167	806		
Minnows	36	4	166	5						
Mojarro							81	3		
Mullet	8	( <sup>o</sup> )	65	4	115	5	28,021	910	21	2
Mummichog	7	1	126	9						
Muttonfish							225	15		
Paddlefish							2	( <sup>o</sup> )		
Permit							15	( <sup>o</sup> )		
Pigfish					69	3	157	3		
Pike or pickerel	( <sup>o</sup> )	( <sup>o</sup> )	1	( <sup>o</sup> )	11	2	10	1		
Pilchard									494,451	2,377
Pilotfish			2	( <sup>o</sup> )						
Pinfish							112	2		
Pollock	17,820	306	114	3						
Pompano					2	( <sup>o</sup> )	602	117	2	1
Porgies							56	2		
Porkfish							1	( <sup>o</sup> )		
Rock bass									508	32
Rockfishes									7,969	308
Rosefish	117	2	1	( <sup>o</sup> )						
Sablefish									4,332	182

\* Less than 500 pounds or \$500.

*Fisheries of the United States and Alaska, 1950—Continued*

CATCH: By sections—Continued

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

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf		Pacific	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>FISH—continued</b>										
<b>Salmon:</b>										
Atlantic.....	88	27								
Blueback, red or sockeye.....									25,103	2,404
Chinook or king.....									37,843	4,153
Chum or keta.....									12,668	117
Humpback or pink.....									272	8
Silver or coho.....									23,729	1,299
Sculpin.....									90	9
Scup.....	2,723	118	8,681	217	464	23				
Sea bass.....	192	14	3,886	161	212	16	442	29	394	20
Sea bass, white (California).....									1,626	144
Sea robin.....	235	3	132	2	1	(*)				
Shad.....	201	16	450	82	7,181	1,139	2,541	426	3,043	82
Sharks.....	103	2	177	4			2,497	5		
Sheepshead, salt-water.....							1,077	41	244	9
Silversides.....			260	12						
Skates.....	1,016	10	269	5	3	(*)	1	(*)	288	6
Skipper.....	6	1								
Smelt.....	796	141	3	1					3,392	117
Snapper:										
Mangrove.....							125	5		
Red.....			4	(*)			7,113	595		
Snook.....							408	14		
Spadefish.....							50	1		
Spanish mackerel.....			16	1	58	7	6,355	311	43	2
Spearfish.....	(*)	(*)								
Split-tail.....									19	1
Spot.....			693	31	2,619	132	2,521	44		
Quawfish.....									5	(*)
Squeteagues or "sea trout":										
Gray.....	186	19	13,272	466	19,266	753	3,396	142		
Spotted.....	1	(*)			202	24	5,206	443		
Squirrelfish.....							1	(*)		
Steelhead trout.....									3,954	331
Striped bass.....	89	17	205	40	1,653	271	457	61	882	92
Sturgeon and sturgeon roe.....	9	1	22	9	5	1	32	6	142	6
Suckers.....	113	8	79	8			16	1	2	(*)
Sunfish.....			2	(*)			443	13		
Surf fishes.....									371	15
Swordfish.....	5,135	876	234	38					563	75
Tautog.....	555	32	338	15	1	(*)				
Tenpounder.....							191	6		
Thimble-eyed mackerel.....			36	1						
Filefish.....	1,783	97	2,312	89						
Pomcod.....	74	1	121	5	(*)	(*)			23	1
Tripletail.....							13	1		
Tuna and tunalike fishes:										
Albacore.....									286	24
Bluefin.....									21,921	1,238
Bonito.....									5,164	167
Skipjack or striped.....									20,486	790
Yellowfin.....									56,654	3,396
Horse mackerel.....	274	15	148	7						
Furbot.....							1	(*)		
Whitebait.....			96	7					179	12
Whitefish.....									225	13
White perch.....	50	5	380	56	616	41	442	33		
Whiting.....	9,863	108	4,113	70	27	1				
Wolfish.....	2,651	54	6	(*)						

\* Less than 500 pounds or \$500.

## Fisheries of the United States and Alaska, 1930—Continued

## CATCH: BY SECTIONS—Continued

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

Species	New England		Middle Atlantic		Chesapeake		South Atlantic and Gulf		Pacific	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH—continued										
Yellow perch.....	1	( <sup>9</sup> )	232	20	154	13	96	7		
Yellowtail.....			3	( <sup>9</sup> )			89	7	4,771	210
Miscellaneous fish.....									144	5
Total.....	645,574	19,232	131,638	3,588	199,327	4,391	301,218	5,278	806,754	21,303
SHELLFISH, ETC.										
Abalone.....									647	130
Clams:										
Cockle.....	29	5							30	10
Hard.....	3,822	858	2,577	1,055	1,294	432	1,042	89	515	38
Pismo.....			3	1					22	10
Razor.....	380	20							838	159
Soft.....	13,299	644	1,131	158					62	11
Surf.....	38	4	423	50						
Mixed.....									5	1
Conchs.....			35	3			20	( <sup>9</sup> )		
Crabs:										
Hard.....	1,952	129	417	29	60,565	1,072	6,493	105	4,540	399
King.....			6,184	29						
Rock.....			1	( <sup>9</sup> )						
Soft.....			135	22	8,194	650	531	117		
Stone.....							308	27		
Crawfish.....									177	18
Lobsters:										
Common.....	12,357	3,218	1,559	369						
Spiny.....							288	27	1,394	263
Mussels, sea.....	11	2	295	14					( <sup>9</sup> )	( <sup>9</sup> )
Octopus.....							4	( <sup>9</sup> )	163	11
Oysters:										
Eastern, market, public.....	46	11	342	45	21,648	2,569	13,341	835		
Eastern, market, private.....	9,386	1,736	21,175	4,032	15,076	1,783	5,243	581	75	31
Eastern, seed, public.....	1,362	168	19,773	2,520	8,235	417				
Eastern, seed, private.....	4,685	682	4,037	554						
Western, market.....									316	259
Japanese, market.....									228	83
Periwinkle.....	330	39								
Scallops:										
Bay.....	1,529	437	397	115	1,825	148	454	56	12	4
Sea.....	947	186	1,503	264						
Shrimp.....	5	4	341	29			88,117	2,995	2,785	49
Squid.....	5,506	112	1,773	55	225	8			10,980	118
Terrapin.....			6	7	2	2	67	21	( <sup>9</sup> )	( <sup>9</sup> )
Turtles.....			11	1	2	( <sup>9</sup> )	84	3	1	( <sup>9</sup> )
Irish moss.....	93	6								
Sponges.....							549	931		
Bloodworms.....			54	63						
Sandworms.....			58	61						
Total.....	55,777	8,261	62,230	9,476	117,066	7,081	116,541	5,787	22,790	1,594
WHALE PRODUCTS <sup>10</sup>										
Oil, whale.....									3,844	167
Total.....									3,844	167
Grand total.....	701,351	27,493	193,868	13,064	316,393	11,472	417,759	11,065	833,388	23,064

<sup>9</sup> Less than 500 pounds or \$500.<sup>10</sup> The weight of whales caught was not determined; therefore, the weight of the manufactured product is shown.

## Fisheries of the United States and Alaska, 1930—Continued

## CATCH: BY SECTIONS—Continued

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

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>FISH</b>								
Alewives.....							40,733	415
Amberjack.....							21	1
Anchovies.....							320	4
Barracuda.....							4,764	379
Black bass.....			74	11			533	61
Bluefish.....							7,055	628
Blue pike.....	11,823	568					11,823	568
Blue runner or hardtail.....							756	14
Bonito.....							626	41
Bowfin.....	19	( <sup>9</sup> )	190	6			228	7
Buffalofish.....	1	( <sup>9</sup> )	17,267	1,014			17,384	1,020
Butterfish.....							9,516	582
Burbot.....	642	17					642	17
Cabio or crab-eater.....							14	1
Cabrilla.....							510	27
Carp.....	3,293	106	18,338	872			23,233	1,099
Catfish and bullheads.....	641	43	8,093	714			15,562	1,100
Cero.....							39	3
Chubs.....	6,162	469					6,162	469
Cigarfish.....							58	2
Cisco.....	347	40					347	40
Cod.....					914	6	132,512	3,687
Crappie.....	4	1	512	49			1,416	84
Crevalle.....							103	3
Croaker.....							30,333	700
Cunner.....							106	3
Cusk.....							6,148	133
Dolly Varden trout.....					92	9	94	9
Dolphin.....							6	1
Drum:								
Black.....							1,358	44
Red or redbfish.....							2,733	162
Eels.....	5	( <sup>9</sup> )	16	1			3,196	326
Flounders.....					327	8	73,825	3,166
Flyingfish.....							48	2
Frigate mackerel.....							385	18
Garfish.....							1	( <sup>9</sup> )
Gizzard shad.....							208	5
Goldeye.....	( <sup>9</sup> )	( <sup>9</sup> )					( <sup>9</sup> )	( <sup>9</sup> )
Goldfish.....	64	1					77	2
Goosefish.....							38	1
Grayfish.....							1,124	16
Groupers.....							3,346	101
Grunts.....							48	2
Haddock.....							267,123	8,608
Hagfish.....							7	( <sup>9</sup> )
Hake.....							32,629	564
Halfmoon.....							37	3
Halibut.....					35,063	2,991	51,781	5,120
Hardhead.....							39	5
Harvestfish or "starfish".....							343	10
Herring:								
Sea.....					145,672	1,093	230,642	1,616
Lake.....	22,482	519					22,482	519
Hickory shad.....							481	20
Hogfish.....							2	( <sup>9</sup> )
Horse mackerel.....							369	11
Jewfish.....							44	1
Kingfish (California).....							457	11
Kingfish or "king mackerel".....							3,689	175
King whiting or "kingfish".....							674	33
Lake trout.....	9,497	1,175					9,497	1,175
Launce.....							183	4
"Lingcod".....					35	1	2,538	99
Mackerel.....							68,401	2,061
Menhaden.....							369,195	1,958
Minnnows.....	( <sup>9</sup> )	( <sup>9</sup> )					202	9
Mojarro.....							81	3
Mooneye.....	36	( <sup>9</sup> )	3	( <sup>9</sup> )			39	( <sup>9</sup> )

\* Less than 500 pounds or \$500.

## Fisheries of the United States and Alaska, 1930—Continued

## CATCH: BY SECTIONS—Continued

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

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
FISH—continued								
Mullet							28,230	921
Mummichog							133	10
Muttonfish							225	15
Paddlefish			1,411	162			1,413	162
Permit							15	( <sup>o</sup> )
Pigfish							226	6
Pike or pickerel							22	3
Pike (jacks)	525	38	20	2			545	40
Pilchard							494,451	2,377
Pilotfish							2	( <sup>o</sup> )
Pinfish							112	2
Pollock							17,934	309
Pompano							606	118
Porgies							56	2
Porkfish							1	( <sup>o</sup> )
Quillback			765	59			765	59
Rock bass	17	1	3	( <sup>o</sup> )			528	33
Rockfishes					9	( <sup>o</sup> )	7,978	309
Rosefish							118	2
Sablefish					661	21	4,993	203
Salmon:								
Atlantic							88	27
Blueback, red or sockeye					76,339	2,742	101,442	5,146
Chinook or king					17,553	521	55,396	4,674
Chum or keta					59,587	581	72,255	698
Humpback or pink					241,616	3,404	241,888	3,412
Silver or coho					31,347	793	55,076	2,092
Sauger pike	1,831	95	5	1			1,836	96
Sculpin							90	9
Scup							11,868	358
Sea bass							5,126	240
Sea bass, white (California)							1,626	144
Sea robin							368	5
Shad							13,416	1,745
Sharks							2,777	11
Sheepshead:								
Salt-water							1,321	50
Fresh-water	2,909	88	5,261	290			8,170	378
Silversides							260	12
Skates							1,577	21
Skipper							6	1
Smelt	( <sup>o</sup> )	( <sup>o</sup> )					4,248	264
Snapper:								
Mangrove							125	5
Red							7,117	595
Snook							408	14
Spadefish							50	1
Spanish mackerel							6,472	321
Spearfish							( <sup>o</sup> )	( <sup>o</sup> )
Splittail							19	1
Spot							5,833	207
Squawfish							5	( <sup>o</sup> )
Squeteagues or "sea trout":								
Gray							36,120	1,330
Spotted							5,409	467
Squirrelfish							1	( <sup>o</sup> )
Steelhead trout							3,987	334
Striped bass							3,286	481
Sturgeon and sturgeon roe	43	11	11	1			264	35
Sturgeon, shovelnose			229	23			229	23
Suckers	6,746	186	700	63			7,656	266
Sunfish	12	1	375	25			832	39
Surf fishes							371	15
Swordfish							5,932	989
Tautog							894	47
Tenpounder							191	6
Thimble-eyed mackerel							36	1
Tilefish							4,095	186
Tomcod							218	7
Tripletail							13	1
Tullibee	905	23					905	23

<sup>o</sup> Less than 500 pounds or \$500.

## Fisheries of the United States and Alaska, 1930—Continued

## CATCH: BY SECTIONS—Continued

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

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>FISH—continued</b>								
Tuna and tunalike fishes:								
Albacore							286	24
Bluefin							21,921	1,238
Bonito							5,164	167
Skipjack or striped							20,486	790
Yellowfin							56,654	3,396
Horse mackerel							422	22
Turbot							1	( <sup>9</sup> )
White bass	484	24	65	5			549	29
Whitebait							275	19
Whitefish	10,172	1,599					10,397	1,612
Whitefish, Menominee	372	25					372	25
White perch							1,488	135
Whiting							14,003	179
Wolfish							2,657	54
Yellow bass			8	1			8	1
Yellow perch	6,578	330	22	2			7,083	372
Yellow pike	4,002	515	25	4			4,027	519
Yellowtail							4,863	217
Miscellaneous fish			73	5			217	10
<b>Total</b>	<b>89,612</b>	<b>5,875</b>	<b>53,466</b>	<b>3,310</b>	<b>609,305</b>	<b>12,178</b>	<b>2,836,894</b>	<b>75,155</b>
<b>SHELLFISH, ETC.</b>								
Abalone							647	130
Clams:								
Cockle							59	15
Hard							9,250	2,472
Pismo							22	10
Razor					853	48	2,074	228
Soft							14,492	813
Surf							461	54
Mixed							5	1
Conchs							55	3
Crabs:								
Hard					195	18	74,162	1,752
King							6,184	29
Rock							1	( <sup>9</sup> )
Soft							8,860	789
Stone							308	27
Crawfish	51	3	8	1			236	22
Lobsters:								
Common							13,916	3,587
Spiny							1,682	290
Mussels, sea							306	16
Mussel shells	5,285	160	54,205	932			59,490	1,092
Octopus							167	11
Oysters:								
Eastern, market, public							35,377	3,460
Eastern, market, private							50,955	8,163
Eastern, seed, public							29,370	3,105
Eastern, seed, private							8,722	1,236
Western, market							316	259
Japanese, market							228	83
Portwinkle							330	39
Scallops:								
Bay							4,217	760
Sea							2,450	450
Shrimp			147	15	932	42	92,327	3,134
Squid							18,484	293
Terrapin							75	30
Turtles			97	3			195	7
Frogs			232	20			232	20
Irish moss							93	6
Sponges							549	931
Bloodworms							54	63
Sandworms							58	61
Miscellaneous shellfish			16	3			16	3
Pearls and slugs		12		101				113
<b>Total</b>	<b>5,336</b>	<b>175</b>	<b>54,705</b>	<b>1,075</b>	<b>1,980</b>	<b>108</b>	<b>436,425</b>	<b>33,557</b>

<sup>9</sup> Less than 500 pounds or \$500.

## Fisheries of the United States and Alaska, 1930—Continued

## CATCH: BY SECTIONS—Continued

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

Species	Lakes		Mississippi River and tributaries		Alaska		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
WHALE PRODUCTS <sup>10</sup>								
Oil, sperm.....					909	41	909	41
Oil, whale.....					6,125	37	9,969	538
Whale meal and scrap.....					2,340	51	2,340	51
Other whale products.....					43	2	43	2
Total.....					9,417	470	13,261	632
Grand total.....	94,948	6,050	108,171	4,385	620,702	12,756	3,286,580	109,349

## CATCH: BY STATES

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

State	Marine and coastal rivers		Mississippi River and tributaries		Lakes <sup>11</sup>		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama.....	7,113	315	1,921	42			9,034	357
Arkansas.....			24,964	744			24,964	744
California.....	696,891	12,473					696,891	12,473
Connecticut.....	88,012	4,519					88,012	4,519
Delaware.....	51,081	653					51,081	653
Florida.....	117,548	4,529			2,867	117	120,415	4,646
Georgia.....	34,873	536					34,873	536
Illinois.....			21,713	996	1,065	97	22,778	1,093
Indiana.....			6,255	268	1,160	81	7,415	349
Iowa.....			7,924	350			7,924	350
Kansas.....			344	24			344	24
Kentucky.....			3,920	185			3,920	185
Louisiana.....	49,886	1,960	11,850	603			61,736	2,563
Maine.....	143,823	4,330					143,823	4,330
Maryland.....	71,098	3,985					71,098	3,985
Massachusetts.....	442,474	16,289					442,474	16,289
Michigan.....			32	1	35,579	2,963	35,611	2,964
Minnesota.....			5,056	211	11,364	388	16,420	599
Mississippi.....	15,736	740	3,855	203			19,591	943
Missouri.....			1,429	102			1,429	102
Nebraska.....			135	15			135	15
New Hampshire.....	1,069	69					1,069	69
New Jersey.....	97,276	7,475					97,276	7,475
New York.....	45,495	4,934			1,701	150	47,196	5,084
North Carolina.....	168,938	1,836					168,938	1,836
Ohio.....			1,263	50	24,115	1,252	25,378	1,302
Oklahoma.....			318	31			318	31
Oregon.....	26,459	2,256					26,459	2,256
Pennsylvania.....	17	3		( <sup>12</sup> )	3,419	279	3,436	282
Rhode Island.....	25,972	2,287					25,972	2,287
South Carolina.....	5,106	253					5,106	253
South Dakota.....			321	8			321	8
Tennessee.....			9,176	255			9,176	255
Texas.....	15,693	777	1,030	34			16,723	811
Virginia.....	245,294	7,487					245,294	7,487
Washington.....	110,038	8,335					110,038	8,335
West Virginia.....			45	7			45	7
Wisconsin.....			6,620	256	16,545	840	23,165	1,096
Alaska.....	620,702	12,756					620,702	12,756
Total.....	3,080,594	98,797	108,171	4,385	97,815	6,167	3,286,580	109,349

<sup>10</sup> The weight of whales caught was not determined; therefore, the weight of the manufactured product is shown.

<sup>11</sup> Includes Lake Ontario, Lake Erie, Lake Huron, Lake Michigan, Lake Superior, Rainy Lake, Nainan Lake, Lake of the Woods, Lake Okeechobee, and several mussel-bearing streams tributary to Lakes Huron and Michigan.

<sup>12</sup> Less than \$500.

## Yield of marine fisheries of the United States, 1930: By gear

Gear	New England		Middle Atlantic		Chesapeake	
	Pounds	Value	Pounds	Value	Pounds	Value
urse seines.....	83,344,140	\$1,678,805	58,108,240	\$528,657	115,599,007	\$832,726
aul seines.....	4,334,554	123,566	6,156,131	175,977	5,734,552	326,897
ill nets.....	27,051,446	800,404	4,457,543	304,193	3,066,406	380,319
mes.....	136,994,604	4,295,936	14,170,459	643,599	50,569,342	887,771
ound nets.....	15,296,727	323,109	31,458,940	1,173,658	71,477,764	2,659,770
loating traps.....	13,313,815	390,587	356,444	20,864	.....	.....
heirs.....	32,615,387	183,934	3,974,060	16,243	.....	.....
op nets.....	.....	.....	137,008	18,659	31,800	3,636
yke nets.....	209,122	20,201	3,715,253	110,383	1,336,855	77,044
ip nets.....	6,896,327	91,929	126,332	21,465	3,359,848	262,185
ast nets.....	.....	.....	8,707	1,279	24,000	2,520
ap nets.....	.....	.....	92,614	8,693	.....	.....
ag nets.....	165,213	22,578	.....	.....	.....	.....
ash nets.....	70,200	20,550	146,170	21,473	.....	.....
ocket nets.....	1,550	293	23,680	4,856	.....	.....
ter trawls.....	324,670,060	10,456,829	14,754,753	496,143	1,882,747	86,319
raps.....	209,825	7,729	.....	.....	.....	.....
ots.....	15,217,939	3,444,182	3,462,348	492,830	291,860	25,445
arpoons.....	5,241,197	875,057	234,140	37,887	.....	.....
ears.....	169,124	19,332	231,117	29,842	16,600	1,244
rapes, crab.....	.....	.....	.....	.....	7,428,389	426,452
redges.....	18,044,906	3,219,820	46,234,785	7,308,141	17,816,643	1,361,773
ongs.....	2,436,536	518,414	3,016,720	843,674	36,782,927	4,002,638
akes.....	1,354,593	330,354	1,550,045	481,311	866,972	103,687
orks.....	11,588,903	499,068	605,460	199,079	.....	.....
oes.....	2,097,266	163,683	327,419	40,921	.....	.....
icks.....	.....	.....	.....	.....	19,432	7,564
afts.....	.....	.....	4,350	784	.....	.....
y hand.....	27,545	6,219	515,263	83,061	87,780	24,160
Total.....	701,350,979	27,493,479	193,867,981	13,063,672	316,392,924	11,472,050

Gear	South Atlantic and Gulf		Pacific		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
urse seines.....	198,360,548	\$803,822	248,983,923	\$4,595,310	704,395,858	\$8,439,320
aul seines.....	26,775,958	1,000,661	5,750,111	508,288	48,751,306	2,135,389
ill nets.....	37,967,157	1,645,386	31,501,924	2,710,774	103,944,476	5,841,076
rammel nets.....	5,399,327	317,993	813,607	87,378	6,212,934	405,374
ines.....	24,870,957	1,252,261	156,287,360	8,849,242	382,892,722	15,928,808
ound nets.....	12,660,693	302,194	21,047,315	1,740,620	151,941,439	6,199,351
loating traps.....	.....	.....	.....	.....	13,670,259	411,459
heirs.....	5,000	250	437,800	2,579	37,032,247	203,001
heels.....	141,000	1,725	280,713	34,086	421,713	35,811
op nets.....	.....	.....	.....	.....	168,808	22,296
yke nets.....	1,156,996	59,917	471,750	58,374	6,889,976	325,911
ip nets.....	517,829	32,303	2,628,623	113,652	13,528,959	521,535
ast nets.....	119,083	6,789	.....	.....	151,790	10,589
ap nets.....	.....	.....	.....	.....	92,614	8,693
ag nets.....	.....	.....	1,296,247	19,444	1,461,460	42,022
ash nets.....	.....	.....	191,501	12,171	337,671	33,644
ocket nets.....	.....	.....	.....	.....	93,880	25,406
eef nets.....	.....	.....	5,162	380	1,550	293
ampara nets.....	.....	.....	329,089,383	1,769,106	329,089,383	1,769,106
aranzella nets.....	.....	.....	18,926,040	840,980	18,926,040	840,980
ter trawls.....	87,967,911	2,989,583	.....	.....	429,275,471	14,028,574
eam trawls.....	.....	.....	2,054,893	46,447	2,054,893	46,447
raps.....	116,073	6,714	6,504,771	702,072	6,830,669	716,515
ots.....	696,426	53,911	.....	.....	19,668,573	4,016,368
arpoons.....	.....	.....	4,379,252	240,810	9,854,589	1,154,654
ears.....	172,016	14,964	.....	.....	588,857	65,382
rapes, crab.....	.....	.....	.....	.....	7,428,389	426,452
redges.....	8,815,612	629,309	.....	.....	90,911,946	12,519,043
ongs.....	7,209,318	717,623	1,090,894	602,089	51,536,995	6,684,338
akes.....	438,645	55,573	.....	.....	4,210,255	970,925
orks.....	97,928	7,630	.....	.....	12,292,291	705,777
oes.....	.....	.....	.....	.....	2,424,685	204,604
rabs.....	3,111,470	119,863	.....	.....	3,111,470	119,863
icks.....	.....	.....	.....	.....	19,432	7,564
afts.....	.....	.....	.....	.....	4,350	784
ooks.....	238,418	220,758	.....	.....	238,418	220,758
iving apparatus, abalone	.....	.....	.....	.....	.....	.....
or sponge.....	333,583	710,402	647,316	130,331	980,899	840,733
y hand.....	687,518	115,188	58	7	1,318,164	228,635
Total.....	417,759,466	11,064,819	833,388,643	23,064,140	2,462,759,993	86,158,160

<sup>1</sup> Includes catch by rakes and shovels.



Industries related to the fisheries of the United States and Alaska, 1930<sup>1</sup>

Item	New England	Middle Atlantic	Chesapeake	South Atlantic and Gulf	Pacific
Transporting:					
Persons engaged—					
On vessels.....	363	101	855	437	
On boats.....	1	117		349	
Total.....	364	218	855	786	
Vessels—					
Steam.....	3				
Net tonnage.....	150				
Motor.....	147	35	404	142	
Net tonnage.....	1,835	525	5,273	1,418	2,000
Sail.....			24	43	
Net tonnage.....			737	409	
Total vessels.....	150	35	428	185	
Total net tonnage.....	1,985	525	6,010	1,827	2,000
Boats.....	1	176		221	
Wholesale and manufacturing:					
Establishments.....	450	444	543	587	
Persons engaged—					
Proprietors.....	364	531	812	726	
Salaried employees.....	1,028	964	294	374	
Wage earners:					
Average for season.....	9,862	4,254	10,569	13,535	10,500
Average for year.....	5,163	3,198	4,708	5,848	5,000
Salaries and wages paid.....	\$8,455,460	\$7,956,080	\$2,976,346	\$3,464,041	\$8,636,000
Manufactured products <sup>2</sup> .....	\$26,755,350	\$15,421,325	\$10,383,691	\$12,320,405	\$45,958,000
Fishermen's manufactured products:					
Persons engaged.....	4,147	592	531	1,011	( <sup>3</sup> )
Products.....	862,965	460,113	108,140	265,165	( <sup>3</sup> )

Item	Lakes	Mississippi River and tributaries	Alaska	Total
Transporting:				
Persons engaged—				
On vessels.....	76	27	1,926	4,000
On boats.....			( <sup>2</sup> )	400
Total.....	76	27	1,926	4,600
Vessels—				
Steam.....	6		20	30
Net tonnage.....	193		32,948	33,300
Motor.....	16	13	466	1,300
Net tonnage.....	249	214	14,927	26,000
Sail.....			1	1
Net tonnage.....			1,590	2,700
Total vessels.....	22	13	487	1,410
Total net tonnage.....	442	214	49,465	62,700
Boats.....			965	1,300
Wholesale and manufacturing:				
Establishments.....	228	174	260	2,000
Persons engaged—				
Proprietors.....	306	6,383	15,453	( <sup>3</sup> )
Salaried employees.....	375			( <sup>3</sup> )
Wage earners:				
Average for season.....	1,330			( <sup>3</sup> )
Average for year.....	1,102	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Salaries and wages paid.....	\$2,985,988	\$4,639,877	( <sup>3</sup> )	( <sup>3</sup> )
Manufactured products <sup>3</sup> .....	\$1,763,205	\$3,804,914	\$33,852,966	\$150,260,000
Fishermen's manufactured products:				
Persons engaged.....	566	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Products.....	257,033	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Data for Mississippi River and tributaries are for 1922 with the exception of the number of establishments and value of manufactured products of the pearl button industry which are for 1930.

<sup>2</sup> Included on vessels.

<sup>3</sup> Includes scows, houseboats, pile drivers, etc.

<sup>4</sup> Detailed statistics not available.

<sup>5</sup> These production figures are not comparable with those shown in previous reports since packaged fresh and frozen fishery products of the marine and lakes sections are now included.

<sup>6</sup> Data not available.

## MANUFACTURED FISHERY PRODUCTS TRADE

Statistics of the products of the various manufactured fishery enterprises were collected more completely for the year 1930 than for any previous year. It will be noted that in addition to statistics on the production of cured fishery products, canned fishery products, and by-products that the data presented herewith indicate the output of all packaged fishery products, including shucked oysters, crab meat, and the like.

This compilation includes the production throughout the marine and lake areas of the United States and Alaska, but does not include the manufactured products of the Mississippi River and tributaries.

*Production of manufactured fishery products and by-products in the marine and lake sections of the United States and Alaska, 1930<sup>1</sup>*

Item	Quantity	Value
<b>Salmon:</b>		
Salted.....pounds.....	12, 623, 595	\$354, 987
Corned.....do.....	1, 622, 600	31, 270
Spiced.....do.....	157, 500	13, 800
Pickled.....do.....	1, 786, 976	103, 175
Smoked.....do.....	298, 231	13, 758
Canned.....standard cases.....	76, 732	232, 121
Roe, canned.....do.....	56, 874	266, 604
Dry scrap.....tons.....	1, 010	46, 254
Oil.....gallons.....	33, 889	7, 173
Salmon, fresh fillets.....pounds.....	225, 000	43, 500
<b>Halibut:</b>		
Fresh fillets.....do.....	618, 301	127, 490
Frozen fillets.....do.....	145, 250	29, 050
Halibut, smoked.....do.....	743, 952	312, 493
<b>Flatfish:</b>		
Pan-dressed.....do.....	63, 986	7, 610
Smoked.....do.....	650, 848	197, 655
Halibut, fresh fillets.....do.....	115, 000	20, 250
Halibut, smoked.....do.....	106, 500	31, 750
Halibut, chubs, and tullibee, smoked.....do.....	8, 272, 227	2, 323, 455
<b>Cod:</b>		
Fresh sticks.....do.....	280, 390	49, 486
Fresh fillets.....do.....	5, 642, 605	843, 373
Frozen fillets.....do.....	1, 609, 928	215, 320
Salted bits.....do.....	21, 627	1, 808
Salted, including boneless salted.....do.....	15, 617, 613	1, 044, 561
Salted, packaged.....do.....	2, 812, 077	412, 740
Stockfish.....do.....	15, 600	2, 090
Pickled.....do.....	120, 135	5, 665
Smoked fillets.....do.....	638, 022	94, 981
Cakes, balls, etc., canned.....standard cases.....	28, 224	259, 659
Oil, cod and cod-liver.....gallons.....	135, 884	102, 857
<b>Crab:</b>		
Pan-dressed.....pounds.....	858, 705	83, 926
Fresh fillets.....do.....	28, 400	3, 473
<b>Shrimp:</b>		
Fresh sticks.....do.....	150, 490	25, 732
Fresh fillets.....do.....	340, 680	53, 507
Frozen fillets.....do.....	17, 460	1, 971
Salted.....do.....	508, 408	22, 933
Smoked fillets.....do.....	869, 635	122, 649
<b>Clams:</b>		
Salted.....do.....	63, 400	6, 340
Smoked.....do.....	77, 682	28, 160
<b>Scallops:</b>		
Pan-dressed.....do.....	85, 565	10, 032
Fresh fillets.....do.....	6, 208, 203	1, 240, 236
Frozen fillets.....do.....	359, 809	61, 712
Scallops, fresh steaks.....do.....	107, 000	19, 220

<sup>1</sup> The figures in the above table do not check in all instances with figures on certain manufactured products shown in the report for 1930. This is due to the fact that the above figures were obtained as the result of a more detailed survey, and several firms' production is included which is not shown in the previous report. The figures herewith include the production of every primary firm in the marine and lakes sections of the United States and Alaska manufacturing fishery products or by-products as shown above which operated in 1930 to the knowledge of the bureau.

<sup>2</sup> The item of 2,812,077 pounds of salted packaged cod, valued at \$412,740, is included in the total, however, it should be explained that this item represents a further manufacture of salted cod which is shown elsewhere in the table.

*Production of manufactured fishery products and by-products in the marine and sections of the United States and Alaska, 1930—Continued*

Item	Quantity	Value
<b>Haddock:</b>		
Pandressed..... pounds	38, 590	\$5, 31
Fresh sticks..... do	183, 470	31, 28
Fresh fillets..... do	44, 189, 952	6, 980, 28
Frozen fillets..... do	19, 511, 707	3, 017, 58
Salted..... do	679, 499	39, 28
Finnan haddie..... do	5, 098, 811	478, 28
Finnan haddie, canned..... standard cases	1, 002	15, 28
Smoked fillets..... pounds	1, 035, 443	191, 28
Flakes, canned..... standard cases	62, 067	614, 28
<b>Hake:</b>		
Sticks, fresh and frozen..... pounds	214, 060	35, 08
Fresh fillets..... do	2, 195, 512	284, 28
Frozen fillets..... do	439, 102	58, 28
Salted..... do	5, 006, 869	173, 98
Smoked fillets..... do	55, 602	6, 18
<b>Halibut:</b>		
Fresh fillets..... do	46, 472	16, 28
Frozen fillets..... do	10, 859	2, 88
Steaks..... do	89, 938	15, 18
Salted..... do	5, 220	84, 28
<b>Herring, sea:</b>		
Salted, including Scotch-cured..... do	8, 722, 670	500, 78
Roused..... do	352, 500	15, 04
Norwegian cure..... do	145, 375	9, 15
Spiced and Bismark..... do	76, 100	7, 76
Kippered..... do	198, 163	43, 71
<b>Smoked—</b>		
Bloaters..... do	2, 850, 862	270, 68
Boneless..... do	1, 387, 750	149, 28
Lengthwise..... do	127, 794	12, 78
Medium scaled..... do	265, 088	26, 28
Miscellaneous..... do	730, 959	105, 51
Canned, "sardines"..... standard cases	1, 399, 212	4, 459, 07
Pomace..... tons	3, 736	7, 59
Meal..... do	13, 831	732, 96
Oil..... gallons	3, 670, 664	908, 35
Scales..... pounds	81, 153	1, 93
<b>Herring, lake:</b>		
Salted..... do	8, 082, 003	248, 85
Spiced..... do	95, 000	13, 36
Smoked, including smoked fillets..... do	637, 440	66, 67
<b>Lake trout:</b>		
Salted..... do	201, 950	29, 57
Smoked..... do	472, 413	132, 36
<b>Mackerel:</b>		
Fresh and frozen fillets..... do	178, 432	37, 45
Salted..... do	2, 410, 532	197, 14
Salted, fillets and split..... do	2, 184, 364	247, 35
Smoked..... do	328, 571	65, 71
Canned..... standard cases	132, 262	467, 88
<b>Menhaden:</b>		
Acid scrap..... tons	15, 725	395, 29
Dry scrap..... do	23, 235	1, 113, 20
Meal..... do	9, 752	514, 71
Oil..... gallons	3, 311, 215	654, 19
<b>Mullet:</b>		
Salted and dry-salted..... pounds	2, 071, 289	128, 01
Roe, salted..... do	75, 184	19, 29
<b>Pilchard or sardines:</b>		
Salted..... do	65, 490	3, 47
Canned..... standard cases	2, 979, 333	8, 741, 92
Meal..... tons	25, 938	1, 414, 85
Oil..... gallons	5, 803, 166	1, 826, 31
<b>Pollock:</b>		
Fresh fillets..... pounds	277, 714	36, 28
Frozen fillets..... do	25, 773	3, 59
Salted..... do	3, 133, 905	171, 11
Rockfishes, fresh fillets..... do	761, 500	120, 46
<b>Sablefish:</b>		
Salted..... do	176, 009	12, 16
Pickled..... do	10, 800	54
Smoked..... do	333, 477	75, 78
<b>Salmon:</b>		
Steaks..... do	34, 917	5, 54
Dried..... do	1, 593, 600	115, 56
Mild-cured..... do	10, 157, 175	2, 065, 51
Salted..... do	189, 546	24, 66
Pickled..... do	863, 150	103, 64
Kippered..... do	2, 672, 214	594, 54

<sup>3</sup> An item of 300,000 pounds of kippered salmon valued at \$115,000, and an item of 6,844,175 pounds of smoked salmon, valued at \$2,665,881, are included in the total; however, it should be explained that these items represent a further manufacture of mild-cured salmon which is shown elsewhere in the table.

## Production of manufactured fishery products and by-products in the marine and lake sections of the United States and Alaska, 1930—Continued

Item	Quantity	Value
Salmon—Continued.		
Smoked.....	pounds	7,660,931
Canned.....	standard cases	6,086,479
Meal.....	tons	2,487
Oil.....	gallons	233,941
Eggs—		
For food, canned.....	standard cases	1,667
For bait, canned.....	do	4,345
Salmon, black, fresh fillets.....	pounds	55,500
Salmon, white, fresh fillets.....	do	326,250
Shad:		
Smoked.....	do	169,784
Canned.....	standard cases	12,248
Roe, canned.....	do	3,339
Dark oil.....	gallons	4,460
Spanish mackerel, dry-salted.....	pounds	75,421
Spot:		
Pan-dressed.....	do	34,445
Salted and dry-salted.....	do	172,000
Wet-teague:		
Pan-dressed.....	do	802,309
Fresh fillets.....	do	233,935
Sun-dried.....	do	27,717
Surgeon:		
Smoked.....	do	2,060,699
Roe—		
Fresh.....	do	182
Salted.....	do	740
Caviar, canned.....	standard cases	8,024
Albacore, fillets.....	pounds	260,000
Albacore and tunalike fishes:		
Salted bonito.....	do	18,134
Canned.....	standard cases	2,010,640
Meal.....	tons	8,554
Oil.....	gallons	56,748
Salmon:		
Pickled meat.....	pounds	37,000
Meal.....	tons	1,170
Bone.....	pounds	5,600
Oil—		
Whale.....	gallons	1,325,229
Sperm.....	do	128,027
Whitefish:		
Salted.....	pounds	112,523
Smoked.....	do	661,759
Caviar.....	do	950
Caviar, canned.....	standard cases	866
Smoking, pan-dressed.....	pounds	88,445
Yellowfish:		
Fresh fillets.....	do	19,812
Frozen fillets.....	do	37,737
Yellow perch, fresh fillets.....	do	180,224
Crab meat:		
Packaged, fresh cooked.....	do	5,573,474
Canned.....	standard cases	1,596
Scrap crab, scrap.....	tons	636
Oyster meat, packaged, fresh cooked.....	pounds	103,716
Crab, whole, cooked.....	do	1,064,250
Crab:		
Headless, packaged—		
Fresh.....	do	1,123,129
Frozen.....	do	1,485,387
Cooked, fresh.....	do	330,645
Canned.....	standard cases	826,242
Sun-dried.....	pounds	1,740,329
Meal.....	tons	2,386
Crab, whole, steaks.....	pounds	583,589
Crab, hard:		
Fresh-shucked.....	gallons	27,931
Canned—		
Whole.....	standard cases	28,502
Chowder.....	do	254,449
Mincod.....	do	4,476
Cocktail juice and broth.....	do	12,945

An item of 16,050 pounds of smoked shad, valued at \$4,182, is included in the total; however, it should be explained that this item represents a further manufacture of mild-cured shad which is included elsewhere in the table.

*Production of manufactured fishery products and by-products in the marine and lake sections of the United States and Alaska, 1930—Continued*

Item	Quantity	Value
Clams, razor, canned:		
Whole..... standard cases.....	5,793	\$50,15
Chowder..... do.....	640	1,60
Minced..... do.....	67,533	612,75
Juice..... do.....	566	2,31
Clams, soft:		
Fresh shucked..... gallons.....	189,577	232,07
Canned—		
Whole..... standard cases.....	95,203	419,63
Chowder..... do.....	71,240	209,98
Juice and broth..... do.....	16,388	54,78
Marine-shell products:		
Blanks..... gross.....	721,343	336,62
Buttons..... do.....	4,286,617	3,651,98
Novelties..... do.....		776,33
Mussels, fresh-water:		
Shells—		
Blanks..... gross.....	176,740	36,31
Buttons..... do.....	1,023,618	369,70
Novelties..... do.....		7
Oysters:		
Eastern—		
Fresh-shucked..... gallons.....	5,435,368	9,937,89
Canned..... standard cases.....	403,981	1,871,89
Japanese, fresh-shucked..... gallons.....	27,950	97,82
Western, fresh-shucked..... do.....	39,405	311,12
Shell products—		
Poultry feed..... tons.....	279,470	2,316,57
Lime..... do.....	58,113	194,44
Lime, "burned"..... do.....	9,847	89,29
Scallops, bay, fresh-shucked..... gallons.....	463,863	821,57
Scallops, sea, fresh-shucked..... do.....	272,153	502,22
Squid, dried..... pounds.....	1,333,660	55,34
Turtle meat and soup, canned..... standard cases.....	4,663	94,88
Terrapin meat and stew, canned..... do.....	96	8,00
Unclassified products:		
Fillets and steaks <sup>5</sup> ..... pounds.....	737,796	89,80
Miscellaneous packaged <sup>6</sup> ..... do.....	172,230	29,60
Salted—		
Cheeks and tongues..... do.....	12,858	1,01
Other <sup>7</sup> ..... do.....	509,503	40,66
Pickled and spiced <sup>8</sup> ..... do.....	163,313	30,65
Smoked <sup>9</sup> ..... do.....	189,900	46,38
Canned—		
Fish for cat and dog food..... standard cases.....	16,587	50,46
Other <sup>10</sup> ..... do.....	131,492	1,038,71
Dry scrap..... tons.....	893	39,76
Meal <sup>11</sup> ..... do.....	16,660	1,026,19
Oil—		
Tanner's..... gallons.....	40,618	19,13
Miscellaneous <sup>12</sup> ..... do.....	72,445	21,57
Glue..... do.....	524,082	1,240,55
Other by-products <sup>13</sup> ..... do.....		344,77
Total fresh and frozen packaged products..... pounds.....	157,378,368	28,996,45
Total cured products..... do.....	124,496,656	16,837,40
Total canned products..... do.....	577,782,585	83,015,05
Total by-products..... do.....		19,559,85
Grand total.....		148,408,77

<sup>5</sup> Includes amberjack, bluefish, butterfish, grouper, lake trout, mullet, jack pike, red snapper, salmon sauger pike, shad, snook, Spanish mackerel, whitefish, and whiting fillets; amberjack, "lingcod," red snapper and rockfish steaks; and red snapper and whiting sticks.

<sup>6</sup> Includes fresh alewife roe, pandressed bluefish; cisco caviar; packaged fish cakes; fresh-shucked conchs and frozen packaged scallops.

<sup>7</sup> Includes salted anchovies, barracuda, bluefish, cabrilla, ciscoes, black and white sea bass, shad and yellowtail; corned shad; and mild-cured shad.

<sup>8</sup> Includes spiced carp; pickled lake herring, sea herring, lake trout, and Dolly Varden trout.

<sup>9</sup> Includes smoked flounders, pilchard, sablefish, and salmon fillets.

<sup>10</sup> Includes canned smoked eels, fish cakes, etc., haddock fillets, creamed fish, smoked sea herring, spiced and soured salmon, salmon roe, smoked sturgeon, shrimp gumbo soup, abalone, clam cakes, pickled mussels, squid, herring for bait, and miscellaneous fish eggs for food.

<sup>11</sup> Includes meal from mackerel, king crabs, clams, kelp, and mixed species.

<sup>12</sup> Includes oil from blackfish, mackerel, shark livers, and mixed species.

<sup>13</sup> Includes agar-agar; alginates, crab scrap, fish flour, isinglass, menhaden for bait, poultry feed and lime from fresh-water mussel shells, sea herring skins, and shark fins, meat, skins, and teeth.

**CANNED FISHERY PRODUCTS AND BY-PRODUCTS TRADE**

The output of canned fishery products and by-products in the United States and Alaska in 1931 was valued at \$79,513,846. Of the total, canned products comprised \$62,948,791 and by-products \$16,565,055, a decrease of 24 per cent in the value of canned products and 30 per cent in the value of by-products when compared with the respective values of the same groups for the previous year.

Fishery products were canned at 412 establishments in the United States and Alaska during 1931. The combined output of these canneries amounted to 12,580,826 standard cases. The net weight of the products canned amounted to 506,414,020 pounds.

Canned fishery products or by-products were prepared in 27 States and Alaska during 1931. Alaska ranked first in the value of these products, accounting for 38 per cent of the total; California ranked second with 19 per cent of the total; and Washington ranked third with 9 per cent.

*Canned fishery products and by-products of the United States and Alaska, 1931*

SUMMARY OF PRODUCTION: BY COMMODITIES

Product	Number of plants	Standard cases	Pounds	Value
<b>Canned products:</b>				
Salmon—				
United States.....	50	1,336,234	64,139,232	\$8,986,308
Alaska.....	116	5,403,811	259,382,928	29,096,868
Sardines—				
Maine.....	27	885,408	22,135,200	2,647,187
California.....	22	1,713,407	82,243,536	4,715,089
Tuna and tunalike fishes.....	15	1,216,976	29,207,424	7,279,392
Alewives.....	16	34,620	1,661,760	78,973
Alewife roe.....	31	32,740	1,571,520	132,073
Shad.....	4	747	35,856	2,091
Shad roe.....	9	2,100	100,800	63,060
Mackerel.....	8	102,392	4,914,816	246,848
Fish flakes.....	5	28,486	1,367,328	514,553
Fish cakes, balls, etc.....	7	103,704	4,977,792	779,411
Cat and dog food.....	4	52,509	2,520,432	143,345
Salmon roe and caviar.....	5	3,360	161,280	30,486
Sturgeon caviar.....	8	4,630	222,240	609,502
Whitefish roe and caviar.....	6	829	39,792	23,498
Salmon eggs (for bait).....	10	5,246	251,808	149,186
Miscellaneous fish, roe, and caviar.....	10	9,391	450,768	77,870
Oysters.....	43	306,278	4,594,170	963,525
Shrimp.....	55	821,275	13,758,649	3,982,247
Clam products.....	61	500,040	11,882,625	2,256,909
Crabs.....	5	646	31,008	12,817
Turtle products.....	3	4,058	194,784	74,945
Miscellaneous shellfish.....	6	11,839	568,272	82,608
<b>Total.....</b>	<b>412</b>	<b>12,580,826</b>	<b>506,414,020</b>	<b>62,948,791</b>
			<b>Quality</b>	<b>Value</b>
<b>By-products:</b>				
Oyster-shell products.....		tons	306,229	\$1,992,024
Fresh-water mussel-shell products.....				4,970,240
Marine pearl-shell products.....				3,552,903
Scrap, meal, etc.....		tons	84,183	2,986,395
Marine-animal oils.....		gallons	8,565,651	1,619,936
Miscellaneous by-products.....				1,443,557
<b>Total.....</b>				<b>16,565,055</b>
<b>Grand total.....</b>				<b>79,513,846</b>

<sup>1</sup> "Cut out" or "Drained" weights of can contents are included for whole and minced clams, and gross contents for chowder, bouillon, broth, juice, and cocktail.

<sup>2</sup> Exclusive of duplication.

Canned fishery products and by-products of the United States and Alaska, 1931  
Continued

## VALUE OF PRODUCTION: BY STATES

State	Canned products	By-products <sup>1</sup>	Total
Maine.....	\$3,580,321	\$219,647	\$3,799,968
Massachusetts and Rhode Island.....	1,134,691	1,650,629	2,785,320
Connecticut.....		992,744	992,744
New York and New Jersey.....	1,345,155	2,826,450	4,171,605
Pennsylvania.....		572,905	572,905
Delaware.....		96,155	96,155
Maryland.....	77,831	695,692	773,523
Virginia.....	129,551	939,218	1,068,769
North Carolina.....	22,439	152,443	174,882
South Carolina.....	293,688	75,604	369,292
Georgia and Florida.....	937,312	441,099	1,378,411
Alabama.....	270,886	47,456	318,342
Mississippi.....	1,283,437	225,200	1,508,637
Louisiana.....	1,863,897	683,945	2,547,842
Texas, Utah, and Wisconsin.....	458,756	157,249	616,005
Missouri, Illinois, and Kentucky.....		75,988	75,988
Iowa.....		3,583,013	3,583,013
Washington.....	6,752,088	133,035	6,885,123
Oregon.....	2,858,046	15,170	2,873,216
California.....	12,529,384	2,290,600	14,819,984
Alaska.....	29,411,309	690,813	30,102,122
Total.....	62,948,791	16,565,055	79,513,846

<sup>1</sup> Including menhaden, fresh-water mussel-shell, and marine pearl-shell products.

## Pack of canned salmon, Pacific Coast States and Alaska, 1931, standard cases

Product	Alaska							
	Southeast		Central		Western		Total	
	Cases	Value	Cases	Value	Cases	Value	Cases	Value
Chinook or king:								
1-pound tall.....	7,093	\$46,476	9,126	\$65,671	5,719	\$39,597	21,938	\$151,744
1-pound flat.....	3,155	33,216	10,722	117,342	2,844	28,185	16,721	178,743
½-pound flat.....	4,648	55,133	7,751	93,677	809	8,090	13,208	156,900
Total.....	14,896	134,825	27,599	276,690	9,372	75,872	51,867	487,387
Blueback, red or sockeye:								
1-pound tall.....	116,327	1,074,133	383,495	3,471,793	1,095,276	9,859,166	1,595,096	14,405,092
1-pound flat.....	17,972	179,720	19,175	186,951	3,855	38,210	41,002	404,881
½-pound flat.....	13,596	217,725	36,483	458,175	8,099	100,215	58,178	776,115
Total.....	147,895	1,471,578	439,153	4,116,919	1,107,230	9,997,591	1,694,278	15,586,088
Silver or coho:								
1-pound tall.....	77,885	506,653	79,037	471,763	92	556	157,014	978,972
1-pound flat.....	2,663	20,239	239	1,670			2,902	21,909
½-pound flat.....	7,907	89,649	2,055	16,104			9,962	105,753
Total.....	88,455	616,541	81,331	489,537	92	556	169,878	1,106,634
Humpback or pink:								
1-pound tall.....	1,967,051	6,797,186	935,875	3,141,778			2,902,926	9,938,964
1-pound flat.....	2,242	8,849	2,168	7,805			4,410	16,654
½-pound flat.....	44,149	246,768	2,375	13,112			46,524	259,880
Total.....	2,013,442	7,052,803	940,418	3,162,695			2,953,860	10,215,498
Chum or keta:								
1-pound tall.....	270,256	870,630	192,768	606,056	66,555	202,202	529,579	1,678,888
1-pound flat.....			35	140			35	140
½-pound flat.....	3,992	20,745	250	912			4,242	21,657
Total.....	274,248	891,375	193,053	607,108	66,555	202,202	533,856	1,700,685
Steelhead: 1-pound tall.....	72	576					72	576
Grand total.....	2,539,008	10,167,698	1,681,554	8,652,949	1,183,249	10,276,221	5,403,811	29,096,868

Pack of canned salmon, Pacific Coast States and Alaska, 1931, standard cases—Con.

Product	United States						Grand total, Alaska and United States	
	Washington		Oregon and Cali- fornia		Total			
	Cases	Value	Cases	Value	Cases	Value	Cases	Value
<b>hinook or king:</b>								
1-pound tall.....	27,471	\$169,084	16,005	\$62,358	43,476	\$231,442	65,414	\$383,186
1-pound oval.....	960	19,200	2,086	42,063	3,046	61,263	3,046	61,263
1-pound flat.....	18,817	230,015	87,672	851,347	106,489	1,081,362	123,210	1,260,105
½-pound oval.....	87	2,001	759	17,457	846	19,458	846	19,458
½-pound flat.....	65,073	876,776	109,047	1,421,569	174,120	2,298,345	187,322	2,455,245
¼-pound flat.....			1,158	30,762	1,158	30,762	1,158	30,762
<b>Total.....</b>	<b>112,408</b>	<b>1,297,076</b>	<b>216,727</b>	<b>2,425,556</b>	<b>329,135</b>	<b>3,722,632</b>	<b>381,002</b>	<b>4,210,019</b>
<b>blueback, red or sockeye:</b>								
1-pound tall.....	1,803	17,128			1,803	17,128	1,596,901	14,422,220
1-pound flat.....	4,629	60,177			4,629	60,177	45,631	465,058
½-pound flat.....	87,282	1,346,238	2,245	35,920	89,527	1,382,158	147,705	2,158,273
<b>Total.....</b>	<b>93,714</b>	<b>1,423,543</b>	<b>2,245</b>	<b>35,920</b>	<b>95,959</b>	<b>1,459,463</b>	<b>1,790,237</b>	<b>17,045,551</b>
<b>silver or coho:</b>								
1-pound tall.....	46,915	333,069	2,012	12,474	48,927	345,543	205,941	1,324,515
1-pound flat.....	21,032	159,748	14,801	112,488	35,833	272,236	38,735	294,145
½-pound flat.....	14,839	135,593	7,612	66,986	22,451	202,579	32,413	308,332
¼-pound oval.....	67	1,206			67	1,206	67	1,206
¼-pound flat.....	2,151	27,963	5,072	65,936	7,223	93,899	7,223	93,899
<b>Total.....</b>	<b>85,004</b>	<b>657,579</b>	<b>29,497</b>	<b>257,884</b>	<b>114,501</b>	<b>915,463</b>	<b>284,379</b>	<b>2,022,097</b>
<b>humpback or pink:</b>								
1-pound tall.....	663,698	2,256,573			663,698	2,256,573	3,566,624	12,195,537
1-pound flat.....	2,887	10,393			2,887	10,393	7,297	27,047
½-pound flat.....	38,943	218,081			38,943	218,081	85,467	477,961
<b>Total.....</b>	<b>705,528</b>	<b>2,485,047</b>			<b>705,528</b>	<b>2,485,047</b>	<b>3,659,388</b>	<b>12,700,545</b>
<b>hum or keta:</b>								
1-pound tall.....	67,152	212,549	11,463	34,575	78,615	247,124	608,194	1,926,012
1-pound flat.....							35	140
½-pound flat.....	199	995			199	995	4,441	22,652
<b>Total.....</b>	<b>67,351</b>	<b>213,544</b>	<b>11,463</b>	<b>34,575</b>	<b>78,814</b>	<b>248,119</b>	<b>612,670</b>	<b>1,948,804</b>
<b>teelhead:</b>								
1-pound tall.....	80	480			80	480	152	1,056
1-pound flat.....	1,438	10,066	1,479	10,353	2,917	20,419	2,917	20,419
½-pound oval.....	1,766	30,375	3,093	53,200	4,859	83,575	4,859	83,575
½-pound flat.....	1,392	15,312	2,782	30,602	4,174	45,914	4,174	45,914
¼-pound oval.....			130	2,730	130	2,730	130	2,730
¼-pound flat.....	62	1,116	75	1,350	137	2,466	137	2,466
<b>Total.....</b>	<b>4,738</b>	<b>57,349</b>	<b>7,559</b>	<b>98,235</b>	<b>12,297</b>	<b>155,584</b>	<b>12,369</b>	<b>156,160</b>
<b>Grand total.....</b>	<b>1,068,743</b>	<b>6,134,138</b>	<b>267,491</b>	<b>2,852,170</b>	<b>1,336,234</b>	<b>8,986,308</b>	<b>6,740,045</b>	<b>38,083,176</b>

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of 1-pound cans, to the case. Salmon were canned at 34 plants in Washington, 11 in Oregon, 5 in California, and 116 in Alaska.



## Pack of canned sardines, 1931

Sardine (herring)	Maine		Sardine (pilchard)	California	
	Cases	Value		Cases	Value
Quarters, ¼-pound (100 cans):			½-pound oval (48 cans):		
In olive oil.....	1, 771	\$10, 802	In tomato sauce.....	22, 440	\$53, 225
In cottonseed oil.....	789, 499	2, 386, 728	In other sauces or oils.....	771	7, 479
In mustard.....	39, 154	138, 044	1-pound oval (48 cans):		
In tomato sauce.....	4, 224	15, 736	In tomato sauce.....	1, 330, 257	3, 536, 204
Three-quarters, ¾-pound (48 cans): In mustard.....	35, 250	95, 877	In cottonseed oil.....	13, 756	38, 524
			In mustard.....	111, 683	293, 964
			In natural oil.....	28, 441	72, 971
			In other sauces or oils.....	9, 284	22, 226
			¾-pound square (100 cans):		
			In various sauces or oils.....	1, 656	13, 646
			5-ounce (100 cans):		
			In natural oil.....	125, 821	353, 635
			In other sauces or oils.....	4, 024	11, 267
			6-ounce (100 cans): In miscellaneous sauces or oils.....	29, 967	79, 778
			1-pound tall (48 cans):		
			In natural oil.....	85, 758	200, 840
			In other sauces or oils.....	12, 360	27, 495
			Other sizes, various sauces or oils (standard cases).....	1, 460	3, 775
Total.....	869, 898	2, 647, 187	Total.....	1, 777, 678	4, 715, 089
Total (standard cases).....	885, 408	-----	Total (standard cases).....	1, 713, 407	-----

NOTE.—“Standard cases” represent the various sized cases converted to the uniform basis of ¼-pound cans, 100 to case, of sardines (herring), and 1-pound cans, 48 to the case, of sardines (pilchard). Sardines were canned at 27 plants in Maine and 22 in California.

## Pack of canned tuna and tunalike fishes in California, 1931

Size	Albacore		Yellowfin		Bluefin		Striped	
	Cases	Value	Cases	Value	Cases	Value	Cases	Value
¼-pound (48 cans).....	1 9, 813	\$50, 666	106, 530	\$456, 764	1, 231	\$3, 770	26, 979	\$95, 411
¼-pound (100 cans).....			10, 227	76, 096	9, 920	72, 176	9, 497	65, 989
½-pound (48 cans).....	111, 900	798, 206	427, 389	2, 703, 344	23, 145	121, 487	173, 043	863, 546
1-pound (48 cans).....	2 14, 506	193, 268	1 51, 773	582, 206	1 3, 855	34, 894	14, 528	119, 431
Flakes (standard cases).....	11, 840	53, 525	56, 671	236, 151	5, 092	20, 596	12, 043	48, 945
Total.....	148, 059	1, 095, 665	652, 590	4, 054, 561	43, 243	252, 923	236, 090	1, 193, 322
Total (standard cases).....	157, 658	-----	651, 523	-----	46, 895	-----	237, 524	-----

Size	“Tonno”		Bonito		Yellowtail		Total	
	Cases	Value	Cases	Value	Cases	Value	Cases	Value
¼-pound (48 cans).....			222	\$610			144, 775	\$607, 221
¼-pound (100 cans).....	56, 259	\$381, 858	14, 520	96, 021	354	\$1, 947	100, 777	694, 087
½-pound (48 cans).....	3 8, 087	53, 129	14, 332	59, 288	408	1, 684	758, 304	4, 600, 684
1-pound (48 cans).....			11, 201	74, 349	1, 241	9, 237	97, 104	1, 013, 385
Flakes (standard cases).....			1, 423	4, 665	38	133	87, 107	364, 015
Total.....	64, 346	434, 987	41, 698	234, 933	2, 041	13, 001	1, 188, 067	7, 279, 392
Total (standard cases).....	66, 687	-----	53, 392	-----	3, 297	-----	1, 216, 976	-----

<sup>1</sup> Includes the pack in ½-pound jars, 96 to the case and 7-ounce jars, 24 to the case, which have been converted to the equivalent of ¼-pound cans, 48 to the case.

<sup>2</sup> Includes the pack in 4-pound cans, 12 to the case, which have been converted to the equivalent of 1-pound cans, 48 to the case.

<sup>3</sup> Includes the pack in ½-pound cans, 50 to the case, which have been converted to the equivalent of ¼-pound cans, 48 to the case.

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of forty-eight ¼-pound cans to the case. Tuna and tunalike fishes were canned in 15 plants in California.

## Pack of canned alewives and alewife roe, 1931

## STANDARD CASES

Product	Maryland		Virginia		North Carolina		Total	
	Cases	Value	Cases	Value	Cases	Value	Cases	Value
Alewives.....	17,650	\$41,155	16,970	\$37,818	-----	-----	34,620	\$78,973
Alewife roe.....	7,896	35,416	21,270	83,264	3,574	\$13,393	32,740	132,073
<b>Total</b> .....	<b>25,546</b>	<b>76,571</b>	<b>38,240</b>	<b>121,082</b>	<b>3,574</b>	<b>13,393</b>	<b>67,360</b>	<b>211,046</b>

## ACTUAL CASES

Product and size	Cases	Value
<b>Alewives:</b>		
16-ounce (48 cans).....	17,519	\$39,034
17-ounce (24 cans).....	4,206	5,423
15 and 19-ounce (24 cans).....	28,763	34,516
<b>Total</b> .....		<b>78,973</b>
<b>Alewife roe:</b>		
7½, 8, and 8½-ounce (48 cans).....	9,181	30,438
16-ounce (24 cans).....	3,278	5,851
17-ounce (24 cans).....	41,341	79,279
19-ounce (24 cans).....	5,746	12,037
Other sizes (standard cases).....	997	4,468
<b>Total</b> .....		<b>132,073</b>
<b>Grand total</b> .....		<b>211,046</b>

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of 1-pound cans, to the case. Alewives or alewife roe were canned at 8 plants in Maryland, 20 in Virginia, and 3 in North Carolina.

## Pack of canned shrimp, 1931

## STANDARD CASES

State	Dry pack (in tins)		Wet pack (in tins)		Wet pack (in glass) <sup>1</sup>		Total	
	Cases	Value	Cases	Value	Cases	Value	Cases	Value
North Carolina and Alabama.....	10,946	\$48,677	46,315	\$216,317	-----	-----	57,261	\$264,994
Georgia.....	16,551	85,101	41,945	222,411	-----	-----	58,496	307,512
Florida.....	2,203	11,530	31,755	165,833	14,235	\$135,569	48,193	312,932
Mississippi.....	60,194	243,140	141,765	548,813	-----	-----	201,959	791,953
Louisiana.....	85,054	429,004	278,193	1,336,583	-----	-----	363,247	1,765,587
Texas.....	7,305	35,938	58,564	264,779	15,820	142,408	81,689	443,125
Georgia and Louisiana.....	-----	-----	-----	-----	10,530	96,144	10,530	96,144
<b>Total</b> .....	<b>182,253</b>	<b>853,390</b>	<b>598,537</b>	<b>2,754,736</b>	<b>40,585</b>	<b>374,121</b>	<b>821,375</b>	<b>3,982,247</b>

<sup>1</sup>The pack of shrimp in glass for Georgia and Louisiana has been grouped to avoid the disclosure of private enterprise.

## Pack of canned shrimp, 1931—Continued

## ACTUAL CASES

Size	Cases	Value
In tins, dry:		
4-ounce (48 cans).....	8, 251	\$32, 348
5-ounce (48 cans).....	153, 212	687, 960
8, 8 $\frac{1}{4}$ , and 8 $\frac{1}{2}$ ounce (24 cans).....	22, 145	110, 620
Other sizes (standard cases).....	4, 163	22, 450
In tins, wet:		
3 $\frac{3}{4}$ , 4, and 5 ounce (48 cans).....	18, 752	91, 120
5 $\frac{3}{4}$ -ounce (48 cans).....	571, 072	2, 583, 490
8 $\frac{1}{4}$ to 9 $\frac{3}{4}$ ounce (24 cans).....	6, 341	23, 410
Other sizes (standard cases).....	7, 141	51, 700
In glass, wet:		
5 $\frac{1}{4}$ -ounce (24 cans).....	75, 802	330, 290
5 $\frac{3}{4}$ -ounce (24 cans).....	7, 333	21, 400
Other sizes (standard cases).....	2, 315	22, 410
Total.....		3, 982, 240

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of 5-ounce cans 48 to the case, in the dry pack and 5 $\frac{3}{4}$ -ounce cans, 48 to the case, in the wet pack. Shrimp were canned at 1 plants in South Carolina, 5 in Georgia, 6 in Florida, 2 in Alabama, 15 in Mississippi, 19 in Louisiana, and 6 in Texas.

## Pack of canned oysters, 1931

## STANDARD CASES

State	Cases	Value	State	Cases	Value
North Carolina, Georgia, and Florida.....	16, 388	\$50, 218	Louisiana.....	24, 415	\$85, 270
South Carolina.....	74, 186	224, 248	Washington.....	7, 930	40, 900
Alabama.....	23, 551	75, 332	Total.....	306, 278	963, 520
Mississippi.....	159, 808	487, 644			

## ACTUAL CASES

Size	Cases	Value
4-ounce (48 cans).....	37, 388	\$102, 230
5-ounce (48 cans).....	219, 521	669, 510
6-ounce (48 cans).....	2, 717	13, 650
8-ounce (24 cans).....	22, 557	74, 890
10-ounce (24 cans).....	35, 543	103, 230
Total.....		963, 520

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of 5-ounce cans 48 to the case. Oysters were canned at 1 plant in North Carolina, 7 in South Carolina, 2 in Georgia, 2 in Florida, 3 in Alabama, 16 in Mississippi, 8 in Louisiana, and 4 in Washington. The pack during the spring period (January to May, 1931) amounted to 238,850 standard cases, valued at \$757,468 and that during the fall period (September to December, 1931) amounted to 67,428 standard cases, valued at \$206,057. The pack during the spring period of 1930 amounted to 333,174 standard cases, valued at \$1,605,647 and during the fall period of 1930, 63,000 standard cases, valued at \$231,215.

## Pack of canned clams and clam products, 1931

Item and State	Cases	Value
<b>Razor clams (Washington, Oregon, and Alaska):</b>		
Whole—		
No. 1, 5-ounce (48 cans) .....	3, 819	\$37, 808
No. 2, 10-ounce (24 cans) .....	140	1, 260
Other sizes (standard cases) .....	104	822
Minced—		
½-pound flat, 4-ounce (48 cans) .....	61, 254	427, 428
No. 1, 5-ounce (48 cans) .....	20, 712	176, 058
No. 2, 10-ounce (24 cans) .....	1, 056	9, 188
Other sizes (standard cases) .....	2, 307	21, 873
Juice—All sizes (standard cases) .....	364	1, 120
Total .....	89, 756	675, 557
Total (standard cases) .....	77, 505	
<b>Hard clams (Rhode Island, New York, New Jersey, Georgia, Florida, Washington, and Alaska):<sup>1</sup></b>		
Whole—		
No. 1, 5-ounce (48 cans) .....	4, 670	39, 833
1-pound 8-ounce (48 cans) .....	3, 133	21, 751
No. 2, 10-ounce (24 cans) .....	7, 700	48, 312
No. 10, 52-ounce (6 cans) .....	4, 250	21, 250
Other sizes (standard cases) .....	763	3, 879
Minced—		
No. 1, 5-ounce (48 cans) .....	908	6, 801
No. 2, 10-ounce (24 cans) .....	1, 483	10, 383
Other sizes (standard cases) .....	5, 997	38, 787
Chowder—		
No. 1, 10-ounce (48 cans) .....	163, 857	604, 266
33-ounce (24 jars) .....	133	1, 319
Other sizes (standard cases) .....	56, 291	234, 384
Juice—		
No. 1, 10-ounce (48 cans) .....	527	1, 716
No. 10, 102-ounce (6 cans) .....	1, 697	5, 489
Other sizes (standard cases) .....	3, 223	17, 625
Cocktail—		
3 and 4 ounce (48 jars) .....	1, 092	7, 374
8-ounce (24 jars) .....	249	1, 387
Other sizes (standard cases) .....	216	2, 513
Broth and bouillon—		
3½ and 4 ounce (48 jars) .....	299	1, 302
10-ounce (48 jars) .....	1, 148	6, 411
Other sizes (standard cases) .....	3, 082	16, 311
Total .....	260, 718	1, 091, 093
Total (standard cases) .....	263, 377	
<b>Soft clams (Maine and Massachusetts):</b>		
Whole—		
No. 1, 5-ounce (48 cans) .....	66, 333	240, 763
1-pound 8-ounce (48 cans) .....	7, 945	46, 734
No. 2, 10-ounce (24 cans) .....	10, 159	34, 473
Other sizes (standard cases) .....	9, 501	20, 793
Chowder—		
No. 1, 10-ounce (48 cans) .....	17, 082	53, 856
No. 2, 20-ounce (24 cans) .....	1, 132	3, 923
Other sizes (standard cases) .....	27, 180	54, 898
Bouillon and juice—		
No. 2, 20-ounce (24 cans) .....	5, 788	10, 419
Other sizes (standard cases) .....	8, 951	24, 400
Total .....	154, 071	490, 259
Total (standard cases) .....	159, 158	
Grand total (standard cases) .....	500, 040	2, 256, 909

<sup>1</sup> Includes a small amount of coquina broth packed in Florida.

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of 5-ounce cans. No. 1 to the case, for whole and minced clams; and 48 No. 1, 10-ounce cans to the case, for other clam products. Razor clam products were canned at 12 plants in Washington, 5 in Oregon, and 6 in Alaska; hard clam products, at 1 plant in Rhode Island, 3 in New York, 1 in New Jersey, 1 in Georgia, 1 in Florida, and 1 in Washington, and 1 in Alaska; soft clam products, at 21 plants in Maine and 2 in Massachusetts; and coquina clam products, at 2 plants in Florida.

## Pack of miscellaneous canned fishery products in the United States and Alaska, 1931

Item	Standard cases	Value	Item	Standard cases	Value
Mackerel.....	102, 392	\$246, 848	Salmon eggs (for bait).....	5, 246	\$149, 100
Shad.....	747	2, 091	Sturgeon caviar <sup>2</sup> .....	4, 630	609, 000
Shad roe.....	2, 100	63, 060	Whitefish roe and caviar.....	829	23, 000
Fish flakes.....	28, 486	514, 553	Miscellaneous roe and caviar <sup>3</sup> .....	1, 966	13, 000
Fish cakes, balls, etc.....	103, 704	779, 411	Crabs.....	646	12, 000
Cat and dog food.....	52, 509	143, 345	Turtle products.....	4, 058	74, 000
Miscellaneous fish <sup>1</sup> .....	7, 425	63, 974	Miscellaneous shellfish <sup>4</sup> .....	11, 839	82, 000
Salmon roe and caviar.....	3, 360	30, 486			
			Total.....	329, 937	2, 810, 200

<sup>1</sup> Includes canned carp, eels, fillets, finnan haddie, smoked salmon, anchovy paste, halibut and salmon fish pudding, haddock chowder, and bait herring and candlefish.

<sup>2</sup> Produced principally from imported sturgeon.

<sup>3</sup> Includes canned fish roe from various species of ground fish and imported roe from fish other than sturgeon.

<sup>4</sup> Includes canned terrapin products, mussels, abalone, squid, and shrimp creole gumbo.

NOTE.—“Standard cases” represent the various sized cases converted to the equivalent of 1-pound cans 48 to the case.

## Production of miscellaneous by-products, 1931

Product	Atlantic and Gulf coasts		Pacific coast (including Alaska)		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
Dried scrap:						
Alewife..... tons.....	515	\$19, 113			515	\$19, 113
Crab, blue, and king..... do.....	3, 178	62, 364			3, 178	62, 364
Miscellaneous <sup>1</sup> ..... do.....	516	17, 030			516	17, 030
Meal:						
Herring (Alaska)..... do.....			7, 911	\$272, 825	7, 911	272, 825
Herring (Maine)..... do.....	1, 398	34, 540			1, 398	34, 540
Pilchard..... do.....			16, 319	610, 462	16, 319	610, 462
Salmon..... do.....			2, 435	108, 682	2, 435	108, 682
Tuna..... do.....			5, 078	169, 505	5, 078	169, 505
Ground fish..... do.....	10, 928	646, 252			10, 928	646, 252
Shrimp..... do.....	<sup>2</sup> 1, 282	<sup>2</sup> 24, 985	( <sup>3</sup> )	( <sup>3</sup> )	1, 282	24, 985
Miscellaneous <sup>4</sup> ..... do.....	1, 466	58, 535	2, 376	119, 411	3, 842	177, 946
Miscellaneous green scrap <sup>4</sup> ..... do.....		917			917	4, 775
Oil:						
Alewife..... gallons.....	16, 696	2, 598			16, 696	2, 598
Cod and cod-liver..... do.....	95, 809	62, 600			95, 809	62, 600
Herring (Alaska)..... do.....			2, 152, 706	376, 582	2, 152, 706	376, 582
Herring (Maine)..... do.....	91, 003	12, 249			91, 003	12, 249
Pilchard..... do.....			3, 916, 336	807, 647	3, 916, 336	807, 647
Salmon..... do.....			250, 871	41, 129	250, 871	41, 129
Tuna..... do.....			15, 939	3, 296	15, 939	3, 296
Miscellaneous <sup>5</sup> ..... do.....	8, 470	5, 705	36, 031	5, 822	44, 501	11, 527
Liquid glue..... do.....	<sup>6</sup> 433, 030	<sup>6</sup> 1, 043, 290	( <sup>6</sup> )	( <sup>6</sup> )	433, 030	1, 043, 290
Miscellaneous by-products <sup>7</sup> ..... pounds.....	404, 630	34, 860	32, 304	365, 407	436, 934	4, 909, 200
Total.....		2, 028, 878		2, 880, 768		4, 909, 646

<sup>1</sup> Includes ground fish and miscellaneous dried scrap.

<sup>2</sup> A small quantity of shrimp meal produced in California is included with the production of the Atlantic and Gulf coasts.

<sup>3</sup> Includes king crab meal, clam meal, mackerel meal, salmon egg and liver meal, fish flour, and miscellaneous meal.

<sup>4</sup> Includes herring pomace (Maine), herring waste (Maine), and miscellaneous green scrap.

<sup>5</sup> Includes tanners oil, shark oil, mackerel oil, and miscellaneous oil.

<sup>6</sup> A quantity of liquid glue produced by one firm in California is included with the production of the Atlantic and Gulf coasts.

<sup>7</sup> Includes herring skins and scales, fish scale ornaments, shark skins and fins, ground clam shells, agar agar and kelp products.

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 oyster-shell products, 1931

State	Crushed oyster shell for poultry feed		Oyster-shell lime		Total	
	Tons	Value	Tons	Value	Tons	Value
Rhode Island and New Jersey.....	6, 700	\$69, 270	1, 760	\$7, 620	8, 460	\$76, 890
Pennsylvania.....	4, 123	44, 822	1, 453	6, 166	5, 576	50, 988
Maryland.....	34, 045	235, 024	15, 593	32, 668	49, 638	267, 692
Virginia.....	19, 941	175, 669	23, 702	149, 370	43, 643	325, 039
North Carolina and South Carolina.....	7, 263	66, 193	525	2, 670	7, 788	68, 863
Florida and California.....	47, 204	252, 952	2, 215	7, 869	49, 419	260, 821
Alabama and Texas.....	7, 824	48, 381	1, 075	925	8, 899	49, 306
Mississippi.....	32, 801	224, 200	1, 855	1, 000	34, 656	225, 200
Louisiana.....	93, 729	654, 027	4, 421	13, 198	98, 150	667, 225
Total.....	253, 630	1, 770, 538	52, 599	221, 486	306, 229	1, 992, 024

<sup>1</sup> Of this amount, 11,207 tons, valued at \$85,884, were reported as "burned" lime.

NOTE.—Crushed oyster-shell products were prepared at 2 plants in Rhode Island, 5 in New Jersey, 5 in Pennsylvania, 6 in Maryland, 8 in Virginia, 3 in North Carolina, 4 in South Carolina, 3 in Florida, 2 in Alabama, 6 in Mississippi, 4 in Louisiana, 1 in Texas, and 3 in California.

## Production of fresh-water mussel-shell products, 1931

Item	Iowa		New York		Other States		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Pearl buttons..... gross.....	11, 088, 981	\$3, 356, 426	4, 517, 622	\$1, 116, 894	1, 081, 893	\$267, 494	16, 688, 496	\$4, 740, 814
Crushed shell for poultry feed..... tons.....	9, 871	90, 661	-----	-----	305	2, 353	10, 176	93, 014
Lime..... do.....	9, 091	9, 091	( <sup>1</sup> )	( <sup>1</sup> )	267	486	9, 358	9, 577
Other products <sup>2</sup> .....	-----	126, 835	-----	-----	-----	-----	-----	126, 835
Total.....	-----	3, 583, 013	-----	1, 116, 894	-----	270, 333	-----	4, 970, 240

<sup>1</sup> A small production made in New York has been included with "Other States."

<sup>2</sup> Includes stucco, colored shells, and "pearl novelties."

Production of marine pearl-shell products,<sup>1</sup> 1931

Item	Maine, Massachusetts, and Connecticut		Rhode Island		New York		New Jersey	
	Gross	Value	Gross	Value	Gross	Value	Gross	Value
Pearl buttons.....	1, 328, 513	\$964, 520	-----	-----	98, 764	\$100, 295	1, 310, 536	\$1, 017, 334
Novelties <sup>2</sup> .....	-----	103, 845	-----	\$18, 067	-----	37, 848	-----	322, 329
Total.....	-----	1, 068, 365	-----	18, 067	-----	138, 143	-----	1, 339, 663

Item	Pennsylvania, Maryland, and Florida		California		Total	
	Gross	Value	Gross	Value	Gross	Value
Pearl buttons.....	-----	1, 741, 650	-----	-----	-----	4, 479, 463
Novelties <sup>2</sup> .....	-----	\$801, 515	-----	-----	-----	\$2, 883, 664
Total.....	-----	148, 777	-----	\$38, 373	-----	669, 239
Total.....	-----	950, 292	-----	38, 373	-----	3, 552, 903

<sup>1</sup> Produced principally from imported shells.

<sup>2</sup> Includes buckles, inlays for jewelry, knife handles, lamps, handles for manicure sets, ornaments, etc.

NOTE.—Marine pearl-shell products were manufactured at 1 plant in Maine, 2 in Massachusetts, 3 in Rhode Island, 6 in Connecticut, 10 in New York, 23 in New Jersey, 3 in Pennsylvania, 1 in Maryland, 3 in Florida, and 3 in California.

## Fish utilized and products of the menhaden industry, 1931

State	Menhaden utilized	Products						Total
		Dry scrap and meal		Acidulated scrap		Oil		
	Number	Tons	Value	Tons	Value	Gallons	Value	Value
New Jersey, Delaware, South Carolina, and Georgia.....	69,540,000	2,140	\$83,812	6,487	\$94,181	397,028	\$63,891	\$241,884
Virginia.....	155,801,000	11,373	366,107			1,122,974	169,471	535,578
North Carolina.....	45,099,000	2,747	92,417	865	14,449	283,656	40,165	147,031
Florida.....	82,444,000	4,833	159,205	1,419	27,763	178,129	28,781	215,746
Total.....	352,884,000	21,093	701,541	8,771	136,393	1,981,790	302,308	1,140,242

<sup>1</sup> 211,730,400 pounds.

<sup>2</sup> Of this quantity 18,185 tons, valued at \$586,413, were reported as dry scrap, and 2,908 tons, valued at \$115,128, as fish meal.

NOTE.—The menhaden factories were located as follows: 2 in New Jersey, 1 in Delaware, 8 in Virginia, 9 in North Carolina, 1 in South Carolina, 1 in Georgia, and 5 in Florida.

## PACKAGED-FISH TRADE

In 1931, the production of fresh, frozen, and smoked packaged fish in the United States amounted to 65,550,700 pounds, valued at \$9,223,507. The most important species packaged was haddock, which alone accounted for 42,976,541 pounds valued at \$6,095,930.

## Production of fresh, frozen, and smoked packaged fish in the United States, 1931

Species	Maine		Massachusetts and Connecticut		New York	
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....					172,400	\$36,537
Cod.....	350,426	\$55,079	6,797,265	\$834,253	2,247,346	330,703
Cusk.....	209,025	34,850	1,275,566	188,939		
Flounders, including "sole".....	( <sup>1</sup> )	( <sup>1</sup> )	<sup>1</sup> 929,545	<sup>1</sup> 190,149	511,080	90,670
Haddock.....	426,439	70,257	39,480,663	5,570,200	2,879,939	427,187
Hake.....	292,295	38,168	1,944,252	214,129	1,425,293	166,936
Halibut.....			474,973	85,343		
Mackerel.....			<sup>2</sup> 136,063	<sup>2</sup> 23,869		
Pollock.....			445,923	43,422		
Salmon.....			222,033	41,242		
Wolffish.....			199,554	23,603		
Yellow perch.....					( <sup>4</sup> )	( <sup>4</sup> )
Miscellaneous <sup>5</sup> .....			1,161,177	89,154		
Total.....	1,278,185	198,354	53,067,014	7,304,303	7,236,058	1,052,033

Species	Pennsylvania		Virginia and North Carolina		Florida, Alabama, and Texas	
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	649,393	\$124,999				
Croaker.....			49,170	\$5,593		
Drum, red or redfish.....					8,200	\$1,568
Flounders, including "sole".....			37,900	5,393		
Groupers.....					154,000	22,200
Haddock.....			189,500	28,286		
Mullet.....					19,000	2,800
Sea bass.....			27,030	4,157		
Snapper, red.....					<sup>3</sup> 149,553	<sup>3</sup> 28,822
Spanish mackerel.....					15,500	3,140
Squeteague or "sea trout".....			597,000	58,048	24,000	7,160
Yellow perch.....	<sup>4</sup> 41,560	<sup>4</sup> 8,261				
Miscellaneous <sup>5</sup> .....			11,000	1,021	35,715	9,483
Total.....	690,953	133,260	911,600	102,498	405,968	75,173

See footnotes at end of table.

*Production of fresh, frozen, and smoked packaged fish in the United States, 1931—*  
Continued

Species	Ohio, Illinois, Minne- sota, and Wisconsin		California and Washington		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike	703, 922	\$136, 305			1, 525, 715	\$297, 841
Cod					9, 395, 037	1, 220, 035
Croaker					49, 170	5, 593
Cusk					1, 484, 501	223, 789
Drum, red or redfish					8, 200	1, 568
Flounders, including "sole"					1, 478, 525	286, 212
Groupers					154, 000	22, 200
Haddock					42, 976, 541	6, 095, 930
Hake					3, 661, 840	419, 233
Halibut			142, 000	\$20, 000	616, 973	105, 343
Mackerel			(2)	(2)	136, 063	23, 869
Mullet					19, 000	2, 800
Pollock					445, 923	43, 422
Salmon			80, 000	10, 150	302, 033	51, 392
Sea bass					27, 030	4, 157
Snapper, red			(3)	(3)	149, 553	28, 822
Spanish mackerel					15, 500	3, 140
Squeteague or "sea trout"					621, 000	65, 208
Wolfish					199, 554	23, 603
Yellow perch	826, 945	156, 718			868, 505	164, 079
Yellow pike	24, 000	5, 100			24, 000	5, 100
Miscellaneous <sup>4</sup>	35, 690	6, 255	148, 365	23, 358	1, 391, 947	129, 271
Total	1, 590, 557	304, 378	370, 365	53, 508	65, 550, 700	9, 223, 507

<sup>1</sup> A small amount of flounders in Maine has been included with Massachusetts and Connecticut.

<sup>2</sup> A small amount of mackerel in California has been included with Massachusetts and Connecticut.

<sup>3</sup> A small amount of red snapper in Washington has been included with Florida, Alabama, and Texas.

<sup>4</sup> A small amount of yellow perch in New York has been included with Pennsylvania.

<sup>5</sup> Includes amberfish, bluefish, butterfish, cabio, frog legs, jewfish, lake trout, "lingcod," mangrove snapper, pinfish, pompano, sablefish, sauger pike, sheepshead, snook, spots, swordfish, tripletail, whitefish, whiting, and a small amount of mixed fish.

<sup>6</sup> Of this amount 61,928,737 pounds, valued at \$8,761,731, were fillets; 1,142,521 pounds, valued at \$154,895, were dressed or pan dressed; 1,837,224 pounds, valued at \$204,386, were sticks; 495,193 pounds, valued at \$77,271, were steaks; and 147,025 pounds, valued at \$25,224, were prepared by other methods. Of the total quantity of fillets prepared 44,437,899 pounds, valued at \$6,364,430, were fresh; 15,451,637 pounds, valued at \$2,071,684, were frozen; and 2,039,201 pounds, valued at \$325,617, were smoked. Of the dressed and pan dressed 596,229 pounds, valued at \$63,768, were fresh; 502,308 pounds, valued at \$84,529, were frozen; and 43,984 pounds, valued at \$6,598, were smoked. Of the sticks, 686,680 pounds, valued at \$117,844, were fresh; and 1,150,544 pounds, valued at \$86,542, were frozen. Of the steaks, 62,000 pounds, valued at \$14,620, were fresh and 433,193 pounds, valued at \$62,651, were frozen. There were prepared by other methods 147,025 pounds, valued at \$25,224.

NOTE.—Fish products were packaged at 6 plants in Maine; 58 in Massachusetts; 35 in New York; 1 in Connecticut; 8 in Pennsylvania; 6 in Virginia; 1 in North Carolina; 7 in Florida; 1 in Alabama; 23 in Ohio; 1 in Illinois; 1 in Minnesota; 2 in Wisconsin; 3 in California; and 5 in Washington—a total of 158 plants.

## FROZEN-FISH TRADE

### FISH FROZEN

In 1931 the freezing plants in the United States and Alaska, reporting their activities to the Government, packed 112,257,416 pounds of frozen fishery products. These products at the time they were held in cold-storage plants were estimated to be valued at \$11,000,000. Compared with the pack in 1930, which was the largest frozen pack of fishery products on record, this is a decrease of 19 per cent in the volume of the pack. Over 60 per cent of the pack consisted of six groups of fishery products. Of first importance was the cod, haddock, haddock fillets, hake, and pollock group with 14 per cent of the total. Haddock fillets accounted for the bulk of the volume of this group. Of next importance were the salmon and halibut, each with 12 per cent of the total. Mackerel made up 11 per cent of the total; whiting, 7 per cent; and sea herring, 6 per cent. Considerable quantities of shellfish; weakfish, including southern



"sea trout"; cisco or lake herring; butterfish; and squid, also were frozen. Frozen squid and sea herring are marketed primarily for bait, although quantities of each are used for human consumption.

*Production of frozen fishery products, 1931*

BY SPECIES AND MONTHS

Species	Month ended the 15th of—						
	January	February	March	April	May	June	July
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Bluefish (all trade sizes).....	10, 672	14, 313	8, 013	2, 574	20, 965	11, 968	7, 098
Butterfish (all trade sizes).....	9, 110	8, 986	2, 419	3, 643	35, 965	496, 044	222, 197
Catfish.....	45, 135	18, 655	10, 861	3, 831	84, 679	66, 645	82, 324
Cisco (Lake Erie).....	15, 620				929	362	7, 641
Cisco (lake herring), including bluefin, blackfin, and chub.....	88, 429	102, 893	22, 354	4, 393	20, 952	47, 616	48, 726
Cisco (tullibees, Canadian lakes).....	45, 508	65, 356	42, 653	2, 097	22, 976	1, 741	18, 448
Cod, haddock, hake, pollock.....	256, 763	45, 732	72, 695	98, 060	113, 987	91, 578	174, 754
Croaker.....	6, 028	10, 570	42, 144	6, 508	528, 525	173, 570	155, 249
Flounders.....	53, 818	7, 179	12, 717	11, 656	198, 399	292, 991	98, 302
Haddock filets.....	650, 238	455, 758	363, 271	1, 576, 376	1, 749, 624	1, 103, 885	1, 560, 296
Halibut (all trade sizes).....	339, 931	213, 250	59, 716	275, 795	2, 459, 219	2, 140, 703	2, 357, 612
Herring, sea (including alewives and bluebacks).....	124, 435	43, 093	51, 715	168, 644	963, 268	467, 725	361, 740
Lake trout.....	20, 762	7, 623	3, 561	93, 902	50, 356	23, 403	82, 583
Mackerel (except Spanish).....	149, 693	162, 449	103, 755	99, 314	48, 507	776, 093	2, 507, 914
Pike, blue and sauger.....	28, 232	2, 639	5, 292	2, 728	429, 975	130, 241	36, 088
Pike, yellow or wall-eyed.....	59, 546	57, 987	26, 895	57, 248	55, 640	23, 493	20, 480
Pike (including pickerel, jacks, and yellow jack).....	51, 917	58, 091	46, 352	34, 234	54, 175	15, 499	20, 171
Sablefish (black cod).....	18, 474	140, 032	11, 283	9, 774	48, 667	29, 316	91, 762
Salmon, chinook.....	420	6, 782	4, 758	2, 170	122, 208	113, 365	389, 876
Salmon, silver.....	71, 945	99, 149	36, 763	19, 344	28, 232	46, 408	86, 312
Salmon, fall and pink.....	53, 304	48, 827	20, 858	16, 135	14, 517	41, 485	16, 010
Salmon, steelhead trout.....	57, 190	770	7, 365	9, 911	18, 691	18, 748	372, 381
Salmon, all other.....	58, 140	59, 435	161, 985	137, 836	155, 848	544, 228	340, 957
Scup (porgies).....	3, 052	1, 243	4, 238	297	3, 075	156, 834	48, 412
Shad and shad roe.....	86, 017	13, 395	25, 665	34, 150	84, 092	166, 630	72, 648
Shellfish.....	607, 824	176, 215	151, 366	133, 698	288, 642	516, 073	475, 357
Smelts, eulachon, etc.....	316, 396	380, 248	285, 680	42, 715	3, 007	9, 078	5, 919
Squid.....	17, 791	6, 566	2, 767	95, 824	292, 205	890, 960	142, 323
Sturgeon and spoonbill cat.....	68, 483	4, 715	1, 572	9, 530	43, 656	112, 233	70, 484
Suckers.....	18, 905	6, 929		440	22, 269	4, 943	11, 920
Weakfish (including southern "sea trout").....	24, 205	75, 452	70, 745	32, 981	157, 565	215, 779	45, 153
Whitefish.....	83, 442	44, 251	56, 904	10, 862	79, 587	86, 838	208, 412
Whiting.....	96, 484	249, 117	279, 171	330, 770	131, 683	2, 782, 800	1, 983, 218
Miscellaneous fish.....	768, 512	572, 420	493, 794	653, 797	1, 522, 864	1, 360, 626	1, 204, 694
Total.....	4, 306, 421	3, 160, 120	2, 489, 873	3, 980, 966	9, 854, 949	12, 959, 901	13, 327, 461

Species	Month ended the 15th of—					
	August	September	October	November	December	Total
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Bluefish (all trade sizes).....	246, 005	314, 737	401, 153	169, 072	27, 998	1, 234, 568
Butterfish (all trade sizes).....	300, 713	197, 986	148, 744	519, 711	167, 963	2, 113, 301
Catfish.....	45, 359	90, 523	101, 960	65, 812	58, 455	674, 239
Cisco (Lake Erie).....	43, 521	40, 127	15, 910	45, 986	66, 429	236, 525
Cisco (lake herring), including bluefin, blackfin, and chub.....	117, 178	84, 072	195, 187	681, 730	897, 785	2, 311, 315
Cisco (tullibees, Canadian lakes).....	20, 609	18, 007	18, 905	35, 812	44, 533	336, 645
Cod, haddock, hake, pollock.....	410, 836	201, 670	481, 146	431, 669	452, 096	2, 830, 986
Croaker.....	417, 140	247, 826	58, 183	47, 033	11, 065	1, 703, 841
Flounders.....	44, 637	85, 453	156, 813	98, 174	94, 938	1, 154, 986
Haddock filets.....	1, 656, 055	1, 277, 577	940, 073	665, 155	945, 489	12, 943, 797
Halibut (all trade sizes).....	2, 480, 697	1, 447, 465	572, 764	431, 831	200, 709	12, 979, 692
Herring, sea (including alewives and bluebacks).....	1, 050, 573	825, 881	942, 705	1, 691, 225	452, 184	7, 143, 188
Lake trout.....	35, 033	29, 585	140, 088	580, 898	227, 718	1, 295, 512
Mackerel (except Spanish).....	1, 745, 618	5, 041, 176	1, 291, 930	284, 915	140, 972	12, 352, 336
Pike, blue and sauger.....	59, 369	19, 473	75, 950	283, 567	356, 010	1, 429, 564
Pike, yellow or wall-eyed.....	7, 007	10, 155	108, 567	63, 709	43, 040	533, 767
Pike (including pickerel, jacks, and yellow jack).....	25, 842	3, 316	75, 568	78, 697	35, 656	499, 518

Production of frozen fishery products, 1931—Continued

BY SPECIES AND MONTHS—Continued

Species	Month ended the 15th of—					
	August	September	October	November	December	Total
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Sablefish (black cod).....	155, 108	179, 543	368, 641	473, 652	224, 031	1, 750, 283
Salmon, chinook.....	388, 221	135, 865	33, 675	32, 748	2, 389	1, 232, 477
Salmon, silver.....	895, 271	1, 534, 794	1, 481, 338	739, 064	70, 311	5, 108, 931
Salmon, fall and pink.....	387, 609	159, 511	82, 997	1, 226, 023	82, 279	2, 149, 555
Salmon, steelhead trout.....	630, 273	298, 125	55, 035	11, 517	5, 160	1, 485, 166
Salmon, all other.....	575, 117	481, 704	237, 341	234, 280	47, 488	3, 034, 359
Scup (porgies).....	56, 698	59, 479	35, 730	25, 810	3, 219	398, 087
Shad and shad roe.....	114, 756	41, 283	41, 638	65, 603	20, 677	766, 554
Shellfish.....	219, 617	390, 320	607, 655	1, 160, 985	982, 730	5, 710, 482
Smelts, eulachon, etc.....	3, 104	15, 334	40, 133	45, 866	184, 874	1, 332, 354
Squid.....	91, 596	139, 471	40, 576	110, 496	44, 408	1, 874, 983
Sturgeon and spoonbill cat.....	23, 484	19, 719	29, 238	18, 365	8, 091	409, 570
Suckers.....	1, 005	470	4, 471	12, 059	6, 251	89, 662
Weakfish (including southern "sea trout").....	318, 437	514, 038	438, 142	369, 263	78, 368	2, 340, 128
Whitefish.....	59, 623	125, 895	59, 774	67, 098	194, 735	1, 077, 421
Whiting.....	610, 948	318, 720	591, 971	393, 733	141, 983	7, 911, 144
Miscellaneous fish.....	983, 014	1, 273, 676	1, 416, 281	1, 807, 838	1, 754, 964	13, 812, 480
Total.....	14, 220, 073	15, 622, 976	11, 290, 282	12, 969, 396	8, 074, 998	112, 257, 416

BY GEOGRAPHICAL SECTIONS AND SPECIES <sup>1</sup>

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

Species	New England	Middle Atlantic	South Atlantic	North Central, East	North Central, West	South Central	Pacific	Total
Bluefish (all trade sizes).....	30	1, 120	12	70	2			1, 234
Butterfish (all trade sizes).....	390	1, 638	49	34	2			2, 113
Catfish.....	47	5	175	109	318	20		674
Cisco (Lake Erie).....		237						237
Cisco (lake herring), including bluefin, blackfin, and chub.....		382		1, 407	522			2, 311
Cisco (tullibees, Canadian lakes).....	50	106	20	97	63	1		337
Cod, haddock, hake, pollock.....	2, 226	316	2	76	44	3	164	2, 831
Croaker.....		731	897	76				1, 704
Flounders.....	456	664	1	15			19	1, 155
Haddock fillets.....	11, 949	261	11	351	244	17	111	12, 944
Halibut (all trade sizes).....	254	604	2	931	90	1	11, 098	12, 980
Herring, sea (including alewives and bluebacks).....	5, 358	321	4	373		2	1, 085	7, 143
Lake trout.....		133	12	909	238	1	3	1, 296
Mackerel (except Spanish).....	10, 599	1, 267	1	124	26		335	12, 352
Pike, blue and sauger.....		992		383		5	50	1, 430
Pike, yellow or wall-eyed.....		76		174	284			534
Pike (including pickerel, jacks, and yellow jack).....		16		113	371			500
Sablefish (black cod).....		1		127	38		1, 584	1, 750
Salmon, Chinook.....	16	15		38	7		1, 156	1, 232
Salmon, silver.....	34	235		90	49		4, 701	5, 109
Salmon, fall and pink.....	100	15		66	64		1, 905	2, 150
Salmon, steelhead trout.....	2	37	1	3			1, 442	1, 485
Salmon, all other.....	87	325	8	112	19		2, 483	3, 034
Scup (porgies).....	62	335	1					398
Shad and shad roe.....	251	256	4	61	2	2	191	767
Shellfish.....	497	2, 392	849	838	272	9	853	5, 710
Smelts, eulachon, etc.....	38	1, 143		59	4		88	1, 332
Squid.....	1, 096	758		9			12	1, 875
Sturgeon and spoonbill cat.....		194	10	22	58	98	28	410
Suckers.....		1		82		7		90
Weakfish (including southern "sea trout").....		2, 085	255					2, 340
Whitefish.....	24	398	28	580	47			1, 077
Whiting.....	5, 899	791	12	10	1, 199			7, 911
Miscellaneous fish.....	1, 917	2, 492	2, 144	2, 798	708	1, 509	2, 244	13, 812
Total.....	41, 382	20, 342	4, 497	10, 138	4, 671	1, 675	29, 552	112, 257

<sup>1</sup> New England includes the 6 States of that section; Middle Atlantic—New York, New Jersey, and Pennsylvania; South Atlantic—Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; North Central, East—Ohio, Indiana, Illinois, Michigan, and Wisconsin; North Central, West—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; South Central—Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Oklahoma, and Arkansas; Pacific—Washington, Oregon, California, and Alaska.

## Production of frozen fishery products, 1931—Continued

BY GEOGRAPHICAL SECTIONS AND MONTHS<sup>1</sup>

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

Month ended the 15th of—	New England	Middle Atlantic	South Atlantic	North Central, East	North Central, West	South Central	Pacific	Total
January.....	992	1,344	298	708	333	113	518	4,306
February.....	470	1,061	69	370	490	58	642	3,160
March.....	277	1,011	12	200	406	112	472	2,490
April.....	1,687	560	23	287	542	93	789	5,981
May.....	2,947	1,695	416	954	457	256	3,130	9,855
June.....	5,658	2,574	283	832	344	217	3,052	12,960
July.....	6,648	1,239	433	724	299	286	3,699	13,328
August.....	5,727	1,309	770	475	271	60	5,608	14,220
September.....	8,266	1,820	535	367	261	61	4,313	15,623
October.....	4,199	2,488	310	1,029	251	147	2,866	11,290
November.....	2,685	3,376	459	1,885	684	159	3,721	12,969
December.....	1,826	1,865	889	2,307	335	113	742	8,075
Total.....	41,382	20,342	4,497	10,138	4,671	1,675	29,552	112,257

<sup>1</sup> New England includes the 6 States of that section; Middle Atlantic—New York, New Jersey, and Pennsylvania; South Atlantic—Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; North Central, East—Ohio, Indiana, Illinois, Michigan, and Wisconsin; North Central, West—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; South Central—Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Oklahoma, and Arkansas; Pacific—Washington, Oregon, California, and Alaska.

## HOLDINGS

During 1931 the average monthly holdings of frozen fish and shellfish were 12 per cent less than the average monthly holdings during 1930, and 5 per cent greater than the 5-year average of monthly holdings. Individual monthly holdings during the year were above normal for 7 months of the year when compared with the 5-year average, being from less than 1 to 27 per cent higher. Compared with the respective monthly holdings in 1930, they were from 8 to 15 per cent greater during 4 months of the year, and 8 to 27 per cent less during the remaining 8 months of the year. Monthly holdings in 1931 were largest in January and from September to December, inclusive, being, in some instances, over double those for certain months from February to August, inclusive. A maximum of 74,725,000 pounds was held on November 15, and a minimum of 28,095,000 pounds on April 15. Holdings during the year averaged 54,999,000 pounds monthly.

## Holdings of frozen fishery products, by species and months, 1931

Species	Month ended the 15th of—					
	January	February	March	April	May	June
Bluefish (all trade sizes).....	<i>Pounds</i> 514, 141	<i>Pounds</i> 403, 792	<i>Pounds</i> 240, 335	<i>Pounds</i> 134, 267	<i>Pounds</i> 119, 865	<i>Pounds</i> 100, 588
Butterfish (all trade sizes).....	534, 291	366, 585	169, 185	79, 589	55, 300	521, 562
Catfish.....	491, 776	389, 900	203, 073	111, 294	141, 012	190, 344
Cisco (Lake Erie).....	275, 251	245, 672	99, 781	61, 335	45, 151	41, 227
Cisco (lake herring), including bluefin, blackfin, and chub.....	1, 795, 845	1, 361, 049	1, 013, 578	620, 060	484, 270	443, 304
Cisco (tullibees, Canadian lakes).....	1, 294, 644	1, 218, 217	812, 210	474, 664	534, 572	688, 762
Cod, haddock, hake, pollock.....	1, 914, 169	1, 716, 179	1, 290, 678	1, 037, 708	986, 832	915, 664
Croaker.....	919, 201	591, 923	221, 291	126, 622	609, 136	755, 777
Flounders.....	728, 018	599, 741	469, 915	326, 060	413, 981	593, 120
Haddock fillets.....	6, 650, 017	5, 469, 663	4, 216, 387	4, 349, 429	5, 006, 965	4, 851, 787
Halibut (all trade sizes).....	7, 223, 395	4, 665, 669	2, 422, 259	2, 196, 011	4, 188, 499	6, 110, 776

## Holdings of frozen fishery products, by species and months, 1931—Continued

Species	Month ended the 15th of—					
	January	February	March	April	May	June
Herring, sea (including alewives and bluebacks).....	<i>Pounds</i> 2,796,289	<i>Pounds</i> 2,291,366	<i>Pounds</i> 1,767,238	<i>Pounds</i> 1,306,644	<i>Pounds</i> 1,648,639	<i>Pounds</i> 1,373,827
Lake trout.....	1,649,411	1,358,140	1,919,804	683,912	647,414	626,000
Mackerel (except Spanish).....	4,781,239	3,333,710	1,834,634	574,324	489,709	1,141,368
Pike, blue and sauger.....	1,349,446	936,956	388,509	244,341	644,549	801,246
Pike, yellow or wall-eyed.....	531,545	531,066	338,815	338,214	349,569	332,066
Pike (including pickerel, jacks, and yellow jack).....	373,099	552,150	484,205	444,077	339,892	349,267
Sablefish (black cod).....	1,659,105	1,465,153	1,077,947	850,554	755,714	614,151
Salmon, chinook.....	1,443,991	1,108,282	659,155	421,734	444,849	482,145
Salmon, silver.....	3,481,184	2,377,032	1,029,002	556,329	342,932	343,642
Salmon, fall and pink.....	1,708,354	1,271,128	697,483	527,860	455,408	435,244
Salmon, steelhead trout.....	509,124	401,632	253,826	227,291	224,569	201,870
Salmon, all other.....	2,156,548	1,044,138	636,463	506,318	512,622	891,977
Scup (porgies).....	516,332	426,441	287,220	47,845	32,862	182,055
Shad and shad roe.....	642,352	528,886	296,783	191,992	226,076	364,329
Shellfish.....	2,740,682	2,334,991	1,610,745	998,482	945,209	1,323,096
Smelts, eulachon, etc.....	804,898	972,478	1,207,839	488,468	419,154	400,278
Squid.....	2,021,826	1,668,707	1,229,775	687,483	737,914	1,582,234
Sturgeon and spoonbill cat.....	869,702	786,085	688,084	625,000	488,104	629,570
Suckers.....	121,675	101,209	88,532	68,420	63,754	68,191
Weakfish (including southern "sea trout").....	1,976,996	1,321,749	559,304	78,663	212,630	399,125
Whitefish.....	1,359,770	1,319,975	1,249,596	753,946	617,918	608,143
Whiting.....	6,017,992	4,885,675	3,743,028	2,777,158	2,371,354	4,684,762
Miscellaneous fish.....	9,964,897	8,514,701	6,360,212	5,169,423	5,726,970	6,336,844
Total.....	71,817,205	56,560,040	38,566,891	28,095,417	31,283,394	39,384,344

Species	Month ended the 15th of—					
	July	August	September	October	November	December
Bluefish (all trade sizes).....	<i>Pounds</i> 78,718	<i>Pounds</i> 303,419	<i>Pounds</i> 788,439	<i>Pounds</i> 1,124,417	<i>Pounds</i> 1,136,460	<i>Pounds</i> 1,017,132
Butterfish (all trade sizes).....	708,736	988,247	1,161,764	1,255,883	1,655,114	1,607,098
Catfish.....	273,718	298,697	336,209	398,419	482,594	498,493
Cisco (Lake Erie).....	25,514	81,791	185,157	297,683	211,412	291,221
Cisco (lake herring), including bluefin, blackfin, and chub.....	609,709	650,558	705,562	881,118	1,389,160	1,921,049
Cisco (tullibees, Canadian lakes).....	616,432	666,183	596,826	462,268	462,939	511,840
Cod, haddock, hake, pollock.....	952,208	1,313,692	1,248,284	1,342,961	1,311,660	1,380,124
Croaker.....	894,146	1,221,064	1,371,934	1,304,078	1,206,702	1,057,562
Flounders.....	465,614	447,398	454,763	498,092	539,280	501,249
Haddock filets.....	5,463,072	6,337,573	6,424,296	6,179,916	5,265,232	5,583,849
Halibut (all trade sizes).....	8,499,702	10,866,432	11,974,153	11,817,147	10,156,830	7,993,672
Herring sea (including alewives and bluebacks).....	1,245,567	1,240,802	1,456,337	2,001,653	2,781,550	2,980,793
Lake trout.....	631,035	630,132	629,690	697,027	1,260,563	1,282,097
Mackerel (except Spanish).....	3,648,846	5,290,973	10,528,130	11,470,169	10,560,441	9,790,145
Pike, blue and sauger.....	507,284	283,739	149,927	226,268	391,370	747,865
Pike, yellow or wall-eyed.....	292,100	262,136	246,964	342,124	380,546	349,601
Pike (including pickerel, jacks, and yellow jack).....	346,125	351,235	311,554	344,779	484,522	534,210
Sablefish (black cod).....	615,724	637,550	803,506	1,042,544	1,334,908	1,294,809
Salmon, chinook.....	804,128	1,116,958	1,199,827	1,129,410	1,025,342	870,019
Salmon, silver.....	387,460	1,234,827	2,688,686	3,956,130	4,318,263	3,564,743
Salmon, fall and pink.....	464,216	813,119	904,334	736,212	1,728,769	1,449,004
Salmon, steelhead trout.....	531,865	1,115,299	1,265,955	1,323,483	1,176,501	1,008,853
Salmon, all other.....	1,087,461	1,542,677	1,811,472	1,932,868	2,005,764	1,744,713
Scup (porgies).....	228,067	264,900	328,249	359,272	368,025	291,122
Shad and shad roe.....	430,255	483,721	484,539	536,944	583,123	547,094
Shellfish.....	1,450,752	1,215,002	1,231,421	1,395,085	2,228,854	2,753,972
Smelts, eulachon, etc.....	408,975	397,740	397,354	415,547	402,581	671,572
Squid.....	1,608,563	1,520,308	1,360,238	1,244,559	1,196,147	1,037,326
Sturgeon and spoonbill cat.....	652,057	676,894	1,012,564	851,521	490,315	322,373
Suckers.....	70,062	54,143	30,844	39,783	48,737	44,527
Weakfish (including southern "sea trout").....	400,110	676,957	1,142,356	1,536,698	1,869,978	1,502,712
Whitefish.....	816,142	930,607	979,733	966,335	1,098,433	1,298,401
Whiting.....	6,384,450	6,579,190	6,176,934	6,288,959	6,085,647	5,599,689
Miscellaneous fish.....	6,846,633	7,023,572	7,701,521	8,742,733	9,117,227	10,233,469
Total.....	48,445,446	57,517,535	68,082,522	73,144,085	74,724,989	72,362,398

*Monthly holdings of frozen fishery products, 1931, by geographical sections<sup>1</sup>*

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

Month ended the 15th of—	New England	Middle Atlantic	South Atlantic	North Central, East	North Central, West	South Central	Pacific <sup>2</sup>	Total
January.....	18,797	16,511	4,072	10,734	4,514	1,074	16,115	71,817
February.....	14,794	13,612	3,015	9,303	4,613	941	10,282	59,560
March.....	10,334	9,606	1,550	6,513	3,777	725	6,062	38,567
April.....	7,374	6,183	536	4,892	3,458	689	4,963	28,095
May.....	7,511	6,736	915	5,083	3,314	700	7,024	31,283
June.....	10,855	8,894	1,142	5,309	3,307	714	9,163	39,384
July.....	15,189	9,568	1,630	5,409	3,432	886	12,331	48,445
August.....	17,415	10,983	2,338	5,365	3,317	778	17,121	57,517
September.....	23,286	12,838	2,752	5,023	3,184	743	20,257	68,083
October.....	24,740	14,274	2,926	5,825	3,231	715	21,434	73,145
November.....	23,207	15,790	3,335	6,855	3,839	858	20,841	74,322
December.....	21,543	16,705	3,917	8,692	3,921	959	16,625	72,765
Average.....	16,271	11,808	2,344	6,584	3,659	815	13,518	54,999

<sup>1</sup> New England includes the 6 States of that section; Middle Atlantic—New York, New Jersey, and Pennsylvania; South Atlantic—Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; North Central, East—Ohio, Indiana, Illinois, Michigan, and Wisconsin; North Central, West—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; South Central—Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Oklahoma, and Arkansas; Pacific—Washington, Oregon, California, and Alaska.

<sup>2</sup> Includes a very small amount of fish held in Colorado in the Mountain section.

### COLD-STORAGE HOLDINGS OF CURED FISH

Only cured herring and mild-cured salmon are reported held in cold-storage warehouses in the United States and Alaska. Other species are also held in cold storage, but no report is made on them to the Government as their volume reaches but small proportions. During 1931 the monthly holdings of cured herring varied between 11,093,000 pounds in July and 17,070,000 pounds in October. Monthly holdings of mild-cured salmon varied between 2,131,000 pounds in April and 6,952,000 pounds in October. The average monthly holdings of cured fish held in cold storage in 1931 were 12 per cent less than the average monthly holdings during the year 1930, and 24 per cent less than the 5-year average of monthly holdings. The respective monthly holdings in 1931 compared with the respective monthly holdings in 1930 show decreases of from 8 to 24 per cent with the exception of December, which shows an increase of less than one-half of 1 per cent. Compared with the respective normal monthly holdings there were decreases of from 15 to 35 per cent.

*Holdings of cured fish, 1931, by species and months*

Month ended the 15th of—	Cured herring	Mild-cured salmon	Total
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
January.....	13,725,701	4,566,769	18,292,470
February.....	12,920,892	3,818,845	16,739,737
March.....	11,763,133	2,810,112	14,573,245
April.....	11,379,111	2,130,664	13,509,775
May.....	12,295,824	2,277,581	14,573,405
June.....	12,020,472	3,494,996	15,515,468
July.....	11,093,454	4,083,623	15,177,077
August.....	13,020,236	6,333,197	19,353,433
September.....	15,387,573	6,926,350	22,313,923
October.....	17,070,455	6,951,711	24,022,166
November.....	15,660,290	6,470,950	22,131,240
December.....	15,525,499	5,732,539	21,258,038

## FOREIGN FISHERY TRADE

Foreign trade in fishery products in the United States in 1931 amounted to \$54,607,646 of which \$43,033,389 represents the value of these products imported for consumption, and \$11,574,257 the value of exports of domestic fishery products. Compared with the previous year, there is a decrease of 20 per cent in the total trade, 5 per cent in the value of imports, and 33 per cent in the value of exports.

Imports consisted of 276,646,946 pounds of edible products, valued at \$28,936,684 and nonedible products, valued at \$14,096,705. Fishery exports consisted of 114,334,877 pounds of edible products, valued at \$11,380,015 and nonedible products valued at \$194,242.

*Exports of domestic fishery products, 1931*

Item	Quantity	Value
<b>Edible fishery products:</b>		
Fish, fresh, frozen, or packed in ice—		
Salmon.....pounds..	3,989,224	\$533,696
Other fresh fish.....do.....	5,074,591	421,370
Total.....do.....	9,063,815	955,066
Fish, salted or dry cured—		
Cod.....do.....	1,021,290	109,491
Haddock, hake, and pollock.....do.....	1,045,890	62,274
Herring.....do.....	1,251,926	70,943
Salmon.....do.....	3,636,426	375,129
Other.....do.....	788,195	73,193
Total.....do.....	7,743,727	691,030
Fish, pickled—		
Salmon.....do.....	943,600	197,866
Other.....do.....	2,747,600	84,593
Total.....do.....	3,691,200	282,459
Fish, canned—		
Salmon.....do.....	24,221,633	4,039,993
Sardines.....do.....	53,246,898	3,445,770
Mackerel.....do.....	1,550,161	111,218
Other.....do.....	782,628	118,673
Total.....do.....	79,801,320	7,715,654
Shellfish—		
Canned.....do.....	3,126,378	565,340
Not canned.....do.....	9,035,467	1,033,689
Total.....do.....	12,161,845	1,599,029
Other fish products.....do.....		
	1,872,970	136,777
Total edible products.....do.....	114,334,877	11,380,015
<b>Nonedible fishery products:</b>		
Marine-animal oils.....do.....	1,597,895	81,547
Buttons, pearl or shell.....gross.....	95,683	27,306
Sponges.....pounds.....	68,036	85,389
Total.....do.....		112,695
Total nonedible products.....do.....		194,242
Grand total.....do.....		11,574,257

## Imports of fishery products entered for consumption, 1931

Item	Pounds	Value
<b>EDIBLE FISHERY PRODUCTS</b>		
Fish, fresh or frozen:		
Whole, beheaded, or eviscerated or both—		
Salmon.....	5,601,687	\$587,420
Fresh-water fish, not elsewhere specified:		
Yellow pike.....	7,462,927	746,690
Whitefish.....	8,176,536	822,854
Tullibees.....	2,396,508	147,821
Jacks or grass pike.....	2,408,473	104,806
Lake trout.....	2,310,192	236,289
Yellow perch.....	726,684	44,861
Lake herring, ciscoes and chubs.....	2,319,104	265,972
Fresh-water fish, not specially provided for.....	17,514,434	1,172,642
Eels.....	356,693	26,746
Cod, haddock, hake, pollock, and cusk.....	1,236,518	63,373
Halibut:		
Fresh.....	3,844,247	404,816
Frozen.....	254,011	35,664
Mackerel.....	1,825,846	90,421
Swordfish.....	2,127,899	207,417
Sturgeon.....	3,434,942	740,540
Fish, not specially provided for.....	2,561,405	205,819
Whether or not whole—		
Smelts.....	6,640,047	840,349
Tuna fish.....	7,857,846	578,615
Sea herring—		
Fresh.....	13,238,367	52,518
Frozen.....	2,918,543	91,451
Fillets, skinned, boned, sliced, or divided, not specially provided for.....	3,008,143	326,578
Total.....	98,221,042	7,794,902
Fish, salted, dried, smoked, pickled or preserved:		
Dried and unsalted—		
Cod, haddock, hake, pollock, and cusk.....	2,400,218	229,711
Other.....	1,800,895	286,932
In oil or in oil and other substances—		
Sardines.....	29,417,669	3,931,024
Anchovies.....	1,888,220	560,410
Antipasto.....	365,185	107,381
Other.....	1,648,765	293,751
Not in oil or in oil and other substances—		
In air-tight containers weighing with contents, not over 15 pounds each—		
Anchovies.....	2,929,333	269,134
Salmon.....	137,350	12,653
Herring and sardines.....	4,902,191	426,971
Fish cakes, balls, and pudding.....	911,219	70,715
Other.....	1,467,195	187,140
Pickled or salted—		
Not in oil, etc., and not in air-tight containers weighing, with contents, 15 pounds or less each:		
Salmon.....	640,593	66,356
Cod, haddock, hake, pollock, and cusk, neither skinned nor boned (except that vertebral column may be removed)—		
Containing not more than 43 per cent moisture by weight.....	23,350,117	1,367,042
Containing more than 43 per cent moisture by weight.....	13,467,714	600,450
Cod, haddock, hake, pollock, and cusk, skinned or boned.....	2,128,359	197,579
Herring—		
In bulk or in containers weighing, with contents, more than 15 pounds each (net weight).....	41,562,791	2,573,487
In containers (not air-tight), weighing, with contents, not more than 15 pounds each.....	32,552	2,252
Mackerel—		
In bulk or in containers weighing, with contents, more than 15 pounds each (net weight).....	6,726,970	312,742
In containers (not air-tight) weighing, with contents, not more than 15 pounds each.....	245	88
Pickled or salted, not specially provided for—		
In bulk or in containers weighing, with contents, more than 15 pounds each (net weight).....	1,909,065	158,463
In containers (not air-tight) weighing, with contents, not more than 15 pounds each.....	42,259	4,976
Smoked or kippered—		
Not in oil, etc., and not in air-tight containers weighing, with contents, 15 pounds or less each—		
Salmon.....	4,278	1,622
Herring—		
Whole or beheaded.....	1,189,092	59,350
Eviscerated, split, skinned, boned, or divided.....	865,919	81,483
Cod, haddock, hake, pollock, and cusk—		
Whole, or beheaded, or eviscerated or both.....	850,506	78,208
Pilletted, skinned, boned, sliced, or divided.....	836,008	96,140
Smoked or kippered, not specially provided for.....	143,814	14,097

Imports of fishery products entered for consumption, 1931—Continued

Item	Pounds	Value
<b>EDIBLE FISHERY PRODUCTS—continued</b>		
Fish, salted, dried, smoked, pickled or preserved—Continued.		
Fish paste and fish sauce.....	67, 288	\$21, 978
Prepared or preserved, not specially provided for—		
In containers weighing, with contents, not more than 15 pounds each.....	378, 642	49, 703
In bulk or in containers weighing, with contents, more than 15 pounds each (net weight).....	80, 437	9, 538
<b>Total</b> .....	<b>142, 144, 889</b>	<b>12, 071, 376</b>
Caviar and other fish roe:		
Not boiled, etc.—		
Sturgeon.....	352, 255	456, 019
Fish roe, not specially provided for.....	91, 313	18, 124
Boiled, packed in air-tight containers.....	81, 073	9, 172
<b>Total</b> .....	<b>524, 641</b>	<b>483, 315</b>
Shellfish:		
Crab meat, crab sauce, and crab paste.....	11, 426, 096	4, 430, 721
Clams, clam juice, or either in combination with other substances, in air-tight containers.....	1, 056, 296	154, 088
Oysters, oyster juice, or either in combination with other substances, in air-tight containers.....	124, 617	24, 130
Lobsters (including spiny lobsters and crawfish)—		
Not canned.....	9, 983, 824	2, 171, 337
Canned.....	1, 702, 721	820, 144
Clams not in air-tight containers.....	3, 144, 295	64, 699
Shrimp and prawn.....	1, 077, 704	151, 509
Scallops.....	153, 427	24, 382
Oysters, not in air-tight containers.....	2, 269, 509	133, 203
Shellfish, not specially provided for.....	4, 140, 719	569, 360
Pastes and sauces of shellfish, not specially provided for.....	126, 226	9, 522
Crabs.....	35, 906	2, 692
Turtles.....	515, 034	31, 304
<b>Total</b> .....	<b>35, 756, 374</b>	<b>8, 587, 091</b>
<b>Total edible fishery products</b> .....	<b>276, 646, 946</b>	<b>28, 936, 684</b>
<b>NONEDIBLE FISHERY PRODUCTS</b>		
Marine-animal oils:		
	<i>Quantity</i>	
Cod oil..... gallons.....	1, 794, 359	610, 126
Cod-liver oil..... do.....	1, 737, 207	1, 311, 831
Eulachon oil..... do.....	1, 375	688
Herring oil..... do.....	4, 243, 420	1, 219, 419
Menhaden and sod oil..... do.....	91, 563	23, 888
Seal oil..... do.....	79, 870	24, 741
Whale oil—		
Sperm, crude..... do.....	327, 115	110, 010
Sperm, refined or otherwise processed..... do.....	46, 107	17, 466
Whale oil, not specially provided for..... do.....	10, 826, 250	4, 815, 690
<b>Total</b> .....	<b>19, 147, 266</b>	<b>8, 133, 859</b>
Pearls and imitation pearls:		
Pearls and parts, not strung or set.....		1, 281, 019
Imitation pearls—		
Half pearls and hollow or filled.....		17, 114
Solid pearls, not elsewhere specified:		
Valued at not more than one-fourth cent an inch..... inches.....	1, 661, 234	1, 891
Valued at more than one-fourth cent and not more than 1 cent an inch..... inches.....	246, 470	1, 534
Iridescent solid pearls:		
Valued at not more than 10 cents per inch..... do.....	41, 102	226
Valued at more than 10 cents per inch..... do.....	90	12
<b>Total</b> .....		<b>1, 301, 796</b>
Shells and buttons of pearl or shell:		
Shells, unmanufactured—		
Green snail shell..... pounds.....	114, 521	13, 620
Mother-of-pearl..... do.....	4, 438, 168	1, 298, 615
Shells, not specially provided for..... do.....	2, 719, 310	71, 234
Shells and mother-of-pearl, engraved, cut, ornamented, or manufactured.....		22, 205
Shell pearl buttons—		
Ocean or trochus..... gross.....	131, 543	56, 105
Buttons (from Philippine Islands)..... do.....	849, 009	384, 743
<b>Total</b> .....		<b>1, 846, 522</b>



## Imports of fishery products entered for consumption, 1931—Continued

Item	Quantity	Value
NONEDIBLE FISHERY PRODUCTS—continued		
Sponges:		
Sheepswool.....	pounds.....	208, 539
Yellow, grass, or velvet.....	do.....	324, 728
Other.....	do.....	38, 904
Manufactures of.....	do.....	2, 557
Total.....		574, 728
Agar-agar.....	pounds.....	469, 335
Ambergris.....	do.....	7
Cod-liver oil cake and cod-liver oil cake meal.....	do.....	944, 856
Cuttlefish bone.....	do.....	432, 970
Goldfish, live.....	number.....	1, 518, 641
Fish for other than human consumption.....		56, 698
Fish sounds.....	pounds.....	97, 766
Fish scrap and fish meal.....	tons.....	38, 447
Skins, fish, raw or salted.....	pounds.....	131, 904
Skins, seal, raw (not fur skins).....	do.....	2, 208, 166
Spermaceti wax.....	do.....	24, 261
Whalebone, unmanufactured.....	do.....	14
Whalebone manufactures of.....		554
Total.....		2, 149, 935
Total nonedible fishery products.....		14, 096, 705
Grand total.....		43, 033, 389

FISHERIES OF THE NEW ENGLAND STATES<sup>4</sup>

The yield of fishery products in the New England States during 1930 amounted to 701,350,979 pounds, valued at \$27,493,479. This is an increase of 1 per cent in the volume of the catch, but a decrease of 5 per cent in its value as compared with the catch in the previous year. Of the total catch in 1930, 645,574,206 pounds, valued at \$19,232,205 were fish, and 55,776,773 pounds, valued at \$8,261,274 were shellfish and miscellaneous products. These fisheries gave employment to 17,077 fishermen which is a decrease of less than one-half of 1 per cent as compared with the number of fishermen in 1929. Of the total number of fishermen employed during 1930, 6,192 regular fishermen were engaged on vessels and 7,961 regular and 2,924 casual fishermen were employed in the boat and shore fisheries.

## Fisheries of the New England States, 1930

## SUMMARY OF CATCH

Product	Maine		New Hampshire		Massachusetts	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	124, 465, 169	\$1, 828, 711	888, 490	\$28, 781	427, 521, 214	\$14, 030, 256
Shellfish, etc.....	19, 358, 465	2, 500, 695	180, 587	40, 363	14, 952, 751	2, 258, 822
Total.....	143, 823, 634	4, 329, 406	1, 069, 077	69, 144	442, 473, 965	16, 289, 078
Product	Rhode Island		Connecticut		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	16, 935, 860	\$699, 748	75, 763, 473	\$2, 644, 709	645, 574, 206	\$19, 232, 205
Shellfish, etc.....	9, 036, 033	1, 587, 522	12, 248, 937	1, 873, 872	55, 776, 773	8, 261, 274
Total.....	25, 971, 893	2, 287, 270	88, 012, 410	4, 518, 581	701, 350, 979	27, 493, 479

<sup>4</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure" which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

## Fisheries of the New England States, 1930—Continued

## OPERATING UNITS: BY STATES

Item	Maine	New Hampshire	Massachusetts	Rhode Island	Connecticut	Total
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
<b>Fishermen:</b>						
On vessels.....	439		4,445	356	952	6,192
On boats and shore—						
Regular.....	3,760	46	2,859	870	426	7,961
Casual.....	952	40	1,377	403	152	2,924
<b>Total.....</b>	<b>5,151</b>	<b>86</b>	<b>8,681</b>	<b>1,629</b>	<b>1,530</b>	<b>17,077</b>
<b>Vessels:</b>						
Steam.....			22	9	33	64
Net tonnage.....			3,291	265	5,477	9,033
Motor.....	78		395	74	102	649
Net tonnage.....	962		15,384	747	1,490	18,583
Sail.....	1		1		3	5
Net tonnage.....	19		6		25	50
<b>Total vessels.....</b>	<b>79</b>		<b>418</b>	<b>83</b>	<b>138</b>	<b>718</b>
<b>Total net tonnage.....</b>	<b>981</b>		<b>18,681</b>	<b>1,012</b>	<b>6,992</b>	<b>27,666</b>
<b>Boats:</b>						
Motor.....	2,166	38	1,669	578	237	4,688
Other.....	1,726	5	1,477	673	218	4,099
Accessory boats.....	189		979	160	62	1,373
<b>Apparatus:</b>						
<b>Purse seines—</b>						
Mackerel.....	31	2	105	4	9	151
Length, yards.....	7,994	500	50,098	560	1,629	60,772
Menhaden.....					2	2
Length, yards.....					720	720
Other.....	28		3	1		32
Length, yards.....	6,724		410	320		7,454
Haul seines.....	78	1	13	27	28	147
Length, yards.....	10,026	100	2,225	3,100	2,710	18,161
<b>Gill nets—</b>						
Anchor.....	1,415		2,034		32	3,481
Square yards.....	209,750		653,340		5,370	868,460
Drift.....	74		9,461	161	230	9,926
Square yards.....	11,681		3,286,236	59,640	22,770	3,380,327
Runaround.....				12		12
Square yards.....				24,100		24,100
Stake.....	105					105
Square yards.....	4,725					4,725
<b>Lines—</b>						
Hand.....	4,375	160	583	432	288	5,838
Hooks.....	4,403	160	849	587	297	6,296
Trawl.....	33,050	3,600	54,956	1,193	1,726	94,525
Hooks.....	1,629,100	180,000	2,730,464	56,550	84,380	4,680,494
Pound nets.....			136	62	11	209
Floating traps.....	25		19	62	8	114
Weirs.....	213		6			219
Fyke nets.....	59		52	40	107	258
Dip nets.....	104		61	17		182
Bag nets.....	165					165
Push nets.....			53			53
Pocket nets.....	17					17
Otter trawls.....	36		331	66	132	565
Yards at mouth.....	1,117		9,750	1,824	3,274	15,965
Box traps.....	10		1	4		15
<b>Pots—</b>						
Crab.....	1,635		1,735		160	3,530
Eel.....	440		1,782	2,015	808	5,045
Lobster.....	205,302	2,570	69,249	39,165	16,505	332,791
Periwinkle and cockle.....			1,012	875		1,887
Harpoons, swordfish.....	44	2	107	49	19	221
Spears.....	41		201	37	40	319
<b>Dredges—</b>						
Oyster.....			26	32	242	300
Yards at mouth.....			27	49	241	317
Scallop.....	113		2,877	532		3,522
Yards at mouth.....	157		2,337	414		2,908
Clam.....			78	6		84
Yards at mouth.....			40	4		44
Tongs.....			183	523	144	850
Rakes.....			552	156	30	738
Forks.....	1,598		538	13	64	2,213
Hoes.....	16		610	10	6	642

Fisheries of the New England States, 1930—Continued

CATCH: BY STATES

Species	Maine		New Hampshire		Massachusetts		Rhode Island		Connecticut		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>												
Albacore							34,759	\$703			34,750	\$703
Alewives	2,129,495	\$17,369			1,789,846	\$17,630	186,050	1,693	1,000	\$30	4,106,391	\$6,722
Bluefish	200	19			210,307	20,752	243,295	29,516	251,651	32,670	705,453	82,957
Bonito					82,417	6,519	57,439	4,221	116	13	139,972	10,753
Butterfish	112,140	14,891			855,113	72,167	901,120	48,717	36,179	3,773	1,904,552	139,548
Carp					2,976	59			17,095	1,946	20,971	2,005
Catfish and bullheads	15,425	158			102,125	2,382					117,550	2,540
Cod	13,483,964	356,731	157,800	\$3,945	77,522,224	2,358,348	1,552,952	64,819	8,915,229	259,169	101,632,169	3,043,012
Croaker					140,005	5,600			10,780	434	150,785	6,034
Cunners					18,735	574	87,600	2,496			106,335	3,070
Cusk	1,353,983	28,555	7,890	117	4,713,076	103,549			65,241	960	6,140,190	133,181
Dolphin									138	8	138	8
Eels	241,975	22,213			479,065	44,466	495,152	47,234	138,729	18,097	1,354,921	131,920
Flounders	1,949,966	88,889	15,780	473	31,334,909	1,262,638	4,700,571	146,972	11,164,206	364,478	49,165,432	1,863,450
Frigate mackerel					384,661	17,921					384,661	17,921
Goosefish					200	3					200	3
Grayfish					84,296	2,882	8,900	167			93,196	3,049
Haddock	12,508,138	371,773	394,000	15,780	202,687,789	6,441,249	886,328	30,121	48,072,674	1,672,619	264,544,929	8,531,542
Hake	11,685,397	116,335	78,900	1,174	19,240,569	412,058	62,860	1,724	1,137,702	25,212	32,205,428	556,503
Halibut	103,344	17,708	300	45	2,880,444	445,638			182,910	33,472	3,166,998	496,863
Herring, sea	73,938,780	385,712	60,000	450	8,687,049	113,467	214,711	3,067			82,900,540	502,696
Hickory shad							4,019	85			4,019	85
King whiting or "kingfish"					200	21					200	21
Launce					182,926	4,384					182,926	4,384
Mackerel	3,012,157	118,038	100,000	4,000	45,531,276	1,569,658	1,411,571	51,650	615,626	24,366	50,700,630	1,767,718
Menhaden							132,160	1,039	1,575,660	15,862	1,707,820	16,901
Minnnows					6,000	1,200			30,035	2,722	36,035	3,922
Mullet							8,392	298			8,392	298
Mummichog									7,134	713	7,134	713
Pike or pickerel									275	41	275	41
Pollock	2,045,142	28,616	39,450	562	15,014,676	261,472	174,926	2,495	545,366	12,519	17,819,560	305,664
Rosefish	3,845	34			109,857	2,189			3,528	25	117,230	2,248
Salmon	88,295	27,265			55	10					88,340	27,275
Scup or porgy					792,008	35,798	1,645,590	76,273	285,452	5,697	2,723,050	117,768
Sea bass	141,587	9,377			141,587	9,377	35,734	2,161	14,253	2,103	191,574	13,641
Sea robin					100	1	193,928	2,360	41,056	207	235,084	2,568
Shad	88,635	1,801			54,149	2,941	4,303	701	53,942	10,095	201,029	15,638

Sharks	41,010	1,039			49,069	976	12,980	216		103,059	2,231	
Skates					51,803	816	680,350	6,517	283,833	1,015,986	9,685	
Skipper or "billfish"							6,068	1,248	2,352	6,068	1,248	
Smelt	720,708	126,399	8,000	1,600	6,250	2,719	50,975	7,680	9,900	795,833	140,521	
Spearfish	94	11								94	11	
Squeteagues or "sea trout":												
Gray					1,238	149	141,145	15,416	43,252	3,822	185,635	
Spotted					1,246	221					1,246	
Striped bass					27,385	6,099	59,817	10,870	1,638	185	88,840	
Sturgeon	440	66			7,745	1,015	1,234	197			9,419	
Suckers	36,859	2,949					7,600	152	69,020	5,263	113,479	
Swordfish	572,519	93,214			3,728,333	657,593	609,899	90,109	224,296	35,668	5,135,047	
Tautog					109,710	6,758	309,635	15,142	135,545	10,087	554,890	
Tilefish									1,783,456	97,068	1,783,456	
Tomcod	51,252	897					22,600	302	200	60	74,052	
Tuna or "horse-mackerel"	140,918	6,873	2,700	162	66,066	5,223	24,180	1,901	5,400	324	239,264	
White perch					450	45	49,700	5,038			50,150	
Whiting	40,630	228			7,902,288	81,719	1,917,287	26,442	2,500	10	9,862,705	
Wolffish	69,470	883	23,670	473	2,520,991	51,970			36,856	501	2,650,987	
Yellow perch	388	45							700	105	1,088	
<b>Total</b>	<b>124,465,169</b>	<b>1,828,711</b>	<b>888,490</b>	<b>28,781</b>	<b>427,521,214</b>	<b>14,030,256</b>	<b>16,935,860</b>	<b>699,748</b>	<b>75,763,473</b>	<b>2,644,709</b>	<b>645,574,206</b>	<b>19,232,205</b>
<b>SHELLFISH, ETC.</b>												
Crabs, hard	1,123,353	33,780			458,298	86,280	166,562	5,256	203,528	4,056	1,951,741	129,372
Lobsters	7,750,682	2,007,343	180,587	40,363	2,338,234	625,946	1,353,107	313,550	734,712	230,266	12,357,322	3,217,468
Shrimp					4,800	3,600					4,800	3,600
Squid	119,140	1,185			3,830,006	68,922	1,545,902	41,876	10,700	225	5,505,748	112,208
Clams:												
Cockle	4,206	210			24,570	4,715					28,776	4,925
Hard, public <sup>1</sup>					1,889,704	477,010	1,626,427	317,874	17,428	8,584	3,533,559	803,468
Hard, private <sup>1</sup>					66,000	7,149	222,448	47,505			288,448	54,654
Razor					380,266	20,476					380,266	20,476
Soft, public <sup>2</sup>	9,648,588	341,612			3,273,652	275,934	28,440	6,442	71,730	12,989	13,022,410	636,977
Soft, private <sup>2</sup>	276,080	7,364									276,080	7,364
Surf or skimmer					38,275	3,750					38,275	3,750
Mussels, sea					10,800	2,100					10,800	2,100
Oysters:												
Market, public, spring <sup>3</sup>					770	200	8,944	2,650	5,135	1,745	14,849	4,595
Market, public, fall <sup>3</sup>							9,079	2,670	21,741	3,825	30,820	6,495
Market, private, spring <sup>3</sup>					222,175	100,411	1,531,592	339,887	3,032,230	423,439	4,785,997	863,737
Market, private, fall <sup>3</sup>					211,569	90,039	1,832,128	392,709	2,556,605	389,525	4,600,302	872,273

<sup>1</sup> Statistics on hard clams used in this table are based on yields of 11 pounds of meats per bushel in Massachusetts and Rhode Island, and 8 pounds in Connecticut. In reports for previous years all hard clams in these States have been computed on the basis of a uniform yield of 8 pounds of meats to the bushel.

<sup>2</sup> Statistics on soft clams used in this table are based on yields of 17 pounds of meats per bushel in Maine, Massachusetts, and Rhode Island; and 15 pounds in Connecticut. In reports for previous years, all soft clams in these States have been computed on the basis of a uniform yield of 10 pounds of meats to the bushel.

<sup>3</sup> Statistics on market oysters used in this table are based on yields of 8.8 pounds of meats per bushel in Massachusetts, 8 pounds in Rhode Island, and 7.5 pounds in Connecticut. In reports for previous years, all market oysters have been computed on the basis of a uniform yield of 7 pounds of meats to the bushel.

Fisheries of the New England States, 1930 - Continued

CATCH: BY STATES—Continued

Species	Maine		New Hampshire		Massachusetts		Rhode Island		Connecticut		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>SHELLFISH, ETC.—continued</b>												
Oysters—Continued.												
Seed, public, spring †							6,023	\$1,002	518,805	\$72,405	524,828	\$73,407
Seed, public, fall †					31,500	\$2,250	361	47	805,406	92,308	837,267	94,605
Seed, private, spring †					115,808	6,886	298,500	40,750	3,709,741	556,963	4,124,049	604,599
Seed, private, fall †									561,176	77,542	561,176	77,542
Periwinkles					17,442	3,887	312,210	34,680			329,652	38,567
Scallops:												
Bay					1,435,144	396,565	94,310	40,624			1,529,454	437,189
Sea	436,416	\$109,201			510,738	77,122					947,154	186,323
Irish moss					93,000	5,580					93,000	5,580
Total	19,358,465	2,500,695	180,587	\$40,363	14,952,751	2,258,822	9,036,033	1,587,522	12,248,937	1,873,872	55,776,773	8,261,274
Grand total	143,823,634	4,329,406	1,069,077	69,144	442,473,965	16,289,078	25,971,893	2,287,270	88,012,410	4,518,581	701,350,979	27,493,479

† Statistics on seed oysters, public and private, used in this table are based on yields of 7 pounds of meats to the bushel, the same as in previous reports.

## Fisheries of the New England States, 1930—Continued

## PRODUCTION OF CERTAIN SHELLFISH IN NUMBERS AND BUSHELS

Product	Maine		Massachusetts		Rhode Island		Connecticut		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Crabs, hard.....number.....	3,370,058	\$33,780	1,374,894	\$86,280	499,686	\$5,256	610,584	\$4,056	5,855,223	\$129,372
Clams:										
Cockle.....bushels.....	421	210	1,365	4,715	-----	-----	-----	-----	1,786	4,925
Hard, public.....do.....	-----	-----	17,791	477,010	147,857	317,874	2,179	8,584	321,827	803,468
Hard, private.....do.....	-----	-----	6,000	7,149	20,223	47,505	-----	-----	26,223	54,654
Razor.....do.....	-----	-----	7,042	20,476	-----	-----	-----	-----	7,042	20,476
Soft, public.....do.....	567,564	341,612	192,568	275,934	1,673	6,442	4,782	12,989	766,587	636,977
Soft, private.....do.....	16,240	7,364	-----	-----	-----	-----	-----	-----	16,240	7,364
Surf or skimmer.....bushels.....	-----	-----	3,190	3,750	-----	-----	-----	-----	3,190	3,750
Mussels.....do.....	-----	-----	1,080	2,100	-----	-----	-----	-----	1,080	2,100
Oysters:										
Market, public, spring.....bushels.....	-----	-----	88	200	1,118	2,650	685	1,745	1,891	4,595
Market, public, fall.....bushels.....	-----	-----	-----	-----	1,135	2,670	2,900	3,825	4,035	6,495
Market, private, spring.....bushels.....	-----	-----	25,247	100,411	191,449	339,887	404,459	423,439	621,155	863,737
Market, private, fall.....bushels.....	-----	-----	24,042	90,039	229,016	392,709	341,017	389,525	594,075	872,273
Seed, public, spring.....bushels.....	-----	-----	-----	-----	860	1,002	74,115	72,405	74,975	73,407
Seed, public, fall.....bushels.....	-----	-----	4,500	2,250	52	47	115,058	92,308	119,610	94,605
Seed, private, spring.....bushels.....	-----	-----	16,544	6,886	42,643	40,750	529,963	556,963	589,150	604,599
Seed, private, fall.....bushels.....	-----	-----	-----	-----	-----	-----	80,168	77,542	80,168	77,542
Periwinkles.....do.....	-----	-----	969	3,887	17,345	34,680	-----	-----	18,314	38,567
Scallops:										
Bay.....do.....	-----	-----	239,191	396,565	15,718	40,624	-----	-----	254,909	437,189
Sea.....do.....	72,736	109,201	85,123	77,122	-----	-----	-----	-----	157,859	186,323

## Industries related to the fisheries of the New England States, 1930

Item	Maine	New Hampshire	Massachusetts	Rhode Island	Connecticut	Total
Transporting:						
Persons engaged—						
On vessels.....	Number 239	Number 3	Number 30	Number 19	Number 72	Number 363
On boats.....	1	-----	-----	-----	-----	1
Total.....	240	3	30	19	72	364
Vessels—						
Steam.....	-----	-----	-----	-----	3	3
Net tonnage.....	-----	-----	-----	-----	150	150
Motor.....	115	1	12	6	13	147
Net tonnage.....	1,260	16	199	55	305	1,835
Total vessels.....	115	1	12	6	16	150
Total net tonnage.....	1,260	16	199	55	455	1,985
Boats.....	1	-----	-----	-----	-----	1
Wholesale and manufacturing—						
Establishments.....	187	3	193	34	33	450
Persons engaged—						
Proprietors.....	214	5	77	28	40	364
Salaried employees.....	155	-----	762	58	53	1,028
Wage earners—						
Average for season.....	5,888	9	2,734	328	903	9,862
Average for year.....	1,814	8	2,429	218	694	5,153
Salaries and wages paid.....	\$1,822,209	\$17,780	\$5,192,823	\$372,328	\$1,050,320	\$8,455,460
Manufactured products <sup>1</sup> .....	\$6,877,816	( <sup>2</sup> )	\$15,869,420	\$1,291,225	\$2,716,889	\$26,755,350
Fishermen's manufactured products:						
Persons engaged.....	355	-----	3,325	467	-----	4,147
Products.....	\$133,956	-----	\$691,678	\$37,331	-----	\$862,965

<sup>1</sup> These production figures are not comparable with those shown in previous bulletins since packaged fresh and frozen fishery products are now included.

<sup>2</sup> Included with Maine.

NOTE.—Of the total number of persons employed on transporting, craft, 8 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 2,950 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## MAINE

## Fisheries of Maine, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets			Lines		Floating traps
	Mack-erel	Other		Anchor	Drift	Stake	Hand	Trawl	
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....	97	95	2	37	6		12	190	
On boats and shore—									
Regular.....	38	19	164	136	8		532	839	32
Casual.....			3	59	7	5	686		8
Total.....	135	114	169	232	21	5	1,230	1,029	35
Vessels:									
Motor—									
5 to 10 tons.....	9	16	1	5			5	8	
11 to 20 tons.....	5	5		2				7	
21 to 30 tons.....		1						2	
31 to 40 tons.....	1							2	
41 to 50 tons.....		1							
51 to 60 tons.....								2	
Total.....	15	23	1	7			5	21	
Net tonnage.....	174	242	9	67			32	410	
Sail—									
10 to 20 tons.....	1				1			1	
Net tonnage.....	19				19			19	
Total vessels.....	16	23	1	7	1		5	22	
Total net tonnage.....	193	242	9	67	19		32	429	
Boats:									
Motor.....	14	5	77	71	4	1	303	581	17
Other.....	14	6	79	59	4	5	157	162	3
Accessory boats.....	22	29	1				1	138	
Apparatus:									
Number.....	31	28	78	1,415	74	105	4,375	33,050	25
Length, yards.....	7,994	6,724	10,026						
Square yards.....				209,750	11,681	4,725			
Hooks, baits, or snoods.....							4,403	1,629,100	

Item	Weirs	Fyke nets	Dip nets	Bag nets	Pocket nets	Otter trawls	Box traps	Pots		
								Crab	Eel	Lob-ster
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:										
On vessels.....						39				10
On boats and shore—										
Regular.....	246		6	33		61		37	13	2,138
Casual.....	83	13	98	60	6		10		11	2
Total.....	329	13	104	93	6	100	10	37	24	2,150
Vessels:										
Motor—										
5 to 10 tons.....						7				5
11 to 20 tons.....						3				
Total.....						10				5
Net tonnage.....						92				27
Boats:										
Motor.....	136	1		15	2	30		28	2	1,804
Other.....	182	12		58	4	4	2	10	22	849
Apparatus:										
Number.....	213	59	104	165	17	36	10	1,635	440	205,302
Yards at mouth.....						1,117				

Fisheries of Maine, 1930—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Harpoons, swordfish	Spears	Dredges, scallop	Forks	Hoes	By hand	Total, exclusive of duplication
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	179		21				439
On boats and shore—							
Regular.....	54	4	109	1,605	16		3,760
Casual.....		37		28		1	952
<b>Total.....</b>	<b>233</b>	<b>41</b>	<b>130</b>	<b>1,633</b>	<b>16</b>	<b>1</b>	<b>5,151</b>
<b>Vessels:</b>							
<b>Motor—</b>							
5 to 10 tons.....	3		5				49
11 to 20 tons.....	7		2				21
21 to 30 tons.....	2						3
31 to 40 tons.....	2						2
41 to 50 tons.....							1
51 to 60 tons.....	2						2
<b>Total.....</b>	<b>16</b>		<b>7</b>				<b>78</b>
Net tonnage.....	374		65				962
<b>Sail—</b>							
10 to 20 tons.....	1						1
Net tonnage.....	19						19
<b>Total vessels.....</b>	<b>17</b>		<b>7</b>				<b>79</b>
<b>Total net tonnage.....</b>	<b>393</b>		<b>65</b>				<b>981</b>
<b>Boats:</b>							
Motor.....	27	1	94	224			2,166
Other.....		40	7	581	3		1,726
Necessary boats.....	14						189
<b>Apparatus:</b>							
Number.....	44	41	113	1,598	16		248,974
Yards at mouth.....			157				

CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets			
	Mackerel		Other				Anchor		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Wives.....	135,000	\$4,000					47,516	\$660		
Starfish.....	1,300	39								
Sk.....							2,996,823	93,208		
Under.....							17,890	354		
Dock.....							4,992	97		
Ke.....							910,435	23,931		
Libut.....							334,677	6,054		
Ring, sea.....	6,381,032	62,546	32,602,280	\$169,471	2,561,391	\$13,873	238	29		
ckerel.....	1,900,205	74,198	150,000	7,200			3,065	61	25,000	\$214
lock.....	143	3	65,810	658			349,900	14,140	89,462	3,282
mon.....	43	7					986,627	14,357		
ad.....	54,026	816	1,500	30			15,152	4,826	600	180
arks.....							1,720	121	29,800	808
elts.....	2,500	375					34,189	871		
urgeon.....							82,797	15,851		
ncod.....							190	16	250	50
iting.....	12,000	60								
iffish.....										
bsters.....							67	1		
							36	15		
<b>Total.....</b>	<b>8,486,249</b>	<b>142,044</b>	<b>32,819,590</b>	<b>177,359</b>	<b>2,841,413</b>	<b>58,513</b>	<b>5,786,314</b>	<b>174,622</b>	<b>145,112</b>	<b>4,534</b>



## Fisheries of Maine, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Gill nets— Stake		Lines				Floating traps		Weirs	
			Hand		Trawl					
			Pounds	Value	Pounds	Value				
Alewives.....										
Bluefish.....							200	\$19	630,833	\$5,65
Butterfish.....							110,840	14,852		
Catfish and bull- heads.....					15,425	\$158				
Cod.....			1,798,906	\$41,085	7,905,720	202,487				
Cusk.....			16,975	173	1,312,165	27,957				
Eels.....					15,640	1,564				
Flounders.....					57,739	1,578				
Haddock.....			1,250,936	32,705	9,500,613	294,998				
Hake.....			1,250,419	12,061	9,833,249	95,654				
Halibut.....			15,647	2,729	87,330	14,929				
Herring, sea.....							1,474,000	9,766	30,892,012	129,78
Mackerel.....							546,590	18,918	6,000	30
Pollock.....			498,713	6,513	493,255	7,046				
Rosefish.....					3,845	34				
Salmon.....	9,000	\$2,700					8,958	2,381	50,512	15,70
Shad.....							1,589	26		
Sharks.....					5,121	123	1,500	41		
Smelts.....	7,334	1,100	207,270	38,392			150	23	6,124	1,14
Whiting.....							28,630	168		
Wolfish.....					67,447	861				
Squid.....							119,140	1,185		
Total.....	16,334	3,800	5,036,866	133,658	29,297,549	647,389	2,291,597	47,379	31,585,481	152,63

Species	Fyke nets		Dip nets		Bag nets		Pocket nets		Otter trawls	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			1,316,146	\$7,059					784,515	\$19,95
Cod.....									6,953	7
Cusk.....									8,000	24
Eels.....	1,595	\$160	8,640	864					1,887,235	87,21
Flounders.....									846,154	20,13
Haddock.....									267,052	2,56
Hake.....									594	2
Halibut.....										
Pollock.....										
Salmon.....			4,030	1,411						
Sharks.....									200	
Smelts.....			19,000	2,900	125,213	\$21,978	1,550	\$293		
Suckers.....	36,859	2,949								
Tomcod.....					40,000	600				
Wolfish.....									1,956	1
Yellow perch.....	388	45								
Total.....	38,842	3,154	1,347,816	12,234	165,213	22,578	1,550	293	3,802,788	130,22

Species	Box traps		Pots						Harpoons, swordfish			
			Crab		Eel		Lobster					
			Pounds	Value	Pounds	Value	Pounds	Value			Pounds	Value
Eels.....	31,875	\$4,232			139,680	\$10,442						
Spearfish.....										94	\$	
Swordfish.....										572,519	93,2	
Tuna or "horse mack- erel".....										140,918	6,8	
Crabs, hard.....			991,353	\$29,390			132,000	\$4,390				
Lobsters.....			14,771	4,654			7,735,875	2,002,674				
Total.....	31,875	4,232	1,006,124	34,044	139,680	10,442	7,867,875	2,007,064		713,531	100,0	

Species	Spears		Dredges, scallop		Forks		Hoos		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....	36,545	4,711								
Clams:										
Cockle.....									4,206	\$2
Soft, public.....					9,457,338	\$334,862	191,250	\$6,750		
Soft, private.....					276,080	7,364				
Scallops, sea.....			436,416	\$109,201						
Total.....	36,545	4,711	436,416	109,201	9,733,418	342,226	191,250	6,750	4,206	2



## Fisheries of Maine, 1930—Continued

## CATCH: BY COUNTIES

Species	Cumberland		Hancock		Kennebec	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			501, 016	\$3, 878		
Bluefish.....	200	\$19				
Butterfish.....	26, 540	2, 608				
Catfish and bullheads.....	15, 425	158				
Cod.....	4, 316, 774	142, 726	3, 302, 790	69, 408		
Cusk.....	860, 739	19, 947	140, 517	1, 700		
Eels.....	23, 000	1, 740	30, 075	2, 208	1, 520	\$15
Flounders.....	442, 043	11, 048	872, 249	58, 577		
Haddock.....	4, 911, 785	171, 963	2, 337, 586	50, 559		
Hake.....	2, 741, 367	44, 739	5, 543, 920	38, 791		
Halibut.....	19, 203	3, 263	29, 308	4, 865		
Herring, sea.....	12, 795, 175	80, 107	10, 440, 248	44, 666		
Mackerel.....	1, 120, 486	36, 706				
Pollock.....	1, 223, 166	17, 548	342, 832	3, 980		
Rosefish.....	3, 845	34				
Salmon.....	1, 971	418	35, 092	11, 128		
Shad.....	60, 604	978				
Sharks.....	41, 010	1, 039				
Smelts.....	92, 467	14, 321	170, 443	34, 374		
Spearfsh.....	94	11				
Sturgeon.....	190	16				
Suckers.....					21, 314	1, 708
Swordfish.....	571, 853	93, 134				
Tomcod.....	11, 252	297				
Tuna or "horse mackerel".....	59, 511	2, 656				
Whiting.....	28, 630	168				
Wolfish.....	51, 710	686				
Crabs, hard.....	766, 853	22, 961	1, 000	10		
Lobsters.....	1, 051, 067	298, 211	1, 915, 824	474, 327		
Squid.....	34, 040	340				
Clams:						
Soft, public.....	1, 741, 208	96, 683	2, 425, 084	59, 865		
Soft, private.....			19, 040	560		
Scallops, sea.....	4, 800	1, 800	135, 798	52, 292		
Total.....	33, 017, 008	1, 066, 323	28, 242, 822	911, 188	22, 834	1, 857

Species	Knox		Lincoln		Penobscot	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	577, 716	\$3, 091	750, 500	\$7, 978		
Butterfish.....			10, 600	1, 060		
Cod.....	2, 267, 003	51, 340	1, 171, 903	27, 975		
Cusk.....	130, 165	2, 804	111, 851	2, 197		
Eels.....	24, 700	3, 445	3, 400	336	200	\$1
Flounders.....	596, 315	17, 458	37, 018	1, 736		
Haddock.....	2, 734, 758	79, 924	684, 145	17, 602		
Hake.....	1, 712, 896	15, 932	864, 102	8, 661		
Halibut.....	14, 839	2, 533	6, 663	1, 251		
Herring, sea.....	9, 069, 902	49, 136	7, 315, 260	65, 159		
Mackerel.....	168, 643	8, 781	1, 116, 428	49, 533		
Pollock.....	175, 945	2, 542	91, 170	1, 360		
Salmon.....			1, 250	333	17, 952	5, 088
Shad.....	19, 400	291	7, 900	459		
Smelts.....	140, 537	21, 304	48, 533	7, 790	29, 099	4, 36
Suckers.....			5, 045	404		
Swordfish.....	666	80				
Tuna or "horse mackerel".....			19, 680	1, 181		
Whiting.....	12, 000	60				
Wolfish.....	2, 283	23	550	7		
Yellow perch.....			138	17		
Crabs, hard.....	10, 000	500	323, 000	10, 140		
Lobsters.....	1, 998, 295	532, 974	917, 498	235, 964		
Squid.....			22, 100	221		
Clams:						
Soft, public.....	743, 002	26, 077	903, 652	30, 011		
Soft, private.....			257, 040	6, 804		
Scallops, sea.....	270, 702	52, 219				
Total.....	20, 669, 767	870, 514	14, 669, 426	478, 179	47, 251	9, 47

## Fisheries of Maine, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Sagadahoc		Waldo		Washington		York	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Lawwives.....	82,000	\$656	6,665	\$200	211,598	\$1,566	-----	-----
Butterfish.....	75,000	11,225	-----	-----	-----	-----	-----	-----
Cod.....	548,080	16,079	51,000	1,230	1,188,792	28,613	637,622	\$19,360
Husk.....	12,790	255	-----	-----	34,507	345	63,414	1,307
Wels.....	46,305	2,631	39,900	3,191	24,725	3,677	48,150	4,815
Flounders.....	-----	-----	-----	-----	-----	-----	2,341	70
addock.....	190,870	5,721	23,665	710	798,912	18,808	826,417	26,486
ake.....	117,500	1,175	32,750	655	466,423	3,512	206,439	2,870
allbut.....	2,400	360	-----	-----	26,313	4,731	4,618	705
erring, sea.....	1,725,000	10,870	136,500	615	32,396,695	134,559	60,000	600
ackerel.....	272,400	8,940	6,000	300	-----	-----	358,200	13,778
ollock.....	32,400	324	-----	-----	111,406	1,926	68,223	936
almon.....	1,950	488	22,750	7,114	7,330	2,696	-----	-----
had.....	-----	-----	-----	-----	731	73	-----	-----
melts.....	68,650	13,258	82,133	12,605	82,181	17,382	6,665	1,000
turgeon.....	250	50	-----	-----	-----	-----	-----	-----
uckers.....	10,500	840	-----	-----	-----	-----	-----	-----
omcod.....	-----	-----	40,000	600	-----	-----	-----	-----
una or "horse mack- erej".....	56,927	2,748	-----	-----	-----	-----	4,800	288
Wolfish.....	-----	-----	-----	-----	-----	-----	14,927	167
ellow perch.....	250	28	-----	-----	-----	-----	-----	-----
Crabs, hard.....	-----	-----	-----	-----	22,500	169	-----	-----
obsters.....	182,422	47,875	8,957	2,801	1,372,652	328,936	303,967	86,255
quid.....	63,000	624	-----	-----	-----	-----	-----	-----
Clams: Cockle.....	-----	-----	-----	-----	4,206	210	-----	-----
Soft, public.....	405,960	16,003	35,020	2,840	2,874,462	79,533	520,200	30,600
callops, sea.....	-----	-----	-----	-----	25,116	2,890	-----	-----
<b>Total.....</b>	<b>3,894,654</b>	<b>140,150</b>	<b>485,340</b>	<b>32,862</b>	<b>39,648,549</b>	<b>629,626</b>	<b>3,125,983</b>	<b>189,237</b>

## Industries related to the fisheries of Maine, 1930

## TRANSPORTING

Item	Cumber- land County	Hancock County	Knox County	Washing- ton County	Total
Persons engaged:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On transporting vessels.....	22	23	18	176	239
On transporting boats.....	-----	-----	-----	1	1
<b>Total.....</b>	<b>22</b>	<b>23</b>	<b>18</b>	<b>177</b>	<b>240</b>
Vessels:					
Motor--					
5 to 10 tons.....	9	7	6	43	65
11 to 20 tons.....	2	4	3	33	42
21 to 30 tons.....	-----	-----	-----	6	6
31 to 40 tons.....	-----	-----	-----	1	1
41 to 50 tons.....	-----	-----	-----	1	1
<b>Total.....</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>84</b>	<b>115</b>
Net tonnage.....	96	111	79	974	1,260
Boats.....	-----	-----	-----	1	1

## Industries related to the fisheries of Maine, 1930—Continued

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Cum-berland County	Han-cock County	Knox County	Lin-coln County	Penob-scot, Sagu-dahoc, and York Counties	Wash-ington County	Total
Establishments	29	29	33	13	4	79	187
Persons engaged:							
Proprietors	43	32	29	12	5	93	214
Salaried employees	59	9	24	7	1	54	154
Wage earners							
Average for season	1,428	614	474	209	21	3,143	5,809
Average for year	440	199	170	98	21	893	1,614
Paid to salaried employees	\$153,317	\$31,126	\$74,971	\$8,877	\$7,900	\$128,022	\$404,123
Paid to wage earners	399,505	177,959	145,919	78,788	34,005	581,900	1,418,086
Total salaries and wages	552,822	209,085	220,890	87,665	41,905	709,922	1,822,209

PRODUCTS MANUFACTURED<sup>1</sup>

Item	Quantity	Value
Alewives, salted	pounds	582,400
Cod		
Fresh sticks	do	290,390
Salted	do	1,477,124
Fish cakes, canned	standard cases	9,051
Oil, cod-liver	gallons	33,904
Cusk		
Fresh sticks	pounds	150,490
Salted	do	85,299
Flounders, fresh fillets	do	8,960
Haddock		
Fresh sticks	do	183,470
Fresh fillets	do	504,988
Frozen fillets	do	568,349
Salted	do	121,367
Finnan haddie	do	178,900
Smoked fillets	do	193,150
Hake		
Fresh sticks	do	214,000
Fresh fillets	do	39,605
Salted	do	3,195,722
Herring, sea		
Smoked		
Blotners	do	1,639,445
Boneless	do	1,387,750
Lengthwise	do	127,794
Medium-sized	do	265,086
Miscellaneous	do	54,447
Canned, "sardines"	standard cases	1,399,212
Meal	tons	2,126
Scrap, dry pomace	do	3,736
Oil	gallons	125,242
Scales	pounds	81,153
Pollock, salted	do	173,067
Soft clams:		
Canned		
Whole	standard cases	95,203
Chowder	do	56,926
Juice and bouillon	do	16,388
Unclassified products:		
Fresh and frozen <sup>2</sup>	pounds	173,113
Salted <sup>3</sup>	do	290,391
Smoked <sup>4</sup>	do	75,397
Canned <sup>5</sup>	standard cases	44,955
Meal, ground fish	tons	896
By-products <sup>6</sup>	(?)	148,750
Total		6,877,816

<sup>1</sup> Includes a small quantity of fish smoked in Rockingham County, N. H.<sup>2</sup> Includes fresh cod and cusk fillets; frozen cod, cusk, flounders, hake, and wolffish fillets; and frozen hake sticks.<sup>3</sup> Includes salt cod bits, boneless cod, cheeks, tongues and sounds, herring, mackerel fillets, and mackerel split; and pickled herring.<sup>4</sup> Includes smoked cod fillets, cusk fillets, and hake fillets.<sup>5</sup> Includes canned clam cakes, finnan haddie, fish flakes, haddock fillets and smoked herring.<sup>6</sup> Includes glue, herring skins, herring dry scrap, clam meal, tanners' oil, and buttons made from imported shells.<sup>7</sup> Data not available.

## Industries related to the fisheries of Maine, 1930—Continued

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 223]

Item	Quantity	Value
<b>Alewives:</b>		
Salted.....pounds..	322,025	\$8,057
Smoked.....do.....	208,063	6,937
Cod, salted.....do.....	10,407	765
Cusk, salted.....do.....	2,308	92
Hake, salted.....do.....	685	27
Herring, sea, salted.....do.....	9,170	447
Mackerel, salted.....do.....	665	13
Pollock, salted.....do.....	2,665	118
Crab meat, packaged (fresh-cooked).....do.....	15,600	7,800
Scallops, sea, fresh-shucked.....gallons..	57,476	109,700
<b>Total.....</b>		<b>133,956</b>

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 174 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## NEW HAMPSHIRE

 Fisheries of New Hampshire, 1930<sup>1</sup>

OPERATING UNITS: BY GEAR

Item	Purse seines, mackerel	Haul seines	Lines		Pots, lobster	Harpoons, swordfish	Total, exclusive of duplication
			Hand	Trawl			
<b>Fishermen:</b>							
On boats and shore—							
Regular.....	6	3	12	34	4	46	
Casual.....			40			40	
<b>Total.....</b>	<b>6</b>	<b>3</b>	<b>40</b>	<b>12</b>	<b>34</b>	<b>4</b>	<b>86</b>
<b>Boats:</b>							
Motor.....	2	1		6	32	2	38
Other.....	2	1			2		5
<b>Apparatus:</b>							
Number.....	2	1	160	3,600	2,570	2	
Length, yards.....	500	100					
Hooks.....			160	180,000			

## CATCH: BY GEAR

Species	Purse seines		Haul seines		Lines				Pots, lobster		Harpoons, swordfish	
	Lbs.	Value	Lbs.	Value	Lbs.	Value	Lbs.	Value	Lbs.	Value	Lbs.	Value
Cod.....							157,800	\$3,945				
Cusk.....							7,890	117				
Flounders.....							15,780	473				
Haddock.....							394,000	15,780				
Hake.....							78,900	1,174				
Halibut.....							300	45				
Herring, sea.....			60,000	\$450								
Mackerel.....	100,000	\$4,000					39,450	562				
Pollock.....												
Smelt.....					8,000	\$1,600						
Tuna or "horse mackerel".....											2,700	\$162
Wolfish.....							23,670	473				
LOBSTERS.....									180,587	\$40,363		
<b>Total.....</b>	<b>100,000</b>	<b>4,000</b>	<b>60,000</b>	<b>450</b>	<b>8,000</b>	<b>1,600</b>	<b>717,790</b>	<b>22,569</b>	<b>180,587</b>	<b>40,363</b>	<b>2,700</b>	<b>162</b>

<sup>1</sup> The fisheries of New Hampshire are confined to Rockingham County.

## Industries related to the fisheries of New Hampshire, 1930

## TRANSPORTING

Persons engaged on vessels-----	3
Vessels:	
Number-----	1
Net tonnage-----	16

## WHOLESALE AND MANUFACTURING IN ROCKINGHAM COUNTY

## OPERATING UNITS, SALARIES, AND WAGES

Establishments-----	3
Persons engaged:	
Proprietors-----	5
Wage earners <sup>1</sup> -----	9
Paid to salaried employees and wage earners-----	\$17,780

NOTE.—A small amount of smoked fish produced in New Hampshire has been included with Maine to avoid the disclosure of private enterprise.

## MASSACHUSETTS

## Fisheries of Massachusetts, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines			Gill nets		Lines		Pound nets	Floating traps	Weirs
	Mack-erel	Other	Haul seines	Anchor	Drift	Hand	Trawl			
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:										
On vessels-----	1,019			209	681	254	1,243			
On boats and shore—										
Regular-----	74	2	34	70	187	173	535	196	34	8
Casual-----		6	8	2	3	10	1			
Total-----	1,093	8	42	281	871	437	1,779	196	34	8
Vessels:										
Motor—										
5 to 10 tons-----	5			4	7	1	5			
11 to 20 tons-----	33			8	40	6	18			
21 to 30 tons-----	16			9	12	1	1			
31 to 40 tons-----	11				7	1	2			
41 to 50 tons-----	9			1	6		6			
51 to 60 tons-----	9				3	3	10			
61 to 70 tons-----	5				1	4	14			
71 to 80 tons-----						1	7			
81 to 90 tons-----	2					1	3			
91 to 100 tons-----	1						3			
111 to 120 tons-----							2			
121 to 130 tons-----							1			
131 to 140 tons-----							1			
Total-----	91			22	76	18	73			
Net tonnage-----	2,823			433	1,699	729	3,685			
Sail—5 to 10 tons-----						1				
Net tonnage-----						6				
Total vessels-----	91			22	76	19	73			
Total net tonnage-----	2,823			433	1,699	735	3,685			
Boats:										
Motor-----	14	3	8	49	67	118	202	59	13	2
Other-----	15	5	18	41	44	33	24	103	19	4
Accessory boats-----	109				50	9	643			
Apparatus:										
Number-----	105	3	13	2,034	9,461	583	54,956	136	19	6
Length, yards-----	50,098	410	2,225	653,340	3,286,236					
Square yards-----										
Hooks, baits, or snoods-----						849	2,730,464			

<sup>1</sup> Salaried employees are included with wage earners.

## Fisheries of Massachusetts, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Fyke nets	Dip nets	Push nets	Otter trawls	Box traps	Pots				Harpoons, swordfish
						Crab	Eel	Lobster	Periwinkle or cockle	
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>										
On vessels.....				2,410						979
On boats and shore—										
Regular.....	19	110	18	190	5	22	52	635	11	49
Casual.....	8	13	35				7	287		
<b>Total.....</b>	<b>27</b>	<b>123</b>	<b>53</b>	<b>2,600</b>	<b>5</b>	<b>22</b>	<b>59</b>	<b>927</b>	<b>11</b>	<b>1,028</b>
<b>Vessels:</b>										
<b>Steam—</b>										
91 to 100 tons.....				5						
111 to 120 tons.....				6						
121 to 130 tons.....				1						
131 to 140 tons.....				1						
151 to 160 tons.....				1						
171 to 180 tons.....				2						
181 to 190 tons.....				1						
201 to 210 tons.....				1						
211 to 220 tons.....				2						
241 to 250 tons.....				1						
261 to 270 tons.....				1						
<b>Total.....</b>				<b>22</b>						
<b>Net tonnage.....</b>				<b>3,291</b>						
<b>Motor—</b>										
5 to 10 tons.....				25				3		10
11 to 20 tons.....				79						31
21 to 30 tons.....				23						8
31 to 40 tons.....				14						7
41 to 50 tons.....				15						5
51 to 60 tons.....				25						15
61 to 70 tons.....				10						6
71 to 80 tons.....				9						6
81 to 90 tons.....				3						1
91 to 100 tons.....				7						
101 to 110 tons.....				5						
111 to 120 tons.....				13						
131 to 140 tons.....										1
151 to 160 tons.....				1						
161 to 170 tons.....				1						
171 to 180 tons.....				2						
201 to 210 tons.....				1						
<b>Total.....</b>				<b>233</b>				<b>3</b>		<b>90</b>
<b>Net tonnage.....</b>				<b>9,649</b>				<b>21</b>		<b>3,139</b>
<b>Total vessels.....</b>				<b>255</b>				<b>3</b>		<b>90</b>
<b>Total net tonnage.....</b>				<b>12,940</b>				<b>21</b>		<b>3,139</b>
<b>Boats:</b>										
Motor.....	3	27		76		22	37	643	7	17
Other.....	19	11	28		1		26	431	4	29
Accessory boats.....								12		203
<b>Apparatus:</b>										
Number.....	52	61	53	331	1	1,735	1,782	69,249	1,012	107
Yards at mouth.....				9,750						



## Fisheries of Massachusetts, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Spears	Dredges			Tongs	Rakes	Forks	Hoes	By hand	Total, exclusive of duplication
		Clam	Oyster	Scallop						
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:										
On vessels.....		26	11	68		8				4,445
On boats and shore—										
Regular.....	114	123	18	371	137	436	343	322	10	2,859
Casual.....	97		6	464	45	114	195	258	21	1,377
Total.....	211	149	35	903	182	558	538	580	31	8,681
Vessels:										
Steam—										
91 to 100 tons.....										5
111 to 120 tons.....										6
121 to 130 tons.....										1
131 to 140 tons.....										1
151 to 160 tons.....										1
171 to 180 tons.....										2
181 to 190 tons.....										1
201 to 210 tons.....										1
211 to 220 tons.....										2
241 to 250 tons.....										1
261 to 270 tons.....										1
Total.....										22
Net tonnage.....										3,291
Motor—										
5 to 10 tons.....		5	3	8		1				50
11 to 20 tons.....		5	1	7		2				130
21 to 30 tons.....										38
31 to 40 tons.....				1						24
41 to 50 tons.....										25
51 to 60 tons.....										41
61 to 70 tons.....										27
71 to 80 tons.....										17
81 to 90 tons.....										6
91 to 100 tons.....										10
101 to 110 tons.....										5
111 to 120 tons.....										15
121 to 130 tons.....										1
131 to 140 tons.....										1
151 to 160 tons.....										1
161 to 170 tons.....										1
171 to 180 tons.....										2
201 to 210 tons.....										1
Total.....		10	4	16		3				395
Net tonnage.....		92	40	200		30				15,384
Sail—5 to 10 tons.....										1
Net tonnage.....										6
Total vessels.....		10	4	16		3				418
Total net tonnage.....		92	40	200		30				18,681
Boats:										
Motor.....		67	10	556	65	72	16	28		1,669
Other.....	68				112	469	97	248		1,477
Accessory boats.....										979
Apparatus:										
Number.....	201	78	26	2,877	183	552	538	610		
Yards at mouth.....		40	27	2,337						

Fisheries of Massachusetts, 1930—Continued

CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets			
	Mackerel		Other				Anchor		Drift	
	Pounds	Value	Lbs.	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	194,600	\$2,349			879,000	\$8,790				
Bluefish.....					900	108	4,215	\$889	28,000	\$2,800
Butterfish.....	17,130	1,203					2,450	180	500	45
Catfish and bullheads.....							13,200	480		
Cod.....							4,198,601	181,595		
Cusk.....							7,581	136		
Flounders.....							2,595	101		
Haddock.....							1,488,224	49,443		
Hake.....							1,189,261	18,982		
Herring, sea.....	331,660	4,058			2,500	38			6,000	120
Launce.....			80,750	\$1,340	80,000	1,600				
Mackerel.....	38,390,393	1,289,713			23,500	1,175	253,555	12,639	5,106,885	200,604
Pollock.....							8,577,040	132,399		
Sea bass.....									1,000	150
Shad.....	19,001	367			8,000	560	4,588	295	100	8
Sharks.....	1,921	104					9,771	352		
Skates.....							388	25		
Striped bass.....					16,000	3,875				
White perch.....					450	45				
Wolfish.....									112	2
<b>Total.....</b>	<b>38,954,705</b>	<b>1,297,794</b>	<b>80,750</b>	<b>1,340</b>	<b>1,010,350</b>	<b>16,191</b>	<b>15,751,581</b>	<b>397,518</b>	<b>5,142,485</b>	<b>203,727</b>

Species	Lines				Pounds net		Floating traps	
	Hand		Trawl					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....					131,151	\$1,288	4,000	\$55
Bluefish.....	129,175	\$10,940			32,417	3,805	2,935	358
Bonito.....					80,617	6,357		
Butterfish.....			540	\$27	551,879	45,053	56,099	4,954
Carp.....					2,976	59		
Catfish and bullheads.....			24,140	598			385	14
Cod.....	3,361,921	97,077	29,646,776	902,932	42,241	1,384	43,345	1,288
Cusk.....	223,033	5,787	3,755,171	83,591				
Eels.....	3,100	310	81,488	1,640	2,147	172		
Flounders.....	52,380	2,088	2,474,152	110,500	39,793	2,141		
Grayfish.....					56,196	2,370		
Haddock.....	1,513,361	51,554	43,182,335	1,414,691			900	27
Hake.....	228,824	6,712	7,677,567	149,214				
Halibut.....	60,953	10,222	2,140,082	322,505				
Herring, sea.....					2,548,092	29,189	847,672	12,432
King whiting or "Kingfish".....					200	21		
Launce.....							9,676	194
Mackerel.....	23,500	1,445	495	59	1,198,023	42,835	353,908	13,502
Pollock.....	177,943	3,023	1,483,940	26,812	6,073	117	119,010	1,788
Rosefish.....			294	4				
Salmon.....							30	9
Scup or porgy.....	469,370	23,623			176,897	6,603		
Sea bass.....	73,718	6,146			2,760	437		
Sea robin.....					100	1		
Shad.....					21,967	1,688		
Sharks.....					27,815	194		
Skates.....			16,500	330	1,541	42		
Smelt.....	6,200	2,717						
Squeteagues or "sea trout":								
Gray.....					1,238	149		
Spotted.....					1,246	221		
Striped bass.....	4,500	1,150			4,785	612		
Sturgeon.....					695	191		
Swordfish.....	266	62	21,116	4,094				
Tautog.....	77,850	4,895			31,258	1,843		
Tuna or "horse mackerel".....			85	8	58,226	4,520		
Whiting.....					5,349,460	46,793	1,809,440	15,402
Wolfish.....	30,431	646	346,574	8,944				
Squid.....					3,128,549	51,404	367,011	7,460
<b>Total.....</b>	<b>6,436,525</b>	<b>228,397</b>	<b>90,851,255</b>	<b>3,025,949</b>	<b>13,498,342</b>	<b>249,489</b>	<b>3,619,931</b>	<b>57,869</b>

## Fisheries of Massachusetts, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Weirs		Fyke nets		Dip nets		Push nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	3,245	\$4			474,400	\$4,269		
Bluefish.....	12,000	1,800						
Bonito.....	1,800	162						
Butterfish.....	11,525	1,630						
Cod.....	10,711	89						
Eels.....			79,460	\$9,979				
Grayfish.....	27,500	500						
Herring, sea.....	53,625	1,030			4,897,500	66,600		
Mackerel.....	53,449	2,865			100,000	1,800		
Minnnows.....					6,000	1,200		
Striped bass.....	2,100	462						
Tautog.....	602	20						
Tuna or "horse mackerel".....	1,200	120						
Whiting.....	517,703	12,559						
Shrimp.....					4,800	3,600		
Squid.....	334,446	10,058						
Scallops: Bay.....							70,200	\$20,550
Total.....	1,029,906	31,299	79,460	9,979	5,482,700	77,469	70,200	20,550

Species	Otter trawls		Box traps		Pots			
					Crab		Eel	
					Pounds	Value	Pounds	Value
Alewives.....	800	\$28	100,000	\$750				
Bluefish.....	665	52						
Butterfish.....	214,990	19,075						
Catfish and bullheads.....	64,400	1,290						
Cod.....	40,218,629	1,173,983						
Croaker.....	140,005	5,600						
Cunner.....	18,735	574						
Cusk.....	727,291	14,035						
Eels.....	9,670	345					237,850	\$24,254
Flounders.....	28,759,989	1,147,628						
Frigate mackerel.....	384,661	17,921						
Goosefish.....	200	3						
Grayfish.....	600	12						
Haddock.....	156,502,969	4,925,534						
Hake.....	10,144,917	237,150						
Halibut.....	679,409	112,911						
Launce.....							12,500	1,250
Mackerel.....	27,568	3,021						
Pollock.....	4,650,670	97,333						
Rosefish.....	109,563	2,185						
Salmon.....	25	1						
Scup or porgy.....	145,741	5,572						
Sea bass.....	64,109	2,644						
Shad.....	493	23						
Sharks.....	8,783	287						
Skates.....	33,374	419						
Smelt.....	50	2						
Sturgeon.....	7,050	824						
Swordfish.....	18,515	3,008						
Tuna or "horse mackerel".....	1,035	189						
Whiting.....	225,685	6,965						
Wolfish.....	2,143,874	42,378						
Crabs, hard.....					396,400	\$74,350		
Total.....	245,304,465	7,820,992	100,000	750	396,400	74,350	250,350	25,504

Fisheries of Massachusetts, 1930—Continued

CATCH: BY GEAR—Continued

Species	Pots				Harpoons, sword-fish		Spears	
	Lobster		Periwinkle or cockle					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....					2,650	\$97		
Eels.....							65,350	\$7,766
Flounders.....							6,000	180
Sharks.....					779	39		
Swordfish.....					3,688,436	650,429		
Crabs, hard.....	61,898	\$11,930						
Lobsters.....	2,338,234	625,946						
Clams, cockle.....			9,450	\$1,975				
Periwinkles.....			14,742	3,587				
Total.....	2,400,132	637,876	24,192	5,562	3,691,865	650,565	71,350	7,946

Species	Dredges						Tongs	
	Clam		Oyster		Scallop			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:								
Cockle.....					11,700	\$1,950		
Hard, public.....	906,712	\$182,847					149,560	\$43,250
Hard, private.....	14,400	3,000					3,600	2,049
Surf or skimmer.....					1,600	350		
Mussels.....					10,800	2,100		
Oysters:								
Market, public, spring.....							700	200
Market, private, spring.....			103,188	\$45,262	9,625	3,750	108,762	51,999
Market, private, fall.....			82,105	33,519	5,396	1,750	116,374	51,770
Seed, private, spring.....			63,000	4,500	38,808	1,386	14,000	1,000
Seed, public, fall.....							31,500	2,250
Periwinkles.....					2,700	300		
Scallops:								
Bay.....					1,351,444	372,265		
Sea.....					510,738	77,122		
Total.....	921,112	185,847	245,893	83,281	1,942,805	460,973	424,566	151,918

Species	Rakes		Forks		Hoes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:								
Cockle.....							3,420	\$790
Hard, public.....	833,432	\$250,913						
Hard, private.....	48,000	2,100						
Razor.....					380,266	\$20,476		
Soft public.....			1,794,992	\$145,327	1,478,660	130,607		
Surf or skimmer.....					31,875	2,200	4,800	1,200
Oysters, market, private, fall.....	7,700	3,000						
Scallops, bay.....							13,500	3,750
Irish moss.....	93,000	5,580						
Total.....	982,132	261,593	1,794,992	145,327	1,890,801	153,283	21,720	5,740

## Fisheries of Massachusetts, 1930—Continued

## OPERATING UNITS: BY COUNTIES

Item	Barnstable	Bristol	Dukes	Essex	Nantucket	Norfolk	Plymouth	Suffolk
	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>								
On vessels.....	132	185	37	1,977	76		5	2,033
On boats and shore—								
Regular.....	898	274	170	633	57	67	256	504
Casual.....	321	94	75	337	61	58	331	100
Total.....	1,351	553	282	2,947	194	125	592	2,637
<b>Vessels:</b>								
<b>Steam—</b>								
91 to 100 tons.....								5
111 to 120 tons.....								6
121 to 130 tons.....								1
131 to 140 tons.....								1
151 to 160 tons.....								1
171 to 180 tons.....								2
181 to 190 tons.....				1				
201 to 210 tons.....								1
211 to 220 tons.....								2
241 to 250 tons.....								1
261 to 270 tons.....								1
Total.....				1				21
Net tonnage.....				184				3,107
<b>Motor—</b>								
5 to 10 tons.....	13	5	3	8	8		3	10
11 to 20 tons.....	11	5	3	40	12			59
21 to 30 tons.....		5	1	18	1			13
31 to 40 tons.....		5		12				7
41 to 50 tons.....		4		14				7
51 to 60 tons.....		1		25				15
61 to 70 tons.....	1			15				11
71 to 80 tons.....				13				4
81 to 90 tons.....				3				3
91 to 100 tons.....				6				4
101 to 110 tons.....				1				4
111 to 120 tons.....				3				12
121 to 130 tons.....								1
131 to 140 tons.....								1
151 to 160 tons.....								1
161 to 170 tons.....								1
171 to 180 tons.....								2
201 to 210 tons.....								1
Total.....	25	25	7	158	21		3	156
Net tonnage.....	327	662	97	6,815	233		25	7,225
<b>Sail, 5 to 10 tons.....</b>	1							
Net tonnage.....	6							
<b>Total vessels.....</b>	26	25	7	159	21		3	177
Total net tonnage.....	333	662	97	6,999	233		25	10,332
<b>Boats:</b>								
Motor.....	497	202	160	283	74	43	249	161
Other.....	498	153	142	346	47	23	253	15
Accessory boats.....	35	7	18	590	9			320
<b>Apparatus:</b>								
<b>Purse seines—</b>								
Mackerel.....	4	3	1	59				38
Length, yards.....	1,850	378	500	28,890				18,480
Other.....	3							
Length, yards.....	410							
Haul seines.....	5	1	1	5			1	
Length, yards.....	1,300	100	450	350			25	
<b>Gill nets—</b>								
Anchor.....	686			1,281		7	6	54
Square yards.....	159,820			476,360		1,680	1,440	14,040
Drift.....	1,022	210	143	5,524			47	2,515
Square yards.....	356,760	75,600	44,616	1,924,020			20,240	865,000
<b>Lines—</b>								
Hand.....	56	148	19	278	2	10	14	56
Hooks.....	65	296	19	377	2	20	14	56
Trawl.....	4,736		240	23,036			180	26,764
Hooks.....	236,800		7,800	1,143,336			6,480	1,336,048

## Fisheries of Massachusetts, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Barnstable	Bristol	Dukes	Essex	Nantucket	Norfolk	Plymouth	Suffolk
	Number	Number	Number	Number	Number	Number	Number	Number
<b>Apparatus—Continued.</b>								
Pound nets.....	97	15	14	1	4		5	
Floating traps.....	7			12				
Weirs.....	6							
Fyke nets.....	42	7	3					
Dip nets.....	17			8		7	14	15
Push nets.....	45				8			
Otter trawls.....	56	25	15	69	21			145
Yards at mouth.....	1,575	850	395	2,080	570			4,280
Box traps.....							1	
Pots—								
Crab.....						50	35	1,650
Eel.....	637	145	275	45	620		60	
Lobster.....	8,752	11,980	8,779	19,129	1,221	3,426	12,137	3,825
Periwinkle and cockle.....	850			75			87	
Harpoons, swordfish.....	20	8	5	53	3			18
Spears.....	66	51	1	15			68	
Dredges—								
Clam.....	41	17	3		17			
Yards at mouth.....	20	9	1		10			
Oyster.....	20	4					2	
Yards at mouth.....	21	3					3	
Scallop.....	729	465	542		406		734	1
Yards at mouth.....	574	419	452		277		613	2
Tongs.....	64	70					49	
Rakes.....	295	46	87		48		76	
Forks.....	41	9	1	275		75	12	125
Hoes.....	140			338			117	15

## CATCH: BY COUNTIES

Species	Barnstable		Bristol		Dukes		Essex	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	361,808	\$3,206	6,848	\$116	785,940	\$7,692	197,250	\$2,461
Bluefish.....	112,728	11,698	7,235	440	19,309	2,387	67,935	5,558
Bonito.....	60,581	4,792	500	40	7,236	559		
Butterfish.....	448,980	36,329	22,536	1,876	82,118	6,940	156,589	13,490
Carp.....	2,976	59						
Catfish and bullheads.....	29,700	596	2,700	54			37,725	1,092
Cod.....	4,193,539	152,026	3,020,401	77,974	265,205	7,447	25,761,505	803,393
Croaker.....			140,005	5,600				
Cunner.....			415	23				
Cusk.....	95,644	1,811	1,634	28			2,119,156	47,230
Eels.....	144,650	16,588	30,207	3,321	72,500	7,536	88,268	2,316
Flounders.....	4,506,096	141,856	4,873,326	239,798	1,117,831	35,910	2,341,666	105,582
Frigate mackerel.....							20,150	888
Goosefish.....							200	3
Grayfish.....	38,096	811	1,200	15	40,000	2,000		
Haddock.....	4,101,828	123,162	12,422,658	381,483	204,726	7,023	53,942,434	1,748,115
Hake.....	895,775	17,481	202,802	2,573	17,040	328	5,564,841	101,279
Halibut.....	6,765	1,033	46,597	7,225			1,892,731	286,736
Herring, sea.....	2,737,152	32,365	25,487	297			1,050,140	14,551
King whiting or "kingfish".....	100	13						
Lance.....	90,426	1,534					92,500	2,850
Mackerel.....	3,079,155	109,566	723,090	16,605	385,929	15,159	27,390,087	942,841
Minnnows.....	6,000	1,200						
Pollock.....	155,854	2,805	53,293	1,050	6,860	131	9,868,067	156,413
Rosefish.....			435	9			21,269	414
Salmon.....							30	9
Scup or porgy.....	56,503	2,912	476,360	23,305	134,795	4,346		
Sea bass.....	2,750	300	96,215	6,851	1,622	176		
Sea robin.....	100	1						
Shad.....	21,778	1,674	89	6			30,399	1,167
Sharks.....	440	5	25,575	135			14,298	587
Skates.....			2,723	54			463	27
Smelt.....							4,100	2,465
Squeteagues or "sea trout":								
Gray.....			1,238	149				
Spotted.....	200	40			546	81		
Striped bass.....	27,385	6,099						
Sturgeon.....	350	96	740	142			700	67

## Fisheries of Massachusetts, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Barnstable		Bristol		Dukes		Essex	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Swordfish.....	341,099	\$60,182	155,997	\$21,100	297,144	\$51,893	2,293,767	\$416,020
Tautog.....	16,203	950	59,337	3,500	21,670	1,300		
Tuna or "horse mackerel".....	64,296	4,961			650	65	1,120	190
White perch.....			450	45				
Whiting.....	6,095,473	60,203	11,152	198	6,728	135	1,201,100	11,111
Wolfish.....	48,667	953	90,347	1,283			391,792	7,566
Crabs, hard.....							37,708	8,111
Lobsters.....	326,062	83,308	259,404	68,350	356,641	79,202	607,880	189,777
Shrimp.....	4,800	3,600						
Squid.....	3,416,401	61,754	150,689	2,062	92,921	1,586	113,195	2,388
Clams:								
Cockle.....	7,020	1,690						
Hard, public.....	1,069,280	253,940	316,120	93,550	160,880	53,798		
Hard, private.....	51,600	4,149						
Razor.....	251,546	14,201						
Soft public.....	121,760	25,653	3,600	900	1,000	225	1,955,692	158,171
Surf or skimmer.....			4,800	1,200	1,600	350	31,875	2,200
Oysters:								
Market, private, spring.....	200,808	92,086						
Market, private, fall.....	197,794	85,122	6,160	1,950				
Seed, private, spring.....			77,000	5,500				
Seed, public, fall.....	31,500	2,250						
Periwinkles.....	9,324	2,383			2,700	300	2,160	480
Scallops:								
Bay.....	600,274	167,335	149,670	43,637	386,586	107,385		
Sea.....	47,940	8,734	462,420	68,320				
Total.....	34,079,206	1,603,512	23,931,455	1,080,854	4,470,077	393,954	137,298,792	5,035,555

Species	Nantucket		Norfolk		Plymouth		Suffolk	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			22,500	\$225	397,500	\$3,750	18,000	\$180
Bluefish.....	2,500	\$625					600	40
Bonito.....	14,100	1,128						
Butterfish.....	35,250	3,878					109,640	9,650
Catfish and bullheads.....							32,000	640
Cod.....	1,120,889	30,786	11,000	300	100,518	3,525	43,049,167	1,282,890
Cunner.....							18,320	550
Cusk.....							2,496,642	54,480
Eels.....	111,000	11,100			22,850	3,266	9,590	330
Flounders.....	3,480,355	164,051	2,600	156	7,000	420	15,006,035	574,866
Frigate mackerel.....							364,511	17,030
Grayfish.....	4,400	44					600	10
Haddock.....	1,421,989	29,567			28,600	780	130,565,554	4,151,110
Hake.....	418	8					12,559,693	290,380
Halibut.....	3,168	482					931,183	150,160
Herring, sea.....			17,500	200	836,500	6,274	4,020,270	59,780
King whiting or "kingfish".....	100	8						
Mackerel.....	37,600	2,632	9,000	360	104,750	3,139	13,801,665	479,350
Pollock.....	5,610	203	1,650	60			4,923,342	100,810
Rosefish.....							88,163	1,760
Salmon.....							25	10
Seep or porgy.....	4,350	435					120,000	4,800
Sea bass.....	1,000	250					40,000	1,800
Shad.....	200	16					1,683	70
Sharks.....	1,800	54					6,956	190
Skates.....							48,617	730
Smelt.....			2,100	252			50	20
Squeteagues or "sea trout," spotted.....	500	100						
Sturgeon.....							5,955	710
Swordfish.....	115,568	15,503					524,758	92,800
Tautog.....					12,600	1,008		
Whiting.....					381,950	3,374	205,885	6,690
Wolfish.....							1,990,185	42,170
Crabs, hard.....			12,290	2,290	12,500	1,660	395,800	74,210
Lobsters.....	45,368	11,689	129,287	39,423	528,591	134,159	85,001	20,040
Squid.....	21,000	420			35,800	716		

Fisheries of Massachusetts, 1930—Continued

CATCH: BY COUNTIES—Continued

Species	Nantucket		Norfolk		Plymouth		Suffolk	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>Clams:</b>								
Cockle.....					17,550	3,025		
Hard, public.....	285,424	59,360			58,000	16,362		
Hard, private.....	14,400	3,000						
Razor.....					128,720	6,275		
Soft, public.....			54,000	5,085	143,600	15,150	994,000	70,750
<b>Mussels.....</b>							10,800	2,100
<b>Oysters:</b>								
Market, public, spring.....					770	200		
Market, private, spring.....					21,367	8,325		
Market, private, fall.....					7,615	2,967		
Seed, private, spring.....					38,808	1,386		
<b>Periwinkles.....</b>					3,258	724		
<b>Scallops:</b>								
Bay.....	106,194	29,898			192,420	48,310		
Sea.....	378	68						
<b>Irish moss.....</b>					93,000	5,580		
<b>Total.....</b>	<b>6,833,561</b>	<b>365,305</b>	<b>261,927</b>	<b>48,351</b>	<b>3,174,267</b>	<b>270,375</b>	<b>232,424,680</b>	<b>7,491,172</b>

Industries related to the fisheries of Massachusetts, 1930

TRANSPORTING

Item	Barnstable County	Suffolk County	Total
Persons engaged on vessels.....	Number 2	Number 28	Number 30
<b>Vessels, motor—</b>			
5 to 10 tons.....	2	2	4
11 to 20 tons.....		5	5
21 to 30 tons.....		2	2
41 to 50 tons.....		1	1
<b>Total.....</b>	<b>2</b>	<b>10</b>	<b>12</b>
<b>Net tonnage.....</b>	<b>12</b>	<b>187</b>	<b>199</b>

WHOLESALE AND MANUFACTURING

OPERATING UNITS, SALARIES, AND WAGES

Item	Barnstable County	Bristol County	Dukes, Middlesex, Nantucket, and Norfolk Counties	Essex County	Plymouth County	Suffolk County	Total
Establishments.....	27	11	4	44	8	99	193
Persons engaged:							
Proprietors.....	11	7	2	28	7	22	77
Salaried employees.....	27	22	4	211	6	492	762
Wage earners—							
Average for season.....	227	58	32	1,172	24	1,221	2,734
Average for year.....	166	41	30	1,003	15	1,174	2,429
Paid to salaried employees.....	\$56,478	\$28,885	\$8,276	\$541,072	\$9,380	\$1,342,606	\$1,986,697
Paid to wage earners.....	196,895	53,137	38,730	1,123,654	21,817	1,771,893	3,206,126
<b>Total salaries and wages.....</b>	<b>253,373</b>	<b>82,022</b>	<b>47,006</b>	<b>1,664,726</b>	<b>31,197</b>	<b>3,114,499</b>	<b>5,192,823</b>



## Industries related to the fisheries of Massachusetts, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Cod:		
Fresh fillets.....pounds..	3, 732, 070	\$538, 878
Frozen fillets.....do.....	1, 291, 480	165, 447
Salted.....do.....	6, 659, 091	552, 300
Smoked fillets.....do.....	567, 217	80, 085
Oil, cod-liver.....gallons..	101, 980	81, 195
Cusk:		
Fresh fillets.....pounds..	282, 680	43, 067
Salted.....do.....	398, 649	18, 448
Smoked fillets.....do.....	867, 145	122, 400
Flounders:		
Fresh fillets.....do.....	1, 210, 243	233, 664
Frozen fillets.....do.....	309, 110	53, 073
Haddock:		
Fresh fillets.....do.....	40, 244, 170	6, 300, 610
Frozen fillets.....do.....	12, 655, 276	1, 974, 343
Salted.....do.....	558, 132	32, 781
Finnan haddie.....do.....	4, 099, 511	346, 261
Smoked fillets.....do.....	720, 748	125, 407
Canned flakes.....standard cases..	20, 142	202, 864
Hake:		
Fresh fillets.....pounds..	2, 008, 907	259, 974
Frozen fillets.....do.....	335, 127	45, 134
Salted.....do.....	1, 800, 022	87, 789
Smoked fillets.....do.....	14, 000	1, 900
Halibut, frozen fillets.....do.....	8, 379	2, 409
Herring, sea:		
Smoked—		
Bloaters.....do.....	1, 131, 417	186, 258
Kipperd.....do.....	179, 467	40, 041
Mackerel:		
Fresh fillets.....do.....	139, 012	27, 798
Salted fillets.....do.....	1, 969, 626	229, 709
Salted.....do.....	2, 277, 667	190, 299
Pollock:		
Fresh fillets.....do.....	272, 714	35, 648
Frozen fillets.....do.....	3, 030	394
Salted.....do.....	2, 957, 113	162, 591
Wolfish:		
Fresh fillets.....do.....	19, 812	3, 719
Frozen fillets.....do.....	37, 410	5, 241
Crab meat, packaged (fresh-cooked).....do.....	169, 383	93, 061
Lobster meat, packaged (fresh-cooked).....do.....	103, 716	129, 488
Clams, soft, fresh-shucked.....gallons..	10, 125	16, 325
Oysters, fresh-shucked.....do.....	2, 279	6, 305
Unclassified products:		
Fresh and frozen <sup>1</sup> .....pounds..	484, 671	52, 184
Salted <sup>2</sup> .....do.....	664, 802	35, 055
Smoked <sup>3</sup> .....do.....	529, 612	210, 670
Canned <sup>4</sup> .....standard cases..	167, 084	1, 189, 181
Glue.....gallons..	497, 838	1, 175, 826
Meal.....tons..	11, 224	722, 997
By-products <sup>5</sup> .....	( <sup>6</sup> )	88, 601
Total.....		15, 869, 420

<sup>1</sup> Includes fresh halibut and whiting fillets; frozen cusk, mackerel, and salmon fillets; and whiting sticks.  
<sup>2</sup> Includes salted alewives, herring, Bismarck herring, Scotch-cured herring, split mackerel, mackerel fillets, salmon, shad, and tongues and cheeks.

<sup>3</sup> Includes smoked alewives, butterfish, flounders, lake trout, mackerel, salmon, shad, and whitefish.

<sup>4</sup> Includes the following canned products: Cod cakes, cod balls, etc., mackerel, haddock chowder, creamed fish, finnan haddie, roe, dog food, and clam products.

<sup>5</sup> Includes isinglass, dry scrap, blackfish oil, tanner's oil, and buttons and novelties from imported marine shells.

<sup>6</sup> Data not available.

## Industries related to the fisheries of Massachusetts, 1930—Continued

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 3,326]

Item	Quantity	Value
<b>Alewives:</b>		
Salted.....pounds	120,000	\$6,200
Smoked.....do	16,500	963
Pickled.....do	303,800	7,974
Cod, salted.....do	1,118,785	54,340
Cusk, salted.....do	22,182	554
Hake, salted.....do	10,440	131
Halibut, salted.....do	5,220	649
Mackerel, salted.....do	68,230	2,856
Pollock, salted.....do	1,060	23
Clams, soft, fresh-shucked.....gallons	129,988	145,988
<b>Scallops:</b>		
Bay, fresh-shucked.....do	159,000	395,000
Sea, fresh-shucked.....do	56,000	77,000
<b>Total</b> .....		691,678

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 2,606 have been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## RHODE ISLAND

## Fisheries of Rhode Island, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets		Lines		Pound nets	Floating traps
	Mack-erel	Other		Drift	Run-around	Hand	Trawl		
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	24	16		13		69	20	6	130
On boats and shore—									
Regular.....			67	1	31	142	23	43	77
Casual.....				1		32			
<b>Total</b> .....	24	16	67	15	31	243	43	49	207
<b>Vessels:</b>									
<b>Steam—</b>									
5 to 10 tons.....									1
11 to 20 tons.....									3
41 to 50 tons.....		1							2
<b>Total</b> .....		1							6
Net tonnage.....		45							139
<b>Motor—</b>									
5 to 10 tons.....	1			3		21	7	2	1
11 to 20 tons.....	3			1		3	1		3
21 to 30 tons.....									1
<b>Total</b> .....	4			4		24	8	2	5
Net tonnage.....	44			35		187	61	12	68
<b>Total vessels</b> .....	4	1		4		24	8	2	11
<b>Total net tonnage</b> ..	44	45		35		187	61	12	207
<b>Boats:</b>									
Motor.....			2	1	5	99	12	3	12
Other.....			50	1	14	55		36	46
Accessory boats.....	6	2	12	2		24	8	4	35
<b>Apparatus:</b>									
Number.....	4	1	27	161	12	432	1,193	62	62
Length, yards.....	560	320	3,110	59,640	24,100				
Square yards.....									
Hooks, baits, or snoods.....						587	56,350		

## Fisheries of Rhode Island, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Fyke nets	Dip nets	Otter trawls	Box traps	Pots			Harpoons	Spears
					Eel	Lobster	Periwinkle		
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	
On vessels.....			212			41		92	
On boats and shore—									
Regular.....	12	14	31	5	34	308	14	38	
Casual.....	1	3	1		6	108	6	2	
Total.....	13	17	244	5	40	457	20	37	
Vessels:									
Steam—									
5 to 10 tons.....			1						
11 to 20 tons.....			3						
Total.....			4						
Net tonnage.....			45						
Motor—									
5 to 10 tons.....			34			18		25	
11 to 20 tons.....			9			1		5	
21 to 30 tons.....			1						
Total.....			44			19		30	
Net tonnage.....			380			136		249	
Total vessels.....			48			19		30	
Total net tonnage.....			425			136		249	
Boats:									
Motor.....	7	9	18	2	19	296	8	19	
Other.....	6			2	17	42	8	18	
Accessory boats.....						18		31	
Apparatus:									
Number.....	40	17	66	4	2,015	39,165	875	49	
Yards at mouth.....			1,824						

Item	Dredges			Tongs	Rakes	Forks	Hoes	By hand	Total, exclusive of duplication
	Clam	Oyster	Scallop						
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	2	68							356
On boats and shore—									
Regular.....	10		100	337	118	10	6	2	870
Casual.....	2		81	187	38	3	4	2	403
Total.....	14	68	181	524	156	13	10	4	1,629
Vessels:									
Steam—									
5 to 10 tons.....									1
11 to 20 tons.....									3
21 to 30 tons.....		1							1
41 to 50 tons.....		1							3
51 to 60 tons.....		1							1
Total.....		3							9
Net tonnage.....		126							265
Motor—									
5 to 10 tons.....	1	2							50
11 to 20 tons.....		9							21
21 to 30 tons.....		1							2
51 to 60 tons.....		1							1
Total.....	1	13							74
Net tonnage.....	7	231							747
Total vessels.....	1	16							83
Total net tonnage.....	7	357							1,012
Boats:									
Motor.....	5		106	180	50		2	1	578
Other.....			2	428	109	13	8	1	673
Accessory boats.....				34					160
Apparatus:									
Number.....	6	32	532	523	156	13	10		
Yards at mouth.....	4	49	414						

## Fisheries of Rhode Island, 1930—Continued

## CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets			
	Mackerel		Other				Drift		Runaround	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....										
Eels.....					165,200	\$17,740				
Flounders.....					20,000	1,000				
Mackerel.....	182,500	\$4,750	86,100	\$1,507			132,000	2,320		
Menhaden.....			114,800	861						
Smelt.....					50,000	7,500				
Squeteague or "sea trout," gray.....					10,680	1,200			5,000	750
Striped bass.....					32,000	5,760				
Suckers.....					7,600	152				
Tomcod.....					1,600	32				
White perch.....					27,600	2,760				
Total.....	182,500	4,750	200,900	2,368	314,680	36,144	135,000	2,680	36,000	6,110

Species	Lines				Pound nets		Floating traps	
	Hand		Trawl					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore.....							34,759	\$703
Alewives.....					173,400	\$1,589	9,383	104
Bluefish.....	10,000	\$750			41,000	2,217	158,295	20,829
Bonito.....							57,439	4,221
Butterfish.....					170,605	9,962	730,515	38,755
Cod.....	941,737	38,875	187,970	\$8,041	10,890	323	331,808	14,536
Cunner.....	16,000	320			1,300	26	5,300	200
Eels.....	44,780	3,944			103,100	8,385	21,812	1,139
Flounders.....	8,200	406	2,200	110	81,400	4,003	460,271	22,700
Grayfish.....							7,800	156
Haddock.....	25,025	834	756,680	25,486	6,750	200	9,383	281
Hake.....	15,600	444	6,000	175	2,400	42	9,260	283
Herring, sea.....					44,125	875	113,916	1,767
Hickory shad.....					200	10	3,849	75
Mackerel.....	15,800	763			104,400	5,198	890,771	37,118
Menhaden.....					16,800	168	560	10
Mullet.....					1,000	40	7,392	258
Pollock.....	104,960	751	5,500	100			64,466	1,644
Scup.....					253,840	12,673	1,371,750	62,601
Sea bass.....					155	13	35,579	2,148
Sea robin.....					87,450	1,085	101,978	1,230
Shad.....					347	67	676	112
Sharks.....					3,400	70	9,580	146
Skates.....	6,000	120					27,800	556
Skipper or "billfish".....							6,068	1,248
Smelt.....					975	180		
Squeteague or "sea trout," gray.....	12,100	1,224			68,540	8,028	44,825	4,214
Striped bass.....	475	95			3,580	568	23,762	4,447
Sturgeon.....							1,234	197
Tautog.....	144,125	7,238			88,900	4,339	62,610	2,865
Tomcod.....					21,000	270		
Tuna or "horse mackerel".....	14,000	1,020					10,180	881
White perch.....					3,900	458	200	20
Whiting.....					292,550	2,778	1,360,387	18,528
Squid.....					152,150	4,021	1,393,752	37,855
Total.....	1,358,802	56,784	958,350	33,912	1,734,157	67,587	7,370,627	281,927

## Fisheries of Rhode Island, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Fyke nets		Dip nets		Otter trawls		Box traps	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod.....					80,547	\$3,044		
Cunner.....			65,000	\$1,950				
Eels.....	14,500	\$1,450						
Flounders.....	13,000	580			4,115,500	118,173		
Grayfish.....					1,100	11		
Haddock.....					88,490	3,320		
Hake.....					29,600	780		
Herring, sea.....							56,670	\$425
Scup.....					20,000	1,000		
Sea robin.....					4,500	45		
Shad.....							3,280	522
Skates.....					646,550	5,841		
Swordfish.....					3,000	500		
Tautog.....	14,000	700						
White perch.....							18,000	1,800
Whiting.....					264,350	5,036		
Scallops, bay.....			811	276				
Total.....	41,500	2,730	65,811	2,226	5,253,637	137,750	77,950	2,747

Species	Pots						Harpoons	
	Eel		Lobster		Periwinkle			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....	114,235	\$11,122	5,550	\$658				
Swordfish.....							606,899	\$89,609
Crabs, hard.....			166,562	5,256				
Lobsters.....			1,353,107	313,550				
Periwinkles.....			233,460	25,940	78,750	\$8,740		
Total.....	114,235	11,122	1,758,679	345,404	78,750	8,740	606,899	89,609

Species	Spears		Dredges					
			Clam		Oyster		Scallop	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....	25,975	\$2,796						
Clams:								
Hard, public.....			20,460	\$3,345				
Hard, private.....			56,100	10,200	62,453	\$16,605		
Oysters:								
Market, private, spring.....					1,531,592	339,887		
Market, private, fall.....					1,832,128	392,709		
Seed, private, spring.....					298,500	40,750		
Scallops, bay.....							93,499	\$40,348
Total.....	25,975	2,796	76,560	13,545	3,724,673	789,951	93,499	40,348

Species	Tongs		Rakes		Forks		Hoes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams:										
Hard, public.....	1,329,064	\$262,906	275,803	\$51,423					1,100	\$200
Hard, private.....	103,895	20,700								
Soft, public.....					20,700	\$4,527	7,740	\$1,915		
Oysters:										
Market, public, spring.....			8,944	2,650						
Market, public, fall.....			8,944	2,650					135	20
Seed, public, spring.....	6,000	1,000							23	2
Seed, public, fall.....									361	47
Total.....	1,438,959	284,606	293,691	56,723	20,700	4,527	7,740	1,915	1,619	269

## Fisheries of Rhode Island, 1930—Continued

## OPERATING UNITS: BY COUNTIES

Item	Bristol	Kent	Newport	Providence	Washington
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	29	3	256	31	37
On boats and shore—					
Regular.....	78	235	320	72	165
Casual.....	63	120	118	44	58
<b>Total.....</b>	<b>170</b>	<b>358</b>	<b>694</b>	<b>147</b>	<b>260</b>
<b>Vessels:</b>					
<b>Steam—</b>					
5 to 10 tons.....			1		
11 to 20 tons.....			3		
21 to 30 tons.....				1	
41 to 50 tons.....			2	1	
51 to 60 tons.....				1	
<b>Total.....</b>			<b>6</b>	<b>3</b>	
Net tonnage.....			139	126	
<b>Motor—</b>					
5 to 10 tons.....	3		40		7
11 to 20 tons.....	5	1	11	1	3
21 to 30 tons.....	1		1		
51 to 60 tons.....				1	
<b>Total.....</b>	<b>9</b>	<b>1</b>	<b>52</b>	<b>2</b>	<b>10</b>
Net tonnage.....	126	11	447	75	88
<b>Total vessels.....</b>	<b>9</b>	<b>1</b>	<b>58</b>	<b>5</b>	<b>10</b>
<b>Total net tonnage.....</b>	<b>126</b>	<b>11</b>	<b>586</b>	<b>201</b>	<b>88</b>
<b>Boats:</b>					
Motor.....	34	178	238	23	105
Other.....	108	225	140	94	106
Accessory boats.....	7	1	109	31	12
<b>Apparatus:</b>					
<b>Purse seines—</b>					
Mackerel.....			3		1
Length, yards.....			360		200
Other.....			1		
Length, yards.....			320		
Haul seines.....			1	16	10
Length, yards.....			300	1,775	1,025
Gill nets—					
Drift.....		2	159		
Square yards.....		2,400	57,240		
Runaround.....			10		2
Square yards.....			2,100		22,000
<b>Lines—</b>					
Hand.....	8	5	307	12	100
Hooks.....	16	3	392	12	164
Trawl.....			1,113		80
Hooks.....			52,550		4,000
Pound nets.....		1	43		18
Floating traps.....			45		17
Fyke nets.....		35			5
Dip nets.....	3		14		
Otter trawls.....	1		47		18
Yards at mouth.....	30		1,339		455
Box traps.....	2			2	
<b>Pots—</b>					
Eel.....	245	390	345	225	810
Lobster.....	1,822	1,080	24,736	138	11,389
Periwinkle or cockle.....	225		425		225
Harpoons, swordfish.....			44		5
Spears.....	1	7		8	21
<b>Dredges—</b>					
Clam.....		3	3		
Yards at mouth.....		1	3		
Oyster.....	16	2		10	4
Yards at mouth.....	24	3		16	6
Scallop.....	69	319	24		120
Yards at mouth.....	54	250	17		93
Tongs.....	106	252	33	87	45
Rakes.....	5	72	48	1	30
Forks.....	5				8
Hoes.....	4	1		5	

## Fisheries of Rhode Island, 1930—Continued

## CATCH: BY COUNTIES

Species	Bristol		Kent		Newport		Providence		Washington	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore					34,759	\$703				
Alewives					66,050	493			120,000	\$1,200
Bluefish			3,000	\$360	173,745	22,950			66,550	6,206
Bonito					56,389	4,127			1,050	94
Butterfish					776,065	38,291			125,065	10,426
Cod	1,400	\$42			1,409,872	59,130			141,680	5,647
Cunner					71,600	2,176			16,000	320
Eels	16,400	1,352	50,550	5,146	114,962	9,716	229,590	\$23,894	83,650	7,126
Flounders	2,000	60	12,000	550	3,418,921	93,459			1,267,680	52,908
Grayfish					1,300	15			7,600	152
Haddock					877,028	29,826			9,300	266
Hake					33,260	944			29,600	780
Herring, sea	26,670	200	600	30	118,441	1,902	30,000	225	39,000	710
Hickory shad					4,049	85				
Mackerel					1,272,571	45,958			139,000	5,668
Menhaden					121,160	929			11,000	110
Mullet					8,392	298				
Pollock					68,046	1,509			106,880	926
Scup					1,346,590	61,663			299,000	14,610
Sea bass					35,734	2,161				
Sea robin					70,928	885			123,000	1,475
Shad	1,800	288			673	127	1,480	234	350	52
Sharks					11,480	186			1,500	30
Skates					302,550	3,296			377,800	3,221
Skipper or "billfish"					6,068	1,248				
Smelt					975	180			50,000	7,500
Squeteague or "sea trout," gray			820	99	49,745	4,065			90,580	10,652
Striped bass					21,342	4,028			38,475	6,842
Sturgeon					1,234	197				
Suckers									7,600	152
Swordfish					545,099	80,929			64,800	9,180
Tautog	11,350	550	14,200	708	160,085	7,499			124,000	6,386
Tomcod					6,000	120			16,600	182
Tuna or "horse-mackerel"					24,180	1,901				
White perch	10,000	1,000			6,100	678	8,000	800	25,600	2,560
Whiting					1,490,537	20,002			426,750	6,440
Crabs, hard	49,335	1,416			117,227	3,840				
Lobsters	44,458	10,571	22,744	5,323	991,570	234,591	779	187	293,556	72,878
Squid					772,902	25,426			773,000	16,450
Clams:										
Hard, public	182,765	33,430	1,013,639	201,416	126,533	18,935	176,440	35,555	127,050	28,538
Hard, private	126,528	28,255	56,100	10,200			39,820	9,050		
Soft, public	6,540	1,227	600	200			6,300	1,575	15,000	3,440
Oysters:										
Market, public, spring									8,944	2,650
Market, public, fall	135	20							8,944	2,650
Market, private, spring	775,757	186,082	16,875	3,375			553,024	114,930	185,936	35,500
Market, private, fall	675,959	160,209	16,875	3,375			767,422	158,125	371,872	71,000
Seed, public, spring	6,000	1,000				23	2			
Seed, public, fall	338	45				23	2			
Seed, private, spring	298,500	40,750								
Periwinkles	50,094	5,566			259,686	28,854			2,430	260
Scallops, bay	5,532	1,619	42,832	19,850	14,446	4,280			31,500	14,875
Total	2,291,561	473,682	1,250,835	250,632	14,988,340	808,266	1,812,855	344,575	5,628,302	410,115

*Industries related to the fisheries of Rhode Island, 1930*

## TRANSPORTING

Item	Bristol County	Kent County	Newport County	Washington County	Total
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Persons engaged on vessels.....	3	2	10	4	19
Vessels, motor:					
5 to 10 tons.....	1	1	2	1	5
11 to 20 tons.....			1		1
Total.....	1	1	3	1	6
Net tonnage.....	7	7	34	7	55

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Bristol County	Kent County	Newport County	Providence County	Washington County	Total
Establishments.....	8	8	6	9	3	34
Persons engaged:						
Proprietors.....	6	9	6	7		28
Salaried employees.....	14	3	13	21	7	58
Wage earners—						
Average for season.....	81	25	12	160	50	328
Average for year.....	55	17	7	109	30	218
Paid to salaried employees.....	\$19, 136	\$3, 625	\$18, 760	\$62, 351	\$15, 600	\$119, 472
Paid to wage earners.....	58, 052	26, 918	8, 000	124, 476	35, 410	252, 856
Total, salaries and wages.....	77, 188	30, 543	26, 760	186, 827	51, 010	372, 328

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Marine-shell novelties.....	(1)	\$49, 454
Oysters, fresh-shucked.....	gallons.. 345, 310	873, 659
Miscellaneous <sup>2</sup> .....	(1)	368, 112
Total.....		1, 291, 225

## FISHERMEN'S MANUFACTURED PRODUCTS

(Number of persons engaged, 401)

Scallops, bay, fresh-shucked.....	gallons.. 8, 839	\$37, 331
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<sup>1</sup> Data not available.

<sup>2</sup> Includes the value of oyster-shell products; fresh-shucked, hard and soft clams; and canned hard clam chowder.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 5 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 170 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.



## CONNECTICUT

## Fisheries of Connecticut, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets		Lines	
	Mack-erel	Men-haden		Anchor	Drift	Hand	Trawl
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels.....	47	60				21	57
On boats and shore—							
Regular.....	4		16	4		67	13
Casual.....			83	5	62		
Total.....	51	60	99	9	62	88	70
Vessels:							
Steam—							
101 to 110 tons.....		1					
161 to 170 tons.....		1					
Total.....		2					
Net tonnage.....		268					
Motor—							
5 to 10 tons.....	2					2	
11 to 20 tons.....	2						
21 to 30 tons.....	1						1
41 to 50 tons.....	1					1	1
51 to 60 tons.....							1
61 to 70 tons.....	1						1
Total.....	7					3	4
Net tonnage.....	171					63	185
Boats:							
Motor.....	2		6	6	26	50	7
Other.....	2		29		10	3	
Accessory boats.....	14	2					41
Apparatus:							
Number.....	9	2	28	32	230	288	1,726
Length, yards.....	1,620	720	2,710				
Square yards.....				5,370	22,770		
Hooks, baits, or snoods.....						297	84,380

Item	Pound nets	Float-ing traps	Fyke nets	Otter trawls	Pots		
					Crab	Eel	Lobster
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels.....				527		4	4
On boats and shore—							
Regular.....	12	5	7	98	4	31	180
Casual.....			6			1	
Total.....	12	5	13	625	4	36	184
Vessels:							
Steam—							
121 to 130 tons.....				2			
161 to 170 tons.....				3			
171 to 180 tons.....				1			
181 to 190 tons.....				1			
201 to 210 tons.....				11			
261 to 270 tons.....				1			
Total.....				19			
Net tonnage.....				3,675			
Motor—							
5 to 10 tons.....				27		1	2
11 to 20 tons.....				18			
21 to 30 tons.....				1			
31 to 40 tons.....				1			
Total.....				47		1	2
Net tonnage.....				514		10	12
Total vessels.....				66		1	2
Total net tonnage.....				4,189		10	12
Boats:							
Motor.....	8	4	1	57	2	5	160
Other.....	1		11			25	6
Apparatus:							
Number.....	11	8	107	132	160	808	16,505
Yards at mouth.....				3,274			

## Fisheries of Connecticut, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Har- poons	Spears	Dredges, oyster	Tongs	Rakes	Forks	Hoes	Total, exclu- sive of dupli- cation
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	45		304	2				952
On boats and shore—								
Regular.....	16	40	12	142	30	64	6	426
Casual.....								152
<b>Total</b> .....	<b>61</b>	<b>40</b>	<b>316</b>	<b>144</b>	<b>30</b>	<b>64</b>	<b>6</b>	<b>1,530</b>
<b>Vessels:</b>								
<b>Steam—</b>								
11 to 20 tons.....			1					1
51 to 60 tons.....			1					1
61 to 70 tons.....			2					2
71 to 80 tons.....			1					1
91 to 100 tons.....			2					2
101 to 110 tons.....			1					2
111 to 120 tons.....			1					1
121 to 130 tons.....								2
131 to 140 tons.....			1					1
161 to 170 tons.....								4
171 to 180 tons.....								1
181 to 190 tons.....								1
201 to 210 tons.....								11
261 to 270 tons.....								1
311 to 320 tons.....			1					1
391 to 400 tons.....			1					1
<b>Total</b> .....			12					33
<b>Net tonnage</b> .....			1,534					5,477
<b>Motor—</b>								
5 to 10 tons.....	5		26	1				54
11 to 20 tons.....	3		10					28
21 to 30 tons.....	2		7					9
31 to 40 tons.....	1		4					5
41 to 50 tons.....			3					4
51 to 60 tons.....								1
61 to 70 tons.....								1
<b>Total</b> .....	<b>11</b>		<b>50</b>	<b>1</b>				<b>102</b>
<b>Net tonnage</b> .....	<b>153</b>		<b>781</b>	<b>6</b>				<b>1,490</b>
<b>Sail—</b>								
5 to 10 tons.....			2					2
11 to 20 tons.....			1					1
<b>Total</b> .....			<b>3</b>					<b>3</b>
<b>Net tonnage</b> .....			<b>25</b>					<b>25</b>
<b>Total vessels</b> .....	<b>11</b>		<b>65</b>	<b>1</b>				<b>138</b>
<b>Total net tonnage</b> .....	<b>153</b>		<b>2,340</b>	<b>6</b>				<b>6,992</b>
<b>Boats:</b>								
Motor.....	8	2	8	8		8		237
Other.....		28		106	21	43	6	218
Accessory boats.....	11							62
<b>Apparatus:</b>								
Number.....	19	40	242	144	30	64	6	
Yards at mouth.....			241					

## Fisheries of Connecticut, 1930—Continued

## CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets			
	Mackerel		Menhaden				Anchor		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	20,974	\$2,933					700	\$76		
Bonito.....	116	13								
Butterfish.....	2,000	200					200	20		
Carp.....					13,060	\$1,356	3,500	420		
Croaker.....	10,780	434								
Mackerel.....	606,070	23,636								
Menhaden.....			1,569,800	\$15,698						
Minnows.....					29,035	2,672				
Mummichog.....					7,134	713				
Scup.....	283,452	5,567								
Shad.....					21,722	3,523	2,250	446	29,970	\$6,126
Smelt.....					7,900	1,823				
Squeteague or "sea trout," gray.....	23,754	659					1,500	275		
Striped bass.....							500	50		
Suckers.....					29,260	2,181				
Whiting.....	2,500	10								
Total.....	949,646	33,452	1,569,800	15,698	108,111	12,268	8,650	1,287	29,970	6,126

Species	Lines				Pound nets		Floating traps		Fyke nets	
	Hand		Trawl							
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....							1,000	\$30		
Bluefish.....	221,066	\$28,307			8,711	\$1,339	200	15		
Butterfish.....					6,738	897	3,100	341		
Carp.....									1,435	\$170
Cod.....			86,400	\$2,592						
Dolphin.....			138	8						
Eels.....			22,250	2,269	7,458	1,119			4,150	790
Flounders.....					11,036	594	7,100	426		
Haddock.....			46,550	1,862						
Hake.....			11,807	283						
Halibut.....			7,755	1,132						
Mackerel.....					3,912	521				
Menhaden.....					3,000	30	860	34	2,000	100
Minnows.....									1,000	50
Pike or pickerel.....									275	41
Pollock.....	2,000	80								
Scup.....					2,000	130				
Sea bass.....	13,833	2,075	400	24	20	4				
Sea robin.....					500	3				
Skates.....			3,065	41	2,000	20				
Smelt.....							2,000	300		
Squeteague or "sea trout," gray.....	804	120			4,994	938	12,200	1,830		
Striped bass.....					138	35	1,000	100		
Suckers.....									39,760	3,082
Swordfish.....			1,619	244						
Tautog.....	128,324	9,573			3,021	178	4,200	336		
Tilefish.....			1,783,456	97,068					700	105
Yellow perch.....										
Squid.....					10,700	225				
Total.....	366,027	40,155	1,963,440	105,523	64,228	6,033	31,660	3,412	49,320	4,338

Fisheries of Connecticut, 1930—Continued

CATCH: BY GEAR—Continued

Species	Otter trawls		Pots					
			Crab		Eel		Lobster	
			Pounds	Value	Pounds	Value	Pounds	Value
Butterfish.....	24, 141	\$2, 315						
Cod.....	8, 828, 829	256, 577						
Cusk.....	65, 241	960						
Eels.....	4, 733	299			64, 884	\$9, 651		
Flounders.....	11, 146, 070	363, 458						
Haddock.....	48, 026, 124	1, 670, 757						
Hake.....	1, 125, 895	24, 929						
Halibut.....	175, 155	32, 340						
Mackerel.....	5, 644	209						
Pollock.....	543, 366	12, 439						
Rosefish.....	3, 528	25						
Sea robin.....	40, 556	204						
Skates.....	278, 768	2, 291						
Swordfish.....	1, 875	225						
Tomcod.....					200	60		
Wolfish.....	36, 856	501						
Crabs, hard.....	1, 188	9	202, 340	\$4, 047				
Lobsters.....	1, 201	313					733, 511	\$229, 953
Total.....	70, 309, 170	2, 367, 851	202, 340	4, 047	65, 084	9, 711	733, 511	229, 953

Species	Harpoons		Spears		Dredges, oyster		Tongs	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....			35, 254	\$3, 879				
Swordfish.....	220, 802	\$35, 199						
Tuna or "horse mackerel".....	5, 400	324						
Clams, hard, public.....							13, 940	\$7, 020
Oysters:								
Market, public, spring.....							5, 135	1, 745
Market, public, fall.....							21, 741	3, 825
Market, private, spring.....					3, 032, 230	\$423, 439		
Market, private, fall.....					2, 543, 110	386, 450	13, 495	3, 075
Seed, public, spring.....					301, 805	41, 405	203, 000	29, 000
Seed, public, fall.....					452, 886	50, 875	315, 700	37, 225
Seed, private, spring.....					3, 709, 741	556, 963		
Seed, private, fall.....					561, 176	77, 542		
Total.....	226, 202	35, 523	35, 254	3, 879	10, 600, 948	1, 536, 674	573, 011	81, 890

Species	Rakes		Forks		Hoes	
	Pounds	Value	Pounds	Value	Pounds	Value
Clams:						
Hard, public.....	800	\$400	1, 888	\$764	800	\$400
Soft, public.....	27, 150	5, 430	37, 905	6, 224	6, 675	1, 335
Oysters:						
Seed, public, spring.....	14, 000	2, 000				
Seed, public, fall.....	36, 820	4, 208				
Total.....	78, 770	12, 038	39, 793	6, 988	7, 475	1, 735

OPERATING UNITS: BY COUNTIES

Item	Fairfield	Hartford	Middlesex	New Haven	New London
	Number	Number	Number	Number	Number
Fishermen:					
On vessels.....	187			188	577
On boats and shore—					
Regular.....	126		50	69	181
Casual.....	15	57	61		19
Total.....	328	57	111	257	777

## Fisheries of Connecticut, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Fairfield	Hartford	Middlesex	New Haven	New London
	Number	Number	Number	Number	Number
<b>Vessels:</b>					
<b>Steam—</b>					
11 to 20 tons	1				
51 to 60 tons	1				
61 to 70 tons	1			1	
71 to 80 tons	1				
91 to 100 tons	1			1	
101 to 110 tons				1	1
111 to 120 tons	1				
121 to 130 tons					2
131 to 140 tons	1				
161 to 170 tons					4
171 to 180 tons					1
181 to 190 tons					1
201 to 210 tons				1	10
261 to 270 tons				1	
311 to 320 tons				1	
391 to 400 tons				1	
<b>Total</b>	7			7	19
<b>Net tonnage</b>	556			1,455	3,466
<b>Motor—</b>					
5 to 10 tons	25			10	19
11 to 20 tons	5			7	16
21 to 30 tons	3			4	2
31 to 40 tons	2			2	1
41 to 50 tons	3				1
51 to 60 tons					1
61 to 70 tons					1
<b>Total</b>	38			23	41
<b>Net tonnage</b>	531			348	611
<b>Sail—</b>					
5 to 10 tons	2				
11 to 20 tons	1				
<b>Total</b>	3				
<b>Net tonnage</b>	25				
<b>Total vessels</b>	48			30	60
<b>Total net tonnage</b>	1,112			1,803	4,077
<b>Boats:</b>					
Motor	29	4	44	41	119
Other	84	17	33	31	53
Accessory boats	1				61
<b>Apparatus:</b>					
<b>Purse seines—</b>					
Mackerel					9
Length, yards					1,620
Menhaden					2
Length, yards					720
Haul seines	3	10	8	4	3
Length, yards	250	1,200	850	180	230
<b>Gill nets—</b>					
Anchor			30		2
Square yards			2,970		2,400
Drift		6	180		44
Square yards		594	17,820		4,356
<b>Lines—</b>					
Hand	22		73	20	173
Hooks	30		74	20	173
Trawl	1				1,726
Hooks					84,380
<b>Pound nets</b>				1	10
<b>Floating traps</b>					8
<b>Fyke nets</b>		56	16	12	23
<b>Otter trawls</b>	11		11	19	91
Yards at mouth	230		220	410	2,414
<b>Pots—</b>					
Crab					160
Eel	141		40	262	365
Lobster	2,565		1,485	3,640	8,815
<b>Harpoons, swordfish</b>	1		1		17
<b>Spears</b>	12			5	23
<b>Dredges, oyster</b>	185			57	
Yards at mouth	166			75	
<b>Tongs</b>	81		19	19	25
<b>Rakes</b>	18			12	
<b>Forks</b>	3		4	9	48
<b>Hoes</b>				6	

## Fisheries of Connecticut, 1930—Continued

## CATCH: BY COUNTIES

Species	Fairfield		Hartford		Middlesex		New Haven		New London	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives									1,000	\$30
Bluefish	890	\$178			40,841	\$6,126	4,329	\$880	205,600	25,486
Bonito									116	13
Butterfish							6,420	715	29,759	3,058
Carp			4,660	\$466	12,000	1,320			1,335	160
Cod	5,000	350					381,125	11,363	8,529,104	247,456
Croaker									10,780	434
Cusk							4,011	123	61,230	837
Dolphin									138	8
Eels	27,100	3,055	2,100	315	6,500	1,160	25,229	3,822	77,800	9,715
Flounders	343,600	17,181			173,355	8,963	752,070	31,836	9,895,181	396,498
Haddock							4,660,167	155,981	43,412,507	1,516,638
Hake							79,581	2,696	1,058,121	22,516
Halibut							9,588	2,034	173,322	31,438
Mackerel							205	15	615,421	24,351
Menhaden							2,000	100	1,573,660	15,762
Minnnows					25,000	2,000	3,750	665	1,285	57
Mummichog					2,134	213	5,000	500		
Pike or pickerel									275	41
Pollock					2,000	80	88,689	1,965	454,677	10,474
Rosefish							3,528	25		
Scup									285,452	5,697
Sea bass	13,333	2,000					520	79	400	24
Sea robin									41,056	207
Shad			19,590	3,188	28,141	5,600			6,211	1,307
Skates	15,804	210					58,430	794	209,599	1,342
Smelt	5,500	1,375							4,400	748
Squeteague or "sea trout," gray					804	120	300	60	42,148	3,642
Striped bass									1,638	185
Suckers			26,140	2,090	36,500	2,790			6,380	383
Swordfish	18,667	2,800			1,500	225	1,875	225	202,254	32,418
Tautog	17,084	1,492			17,540	1,161	6,621	529	94,300	6,905
Tilefish									1,783,455	97,068
Tomcod	200	60								
Tuna or "horse mackerel"									5,400	324
Whiting									2,500	10
Wolfish							5,356	78	31,509	423
Yellow perch									700	105
Crabs, hard									203,528	4,056
Lobsters	84,970	33,147			68,910	24,118	126,004	46,482	454,828	125,519
Squid									10,700	225
Clams:										
Hard, public	6,460	3,280					9,528	4,764	1,440	540
Soft, public	6,000	1,200			1,725	345	36,525	7,305	27,480	4,139
Oysters:										
Market, public, spring									5,135	1,745
Market, public, fall					17,243	2,925	4,498	900		
Market, private, spring	2,660,949	360,284					371,281	63,155		
Market, private, fall	1,702,427	245,027			2,249	450	851,929	144,048		
Seed, public, spring	508,305	70,905					10,500	1,500		
Seed, public, fall	792,806	90,508					12,600	1,800		
Seed, private, spring	2,278,283	308,977					1,431,458	247,986		
Seed, private, fall	279,076	33,567					282,100	43,975		
Total	8,766,454	1,175,602	52,490	6,059	436,442	57,536	9,235,208	776,400	69,521,816	2,502,984

## Industries related to the fisheries of Connecticut, 1930

## TRANSPORTING

Item	Fairfield County	New Haven County	Total
Persons engaged on vessels.....	Number 45	Number 27	Number 72
Vessels:			
Steam—			
11 to 20 tons.....		1	1
61 to 70 tons.....	1	1	2
Total.....	1	2	3
Net tonnage.....	65	85	150
Motor—			
5 to 10 tons.....	5		5
11 to 20 tons.....	1	3	4
21 to 30 tons.....	1		1
31 to 40 tons.....		1	1
41 to 50 tons.....	1		1
111 to 120 tons.....	1		1
Total.....	9	4	13
Net tonnage.....	178	127	305
Total vessels.....	10	6	16
Total net tonnage.....	243	212	455

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Fairfield County	New London County	New Haven County	Tolland County	Total
Establishments:.....	7	9	11	6	33
Persons engaged:					
Proprietors.....	9	6	14	11	40
Salaried employees.....	7	30	10	6	53
Wage earners—					
Average for season.....	87	310	166	340	903
Average for year.....	54	291	75	274	694
Paid to salaried employees.....	\$42,908	\$105,636	\$68,926	\$38,121	\$255,591
Paid to wage earners.....	69,697	363,595	87,649	273,788	794,729
Total salaries and wages.....	112,605	469,231	156,575	311,909	1,050,320

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Marine-shell buttons..... gross.....	1,315,173	\$980,651
Oysters, fresh-shucked..... gallons.....	226,297	563,674
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	1,172,564
Total.....		2,716,889

<sup>1</sup> Includes fresh haddock filets; frozen cod, flounder, haddock, hake, halibut, pollock, and salmon filets frozen whitening sticks; smoked haddock filets; frozen scallops; menhaden products; oyster-shell products fish meal; and marine-shell novelties.

<sup>2</sup> Data not available.

NOTE.—Of the total number of persons employed on transporting craft, 3 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

VESSEL FISHERIES AT THE PRINCIPAL NEW ENGLAND PORTS <sup>5</sup>

ECONOMIC ASPECT

The landings of fishery products at the three principal New England ports (Boston and Gloucester, Mass., and Portland, Me.), by vessels of 5 net tons and over, during 1931, amounted to 263,684,584 pounds as landed, valued at \$9,249,257. This is a decrease of 25 per cent in the quantity of the catch as compared with 1930, and a decrease of 28 per cent in the value of the catch. Of the total landings, 99 per cent consisted of fresh fish and 1 per cent of salted fish. The landings at Boston accounted for the largest amount landed at the three ports in 1931, accounting for 219,945,003 pounds, valued at \$7,906,494, or 84 per cent of the total quantity. This is a decrease of 23 per cent in amount and 27 per cent in value as compared with 1930. Landings at Gloucester in 1931 amounted to 24,849,803 pounds, valued at \$775,823, or 9 per cent of the total quantity. This is a decrease of 48 per cent in amount and 42 per cent in value as compared with the previous year. Landings at Portland amounted to 18,889,778 pounds, valued at \$566,940, or 7 per cent of the total landings. This is an increase of 4 per cent in the quantity and less than one-half of 1 per cent in the value as compared with 1930.

Among the landings of fresh fish, haddock outranked other species in volume landed, the amount of all sizes in 1931 being 132,845,465 pounds, or 51 per cent of the total fresh fish. This is 30 per cent less than the amount landed in 1930.

*Landings by fishing vessels at principal New England ports, 1931*

BOSTON: BY MONTHS

Species	January		February		March	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large.....	1,739,505	\$62,786	2,144,428	\$96,430	5,481,845	\$133,137
Market.....	1,805,664	49,367	1,339,248	44,478	1,872,055	46,948
Scrod.....	41,390	365	500	8	5,200	90
Haddock, fresh:						
Large.....	9,433,050	442,167	12,381,077	497,861	14,994,510	544,977
Scrod.....	279,905	6,901	425,490	10,658	415,707	9,319
Hake, fresh:						
Large.....	759,955	23,717	718,920	25,980	616,200	23,758
Small.....	1,500	68			4,220	118
Pollock, fresh.....	608,815	10,763	463,025	15,351	357,220	11,031
Cusk, fresh.....	582,070	13,191	439,020	11,707	544,765	11,892
Halibut, fresh.....	58,333	12,753	170,545	30,547	248,503	47,914
Flounders, fresh.....	934,110	60,980	861,988	53,976	903,553	49,948
Other, fresh.....	205,593	5,213	236,234	6,067	328,362	8,642
Total, fresh.....	16,449,890	688,271	19,180,475	793,063	25,772,140	887,774
Landed in 1930: Fresh.....	20,794,385	1,062,808	23,914,328	943,530	29,136,729	1,279,861

<sup>5</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure," which gives in detail methods for collecting statistics, compilation practices and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.



## Landings by fishing vessels at principal New England ports, 1931—Continued

BOSTON: BY MONTHS—Continued

Species	April		May		June		July	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:								
Large.....	2, 587, 710	\$58, 305	1, 630, 677	\$47, 205	1, 805, 215	\$60, 170	1, 804, 608	\$55, 15
Market.....	1, 471, 670	24, 146	1, 555, 230	27, 559	2, 032, 237	44, 388	3, 126, 495	52, 62
Scrod.....	10, 700	113					8, 200	4
Cod, salted, large.....			8, 290	269				
Haddock, fresh:								
Large.....	12, 892, 170	243, 846	9, 979, 125	226, 675	9, 058, 320	271, 685	7, 959, 060	222, 83
Scrod.....	476, 825	4, 371	291, 690	2, 953	400, 250	4, 791	332, 790	3, 02
Hake, fresh, large.....	282, 190	6, 067	355, 905	6, 780	264, 430	4, 760	321, 280	4, 16
Pollock, fresh.....	228, 865	5, 114	303, 805	3, 490	276, 167	4, 785	221, 080	3, 83
Cusk, fresh.....	263, 393	4, 117	316, 375	4, 130	68, 673	1, 151	50, 750	68
Halibut, fresh.....	338, 592	55, 251	395, 042	48, 943	287, 106	39, 876	313, 963	36, 05
Mackerel, fresh.....	57, 300	9, 454	1, 920, 390	120, 101	3, 468, 495	147, 474	4, 362, 842	181, 71
Flounders, fresh.....	700, 800	23, 653	985, 685	21, 232	603, 240	19, 852	520, 680	20, 98
Swordfish, fresh.....					196, 575	61, 059	492, 542	134, 08
Other, fresh.....	296, 783	4, 059	294, 693	5, 394	215, 287	4, 491	136, 117	5, 24
Total, fresh.....	19, 606, 998	438, 496	18, 028, 617	514, 462	18, 675, 995	664, 482	19, 650, 407	720, 43
Total, salted.....			8, 290	269				
Grand total.....	19, 606, 998	438, 496	18, 036, 907	514, 731	18, 675, 995	664, 482	19, 650, 407	720, 43
Landed in 1930:								
Fresh.....	27, 700, 507	782, 318	23, 578, 286	635, 507	24, 210, 764	932, 343	30, 404, 936	1, 055, 98
Salted.....							42, 700	1, 83
Total.....	27, 700, 507	782, 318	23, 578, 286	635, 507	24, 210, 764	932, 343	30, 447, 636	1, 057, 82

Species	August		September		October	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large.....	1, 309, 297	\$53, 810	1, 481, 042	\$61, 867	1, 709, 983	\$68, 99
Market.....	3, 059, 870	61, 873	2, 808, 421	77, 700	2, 776, 355	84, 95
Scrod.....	1, 100	16	5, 570	65	48, 925	1, 08
Cod, salted, large.....			4, 400	171		
Haddock, fresh:						
Large.....	6, 484, 560	263, 706	6, 918, 270	299, 075	6, 074, 825	314, 62
Scrod.....	637, 253	9, 654	1, 357, 685	26, 860	2, 258, 550	53, 01
Hake, fresh:						
Large.....	241, 220	3, 587	236, 135	4, 724	642, 605	13, 50
Small.....			2, 000	40	5, 900	9
Pollock, fresh.....	375, 060	5, 179	564, 455	6, 320	697, 485	7, 89
Cusk, fresh.....	102, 270	1, 375	181, 765	3, 055	208, 445	4, 52
Halibut, fresh.....	237, 198	26, 560	89, 528	13, 238	107, 260	16, 15
Mackerel, fresh.....	5, 535, 740	219, 814	3, 386, 825	137, 532	845, 790	52, 02
Mackerel, salted.....			3, 000	120		
Flounders, fresh.....	432, 170	18, 733	680, 073	30, 842	998, 158	42, 41
Swordfish, fresh.....	514, 416	118, 402	307, 332	80, 952	15, 027	4, 97
Herring, fresh.....	5, 700	142				
Other, fresh.....	118, 368	4, 634	65, 517	3, 255	109, 601	6, 04
Total, fresh.....	19, 054, 222	787, 485	18, 084, 618	745, 525	16, 498, 909	670, 31
Total, salted.....			7, 400	291		
Grand total.....	19, 054, 222	787, 485	18, 092, 018	745, 816	16, 498, 909	670, 31
Landed in 1930:						
Fresh.....	24, 726, 124	938, 855	29, 723, 655	929, 812	20, 135, 688	937, 81
Salted.....	2, 000	80				
Total.....	24, 728, 124	938, 935	29, 723, 655	929, 812	20, 135, 688	937, 81

NOTE.—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. Large cod are classified as those weighing over 10 pounds; market cod, 2½ to 10 pounds; and scrod cod, 1 to 2½ pounds. Large haddock are those weighing over 2½ pounds and scrod haddock, 1 to 2½ pounds. Large hake are those weighing over 6 pounds and small hake, under 6 pounds. Only landings by vessels having a capacity of 5 net tons or greater are used in this tabulation.

## Landings by fishing vessels at principal New England ports, 1931—Continued

## BOSTON: BY MONTHS—Continued

Species	November		December		Total, 1931		1930	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:								
Large	1, 271, 234	\$54, 485	967, 085	\$41, 729	23, 932, 629	\$794, 081	24, 068, 140	\$993, 288
Market	2, 367, 975	63, 279	1, 515, 380	42, 741	25, 730, 600	620, 059	28, 211, 846	690, 620
Scrod	74, 130	1, 222	48, 630	874	244, 345	3, 882	119, 505	2, 776
Cod, salted, large					12, 690	440		
Haddock, fresh:								
Large	5, 474, 213	262, 073	4, 379, 165	230, 048	106, 028, 345	3, 819, 572	159, 276, 930	5, 838, 526
Scrod	3, 804, 210	66, 178	3, 578, 040	63, 892	14, 258, 395	261, 610	7, 821, 344	156, 169
Hake, fresh:								
Large	959, 845	14, 719	462, 230	11, 034	5, 860, 915	142, 802	12, 614, 249	336, 873
Small	3, 600	70	26, 200	751	43, 420	1, 144	81, 375	1, 634
Pollock, fresh	601, 580	5, 334	330, 430	4, 621	5, 027, 987	83, 717	4, 671, 009	106, 912
Cusk, fresh	296, 450	5, 101	393, 115	7, 367	3, 447, 091	68, 290	3, 411, 741	90, 134
Halibut, fresh	32, 815	7, 591	30, 941	6, 856	2, 309, 826	341, 734	2, 510, 353	432, 238
Mackerel, fresh	202, 752	13, 253	74, 918	8, 270	19, 855, 052	889, 633	23, 637, 679	870, 821
Mackerel, salted					3, 000	120	44, 700	1, 915
Flounders, fresh	1, 128, 105	38, 336	744, 925	39, 256	9, 493, 487	420, 205	13, 095, 404	596, 412
Swordfish, fresh	450	155			1, 526, 342	399, 629	3, 078, 274	666, 922
Herring, fresh					5, 700	142		
Other, fresh	98, 543	3, 841	60, 081	2, 546	2, 165, 179	59, 434	2, 614, 929	85, 446
Total, fresh	16, 315, 902	535, 637	12, 611, 140	459, 985	219, 929, 313	7, 905, 934	285, 212, 778	10, 868, 671
Total, salted					15, 690	560	44, 700	1, 915
Grand total	16, 315, 902	535, 637	12, 611, 140	459, 985	219, 945, 003	7, 906, 494	285, 257, 478	10, 870, 586
Landed in 1930:								
Fresh	16, 151, 607	662, 030	14, 735, 769	707, 802			285, 212, 778	10, 868, 671
Salted							44, 700	1, 915
Total	16, 151, 607	662, 030	14, 735, 769	707, 802			285, 257, 478	10, 870, 586

## GLOUCESTER: BY MONTHS

Species	January		February		March		April	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:								
Large	154, 356	\$8, 197	119, 875	\$7, 585	929, 775	\$22, 732	771, 155	\$17, 743
Market	15, 840	431	9, 790	317	37, 875	514	128, 400	1, 884
Scrod	3, 855	42	1, 955	28	140	2		
Cod, salted:								
Large							110, 610	4, 225
Market							6, 479	191
Haddock, fresh:								
Large	164, 030	8, 990	278, 495	12, 972	353, 505	13, 801	2, 222, 845	47, 952
Scrod	3, 695	78	7, 760	131	5, 760	107	19, 200	312
Hake, fresh, large	71, 395	1, 838	52, 910	1, 729	15, 008	358	11, 640	135
Hake, salted, large							275	4
Pollock, fresh	329, 905	6, 305	21, 055	800	4, 275	58	15, 740	124
Pollock, salted							117	2
Cusk, fresh	1, 230	23	445	9	625	13	30, 545	356
Halibut, fresh	35	4			18	3	4, 695	704
Flounders, fresh	99, 285	4, 545	76, 510	3, 803	74, 920	3, 796	47, 040	2, 396
Herring, salted	1, 441, 368	51, 915						
Other, fresh	24, 292	189	18, 135	130	9, 870	102	8, 055	54
Total, fresh	867, 918	30, 642	586, 930	27, 504	1, 431, 771	41, 486	3, 259, 315	71, 660
Total, salted	1, 441, 368	51, 915					117, 481	4, 422
Grand total	2, 309, 286	82, 557	586, 930	27, 504	1, 431, 771	41, 486	3, 376, 796	76, 082
Landed in 1930:								
Fresh	2, 210, 932	93, 240	1, 774, 509	61, 639	1, 328, 629	61, 035	3, 466, 894	100, 172
Salted	1, 563, 576	58, 794					69, 015	3, 420
Total	3, 774, 508	152, 034	1, 774, 509	61, 639	1, 328, 629	61, 035	3, 535, 909	103, 592

## Landings by fishing vessels at principal New England ports, 1931—Continued

## GLOUCESTER: BY MONTHS—Continued

Species	May		June		July	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large	908,545	\$26,020	359,095	\$10,902	444,830	\$12,135
Market	222,546	2,945	73,290	1,116	216,635	3,225
Scrod	100	1	175	2	400	
Cod, salted:						
Large	246,590	8,627	118,455	4,110	107,650	3,775
Market	15,140	379	17,520	396	11,285	265
Haddock, fresh:						
Large	650,720	14,016	224,335	6,569	430,420	9,225
Scrod	2,450	20	6,100	50	27,545	195
Haddock, salted, large	675	10				
Hake, fresh, large	12,255	116	43,625	711	48,780	485
Hake, salted, large	245	5			1,145	15
Pollock, fresh	101,390	1,061	51,560	1,142	8,860	65
Pollock, salted	520	12	100	2	320	
Cusk, fresh	9,305	97	19,450	224	26,095	295
Cusk, salted	190	4	1,615	31	2,180	45
Halibut, fresh			2,375	351	47,789	4,515
Halibut, salted					145	2
Mackerel, fresh	240,145	8,086	296,965	11,562	548,090	20,125
Mackerel, salted			10,470	524		
Flounders, fresh	1,595	78	27,750	807	38,140	1,315
Swordfish, fresh			1,980	687	4,593	1,215
Other, fresh	445	9	2,450	40	2,685	85
Total, fresh	2,149,496	52,449	1,109,150	34,163	1,844,862	52,815
Total, salted	263,360	9,037	148,160	5,063	122,725	4,075
Grand total	2,412,856	61,486	1,257,310	39,226	1,967,587	56,890
Landed in 1930:						
Fresh	4,892,302	111,667	2,670,552	77,462	7,728,185	153,485
Salted	279,715	13,380	178,142	8,677	175,055	8,355
Total	5,172,017	125,047	2,848,694	86,139	7,903,240	161,840

Species	August		September		October		November	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:								
Large	87,295	\$1,912	258,473	\$10,292	397,025	\$21,774	120,633	\$5,405
Market	86,560	1,320	44,220	872	12,735	331	46,971	1,202
Scrod	175	2			2,485	48	990	
Cod, salted:								
Large	346,077	12,097	61,530	2,153	37,920	1,328		
Market	147,853	3,697	2,175	55	1,080	31		
Scrod	5,645	85						
Haddock, fresh:								
Large	252,630	9,393	215,120	8,064	23,660	1,289	12,808	785
Scrod	37,780	362	89,885	1,124	2,330	52	20	
Haddock, salted, large	135	2						
Hake, fresh:								
Large	21,000	179	99,880	1,983	97,462	1,890	95,940	1,495
Small							1,130	15
Hake, salted, large	1,200	12			2,235	28		
Pollock, fresh	9,575	63	56,430	719	288,407	3,336	461,951	4,585
Pollock, salted	105	1	100	1				
Cusk, fresh	27,910	325	13,325	161	5,525	80	5,525	75
Cusk, salted	765	15			55	1		
Halibut, fresh					450	36	70	15
Halibut, salted					100	10		
Mackerel, fresh	2,886,995	85,842	1,981,742	67,089	318,899	18,434	863,627	45,025
Mackerel, salted	36,159	1,447	5,700	239				
Flounders, fresh	39,560	1,512	12,645	624	11,850	469	5,435	205
Swordfish, fresh			4,047	793				
Herring, fresh					79,700	684		
Other, fresh	2,790	111	220,500	2,559	33,727	1,215	122,736	5,275
Total, fresh	3,452,270	101,021	2,996,267	94,280	1,274,255	49,638	1,737,836	64,105
Total, salted	537,939	17,356	69,505	2,448	41,390	1,398		
Grand total	3,990,209	118,377	3,065,772	96,728	1,315,645	51,036	1,737,836	64,105
Landed in 1930:								
Fresh	3,414,305	87,790	6,099,035	145,377	2,326,872	83,902	6,222,155	155,395
Salted	307,693	14,832	779,080	42,792	344,683	17,839		
Total	3,721,998	102,622	6,878,115	188,169	2,671,555	101,741	6,222,155	155,395

## Landings by fishing vessels at principal New England ports, 1931—Continued

## GLOUCESTER: BY MONTHS—Continued

Species	December		Total, 1931		1930	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large	119,855	\$6,829	4,670,912	\$151,511	7,145,692	\$270,927
Market	2,395	60	897,257	14,215	2,262,190	46,763
Scrod	165	2	10,440	159	21,370	227
Cod, salted:						
Large			1,028,832	36,262	1,335,845	71,853
Market			201,532	5,015	534,122	26,350
Scrod			5,645	85	201,454	8,704
Haddock, fresh:						
Large	18,655	1,042	4,847,223	134,093	12,782,802	363,290
Scrod	5,225	53	207,750	2,485	673,713	9,321
Haddock, salted, large			810	12		
Hake, fresh:						
Large	26,480	597	596,375	11,480	1,613,113	29,252
Small			1,130	12	17,185	376
Hake, salted, large			5,100	66	4,230	79
Pollock, fresh	47,955	1,053	1,397,103	19,313	8,376,338	141,650
Pollock, salted			1,262	24	3,155	71
Cusk, fresh	1,010	13	140,990	1,674	375,015	5,937
Cusk, salted			4,805	93	18,052	438
Halibut, fresh	37	6	55,469	5,632	22,505	3,169
Halibut, salted			245	30	2,995	532
Mackerel, fresh	161,910	17,314	7,298,373	273,477	9,068,868	255,557
Mackerel, salted			52,329	2,210	33,530	1,271
Flounders, fresh	33,945	1,657	468,675	21,199	1,011,189	47,586
Swordfish, fresh			10,620	2,690	2,773	673
Herring, fresh	125,000	3,000	204,700	3,684	77,400	774
Herring, salted	845,508	28,674	2,286,876	80,589	1,563,576	58,794
Other, fresh	9,665	46	455,350	9,813	212,355	4,493
Total, fresh	552,297	31,672	21,262,367	651,437	43,662,508	1,179,995
Total, salted	845,508	28,674	3,587,376	124,386	3,696,959	168,092
Grand total	1,397,805	60,346	24,849,803	775,823	47,359,467	1,348,087
Landed in 1930:						
Fresh	1,528,138	48,838			43,662,508	1,179,995
Salted					3,696,959	168,092
Total	1,528,138	48,838			47,359,467	1,348,087

## PORTLAND: BY MONTHS

Species	January		February		March		April	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:								
Large	106,656	\$4,485	80,672	\$3,735	493,045	\$15,814	1,132,605	\$29,013
Market	50,156	1,242	37,211	1,169	78,022	1,811	83,380	1,495
Scrod	4,420	44	2,535	26	2,058	20	980	8
Haddock, fresh:								
Large	311,374	17,257	263,177	12,596	973,882	26,120	4,569,238	105,417
Scrod	10,782	109	8,240	83	13,012	128	2,840	28
Hake, fresh:								
Large	44,060	1,279	16,335	473	23,693	682	7,665	195
Small	101,352	2,762	59,745	1,895	41,667	1,089	35,725	704
Pollock, fresh	40,329	383	18,726	426	23,185	421	82,725	621
Cusk, fresh	92,081	2,213	77,347	2,187	119,255	2,630	109,670	1,725
Halibut, fresh	582	137	361	86	4,366	865	24,120	3,551
Flounders, fresh	27,792	857	30,190	1,390	33,778	908	49,362	775
Other, fresh	43,569	1,015	39,301	1,007	49,054	1,082	48,191	666
Total, fresh	833,153	31,783	633,840	25,073	1,855,017	51,570	6,146,501	144,198
Landed in 1930: Fresh	574,142	26,072	1,456,416	53,711	834,017	30,561	2,786,216	67,446

## Landings by fishing vessels at principal New England ports, 1931—Continued

## PORTLAND: BY MONTHS—Continued

Species	May		June		July	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large.....	157,561	\$4,897	187,154	\$8,621	264,914	\$11,799
Market.....	73,457	1,202	16,245	323	26,054	552
Scrod.....	1,825	16	1,251	13	1,030	9
Cod, salted:			4,450	156	4,275	146
Large.....						
Market.....			2,340	59		
Scrod.....			115	2		
Haddock, fresh:						
Large.....	376,912	7,536	96,472	4,391	142,704	5,891
Scrod.....	2,092	21	2,678	24	7,880	80
Hake, fresh:						
Large.....	9,970	155	15,035	156	6,832	103
Small.....	41,395	550	45,222	496	51,572	682
Pollock, fresh.....	45,805	459	45,255	428	100,466	987
Cusk, fresh.....	81,305	1,378	6,977	106	9,683	117
Halibut, fresh.....	9,466	1,420	32,764	3,856	51,623	6,708
Mackerel, fresh.....	12,925	777	84,105	3,283	88,296	3,783
Flounders, fresh.....	18,452	611	5,775	168	28,502	968
Swordfish, fresh.....			16,388	4,830	90,022	25,061
Herring, fresh.....			108,530	1,086	40,400	4
Other, fresh.....	31,410	673	17,751	339	42,466	917
Total, fresh.....	862,575	19,695	681,602	28,120	912,444	57,691
Total, salted.....			6,905	217	4,275	146
Grand total.....	862,575	19,695	688,507	28,337	916,719	57,837
Landed in 1930:						
Fresh.....	2,616,242	63,429	1,445,677	44,159	2,626,869	90,496
Salted.....	13,105	556			665	13
Total.....	2,629,347	63,985	1,445,677	44,159	2,627,534	90,509

Species	August		September		October		November	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:								
Large.....	246,639	\$11,558	221,126	\$10,674	262,588	\$11,767	99,001	\$4,545
Market.....	13,269	265	11,716	247	45,565	912	41,930	911
Scrod.....	1,260	11	1,480	13	4,430	36	6,900	67
Cod, salted:								
Large.....	9,130	319	23,725	889	55	2		
Market.....	1,010	27	2,700	68	20	1		
Haddock, fresh:								
Large.....	151,480	7,018	110,959	5,789	175,322	9,019	161,996	8,955
Scrod.....	7,235	69	4,342	44	8,485	76	3,136	42
Hake, fresh:								
Large.....	6,210	79	16,282	261	67,550	958	59,961	832
Small.....	53,623	567	49,315	815	194,281	2,795	161,568	1,928
Hake, salted, small.....	155	1						
Pollock, fresh.....	80,037	790	109,938	1,054	294,173	3,058	188,463	949
Pollock, salted.....					10			
Cusk, fresh.....	2,917	49	10,200	185	72,745	1,147	57,527	786
Cusk, salted.....			200	3				
Halibut, fresh.....	58,126	8,665	19,680	2,622	2,033	269	825	149
Mackerel, fresh.....	1,420,697	37,146	672,095	13,516	12,631	867	11,847	649
Mackerel, salted.....	9,555	113						
Flounders, fresh.....	38,080	1,006	31,848	1,028	37,877	1,204	3,945	163
Swordfish, fresh.....	90,531	20,741	26,426	5,794				
Herring, fresh.....	47,600	494	193,100	1,272	295,200	1,724	22,600	90
Other, fresh.....	185,383	3,135	23,029	403	70,363	1,334	42,620	836
Total, fresh.....	2,403,087	91,593	1,501,536	43,717	1,543,243	35,166	862,319	20,902
Total, salted.....	19,850	460	26,625	960	85	3		
Grand total.....	2,422,937	92,053	1,528,161	44,677	1,543,328	35,169	862,319	20,902
Landed in 1930:								
Fresh.....	1,431,689	49,859	1,172,065	37,521	1,402,070	43,499	1,108,052	30,407
Salted.....	4,900	196						
Total.....	1,436,589	50,055	1,172,065	37,521	1,402,070	43,499	1,108,052	30,407

## Landings by fishing vessels at principal New England ports, 1931—Continued

## PORTLAND: BY MONTHS—Continued

Species	December		Total, 1931		1930	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large.....	62,800	\$2,717	3,314,761	\$119,625	1,987,921	\$78,428
Market.....	37,111	940	514,116	11,069	660,505	16,864
Scrod.....	5,195	51	33,364	314	51,642	540
Cod, salted:						
Large.....			41,635	1,512	15,340	718
Market.....			6,070	155	260	10
Scrod.....			115	2		
Haddock, fresh:						
Large.....	96,025	5,859	7,429,541	215,848	8,589,386	274,188
Scrod.....	2,679	45	73,401	749	227,158	4,292
Hake, fresh:						
Large.....	36,730	820	310,323	5,993	168,328	3,468
Small.....	103,099	2,201	938,564	16,484	1,119,273	23,279
Hake, salted, small.....			155	1		
Pollock, fresh.....	176,138	1,108	1,205,240	10,684	929,624	15,178
Pollock, salted.....			10		70	1
Cusk, fresh.....	31,814	625	671,521	13,148	628,607	16,722
Cusk, salted.....			200	3		
Halibut, fresh.....	750	142	204,696	28,470	43,340	6,990
Halibut, salted.....					2,335	23
Mackerel, fresh.....	2,825	99	2,305,421	60,120	727,176	28,030
Mackerel, salted.....			9,555	113	665	13
Flounders, fresh.....	7,581	353	313,182	9,461	300,144	7,412
Swordfish, fresh.....			223,367	56,426	299,987	58,354
Herring, fresh.....			667,430	4,670	1,081,750	10,657
Other, fresh.....	33,974	686	627,111	12,093	1,351,014	21,612
Total, fresh.....	596,721	15,646	18,832,038	565,154	18,165,855	566,014
Total, salted.....			57,740	1,786	18,670	765
Grand total.....	596,721	15,646	18,889,778	566,940	18,184,525	566,779
Landed in 1930:						
Fresh.....	712,400	28,854			18,165,855	566,014
Salted.....					18,670	765
Total.....	712,400	28,854			18,184,525	566,779

## SUMMARY: BY PORTS

Species	Boston		Gloucester		Portland	
	Pounds	Value	Pounds	Value	Pounds	Value
Cod, fresh:						
Large.....	23,932,629	\$794,081	4,670,912	\$151,511	3,314,761	\$119,625
Market.....	25,730,600	620,059	897,257	14,215	514,116	11,069
Scrod.....	244,345	3,882	10,440	159	33,364	314
Cod, salted:						
Large.....	12,690	440	1,028,832	36,262	41,635	1,512
Market.....			201,532	5,015	6,070	155
Scrod.....			5,645	85	115	2
Haddock, fresh:						
Large.....	106,028,345	3,819,572	4,847,223	134,093	7,429,541	215,848
Scrod.....	14,258,395	261,610	207,750	2,485	73,401	749
Haddock, salted, large.....			810	12		
Hake, fresh:						
Large.....	5,860,915	142,802	596,375	11,480	310,323	5,993
Small.....	43,420	1,144	1,130	12	938,564	16,484
Hake, salted:						
Large.....			5,100	66		
Small.....					155	1
Pollock, fresh.....	5,027,987	83,717	1,397,103	19,313	1,205,240	10,684
Pollock, salted.....			1,262	24	10	
Cusk, fresh.....	3,447,091	68,290	140,990	1,674	671,521	13,148
Cusk, salted.....			4,805	93	200	3
Halibut, fresh.....	2,309,826	341,734	55,469	5,632	204,696	28,470
Halibut, salted.....			245	30		
Mackerel, fresh.....	19,855,052	889,633	7,298,373	273,477	2,305,421	60,120
Mackerel, salted.....	3,000	120	52,329	2,210	9,555	113

## Landings by fishing vessels at principal New England ports, 1931—Continued

## SUMMARY: BY PORTS—Continued

Species	Boston		Gloucester		Portland	
	Pounds	Value	Pounds	Value	Pounds	Value
Flounders, fresh.....	9,493,487	\$420,205	468,675	\$21,199	313,182	\$9,461
Swordfish, fresh.....	1,526,342	399,629	10,620	2,690	223,367	56,426
Herring, fresh.....	5,700	142	204,700	3,684	667,430	4,670
Herring, salted.....			2,286,876	80,589		
Other, fresh.....	2,165,179	59,434	455,350	9,813	627,111	12,093
Total, fresh.....	219,929,313	7,905,934	21,262,367	651,437	18,832,038	565,154
Total, salted.....	15,690	560	3,587,436	124,386	57,740	1,786
Grand total.....	219,945,003	7,906,494	24,849,803	775,823	18,889,778	566,940
Landed in 1930:						
Fresh.....	285,212,778	10,868,671	43,662,508	1,179,995	18,165,855	566,014
Salted.....	44,700	1,915	3,696,959	168,092	18,670	765
Total.....	285,257,478	10,870,586	47,359,467	1,348,087	18,184,525	566,779

Species	Total, 1931		1930	
	Pounds	Value	Pounds	Value
Cod, fresh:				
Large.....	31,918,302	\$1,065,217	33,201,753	\$1,342,643
Market.....	27,141,973	645,343	31,134,541	754,247
Scrod.....	288,149	4,355	192,517	3,543
Cod, salted:				
Large.....	1,083,157	38,214	1,351,185	72,571
Market.....	207,602	5,170	534,382	26,360
Scrod.....	5,760	87	201,454	8,704
Haddock, fresh:				
Large.....	118,305,109	4,169,513	180,649,118	6,476,004
Scrod.....	14,539,546	264,844	8,722,215	169,782
Haddock, salted, large.....	810	12		
Hake, fresh:				
Large.....	6,767,613	160,275	14,395,690	369,593
Small.....	983,114	17,640	1,217,833	25,189
Hake, salted:				
Large.....	5,100	66	4,230	79
Small.....	155	1		
Pollock, fresh.....	7,630,330	113,714	13,976,971	263,740
Pollock, salted.....	1,272	24	3,225	72
Cusk, fresh.....	4,259,602	83,112	4,415,363	112,793
Cusk, salted.....	5,005	96	18,052	438
Halibut, fresh.....	2,569,991	375,836	2,576,198	442,397
Halibut, salted.....	245	30	5,330	555
Mackerel, fresh.....	29,458,846	1,223,230	33,433,723	1,154,408
Mackerel, salted.....	64,884	2,443	78,895	3,199
Flounders, fresh.....	10,275,344	450,865	14,406,737	651,410
Swordfish, fresh.....	1,760,329	458,745	3,381,034	725,949
Herring, fresh.....	877,830	8,496	1,159,150	11,431
Herring, salted.....	2,286,876	80,589	1,563,576	58,794
Other, fresh.....	13,247,640	81,340	4,178,298	111,551
Total, fresh.....	260,023,718	9,122,525	347,041,141	12,614,680
Total, salted.....	3,660,866	126,732	3,760,329	170,772
Grand total.....	263,684,584	9,249,257	350,801,470	12,785,452
Landed in 1930:				
Fresh.....			347,041,141	12,614,680
Salted.....			3,760,329	170,772
Total.....			350,801,470	12,785,452

<sup>1</sup> The items under "Other" include alewives, 351,800 pounds, value \$4,240; butterfish, 122,571 pounds, value \$9,482; eels, 10,565 pounds, value \$159; cunner ("perch"), 675 pounds, value \$18; rosefish, 120,287 pounds, value \$1,152; salmon, 54 pounds, value \$14; sea robins, 250 pounds, value \$5; scup, 780 pounds, value \$78; shad, 193,095 pounds, value \$7,388; sharks, 57,628 pounds, value \$909; skates, 41,040 pounds, value \$307; smelt, 680 pounds, value \$34; sturgeon, 4,054 pounds, value \$406; tuna, 247 pounds, value \$25; whiting, 69,598 pounds, value \$2,066; wolfish, 1,773,935 pounds, value \$40,669; lobsters, 192 pounds, value \$50; scallops, 369 pounds, value \$56; spearfish, 500 pounds, value \$10; goosefish, 150 pounds, value \$2; sea bass, 2,200 pounds, value \$110; livers, 403,077 pounds, value \$8,402; spawn, 92,544 pounds, value \$5,623; and tongues, 1,349 pounds, value \$135.

## BIOLOGICAL ASPECT

In 1931, the fishing fleet landing fares at Boston and Gloucester, Mass., and Portland, Me., and operating on the fishing banks of the North Atlantic from Flemish Cap to New York, numbered 427 steam, motor, and sail vessels, of over 5 net tons, as measured by the United States Customs Service. These made 11,543 trips to the fishing grounds, and were absent from port 54,932 days, or an average of about 4.8 days per trip. This is 0.1 of a day less than the average length of a trip during 1930. Their catches of edible fish landed at the three ports amounted to 266,037,858 pounds when the salted fish had been converted to the basis of fresh gutted or round fish as landed. This does not represent the entire catch of edible fish of these vessels, for small quantities, estimated at not more than 5 per cent of their total catch, were landed at ports in New England other than these three, at New York City, and at ports in New Jersey.

Otter trawls on all sizes of vessels accounted for 153,566,035 pounds, or 58 per cent of the total catch. Line trawls were next in importance, accounting for 62,619,353 pounds, or 24 per cent of the total catch landed at the three ports in 1931.

The catch taken on Georges Bank was considerably larger than that taken on any other fishing ground and landed at the three ports in 1931. It amounted to 100,142,605 pounds, or 38 per cent of the total catch. It was taken mainly by otter trawls. The grounds near the shore, Browns Bank, and South Channel were next in importance, each accounting for about 15 per cent of the total catch. The catch on the grounds near the shore was taken mainly in purse seines; that on Browns Bank, mainly by line trawls; and that on South Channel, largely by otter trawls.



## Landings by fishing vessels at the three principal New England ports, 1931

## BY GEAR AND FISHING GROUNDS

Gear and fishing ground	Vessels fishing	Trips	Days absent	Cod			Haddock		Hake	
				Large	Market	Scrod	Large	Scrod	Large	Small
				Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
<b>Line trawls:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>							
Off Funks.....	1	1	5							
Grand Bank.....	5	8	183	4,412	246				5,239	
Green Bank.....	3	3	70	4,617	1,377					307
St. Peters Bank.....	3	5	113	1,540	780					1,470
Off Newfoundland.....	2	2	36							
Seal Island grounds.....	2	2	11	3,020	2,945	270	10,420	375		10,625
Gulf of St. Lawrence.....	2	2	70	575,951	274,671	11,088				2,280
Scatari Bank.....	1	1	35	7,154	2,716					
Quereau Bank.....	10	14	308	73,651	13,302	228	1,390			5,276
The Gully.....	3	4	79	8,600	12,985		40,000			
Sable Island Bank (Western Bank).....	13	18	199	557,040	363,740		720,305			5,855
Cape Shore.....	36	87	944	540,100	1,115,765	715	1,816,290	1,005		282,720
Emerald Bank.....	1	1	8	24,000	18,980		38,800			
La Have Bank.....	33	64	622	618,137	859,512	800	1,799,135	22,250		82,835
Roseway Bank.....	4	5	41	49,210	99,300		131,050			10,500
Browns Bank.....	52	369	3,696	3,900,442	3,734,621	1,020	11,712,350	15,240		645,095
Georges Bank.....	43	152	1,771	3,338,937	1,127,438	265	2,379,770	45,150		138,474
South Channel.....	38	324	2,089	1,871,467	2,943,485	1,780	6,844,420	33,560		866,760
Off Highland Light.....	2	2	10	5,400	6,600		42,900			3,100
Off Chatham.....	4	5	28	15,265	15,800	400	85,500			22,080
Nantucket Shoals.....	4	12	107	26,105	12,025		28,905			1,800
Cashes Bank.....	16	31	125	73,540	40,050	2,475	129,125	2,103		127,765
Pippenies Bank.....	6	6	28	15,580	8,860		24,815			28,800
Platts Bank.....	4	6	15	9,935	4,122	125	18,210	540		8,240
Jeffreys Ledge.....	27	294	635	201,914	97,253	11,316	881,059	34,910		262,081
Tillies Bank.....	1	1	8	190			3,100	200		3,200
Middle Bank (Stellwagen Bank).....	7	54	274	40,575	20,928	800	424,735	13,065		206,580
Shore, general.....	51	329	917	344,425	230,874	20,993	817,036	32,961		169,368
<b>Total.....</b>	<b>1 105</b>	<b>1,802</b>	<b>12,427</b>	<b>12,331,207</b>	<b>11,008,375</b>	<b>52,275</b>	<b>27,940,315</b>	<b>201,359</b>	<b>2,878,048</b>	<b>669,561</b>
<b>Hand lines:</b>										
Cape Shore.....	5	16	136	170,730	358,150		14,185			400
Browns Bank.....	6	19	184	238,945	338,880		36,540			1,030
Georges Bank.....	6	30	277	622,260	399,860		18,590			
South Channel.....	3	3	20	23,670	15,770		4,900			
Off Chatham.....	1	1	6		1,135		75			
Off Chatham (occasional).....					776	89	278			
Nantucket Shoals.....	7	24	160	81,615	157,920		1,620	290		10,300

County, general or Shore, general (occasional)	9	4	7	10	1,335	2,200
Total	17	97	810	1,146,303	1,287,291	344
<b>Harpoons:</b>						
Gulf of St. Lawrence.....	1	1	5			
Guirto Bank.....	1	1	26			
The Gully.....	1	1	20			
Cape Shore.....	4	4	79			
Browns Bank.....	52	67	1,224			
Georges Bank.....	74	191	3,512			
South Channel.....	1	1	7			
Off Chatham.....	2	2	16			
Nantucket Shoals.....	2	2	29			
Shore, general.....	8	8	127			
Total.....	179	278	5,045			
<b>Other trawls, large:</b>						
Gulf of St. Lawrence.....	1	1	15	4,300	9,400	40,700
Sable Island Bank (Western Bank)	38	93	1,067	1,576,640	1,389,363	6,465,365
La Have Bank.....	32	50	625	489,075	680,265	35,130
Browns Bank.....	42	105	1,042	1,838,310	794,835	19,775
Georges Bank.....	65	797	7,846	7,968,770	6,970,498	8,101,157
South Channel.....	44	204	1,864	1,067,288	1,115,635	7,258,055
Off Chatham.....	2	2	15	13,325	29,500	1,411,945
Nantucket Shoals.....	21	27	259	88,310	143,185	1,131,368
Shore, general.....	1	1	11	2,000	2,000	2,900
Total.....	167	1,289	12,744	12,148,018	11,134,681	56,517,518
<b>Other trawls, medium:</b>						
Sable Island Bank (Western Bank)	2	2	20	1,800	7,400	3,000
Cape Shore.....	2	2	17	2,510	3,500	50,210
La Have Bank.....	11	15	129	73,780	79,070	509,000
Browns Bank.....	35	73	622	425,755	261,140	3,172,560
Georges Bank.....	68	775	6,404	3,042,608	2,008,420	16,488,970
Clark Bank.....	1	1	8	1,000	250	16,500
South Channel.....	59	345	2,759	485,390	1,055,085	10,105
Off Highland Light.....	1	1	4		1,725	3,200
Off Chatham.....	9	25	159	44,055	62,890	329,025
Nantucket Shoals.....	34	64	504	28,500	145,800	54,180
Caubin Bank.....	1	1	5	800	1,900	1,082,410
Jeffreys Ledge.....	4	6	31	540	515	15,895
Middle Bank (Stedwagen Bank)	2	3	14	2,075	125	760
Shore, general.....	1	1	3			13,500
Total.....	30	174	496	41,489	47,610	389,270
<b>Total.....</b>						
	191	1,488	11,175	4,150,852	3,672,430	28,917,987
						69,935
						4,576,842
						886,600
						5,170

1 Exclusive of duplication.

## Landings by fishing vessels at the three principal New England ports, 1931—Continued

## BY GEAR AND FISHING GROUNDS—Continued

Gear and fishing ground	Vessels fishing	Trips	Days absent	Cod			Haddock		Hake	
				Large	Market	Scrod	Large	Scrod	Large	Small
				Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Number	Number	Number	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
Otter trawls, small:										
Cape Shore.....	1	1	7	50	200		100		800	
Browns Bank.....	1	1	7	2,700	3,400		33,500			
Georges Bank.....	6	49	383	96,445	68,845		642,760	123,025	10,500	
South Channel.....	3	9	73	3,840	25,525		112,800	22,770	915	
Nantucket Shoals.....	5	7	45	1,430	26,845		36,325	2,135	1,050	
Jeffreys Ledge.....	2	2	5	130	35		2,165	80		
Shore, general.....	59	442	1,115	69,213	49,294	1,605	633,208	31,899	87,098	
Total.....	1 62	511	1,635	173,808	174,144	1,605	1,460,858	179,909	100,363	38,145
Sink gill nets:										
Jeffreys Ledge.....	5	56	57	56,651	5,120		14,793		4,710	19,422
Shore, general.....	35	3,613	3,669	3,969,460	262,683	925	3,368,743	938	396,081	234,103
Total.....	35	3,669	3,726	4,026,111	267,803	925	3,383,536	938	400,791	253,525
Drift gill nets:										
Bay of Islands.....	7	8	412							
Georges Bank.....	1	1	4							
Jeffreys Ledge.....	1	3	7							
South.....	12	14	44							
Shore, general.....	84	741	1,534							
Total.....	1 92	767	2,001							
Purse seines:										
Cape Shore.....	3	4	38							
Georges Bank.....	47	72	271							
South Channel.....	36	45	167							
Off Chatham.....	55	94	407							
Nantucket Shoals.....	22	25	75							
Middle Bank (Stellwagen Bank).....	3	3	9							
South.....	54	91	315							
Shore, general.....	124	1,308	4,087							
Total.....	1 127	1,642	5,369							
Grand total.....	1 427	11,543	54,932	33,976,299	27,544,724	299,554	118,306,777	14,539,546	6,777,302	983,421

NOTE.—The 3 principal New England ports are Boston and Gloucester, Mass., and Portland, Me. Otter trawls (including V-D trawls) are classified according to the size of the vessel. The weight of salted fish landed has been converted to the equivalent of fresh fish as landed. Only landings by vessels having a capacity of 5 net tons or greater are used in this tabulation. "Occasional" after the name of a bank or ground indicates that the vessel or vessels contributing to the catch as shown fished chiefly with another type of gear. In such cases the number of vessels fishing, number of trips, and number of days absent are shown under the principal type of gear used.

Gear and fishing ground	Pollock	Cusk	Halibut	Flounders	Swordfish	Mackerel	Herring	Other	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
<b>Line trawls:</b>									
Off Funks			32, 530						32, 530
Grand Bank		885	273, 825					2, 500	287, 107
Green Bank		40	65, 439						71, 780
St. Peters Bank		2, 975	214, 734						221, 499
Off Newfoundland			81, 573						81, 573
Seal Island grounds	672	6, 075	164					1, 850	36, 416
Gulf of St. Lawrence			44, 526						908, 516
Seatari Bank		1, 102	6, 117						17, 089
Quereau Bank	247		15, 360		1, 325			2, 451	329, 024
The Gully	355	10, 125	48, 671						120, 736
Sable Island Bank (Western Bank)	14, 235	11, 525	44, 390			195		3, 040	1, 720, 325
Cape Shore	40, 365	371, 940	11, 172	350				46, 260	4, 236, 722
Emerald Bank	275	940	822						83, 817
La Have Bank	34, 800	148, 845	105, 682		203		320	19, 320	3, 692, 404
Roseway Bank	2, 100	18, 555	976					2, 375	314, 066
Browns Bank	264, 450	1, 954, 144	302, 816	4, 250	10, 862			147, 795	22, 709, 905
Georges Bank	91, 341	270, 156	585, 717	80	6, 295			16, 023	8, 019, 646
South Channel	347, 125	198, 055	26, 682	4, 825				54, 205	13, 196, 374
Off Highland Light	460	600							59, 060
Off Chatham	6, 350	2, 700	79						2, 390
Nantucket Shoals	800	400	45, 559						262
Cashes Bank	26, 015	210, 200	3, 707					16, 265	687, 875
Fippenies Bank	4, 230	18, 670	522					950	106, 822
Platts Bank	3, 680	7, 430	388					4, 325	66, 820
Jeffreys Ledge	58, 896	300, 076	3, 104	3, 635				110, 806	2, 252, 056
Tillies Bank	500	200							7, 390
Middle Bank (Stellwagen Bank)	13, 040	64, 520	806					6, 447	795, 496
Shore, general	63, 030	249, 261	7, 820	3, 356				94, 893	2, 297, 885
<b>Total</b>	<b>972, 966</b>	<b>3, 864, 779</b>	<b>2, 123, 615</b>	<b>16, 496</b>	<b>2 18, 880</b>	<b>2 320</b>		<b>532, 157</b>	<b>62, 619, 353</b>
<b>Hand lines:</b>									
Cape Shore	49, 455	14, 905	277					11, 595	619, 697
Browns Bank	33, 615	20, 843	3, 917					14, 320	688, 110
Georges Bank	64, 010	19, 665	8, 190					12, 720	1, 145, 295
South Channel	3, 140	800	64					1, 450	49, 794
Off Chatham									1, 210
Off Chatham (occasional)									1, 143
Nantucket Shoals	5, 840	760							258, 345
Shore, general	2, 000	1, 000						275	28, 335
Shore, general (occasional)	105								2, 758
<b>Total</b>	<b>158, 165</b>	<b>57, 973</b>	<b>12, 448</b>					<b>40, 360</b>	<b>2, 794, 687</b>

1 Exclusive of duplication.

2 Incidental catch.

## Landings by fishing vessels at the three principal New England ports, 1931—Continued

## BY GEAR AND FISHING GROUNDS—Continued

Gear and fishing ground	Pollock	Cusk	Halibut	Flounders	Swordfish	Mackerel	Herring	Other	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
<b>Harpoons:</b>									
Grand Bank (occasional)					378				378
Green Bank (occasional)					135				135
Gulf of St. Lawrence					1,901				1,901
Gurdo Bank					4,474				4,474
Quereau Bank (occasional)					794				794
The Gully					5,567				5,567
Cape Shore					32,367				32,367
La Have Bank (occasional)					1,218				1,218
Browns Bank					519,416				519,416
Browns Bank (occasional)					2,725				2,725
Georges Bank					1,120,482			913	1,121,395
Georges Bank (occasional)					5,588				5,588
South Channel					471				471
South Channel (occasional)					144				144
Off Chatham					392				392
Nantucket Shoals					3,379				3,379
Shore, general					41,431				41,431
Shore, general (occasional)					263				263
<b>Total</b>					1,741,125			913	1,742,038
<b>Otter trawls, large:</b>									
Gulf of St. Lawrence				2,800					77,500
Sable Island Bank (Western Bank)	373,000	2,685	38,301	185,105				190,914	10,554,913
La Have Bank	170,100	12,490	26,559	157,460		100		88,653	4,673,887
Browns Bank	256,110	22,080	57,317	147,950				219,997	11,558,356
Georges Bank	2,166,135	220,865	172,725	1,955,136		9,515	5,700	638,856	58,350,796
South Channel	559,820	36,985	39,877	589,200		1,633		187,613	13,279,249
Off Chatham	4,450	100		2,850				2,580	128,520
Nantucket Shoals	44,600	600	1,535	87,405				34,265	2,112,310
Shore, general				2,000					59,000
<b>Total</b>	3,574,215	295,805	336,314	3,129,906		11,248	5,700	1,362,878	100,794,531
<b>Otter trawls, medium:</b>									
Sable Island Bank (Western Bank)	1,645		15	135					40,220
Cape Shore	1,050	800	129	1,225				390	73,214
La Have Bank	19,005	1,290	4,059	23,045				9,915	833,469
Browns Bank	48,710	3,790	10,895	86,310				70,225	4,231,225
Georges Bank	321,545	11,450	59,289	3,117,210		1,100		190,412	28,714,179
Clark Bank	2,300			585					23,035
South Channel	126,907	2,570	16,320	1,074,595		395		117,678	11,020,882
Off Highland Light	100			815					14,160
Off Chatham	47,660	250	458	53,025				22,620	637,928

Nantucket Shoals.....	8,020		2,092	463,305		50		12,866	1,957,328
Cashes Bank.....		15,000							20,770
Jeffreys Ledge.....		330		29,003				835	47,878
Middle Bank (Stellwagen Bank).....				10,230				225	37,625
South.....				400				2,980	3,380
Shore, general.....	24,515	860	424	410,870				36,312	1,092,877
Total.....	601,457	36,340	93,681	5,279,753		<sup>2</sup> 1,545		464,578	48,748,170
Otter trawls, small:									
Cape Shore.....				15,100					16,250
Browns Bank.....	450		43	1,435				1,200	42,728
Georges Bank.....	595		3,561	340,783				4,165	1,290,679
South Channel.....	50		95	50,885				50	216,930
Nantucket Shoals.....	150			58,015				858	126,808
Jeffreys Ledge.....				2,605				200	5,215
Shore, general.....	4,412	1,910	161	1,337,392				70,387	2,324,724
Total.....	5,657	1,910	3,860	1,806,215				76,860	4,023,334
Sink gill nets:									
Jeffreys Ledge.....	121,980	477						14,201	237,354
Shore, general.....	2,198,307	11,827	563	42,974				276,802	10,763,406
Total.....	2,320,287	12,304	563	42,974				291,003	11,000,760
Drift gill nets:									
Bay of Islands.....							3,555,314		3,555,314
Georges Bank.....						9,147			9,147
Jeffreys Ledge.....						4,920			4,920
South.....						150,760		25	150,785
Shore, general.....						1,486,100	200	19,623	1,505,923
Shore, general (occasional).....						9,290			9,290
Total.....						1,660,217	3,555,514	19,648	5,235,379
Purse seines:									
Cape Shore.....						189,784			189,784
Georges Bank.....						1,485,450		430	1,485,880
South Channel.....						1,170,885		600	1,171,485
Off Chatham.....						1,037,980		1,330	1,039,310
Nantucket Shoals.....						784,972		250	785,222
Middle Bank (Stellwagen Bank).....						69,775			69,775
South.....						2,098,290		150	2,098,450
Shore, general.....					324	21,035,973	746,930	456,383	22,239,610
Total.....						<sup>2</sup> 324	27,873,109	746,930	459,153
Scallop drags: Shore, general (occasional).....									90
Grand total.....	7,632,747	4,269,111	2,570,481	10,275,344	1,760,329	29,546,439	4,308,144	3,247,640	266,037,858

<sup>2</sup> Incidental catch.

## Landings by fishing vessels at the three principal New England ports, 1931—Continued

## SUMMARY: BY FISHING GROUNDS

Fishing ground	Vessels fishing	Trips	Days absent	Cod			Haddock		Hake	
				Large	Market	Scrod	Large	Scrod	Large	Small
<i>East of 66° W. longitude</i>										
Off Newfoundland:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Off Funks.....	1	1	5							
Grand Bank.....	5	8	183	4,412	246				5,239	
Green Bank.....	3	3	70	4,617	1,377					307
St. Peters Bank.....	3	5	113	1,540	780					1,470
Bay of Islands.....	7	8	412							
Off Newfoundland.....	2	2	36							
Total.....	17	27	819	10,569	2,403				5,239	1,777
Off Canada:										
Seal Island grounds.....	2	2	11	3,020	2,945	270	10,420	375		10,625
Gulf of St. Lawrence.....	4	4	90	580,251	284,071	11,088	40,700	900	21,680	
Scatari Bank.....	1	1	35	7,154	2,716					
Gurdo Bank.....	1	1	26							
Quereau Bank.....	10	14	308	73,651	13,302	228	1,390		5,276	
The Gully.....	4	5	99	8,600	12,985		40,000			
Sable Island Bank (Western Bank).....	52	113	1,286	2,135,480	1,760,503	35,130	7,210,770	229,080	79,310	
Cape Shore.....	48	114	1,221	713,390	1,477,615	715	1,880,785	12,505	285,820	10,040
Emerald Bank.....	1	1	8	24,000	18,980		38,800			
La Have Bank.....	75	138	1,376	1,180,942	1,618,847	21,075	5,139,795	245,710	170,980	565
Roseway Bank.....	4	5	41	49,210	99,300		131,050		10,500	
Total.....	125	398	4,501	4,775,698	5,291,264	68,506	14,493,710	488,570	573,566	21,230
<i>West of 66° W. longitude</i>										
Off United States:										
Browns Bank.....	166	634	6,775	5,906,152	5,132,876	13,930	23,656,107	544,815	876,000	16,920
Georges Bank.....	274	2,067	20,468	14,689,020	10,572,061	146,045	49,380,391	10,478,125	1,942,794	18,920
Clark Bank.....	1	1	8	1,600	250		16,500	100	1,700	
South Channel.....	180	931	6,979	3,451,655	5,155,500	26,305	21,634,602	2,211,868	1,835,770	6,510
Off Highland Light.....	3	3	14	5,400	8,325		46,100	5,800	5,500	
Off Chatham.....	71	129	631	72,645	110,101	489	476,318	57,080	57,220	
Nantucket Shoals.....	91	161	1,179	225,960	485,775	3,160	2,463,270	505,420	119,680	
Cashes Bank.....	16	32	130	74,340	41,950	2,475	129,125	2,103	130,835	56,630
Fippenies Bank.....	6	6	28	15,580	8,860		24,815		28,800	4,395
Platts Bank.....	4	6	15	9,935	4,122	125	18,210	540	8,240	9,825
Jeffreys Ledge.....	38	361	735	259,235	102,923	11,316	913,912	34,990	267,551	306,428
Tillies Bank.....	1	1	8	190			3,100	200	3,200	
Middle Bank (Stellwagen Bank).....	12	60	297	42,650	21,053	800	434,985	26,565	207,800	4,000
South.....	65	106	362							
Shore, general.....	257	6,620	11,983	4,435,670	607,261	26,403	5,215,632	183,370	713,407	536,786
Total.....	1,416	11,118	49,612	29,190,032	22,251,057	231,048	103,813,067	14,050,976	6,198,497	960,414
Grand total.....	1,427	11,543	54,932	33,976,299	27,544,724	299,554	118,306,777	14,539,546	6,777,302	983,421

Fishing ground	Pollock	Cusk	Halibut	Flounders	Swordfish	Mackerel	Herring	Other	Total
<i>East of 66° W. longitude</i>									
Off Newfoundland:	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Off Funks.....			32, 530						32, 530
Grand Bank.....		885	273, 825		378			2, 500	287, 485
Green Bank.....		40	65, 439		135				71, 915
St. Peters Bank.....		2, 975	214, 734						221, 499
Bay of Islands.....							3, 555, 314		3, 555, 314
Off Newfoundland.....			81, 573						81, 573
Total.....		3, 900	668, 101		513		3, 555, 314	2, 500	4, 250, 316
Off Canada:									
Seal Island grounds.....	672	6, 075	164					1, 850	36, 416
Gulf of St. Lawrence.....			44, 526	2, 800	1, 901				987, 917
Scatari Bank.....		1, 102	6, 117						17, 089
Curdo Bank.....					4, 474				4, 474
Quereau Bank.....	247	15, 360	215, 794		2, 119			2, 451	329, 818
The Gully.....	355	10, 125	48, 671		5, 567				126, 303
Sable Island Bank (Western Bank).....	388, 880	14, 210	82, 706	185, 240	195			193, 954	12, 315, 458
Cape Shore.....	90, 870	387, 645	11, 578	16, 675	32, 367	189, 784		58, 245	5, 168, 034
Emerald Bank.....	275	940	822						83, 817
La Have Bank.....	223, 905	162, 625	136, 300	180, 505	1, 421	420		117, 888	9, 200, 978
Roseway Bank.....	2, 100	18, 555	976					2, 375	314, 066
Total.....	707, 304	615, 637	547, 654	385, 220	48, 044	190, 204		376, 763	28, 584, 370
<i>West of 66° W. longitude</i>									
Off United States:									
Browns Bank.....	603, 335	2, 000, 857	374, 988	239, 945	533, 903			453, 537	39, 752, 465
Georges Bank.....	2, 643, 626	522, 136	829, 482	5, 413, 209	1, 132, 365	1, 505, 212	5, 700	863, 519	100, 142, 605
Clark Bank.....	2, 300			585					23, 035
South Channel.....	1, 037, 042	238, 410	83, 038	1, 719, 505	615	1, 172, 913		361, 596	38, 935, 329
Off Highland Light.....	560	600		815				120	73, 220
Off Chatham.....	58, 460	3, 050	537	55, 875	392	1, 037, 980		28, 920	1, 959, 067
Nantucket Shoals.....	59, 410	1, 760	49, 186	608, 725	3, 379	785, 022		48, 501	5, 359, 248
Cashes Bank.....	26, 015	225, 200	3, 707					16, 265	708, 645
Fippenies Bank.....	4, 230	18, 670	522					950	106, 822
Platts Bank.....	3, 680	7, 430	388					4, 325	66, 820
Jeffreys Ledge.....	180, 876	300, 883	3, 104	35, 243		4, 920		126, 042	2, 547, 423
Tillies Bank.....	500	200							7, 390
Middle Bank (Stellwagen Bank).....	13, 040	64, 520	806	10, 230		69, 775		6, 672	902, 896
South.....				400		2, 249, 050		3, 165	2, 252, 615
Shore, general.....	2, 292, 369	264, 858	8, 968	1, 805, 592	42, 018	22, 531, 363	747, 130	954, 765	40, 365, 592
Total.....	6, 925, 443	3, 648, 574	1, 354, 726	9, 890, 124	1, 711, 772	29, 356, 235	752, 830	2, 868, 377	233, 203, 172
Grand total.....	7, 632, 747	4, 269, 111	2, 570, 481	10, 275, 344	1, 760, 329	29, 546, 439	4, 308, 144	3, 247, 640	266, 037, 858

<sup>1</sup> Exclusive of duplication.

NOTE.—The weight of salted fish landed has been converted to the equivalent of fresh fish as landed.



## Days' absence from port of fishing vessels landing fish at Boston and Gloucester, Mass., and Portland, Me., 1931

Fishing ground	January	February	March	April	May	June	July
<b>Off Newfoundland:</b>							
Grand Bank				2	91		47
Green Bank		27					
St. Peters Bank		21	44	27			21
Bay of Islands	316						
Off Newfoundland							36
Total	316	48	44	29	91		104
<b>Off Canada:</b>							
Gulf of St. Lawrence					22		
Scatari Bank							35
Quereau Bank				5	45	141	
The Gully			24	55			
Sable Island Bank (Western Bank)	240		98	347	97	62	93
Cape Shore	39				16	54	23
Emerald Bank							8
La Have Bank	198	146	40	101	52	32	70
Roseway Bank					8		
Total	477	146	162	508	240	324	194
<b>Off United States:</b>							
Browns Bank	718	899	978	1,212	341	122	614
Georges Bank	1,644	1,276	1,982	1,028	1,446	2,047	2,430
Clark Bank	8						
South Channel	488	240	366	136	435	740	1,114
Off Chatham	15	20	28	10	19	24	405
Nantucket Shoals	80	41	60	35	127	54	194
Cashes Bank	24		10	14	19		5
Fippenies Bank				5			
Platts Bank	5	2					
Jeffreys Ledge	190	141	91	16	14	7	1
Middle Bank (Stellwagen Bank)	50	49	37	4			6
South				9	274	79	
Shore, general	684	595	741	912	756	1,059	605
Total	3,906	3,263	4,293	3,381	3,431	4,132	5,374
Grand total	4,699	3,457	4,499	3,918	3,762	4,456	5,672

Fishing ground	August	September	October	November	December	Total
<b>Off Newfoundland:</b>						
Off Funks	5					5
Grand Bank	43					183
Green Bank	43					70
St. Peters Bank						113
Bay of Islands					96	412
Off Newfoundland						36
Total	91				96	819
<b>Off Canada:</b>						
Seal Island grounds			11			90
Gulf of St. Lawrence	48		5	15		11
Scatari Bank						35
Gurdo Bank		26				26
Quereau Bank	22	63	32			308
The Gully	20					99
Sable Island Bank (Western Bank)		32	71	129	117	1,286
Cape Shore	70	93	95	470	361	1,221
Emerald Bank						8
La Have Bank	87	87	183	170	210	1,376
Roseway Bank	5				28	41
Total	252	301	397	784	716	4,501
<b>Off United States:</b>						
Browns Bank	934	259	117	160	421	6,775
Georges Bank	1,719	2,592	1,353	1,591	1,360	20,468
Clark Bank						8
South Channel	1,061	711	1,048	446	194	6,979
Off Highland Light		3	7	4		14
Off Chatham	46		36	15	13	631
Nantucket Shoals	73	96	150	173	96	1,179
Cashes Bank			5	42	11	130

*Days' absence from port of fishing vessels landing fish at Boston and Gloucester, Mass., and Portland, Me., 1931—Continued*

Fishing ground	August	September	October	November	December	Total
<i>Off United States—Continued.</i>						
Fippenes Bank.....			5	9	9	28
Platts Bank.....			5	3		15
Jeffreys Ledge.....	2	11	91	83	88	735
Tillies Bank.....					8	8
Middle Bank (Stellwagen Bank).....			14	58	79	297
South.....						362
Shore, general.....	1,768	1,729	1,021	1,343	770	11,983
Total.....	5,603	5,401	3,852	3,927	3,049	49,612
Grand total.....	5,946	5,702	4,249	4,711	3,861	54,932

### MACKEREL FISHERY OF THE ATLANTIC COAST

That part of the 1931 mackerel catch taken by purse seines and drift gill nets and landed at the principal Atlantic receiving ports amounted to 36,483,472 pounds, a decrease of 16 per cent as compared with similar figures for the previous year. Because of their importance in certain seasons, the catch of fishing boats of less than 5 net tons capacity has been included in so far as data were available. The catch by shore gear, such as pound nets and traps, were omitted. Practically all of the statistics were collected by the bureau's agents at Cape May, N. J.; New York City, N. Y.; Boston, Gloucester, and Woods Hole, Mass.; and Portland, Me. A few of the landings, particularly at ports not having a bureau representative, were secured from unofficial sources and often consisted of estimated rather than "weighed out" fares. The error involved is probably well under 5 per cent in the vessel fishery. The figures on the boat fishery are probably less complete.

#### *Mackerel fishery of the Atlantic coast, 1931*

CATCH: BY PORTS IN 5-DAY PERIODS<sup>1</sup>

Date	Cape May, Wildwood, and Atlantic City	New York	Newport, New Bedford, Cape Cod Canal, Woods Hole, Nantucket, and Provincetown	Boston	Gloucester	Portland, Rockland, Boothbay, and Southwest Harbor	Total
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
April 6-10.....	14,500						14,500
April 11-15.....	1,900						1,900
April 16-20.....	942,222	86,700					1,028,922
April 21-25.....	608,378	13,970					622,348
April 26-30.....	145,500	5,458		57,300			208,258
May 1-5.....	559,233	182,475	1,800	31,380			774,888
May 6-10.....	475,450	107,136	350				582,936
May 11-15.....	104,250	654,825	66,103	548,300			1,373,478
May 16-20.....		167,850	200,540	271,500	1,175		641,065
May 21-25.....		154,239	193,555	384,685	24,450	655	757,584
May 26-31.....		89,530	376,251	684,375	215,720	12,270	1,378,146
June 1-5.....		90,000	117,663	662,380	51,485	13,870	935,398
June 6-10.....		38,000	50,075	426,840	95,519	1,165	611,599

<sup>1</sup> The landings at the ports of Boston, Gloucester, and Portland vary somewhat from those published under "Vessel fisheries at principal New England ports" in the annual reports of the division of fishery industries, due to the inclusion of landings of some small boats in the above data and also to different methods in the collection of the statistics.

## Mackerel fishery of the Atlantic coast, 1931—Continued

CATCH: BY PORTS IN 5-DAY PERIODS—Continued.

Date	Cape May, Wildwood, and Atlan- tic City	New York	Newport, New Bed- ford, Cape Cod Canal, Woods Hole, Nan- tucket, and Provincet- own	Boston	Gloucester	Portland, Rockland, Boothbay, and South- west Harbor	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
June 11-15			40,415	174,930	9,435	3,601	228,381
June 16-20		20,000	68,590	1,067,891	97,095	15,282	1,268,858
June 21-25		11,000	268,000	609,270	28,370	37,962	954,602
June 26-30			5,600	539,025	76,455	12,225	633,305
July 1-5				1,068,645	196,370	42,596	1,307,611
July 6-10			21,500	1,126,930	152,050	8,085	1,308,565
July 11-15			89,625	642,720	66,720	5,935	805,000
July 16-20				729,262	187,655	1,770	918,687
July 21-25			31,000	325,800	50,380	730	407,910
July 26-31			4,275	420,225	72,550	29,180	526,230
Aug. 1-5				923,131	235,875	190,840	1,349,846
Aug. 6-10			13,000	426,275	274,715	189,855	903,845
Aug. 11-15				393,005	49,350	104,076	546,431
Aug. 16-20				1,406,915	562,172	248,175	2,217,262
Aug. 21-25				1,444,310	1,171,383	281,388	2,897,081
Aug. 26-31			60,000	943,440	771,000	401,862	2,176,302
Sept. 1-5				629,070	222,355	96,185	947,610
Sept. 6-10				592,985	401,080	77,850	1,071,915
Sept. 11-15				899,025	626,902	238,795	1,764,722
Sept. 16-20			15,000	445,430	207,470	161,723	829,623
Sept. 21-25				499,930	633,655	227,487	1,361,072
Sept. 26-30				327,600	213,160	12,820	553,580
Oct. 1-5			4,500	284,830	167,305	1,843	458,478
Oct. 6-10			1,535	273,830	26,466	4,355	306,186
Oct. 11-15			3,633	52,530	88,543	5,035	149,741
Oct. 16-20				59,645	2,445	277	62,367
Oct. 21-25				184,747	68,040	342	253,129
Oct. 26-31					4,815	779	5,594
Nov. 1-5				1,390	4,340	773	6,503
Nov. 6-10					12,496	489	12,985
Nov. 11-15					31,741	750	32,491
Nov. 16-20				49,925	58,020	475	108,420
Nov. 21-25				106,017	565,575	9,360	680,952
Nov. 26-30				45,630	217,922		263,552
Dec. 1-5				46,868	65,548		112,416
Dec. 6-10				24,420	74,522		98,942
Dec. 11-15				1,300	18,116		19,416
Dec. 16-20				2,100	740		2,840
Total	2,851,433	1,621,183	1,633,010	19,835,806	8,101,180	2,440,860	36,483,472

## OPERATING UNITS AND CATCH: BY FLEET CLASSIFICATION AND GROUNDS

Designation	Vessels and boats	Tonnage	Crew	Trips	Total catch
	Number	Net tons	Number	Number	Pounds
SOUTHERN					
Seiners:					
Regular vessels	36	1,386	460	212	3,742,709
Miscellaneous vessels	19	710	218	47	721,189
Netters:					
Regular vessels	19	409	135	121	594,841
Miscellaneous vessels	17	283	107	49	181,335
Miscellaneous boats	2			4	4,165
Total	191	2,788	920	433	5,244,239

¹ Exclusive of boats and of duplication.

*Mackerel fishery of the Atlantic coast, 1931—Continued*

OPERATING UNITS AND CATCH: BY FLEET CLASSIFICATION AND GROUNDS—Continued

Designation	Vessels and boats	Tonnage	Crew	Trips	Total catch
	Number	Net tons	Number	Number	Pounds
<b>BLOCK ISLAND</b>					
Seiners:					
Regular vessels (spring).....	47	1,645	587	261	4,300,955
Miscellaneous vessels (spring).....	32	798	259	63	932,478
Miscellaneous vessels (summer).....	24	930	297	34	886,547
Netters:					
Regular vessels.....	16	262	99	63	555,127
Miscellaneous vessels.....	25	461	157	36	332,866
Miscellaneous boats.....	8			18	55,209
Total.....	<sup>1</sup> 121	4,096	1,399	475	7,063,182
<b>GULF OF MAINE</b>					
Seiners:					
Regular vessels.....	55	1,883	673	918	17,288,071
Miscellaneous vessels.....	54	1,236	457	398	5,013,146
Miscellaneous boats.....	7			23	151,450
Netters:					
Spring—					
Regular vessels.....	2	18	9	28	39,844
Miscellaneous vessels.....	9	119	45	13	22,930
Miscellaneous boats.....	6			17	13,800
Fall—					
Regular vessels.....	46	1,140	348	596	1,110,824
Miscellaneous vessels.....	31	645	217	124	235,004
Miscellaneous boats.....	11			26	13,658
Total.....	<sup>1</sup> 147	5,041	1,749	2,143	23,888,727
<b>CAPE SHORE</b>					
Seiners, regular vessels.....	5	262	70	6	287,324
Total seiners.....	<sup>1</sup> 112			1,962	33,323,869
Total netters.....	<sup>1</sup> 94			1,095	3,159,603
Grand total.....	<sup>1</sup> 160			3,057	36,483,472

<sup>1</sup> Exclusive of boats and of duplication.

**FISHERIES OF THE MIDDLE ATLANTIC STATES <sup>6</sup>**

The yield of fishery products in the Middle Atlantic States (New York, New Jersey, Pennsylvania, and Delaware) during 1930 amounted to 193,867,981 pounds, valued at \$13,063,672. This is an increase of 2 per cent in the amount of the catch, but a decrease of 8 per cent in the value of the catch as compared with the quantity and its value for 1929. Of the total catch in 1930, 131,637,591 pounds, valued at \$3,587,793, were fish; and 62,230,390 pounds, valued at \$9,475,879, were shellfish and miscellaneous products. These fisheries gave employment to 10,065 fishermen or 1 per cent more than in 1929. Of the total number of fishermen employed during 1930, 4,665 regular fishermen were engaged on vessels, and 3,180 regular and 2,760 casual fishermen were employed in the shore and boat fisheries.

<sup>6</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical Survey Procedure" which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

## Fisheries of the Middle Atlantic States, 1930

## SUMMARY OF CATCH

Product	New York		New Jersey		Pennsylvania	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	27,280,562	\$1,067,939	55,578,024	\$1,993,577	16,745	\$2,803
Shellfish, etc.....	18,213,989	3,865,710	41,697,861	5,480,848	-----	-----
Total.....	45,494,551	4,933,649	97,275,885	7,474,425	16,745	2,803

Product	Delaware		Total	
	Pounds	Value	Pounds	Value
Fish.....	48,762,260	\$523,474	131,637,591	\$3,587,793
Shellfish, etc.....	2,318,540	129,321	62,230,390	9,475,879
Total.....	51,080,800	652,795	193,867,981	13,063,672

## OPERATING UNITS: BY STATES

Item	New York	New Jersey	Pennsylvania	Delaware	Total
Fishermen:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	707	3,292	-----	666	4,665
On boats and shore—					
Regular.....	1,236	1,747	-----	197	3,180
Casual.....	1,157	1,177	52	374	2,760
Total.....	3,100	6,216	52	1,237	10,605
Vessels:					
Steam.....	1	-----	-----	14	15
Net tonnage.....	36	-----	-----	1,904	1,940
Motor.....	168	286	-----	9	463
Net tonnage.....	2,275	4,434	-----	289	6,998
Sail.....	10	77	-----	10	97
Net tonnage.....	88	2,085	-----	133	2,306
Total vessels.....	179	363	-----	33	575
Total net tonnage.....	2,399	6,519	-----	2,326	11,244
Boats:					
Motor.....	562	1,379	5	68	2,014
Other.....	1,080	750	14	192	2,036
Accessory boats.....	79	121	-----	86	286
Apparatus:					
Purse seines—					
Menhaden.....	4	1	-----	16	21
Length, yards.....	1,340	456	-----	6,528	8,324
Other.....	1	15	-----	-----	16
Length, yards.....	400	5,880	-----	-----	6,280
Haul seines.....	141	102	11	87	341
Length, yards.....	20,503	11,898	1,380	23,970	57,751
Gill nets—					
Anchor.....	198	5	-----	-----	203
Square yards.....	34,387	5,940	-----	-----	40,327
Drift.....	581	862	11	79	1,533
Square yards.....	450,986	658,830	15,690	211,379	1,336,885
Runaround.....	40	90	-----	45	175
Square yards.....	71,620	405,674	-----	40,000	517,294
Stake.....	110	1,340	-----	209	1,659
Square yards.....	35,819	161,823	-----	23,424	221,066
Lines—					
Hand.....	90	555	1	52	698
Hooks.....	128	793	1	104	1,026
Trawl.....	1,897	824	-----	14	2,735
Hooks.....	279,225	503,450	-----	6,100	788,775
Troll.....	20	304	-----	-----	324
Hooks.....	20	316	-----	-----	336
Trot, with baits or snoods.....	-----	4	-----	1	5
Baits or snoods.....	-----	1,775	-----	50	1,825
Trot, with hooks.....	15	-----	-----	-----	15
Hooks.....	2,640	-----	-----	-----	2,640

## Fisheries of the Middle Atlantic States, 1930—Continued

## OPERATING UNITS: BY STATES—Continued

Item	New York	New Jersey	Pennsylvania	Delaware	Total
	Number	Number	Number	Number	Number
Apparatus—Continued					
Pound nets.....	418	181	-----	67	666
Floating traps.....	9	-----	-----	-----	9
Wiers.....	-----	83	-----	-----	83
Stop nets.....	18	60	-----	9	87
Square yards.....	13,170	34,704	-----	3,368	51,242
Fyke nets.....	2,412	1,772	30	320	4,534
Dip nets.....	65	36	-----	36	137
Cast nets.....	-----	4	-----	7	11
Scap nets.....	158	-----	-----	-----	158
Drag nets.....	18	6	-----	-----	24
Yards at mouth.....	32	17	-----	-----	49
Push nets.....	29	-----	-----	-----	29
Otter trawls—					
Fish.....	114	61	-----	-----	175
Yards at mouth.....	2,887	1,331	-----	-----	4,218
Scallops.....	1	-----	-----	-----	1
Yards at mouth.....	12	-----	-----	-----	12
Shrimp.....	1	3	-----	-----	4
Yards at mouth.....	30	72	-----	-----	102
Pots—					
Crab.....	54	4	-----	-----	58
Eel.....	4,391	5,299	-----	775	10,465
Lobster.....	17,841	33,920	-----	185	51,946
Harpoons.....	21	-----	-----	-----	21
Spears.....	139	60	-----	6	205
Dredges—					
Clam.....	16	56	-----	10	82
Yards at mouth.....	16	62	-----	10	88
Crab.....	-----	53	-----	-----	53
Yards at mouth.....	-----	59	-----	-----	59
Mussel.....	8	-----	-----	-----	8
Yards at mouth.....	10	-----	-----	-----	10
Oyster.....	105	537	-----	32	674
Yards at mouth.....	144	634	-----	39	817
Scallop.....	1,210	9	-----	-----	1,219
Yards at mouth.....	1,196	29	-----	-----	1,225
Tongs.....	605	868	-----	80	1,553
Rakes.....	455	667	-----	6	1,128
Forks.....	456	19	-----	-----	475
Hoes.....	-----	74	-----	-----	74
Gaffs.....	-----	32	-----	1	33

## Fisheries of the Middle Atlantic States, 1930—Continued

CATCH: BY STATES

Species	New York		New Jersey		Pennsylvania		Delaware		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>										
Albacore.....	59,900	\$2,050	31,114	\$509					91,014	\$2,559
Alewives.....	631,694	10,053	1,464,122	15,928	2,000	\$100	3,193,966	\$9,742	5,291,782	35,823
Bluefish.....	821,080	77,657	2,961,744	312,662			31,010	2,314	3,813,834	392,633
Bonito.....	186,589	13,733	230,246	13,161					416,835	26,894
Butterfish.....	742,791	58,445	2,393,821	178,609					3,136,612	237,054
Carp.....	170,450	22,871	100,432	13,146	893	97	85,836	9,045	357,611	45,159
Catfish and bullheads.....	17,538	3,071	36,347	2,961	1,425	163	38,917	3,761	94,227	9,956
Cero.....			20,000	2,000					20,000	2,000
Cod.....	2,802,306	95,220	7,779,371	235,669			97,144	3,600	10,678,821	334,489
Croaker.....	325,000	8,125	1,439,807	50,493			1,124,930	28,704	2,889,737	87,322
Cusk.....			8,400	84					8,400	84
Dolphin.....			1,132	40					1,132	40
Drum:										
Black.....			6,904	135					6,904	135
Red or redfish.....			64,924	11,656					64,924	11,656
Eels.....	637,477	77,378	539,749	58,608	865	200	93,589	10,996	1,271,680	147,182
Flounders.....	6,499,904	216,314	2,926,352	147,850			132,553	9,503	9,558,809	373,667
Gizzard shad.....							950	7	950	7
Goosefish.....			37,892	1,118					37,892	1,118
Grayfish.....	1,250	38	11,440	229					12,690	267
Grunts.....			150	6					150	6
Haddock.....	2,567,655	76,837	5,797	205					2,573,452	77,042
Hagfish.....			7,200	72					7,200	72
Hake.....	142,755	2,446	222,747	4,002					365,502	6,448
Halibut.....	4,895	968							4,895	968
Herring, sea.....	32,456	674	659,847	6,664					692,303	7,338
King whiting or "kingfish".....	14,021	1,821	69,223	7,538			3,080	119	86,324	9,478
Mackerel.....	464,735	20,743	655,728	25,442					1,120,463	46,185
Menhaden.....	4,599,640	19,423	5,918,010	41,350			41,900,142	307,112	52,477,792	367,885
Minnnows.....	147,694	4,438	18,000	220					165,694	4,658
Mullet.....			340	22			64,800	4,300	65,140	4,322
Mummichog.....	110,155	9,167	16,000	200					126,155	9,367
Pike or pickerel.....	705	108							705	108
Pilotfish.....			2,460	123					2,460	123
Pollock.....	111,430	2,787	2,964	111					114,394	2,898
Rosefish.....	1,375	41							1,375	41
Scup or porgy.....	1,089,581	31,257	7,564,041	183,266			27,000	2,160	8,680,622	216,683
Sea bass.....	319,751	24,468	3,546,149	134,360			20,250	1,620	3,886,150	160,448

Sea robin	14,654	315	117,747	1,946						132,401	2,261
Shad	167,162	28,267	223,714	41,127	4,855	1,464	54,446	10,874		450,177	81,732
Sharks	450	23	176,469	3,795						176,919	3,818
Silversides	260,410	12,395								260,410	12,395
Skates	27,513	333	241,091	4,380						268,604	4,713
Smelt	3,100	868								3,100	868
Snapper, red			4,000	400						4,000	400
Spanish mackerel			15,839	1,496						15,839	1,496
Spot	3,878	309	542,616	22,645			146,761	8,250		693,255	31,204
Squeteague or "sea trout," gray	939,368	67,165	11,097,692	357,844			1,234,725	40,468		13,271,785	465,477
Striped bass	66,440	11,344	36,862	5,761			102,027	22,449		205,329	39,554
Sturgeon	2,110	610	4,208	1,787		182	15,313	6,253		21,813	8,832
Suckers	44,352	5,054	27,575	2,827	6,525	597	150	9		78,602	8,487
Sunfish	2,028	211								2,028	211
Swordfish	234,140	37,887								234,140	37,887
Tautog	82,177	6,196	181,966	6,115			74,000	2,300		338,143	14,611
Thimble-eyed mackerel			35,722	1,115						35,722	1,115
Tilefish	2,312,200	88,415								2,312,200	88,415
Tomcod	120,805	4,818								120,805	4,818
Tuna or "horse mackerel"	19,600	2,301	37,562	2,473						57,162	4,774
Whitebait	95,800	7,140								95,800	7,140
White perch	20,791	3,070	149,356	17,226			209,971	35,115		380,118	55,411
Whiting	349,267	10,367	3,763,942	59,568						4,113,209	69,935
Wolfish	6,425	113								6,425	113
Yellow perch	5,065	605	179,210	14,633			47,760	4,689		232,035	19,927
Yellowtail							2,940	84		2,940	84
Total	27,280,562	1,067,939	55,578,024	1,993,577	16,745	2,803	48,762,260	523,474		131,637,591	3,587,793
SHELLFISH, ETC.											
Crabs:											
Hard	165,144	8,716	252,056	20,307						417,200	29,023
King			5,215,800	27,548			968,760	1,265		6,184,560	28,813
Rock	640	80								640	80
Soft	5,576	1,704	105,824	15,173			23,800	4,850		135,200	21,727
Lobsters	536,391	136,692	1,010,579	230,110			11,750	2,620		1,558,720	369,422
Shrimp	95,530	14,318	245,526	14,485						341,056	28,803
Squid	533,984	21,757	1,239,524	33,019						1,773,508	54,776
Clams:											
Hard, public <sup>1</sup>	793,656	358,302	1,561,556	648,098			18,503	3,790		2,373,715	1,010,190
Hard, private <sup>1</sup>	46,180	18,122	150,910	25,058			6,003	2,001		203,093	45,181
Razor	3,080	756								3,080	756
Soft, public <sup>2</sup>	501,975	70,448	628,628	87,808						1,130,603	158,256
Soft, private <sup>2</sup>	192	12								192	12
Surf or skimmers	291,270	34,639	131,670	15,281						422,940	49,920

<sup>1</sup> Statistics on hard clams used in this table are based on yields of 9 pounds of meats per bushel for those from public beds in New York, and 8 pounds for those from public beds in New Jersey and Delaware; 10 pounds for those from private beds in New York and New Jersey, and 8 pounds for those from private beds in Delaware. In reports for previous years all hard clams in these States have been computed on the basis of a uniform yield of 8 pounds of meats to the bushel.

<sup>2</sup> Statistics on soft clams used in this table are based on yields of 15 pounds of meats to the bushel in New York and 12 pounds in New Jersey. In reports for previous years all soft clams have been computed on the basis of a uniform yield of 10 pounds of meats to the bushel.



## Fisheries of the Middle Atlantic States, 1930—Continued

## CATCH: BY STATES—Continued

Species	New York		New Jersey		Pennsylvania		Delaware		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.—continued										
Conchs.....	35,226	\$2,945							35,226	\$2,945
Mussels.....	271,500	11,985	4,200	\$282			19,500	\$1,875	295,200	14,142
Oysters: <sup>3</sup>										
Market, public, spring.....	8,767	2,166	37,602	5,671					46,369	7,837
Market, public, fall.....	7,521	1,858	121,226	16,613			166,467	18,942	295,214	37,413
Market, private, spring.....	4,741,779	1,123,278	3,656,171	587,952			28,120	3,967	8,426,070	1,715,197
Market, private, fall.....	4,505,158	1,045,663	8,009,996	1,238,752			233,513	32,002	12,748,667	2,316,417
Seed, public, spring.....	132,720	17,475	18,621,970	2,421,382			764,100	53,370	19,518,790	2,492,227
Seed, public, fall.....	96,215	13,460	82,804	9,959			75,374	4,501	254,393	27,920
Seed, private, spring.....	738,878	130,006	439,343	42,044					1,178,221	172,050
Seed, private, fall.....	2,854,610	381,550	4,000	300					2,858,610	381,850
Scallops:										
Bay.....	396,711	115,274							396,711	115,274
Sea.....	1,338,462	230,746	164,100	33,342					1,502,562	264,088
Terrapin, diamond-back.....			6,041	7,052					6,041	7,052
Turtles:										
Loggerhead.....			905	31					905	31
Snapper.....			7,430	581			2,650	138	10,080	719
Bloodworms.....	54,404	62,588							54,404	62,588
Sandworms.....	58,420	61,170							58,420	61,170
Total.....	18,213,989	3,865,710	41,697,861	5,480,848			2,318,540	129,321	62,230,390	9,475,879
Grand total.....	45,494,551	4,933,649	97,275,885	7,474,425	16,745	\$2,803	51,080,800	652,795	193,867,981	13,063,672

<sup>3</sup> Statistics on oysters used in this table are based on yields of 7 pounds of meats per bushel for market oysters in New York, 8.41 pounds for market oysters in New Jersey, and 7.5 pounds for market oysters in Delaware; and 7 pounds for seed oysters in New York, and 4.5 pounds for seed oysters in New Jersey and Delaware. In reports for previous years, all oysters in these States have been computed on the basis of a uniform yield of 7 pounds of meats to the bushel.

NOTE.—Of the above catch, all the cero and red snapper were taken off the coast of Florida. In addition, 45,000 pounds of shrimp, valued at \$1,800, which were reported under New York, were taken off the coast of Florida; and 830 pounds of bluefish, valued at \$123; 6,750 pounds of shad, valued at \$900; 2,141 pounds of Spanish mackerel, valued at \$145; and 222,658 pounds of shrimp, valued at \$9,132 which were reported under New Jersey, were also taken off the coast of Florida.

## Fisheries of the Middle Atlantic States, 1930—Continued

## PRODUCTION OF CERTAIN SHELLFISH IN NUMBERS AND BUSHEL

Product	New York		New Jersey		Delaware		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:								
Hard.....number.....	495,432	\$8,716	756,163	\$20,307	-----	-----	1,251,600	\$20,023
King.....do.....	-----	-----	1,303,950	27,548	242,190	\$1,265	1,546,140	28,813
Rock.....do.....	1,920	80	-----	-----	-----	-----	1,920	80
Soft.....do.....	16,728	1,704	317,472	15,173	71,400	4,850	405,600	21,727
Clams:								
Hard, public.....bushels.....	88,184	358,302	195,194	648,098	2,313	3,790	285,691	1,010,190
Hard, private.....do.....	4,618	18,122	15,091	25,058	750	2,001	20,459	45,181
Soft, public.....do.....	33,465	70,448	52,386	87,808	-----	-----	85,851	158,256
Soft, private.....do.....	13	12	-----	-----	-----	-----	13	12
Surf or skimmers.....do.....	24,272	34,639	10,972	15,281	-----	-----	35,244	49,920
Conchs.....do.....	1,957	2,945	-----	-----	-----	-----	1,957	2,945
Mussels.....do.....	27,150	11,985	420	282	1,950	1,875	29,520	14,142
Oysters:								
Market, public, spring.....bushels.....	1,252	2,166	4,471	5,671	-----	-----	5,723	7,837
Market, public, fall.....do.....	1,074	1,858	14,415	16,613	22,196	18,942	37,685	37,413
Market, private, spring.....bushels.....	677,397	1,123,278	434,741	587,952	3,749	3,967	1,115,887	1,715,197
Market, private, fall.....do.....	643,594	1,045,663	952,437	1,238,752	31,135	32,002	1,627,166	2,316,417
Seed, public, spring.....do.....	18,960	17,475	4,138,216	2,421,382	169,800	53,370	4,326,976	2,492,227
Seed, public, fall.....do.....	13,745	13,460	18,401	9,959	16,750	4,501	48,896	27,920
Seed, private, spring.....do.....	105,554	130,006	97,632	42,044	-----	-----	203,186	172,050
Seed, private, fall.....do.....	407,801	381,550	889	300	-----	-----	408,690	381,850
Scallops:								
Bay.....do.....	66,118	115,274	-----	-----	-----	-----	66,118	115,274
Sea.....do.....	223,077	230,746	27,350	33,342	-----	-----	250,427	264,088

## Industries related to the fisheries of the Middle Atlantic States, 1930

Item	New York	New Jersey	Pennsylvania	Delaware	Total
Transporting:					
Persons engaged—					
On vessels.....	Number 61	Number 35	Number	Number 5	Number 101
On boats.....	-----	117	-----	-----	117
Total.....	61	152	-----	5	218
Vessels—					
Motor.....	24	10	-----	1	35
Net tonnage.....	357	159	-----	9	525
Boats.....	-----	176	-----	-----	176
Wholesale and manufacturing:					
Establishments.....	246	124	56	18	444
Persons engaged—					
Proprietors.....	257	165	86	23	531
Salaried employees.....	677	141	124	22	964
Wage earners:					
Average for season.....	1,845	1,536	540	330	4,254
Average for year.....	1,686	929	453	130	3,198
Salaries and wages paid.....	\$5,420,042	\$1,242,574	\$1,163,278	\$130,186	\$7,956,080
Products <sup>1</sup> .....	\$8,987,601	\$3,649,260	\$2,027,205	\$757,259	\$15,421,325
Fishermen's manufactured products:					
Persons engaged.....	504	49	-----	39	592
Products.....	\$412,162	\$40,847	-----	\$7,104	\$460,113

<sup>1</sup> These production figures are not comparable with those shown in previous bulletins since packaged fresh and frozen fishery products are now included.

NOTE.—Of the total number of persons employed on transporting craft, 124 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 545 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## NEW YORK

Fisheries of New York, 1930

OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets			
	Men-haden	Other		Anchor	Drift	Run-around	Stake
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels.....	67	12		2	37	16	
On boats and shore--							
Regular.....			151	36	18	45	49
Casual.....			186	33	203	6	71
Total.....	67	12	337	71	258	67	111
Vessels:							
Motor--							
5 to 10 tons.....				1		5	
11 to 20 tons.....	3				1	1	
21 to 30 tons.....	1	1			1		
41 to 50 tons.....					1		
61 to 70 tons.....					1		
Total.....	4	1		1	4	6	
Net tonnage.....	67	29		7	142	51	
Boats:							
Motor.....			16	15	20	25	11
Other.....			133	18	97	10	83
Accessory boats.....	7	2			16	1	
Apparatus:							
Number.....	4	1	141	198	581	40	119
Length, yards.....	1,340	400	20,503				
Square yards.....				34,387	450,986	71,620	35,819

Item	Lines				Pound nets	Floating traps	Stop nets
	Hand	Trawl	Trot, with hooks	Troll			
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels.....	20	91			6		
On boats and shore--							
Regular.....	37	134	2	7	142	10	7
Casual.....	16	7	16	2	12		27
Total.....	73	232	18	9	160	10	34
Vessels:							
Motor--							
5 to 10 tons.....	4	12			3		
11 to 20 tons.....		4					
21 to 30 tons.....	1	1					
41 to 50 tons.....		1					
51 to 60 tons.....		1					
Total.....	5	19			3		
Net tonnage.....	53	264			18		
Boats:							
Motor.....	41	55		5	49	2	3
Other.....	12	9	15		120	5	19
Accessory boats.....		50					
Apparatus:							
Number.....	90	1,897	15	20	418	9	18
Square yards.....							13,170
Hooks, baits, or snoods.....	128	279,225	2,640	20			



## Fisheries of New York, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Dredges—Contd.		Tongs	Rakes	Forks	By hand	Total, exclusive of duplication
	Oyster	Scallop					
	Number	Number	Number	Number	Number	Number	Number
Fishermen:							
On vessels.....	221	152	57	2			707
On boats and shore—							
Regular.....	8	203	445	311	283	83	1,236
Casual.....	2	152	112	141	176	37	1,157
Total.....	231	507	614	454	459	120	3,100
Vessels:							
Steam—31 to 40 tons.....	1						1
Net tonnage.....	36						36
Motor—							
5 to 10 tons.....	14	19	26	1			94
11 to 20 tons.....	17	13					44
21 to 30 tons.....	12	3					21
31 to 40 tons.....	2						2
41 to 50 tons.....	2						4
51 to 60 tons.....	1						2
61 to 70 tons.....							1
Total.....	48	35	26	1			168
Net tonnage.....	882	407	164	6			2,275
Sail—							
5 to 10 tons.....		7	1				8
11 to 20 tons.....		1					1
21 to 30 tons.....							1
Total.....		8	1				10
Net tonnage.....		55	6				88
Total vessels.....	49	43	27	1			179
Total net tonnage.....	918	462	170	6			2,399
Boats:							
Motor.....	4	30	182	155			562
Other.....		158	306	270	39	1	1,080
Accessory boats.....							79
Apparatus:							
Number.....	105	1,210	605	455	456		
Yards at mouth.....	144	1,196					

## CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets—Anchor	
	Menhaden		Other		Pounds	Value	Pounds	Value
Alewives.....					470,336	\$6,279		
Bluefish.....					6,030	1,054	41,572	\$6,217
Carp.....					69,168	9,649	400	56
Catfish and bullheads.....					2,286	440	20	3
Cod.....					3,850	105		
Eels.....					107,430	2,985		
Flounders.....					5,300	530		
Menhaden.....	4,475,640	\$18,183						
Minnows.....					147,494	4,368		
Mummichog.....					86,620	6,922		
Pike or pickerel.....					400	54		
Scup or porgy.....			500,000	\$7,500				
Sea robin.....							400	10
Shad.....					1,148	223		
Silversides.....					260,370	12,391		
Smelt.....					2,500	750	50	20
Squeteagues or "sea trout," gray.....			200,000	5,000	33,350	5,283	84,247	11,563
Striped bass.....					41,380	8,548	2,011	497
Sturgeon.....					75	15	599	135
Suckers.....					10,087	1,017	875	90
Sunfish.....					661	72		
Whitebait.....					95,800	7,140		
White perch.....					3,170	664	2,849	282
Yellow perch.....					250	35		
Shrimp.....					400	60		
Total.....	4,475,640	18,183	700,000	12,500	1,348,105	68,584	133,023	18,873

## Fisheries of New York, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Gill nets—Continued						Lines—Hand	
	Drift		Runaround		Stake		Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value		
Alewives.....	10,800	\$226			400	\$24		
Bluefish.....	6,050	825	292,580	\$25,112	1,900	130	178,020	\$17,948
Butterfish.....			5,000	448				
Carp.....	1,426	225			8,059	1,158		
Cod.....							152,617	6,730
Flounders.....							30,450	522
Hake.....							9,000	110
Mackerel.....	195,460	6,088					8,500	510
Pollock.....							91,575	2,498
Scup or porgy.....					150	5	15,400	1,016
Sea bass.....							102,350	11,795
Shad.....	148,372	24,168			17,173	3,763		
Squeteagues or "sea trout," gray.....	550	75	103,285	8,604	16,800	775	27,880	2,705
Striped bass.....			1,000	120	344	114	7,400	615
Sturgeon.....	1,211	401			225	59		
Suckers.....					755	85		
Tautog.....							26,100	1,380
Tuna or "horse mackerel".....	220	15						
White perch.....					1,483	155		
Total.....	364,089	32,023	401,865	34,284	47,289	6,268	649,292	46,429

Species	Lines—Continued						Pound nets	
	Trawl		Trot, with hooks		Troll		Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value		
Albacore.....							59,900	\$2,050
Alewives.....							89,950	1,041
Bluefish.....					4,980	\$542	289,748	25,814
Bonito.....							186,589	13,733
Butterfish.....							689,105	53,129
Carp.....			325	\$47				
Catfish and bullheads.....			64	13				
Cod.....	1,621,294	\$59,097					37,159	1,652
Eels.....	11,500	1,495	5,572	1,108			175,410	23,326
Flounders.....	300	30					263,892	10,431
Grayfish.....	1,250	38						
Haddock.....	31,895	1,254						
Hake.....	23,112	679						
Herring, sea.....							32,456	674
King whiting or "kingfish".....							13,976	1,817
Mackerel.....							239,300	13,022
Menhaden.....							124,000	1,240
Scup or porgy.....							391,445	19,928
Sea bass.....							48,886	4,753
Sea robin.....							11,139	243
Shad.....							283	48
Sharks.....							450	23
Skates.....	24,350	241					150	2
Spot.....							3,878	309
Squeteagues or "sea trout," gray.....							471,227	33,036
Striped bass.....							13,893	1,380
Tautog.....							38,035	3,037
Tilefish.....	2,312,200	88,415					19,380	2,286
Tuna or "horse mackerel".....							750	25
White perch.....							337,940	10,140
Whiting.....							7,334	880
Crabs, hard.....							473,597	19,947
Squid.....								
Total.....	4,025,901	151,246	5,961	1,168	4,980	542	4,019,872	243,966

## Fisheries of New York, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Floating traps		Stop nets		Fyke nets		Dip nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			234	\$7	19,067	\$250		
Butterfish.....	45,686	\$4,569						
Carp.....			44,450	6,189	7,663	871		
Catfish and bullheads.....			1,800	225	12,791	2,300		
Cod.....	496	27						
Eels.....					3,860	614		
Flounders.....	137,850	8,960			1,387,440	26,528		
Hake.....	526	26						
King whiting or "kingfish".....	45	4						
Mackerel.....	21,475	1,123						
Pike or pickerel.....			53	5	90	21		
Pollock.....	3,520	70						
Scup or porgy.....	31,561	1,262						
Sea bass.....	35,777	2,503						
Sea robin.....	3,115	62						
Shad.....			60	9				
Skates.....	3,013	90						
Smelt.....							200	\$10
Squeteagues or "sea trout," gray.....	509	74						
Striped bass.....			200	60	12	1		
Suckers.....			3,261	383	21,617	2,361		
Sunfish.....			37	2	1,065	109		
Tautog.....	1,157	57			7,900	766		
Tomcod.....					120,678	4,799		
White perch.....					10,356	1,779		
Whiting.....	11,327	227						
Yellow perch.....					3,931	463		
Crabs:								
Hard.....					36,975	1,110	43,100	3,774
Soft.....							5,576	1,704
Shrimp.....							510	50
Squid.....	60,387	1,810						
Scallops, bay.....							11,130	2,340
Total.....	356,444	20,864	50,095	6,880	1,633,445	41,972	60,516	7,878

Species	Scap nets		Drag nets		Push nets		Otter trawls			
	Pounds	Value	Pounds	Value	Pounds	Value	Fish		Scallop	
							Pounds	Value	Pounds	Value
Alewives.....	40,907	\$2,226								
Bluefish.....							200	\$15		
Butterfish.....							3,000	299		
Carp.....	38,959	4,676								
Catfish and bullheads.....	577	90								
Cod.....							986,890	27,609		
Croaker.....							325,000	8,125		
Eels.....	117	22								
Flounders.....							4,667,957	168,341		
Haddock.....							2,535,760	75,583		
Hake.....							110,117	1,631		
Halibut.....							4,895	968		
Minnnows.....	200	70								
Mummichog.....					40	\$4				
Pike or pickerel.....	162	28								
Pollock.....							16,335	219		
Rosefish.....							1,375	41		
Scup or porgy.....							151,025	1,546		
Sea bass.....							31,688	1,756		
Shad.....	126	56								
Silversides.....					40	4				
Smelt.....	350	88								
Squeteagues or "sea trout," gray.....							1,520	50		
Striped bass.....							200	9		
Suckers.....	7,757	1,118								
Sunfish.....	265	28								
Tautog.....							8,985	356		
Tomcod.....	127	19								
White perch.....	2,183	165								
Wolfish.....							6,425	113		
Yellow perch.....	884	107								
Crabs, hard.....			67,500	\$2,025						
Lobsters.....							400	120		
Shrimp.....			49,600	12,400	20	8				
Clams, soft, private.....							192	12		
Conchs.....							1,710	152		
Scallops:										
Bay.....					23,580	4,840				
Sea.....			7,902	1,756					13,500	\$1,875
Total.....	92,614	8,693	125,002	16,181	23,680	4,856	8,853,674	286,945	13,500	1,875

Fisheries of New York, 1930—Continued

CATCH: BY GEAR—Continued

Species	Otter trawls— Shrimp		Pots						Harpoons	
			Crab		Eel		Lobster			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....					267,664	\$36,921				
Flounders.....					1,400	262				
Mummichog.....					23,495	2,241				
Sea bass.....							101,050	\$3,661		
Swordfish.....									234,140	\$37,887
Crabs:										
Hard.....			5,685	\$753			3,650	165		
Rock.....					640	80				
Lobsters.....							535,991	136,572		
Shrimp.....	45,000	\$1,800								
Total.....	45,000	1,800	5,685	753	293,199	39,504	640,691	140,398	234,140	37,887

Species	Spears		Dredges							
			Clam		Mussel		Oyster		Scallop	
	Lbs.	Value	Lbs.	Value	Lbs.	Value	Pounds	Value	Pounds	Value
Eels.....	65,924	\$10,907								
Flounders.....	5,315	710								
Clams:										
Hard, private.....							1,200	\$500		
Surf or skimmers.....			224,950	\$18,340						
Conchs.....									33,516	\$2,793
Mussels.....					235,400	\$10,762	21,600	648		
Oysters:										
Market, private, spring.....							4,703,979	1,111,178		
Market, private, fall.....							4,456,998	1,030,107		
Seed, public, fall.....							4,200	450		
Seed, private, spring.....							738,878	130,006		
Seed, private, fall.....							2,854,610	381,550		
Scallops:										
Bay.....									357,633	106,763
Sea.....									1,317,060	227,115
Total.....	71,239	11,617	224,950	18,340	235,400	10,762	12,781,465	2,654,439	1,708,205	336,671

Species	Tongs		Rakes		Forks		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard.....	200	\$2	700	\$7				
Clams:								
Hard, public.....	382,588	165,015	371,220	175,191			39,848	\$18,096
Hard, private.....	44,980	17,622						
Razor.....					3,080	\$756		
Soft, public.....			137,250	13,088	364,725	57,360		
Surf or skimmers.....	66,320	16,299						
Mussels.....	6,500	325					8,000	250
Oysters:								
Market, public, spring.....	8,767	2,166						
Market, public, fall.....	7,521	1,858						
Market, private, spring.....	37,800	12,100						
Market, private, fall.....	48,160	15,556						
Seed, public, spring.....	62,720	8,975	70,000	8,500				
Seed, public, fall.....	67,515	9,675	12,600	1,700			11,900	1,635
Scallops, bay.....				689			2,100	642
Bloodworms.....					54,404	62,588		
Sandworms.....					58,420	61,170		
Total.....	733,071	249,593	594,038	199,175	480,629	181,874	61,848	20,623



## Fisheries of New York, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Floating traps		Stop nets		Fyke nets		Dip nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			234	\$7	19,067	\$250		
Butterfish	45,686	\$4,569						
Carp			44,450	6,189	7,663	871		
Catfish and bullheads			1,800	225	12,791	2,309		
Cod	496	27						
Eels					3,860	614		
Flounders	137,850	8,960			1,387,440	26,528		
Hake	526	26						
King whiting or "kingfish"	45	4						
Mackerel	21,475	1,123						
Pike or pickerel			53	5	90	21		
Pollock	3,520	70						
Scup or porgy	31,561	1,262						
Sea bass	35,777	2,503						
Sea robin	3,115	62						
Shad			60	9				
Skates	3,013	90						
Smelt							200	\$10
Squeteagues or "sea trout," gray	509	74						
Striped bass			200	60	12	1		
Suckers			3,261	383	21,617	2,361		
Sunfish			37	2	1,065	109		
Tautog	1,157	57			7,900	766		
Tomcod					120,678	4,769		
White perch					10,356	1,779		
Whiting	11,327	227						
Yellow perch					3,931	463		
Crabs:								
Hard					36,975	1,110	43,100	3,774
Soft							5,576	1,704
Shrimp							519	50
Squid	60,387	1,810						
Scallops, bay							11,130	2,340
Total	356,444	20,864	50,095	6,880	1,633,445	41,972	60,516	7,878

Species	Scap nets		Drag nets		Push nets		Otter trawls			
	Pounds	Value	Pounds	Value	Pounds	Value	Fish		Scallop	
							Pounds	Value	Pounds	Value
Alewives	40,907	\$2,226					200	\$15		
Bluefish							3,000	299		
Butterfish										
Carp	38,959	4,676								
Catfish and bullheads	577	90								
Cod							986,890	27,609		
Croaker							325,000	8,125		
Eels	117	22								
Flounders							4,667,957	168,341		
Haddock							2,535,760	75,583		
Hake							110,117	1,631		
Hallibut							4,895	968		
Minnnows	200	70								
Mummichog					40	\$4				
Pike or pickerel	162	28								
Pollock							16,335	219		
Rosefish							1,375	41		
Scup or porgy							151,025	1,546		
Sea bass							31,688	1,756		
Shad	126	56								
Silversides					40	4				
Smelt	350	88								
Squeteagues or "sea trout," gray							1,520	50		
Striped bass							200	9		
Suckers	7,757	1,118								
Sunfish	265	28								
Tautog							8,985	356		
Tomcod	127	19								
White perch	2,183	165								
Wolfish							6,425	113		
Yellow perch	884	107								
Crabs, hard			67,500	\$2,025						
Lobsters							400	120		
Shrimp			49,600	12,400	20	8				
Clams, soft, private							192	12		
Conchs							1,710	152		
Scallops:										
Bay					23,580	4,840				
Sea			7,902	1,756					13,500	\$1,875
Total	92,614	8,693	125,002	16,181	23,680	4,856	8,853,674	286,945	13,500	1,875

## Fisheries of New York, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Otter trawls— Shrimp		Pots						Harpoons	
			Crab		Eel		Lobster			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....					267,664	\$36,921				
Flounders.....					1,400	262				
Mummichog.....					23,495	2,241				
Sea bass.....							101,050	\$3,661		
Swordfish.....									234,140	\$37,887
Crabs:										
Hard.....			5,685	\$753			3,650	165		
Rock.....					640	80				
Lobsters.....							535,991	136,572		
Shrimp.....	45,000	\$1,800								
Total.....	45,000	1,800	5,685	753	293,199	39,504	640,691	140,398	234,140	37,887

Species	Spears		Dredges							
			Clam		Mussel		Oyster		Scallop	
	Lbs.	Value	Lbs.	Value	Lbs.	Value	Pounds	Value	Pounds	Value
Eels.....	65,924	\$10,907								
Flounders.....	5,315	710								
Clams:										
Hard, private.....							1,200	\$500		
Surf or skimmers.....			224,950	\$18,340					33,516	\$2,793
Conchs.....										
Mussels.....					235,400	\$10,762	21,600	648		
Oysters:										
Market, private, spring.....							4,703,979	1,111,178		
Market, private, fall.....							4,456,998	1,030,107		
Seed, public, fall.....							4,200	450		
Seed, private, spring.....							738,878	130,006		
Seed, private, fall.....							2,854,610	381,550		
Scallops:										
Bay.....									357,633	106,763
Sea.....									1,317,060	227,115
Total.....	71,239	11,617	224,950	18,340	235,400	10,762	12,781,465	2,654,439	1,708,205	336,671

Species	Tongs		Rakes		Forks		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard.....	200	\$2	700	\$7				
Clams:								
Hard, public.....	382,588	165,015	371,220	175,191			39,848	\$18,096
Hard, private.....	44,980	17,622						
Razor.....					3,080	\$756		
Soft, public.....			137,250	13,088	364,725	57,360		
Surf or skimmers.....	66,320	16,299						
Mussels.....	6,500	325					8,000	250
Oysters:								
Market, public, spring.....	8,767	2,166						
Market, public, fall.....	7,521	1,858						
Market, private, spring.....	37,800	12,100						
Market, private, fall.....	48,160	15,556						
Seed, public, spring.....	62,720	8,975	70,000	8,500				
Seed, public, fall.....	67,515	9,675	12,600	1,700			11,900	1,635
Scallops, bay.....			2,268	689			2,100	642
Bloodworms.....					54,404	62,588		
Sandworms.....					58,420	61,170		
Total.....	733,071	249,593	594,038	199,175	480,620	181,874	61,848	20,623

## Fisheries of New York, 1930—Continued

## OPERATING UNITS: BY COUNTIES

Item	Albany	Bronx	Colum- bia	Dutch- ess	Greene	Kings	Nassau	New York	Orange
Fishermen:									
On vessels	Number	Number	Number	Number	Number	Number	Number	Number	Number
On boats and shore—									
Regular			2	2	2	148	46	130	
Casual	10	2	32	104	35	187	215		2
Total	10	2	34	106	37	444	398	130	43
Vessels:									
Motor—									
5 to 10 tons						22	3	4	
11 to 20 tons						8	6	6	
21 to 30 tons						5	2	5	
31 to 40 tons								1	
41 to 50 tons								2	
51 to 60 tons								1	
61 to 70 tons								1	
Total						35	11	20	
Net tonnage						403	164	489	
Sail—21 to 30 tons						1			
Net tonnage						27			
Total vessels						36	11	20	
Total net tonnage						430	164	489	
Boats:									
Motor				6		91	34		1
Other	7	2	19	44	27	8	205		21
Accessory boats						6	1	57	
Apparatus:									
Purse seines—									
Other						1			
Length, yards						400			
Haul seines	2		6	5	7	5	18		10
Length, yards	216		602	631	707	65	996		1,220
Gill nets—									
Drift			1	31	1		50	420	9
Square yards			2,000	96,670	1,050		40,400	75,600	26,988
Runaround							18		
Square yards							37,700		
Stake				1	1				
Square yards				800	66				
Lines—									
Hand						38		6	
Hooks						66		12	
Trawl						68	23	40	
Hooks						79,000	48,425	60,900	
Trot, with hooks				3					1
Hooks				710					150
Troll						16			
Hooks						16			
Pound nets							4		
Stop nets			2	2	3				1
Square yards			1,525	2,017	3,464				498
Fyke nets	22		33	55	37				52
Dip nets							22		
Scap nets	5		12	35	16				12
Drag nets							3		
Yards at mouth							5		
Push nets							1		
Otter trawls—									
Fish						30	4	4	
Yards at mouth						649	87	125	
Shrimp							1		
Yards at mouth							30		
Pots—									
Crab						36			
Eel				3		112	440		15
Lobster						6,933	3,655		
Harpoons						1		2	
Spears						11	55		
Dredges—									
Clam						15			
Yards at mouth						15			
Mussel							6		
Yards at mouth							7		
Oyster							17	18	
Yards at mouth							20	27	
Scallop						30	6	4	
Yards at mouth						82	16	11	
Tongs		2					182		
Rakes							70		
Forks						125	143		

## Fisheries of New York, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Putnam	Queens	Rensselaer	Richmond	Rockland	Saratoga	Suffolk	Ulster	Westchester
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....		2		2			376		3
On boats and shore—									
Regular.....				6			809	4	7
Casual.....	1	2	18	6	44	3	409	146	58
Total.....	1	4	18	14	44	3	1,594	150	68
<b>Vessels:</b>									
Steam—31 to 40 tons.....							1		
Net tonnage.....							36		
Motor—									
5 to 10 tons.....				1			63		1
11 to 20 tons.....		1					23		
21 to 30 tons.....							9		
31 to 40 tons.....							1		
41 to 50 tons.....							2		
51 to 60 tons.....							1		
Total.....		1		1			99		1
Net tonnage.....		16		7			1,188		8
Sail—									
5 to 10 tons.....							8		
11 to 20 tons.....							1		
Total.....							9		
Net tonnage.....							61		
Total vessels.....		1		1			109		1
Total net tonnage.....		16		7			1,285		8
<b>Boats:</b>									
Motor.....				8	4		410	4	4
Other.....	1	1	15		21	3	397	78	31
Accessory boats.....							15		
<b>Apparatus:</b>									
Purse seines—									
Menhaden.....							4		
Length, yards.....							1,340		
Haul seines.....		1	3	1	3		69	5	6
Length, yards.....		100	534	5	600		13,486	542	799
Gill nets—									
Anchor.....					27		38	10	123
Square yards.....					460		32,129	100	1,698
Drift.....					7		4	47	11
Square yards.....					21,010		7,300	137,536	42,532
Runaround.....							22		
Square yards.....							33,930		
Stake.....					10		67	18	13
Square yards.....					5,843		13,280	2,887	12,943
Lines—									
Hand.....							46		
Hooks.....							50		
Trawl.....							1,766		
Hooks.....							90,900		
Trot, with hooks.....	1		1		4			4	1
Hooks.....	150		60		760			510	300
Troll.....							4		
Hooks.....							4		
Pound nets.....							414		
Floating traps.....							9		
Stop nets.....	1							8	1
Square yards.....	66							5,201	399
Fyke nets.....			23		2		2,085	66	33
Dip nets.....							43		
Scap nets.....			12		1	3		61	1
Drag nets.....							15		
Yards at mouth.....							27		
Push nets.....							28		
Otter trawls—									
Fish.....		1		1			74		
Yards at mouth.....		30		19			1,977		
Scallop.....							1		
Yards at mouth.....							12		
Pots—									
Crab.....					18				
Eel.....	2				35		3,718	8	58
Lobster.....				1,130			6,085		18

## Fisheries of New York, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Putnam	Queens	Rensselaer	Richmond	Rockland	Saratoga	Suffolk	Ulster	Westchester
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Apparatus—Continued.									
Harpoons.....	17								1
Spears.....	72								1
Dredges—									
Clam.....				1					
Yards at mouth.....				1					
Mussel.....							2		
Yards at mouth.....							3		
Oyster.....							70		
Yards at mouth.....							97		
Scallop.....				2			1,168		
Yards at mouth.....				4			1,083		
Tongs.....							418		3
Rakes.....							384		1
Forks.....				4			184		

## CATCH: BY COUNTIES

Species	Albany		Bronx		Columbia		Dutchess		Greene	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	3,500	\$145			33,560	\$1,135	9,510	\$585	8,905	\$404
Carp.....	3,880	392			26,220	3,104	9,507	1,223	20,641	2,798
Catfish and bullheads.....	150	23			3,371	625	1,880	409	6,026	862
Eels.....					200	40	3,844	737	100	13
Minnnows.....									100	20
Pike or pickerel.....	495	70					15	4		
Shad.....					947	120	49,164	8,506	230	59
Striped bass.....							282	56		
Sturgeon.....							700	210		
Suckers.....	3,190	291			8,608	872	2,937	398	1,461	154
Sunfish.....					20	2	660	72		
Tomcod.....					100	15				
White perch.....							408	47		
Yellow perch.....					3,085	339	584	103	186	24
Clams, hard, public.....			160	\$120						
Total.....	11,215	921	160	120	76,111	6,252	79,491	12,350	37,679	4,334

Species	Kings		Nassau		New York		Orange	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....							2,130	\$131
Bluefish.....	156,360	\$14,269	137,835	\$9,663				
Butterfish.....			5,000	448	3,000	\$299		
Carp.....							15,858	2,208
Catfish and bullheads.....							1,327	272
Cod.....	972,975	31,526	309,735	10,488	449,820	11,203		
Croaker.....	325,000	8,125						
Eels.....	17,600	2,288	45,980	7,578			1,957	375
Flounders.....	695,750	23,274	141,990	6,852	370,177	12,160		
Haddock.....	661,150	20,655			1,677,030	46,295		
Hake.....	64,650	963	770	21	55,117	721		
Halibut.....	1,700	340			3,195	628		
Mackerel.....			43,350	1,018	152,110	5,070		
Minnnows.....							194	68
Mummichog.....	26,100	3,905	23,855	2,244				
Pollock.....					16,335	219		
Rosefish.....					1,375	41		
Scup or porgy.....	656,500	9,325	250	15				
Sea bass.....	46,500	3,430	98,550	3,355	550	55		
Shad.....							9,328	2,021
Silversides.....	1,050	63	20,035	2,807				
Skates.....			600	3				
Squeteagues or "sea trout," gray.....	201,000	5,018	26,250	1,601				
Striped bass.....			7,600	1,900			235	47
Suckers.....							8,575	1,095

## Fisheries of New York, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Kings		Nassau		New York		Orange	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Swordfish.....	44,610	\$7,969			90,080	\$16,061		
Tautog.....	22,500	1,575			600	60		
Tilefish.....	346,900	19,103			1,965,300	69,312		
Tuna or "horse mackerel".....					220	15		
White perch.....							570	\$72
Wolfish.....					6,425	113		
Crabs:								
Hard.....	3,685	503	3,400	\$129				
Rock.....			640	80				
Soft.....			2,480	930				
Lobsters.....	295,850	68,020	52,400	16,487				
Shrimp.....			46,120	2,083				
Clams:								
Hard, public.....			195,944	85,609				
Hard, private.....			400	200				
Razor.....			3,080	756				
Soft, public.....	17,700	2,360	139,350	23,000				
Soft, private.....	192	12						
Surf or skimmers.....	203,350	16,315	9,000	1,969				
Conchs.....	25,650	2,147						
Mussels.....	8,000	250	197,500	8,435				
Oysters:								
Market, public, fall.....			14	4				
Market, private, spring.....			431,900	114,450	721,497	103,057		
Market, private, fall.....			393,792	91,901	744,198	106,314		
Seed, public, fall.....			7,700	825				
Seed, private, spring.....					14,000	2,000		
Seed, private, fall.....			550,000	60,000	2,187,010	303,000		
Scallops:								
Bay.....			6,048	1,833				
Sea.....	805,434	145,343	153,000	25,500	82,500	13,800		
Bloodworms.....	28,110	29,454	14,839	18,096				
Sandworms.....	28,110	29,454	3,708	3,798				
Total.....	5,656,426	445,686	3,073,075	504,078	8,540,539	690,423	40,174	6,289

Species	Putnam		Queens		Rensselaer		Richmond		Rockland	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....					4,452	\$182			12	\$1
Carp.....	210	\$31	100	\$12	10,242	1,168			7,100	790
Catfish and bullheads.....					1,989	364			69	13
Eels.....	495	86			631	158			2,376	281
Flounders.....			90,000	1,350			36,547	\$1,462		
Minnnows.....					100	50				
Mummichog.....							1,500	300		
Pike or pickerel.....	53	5			52	8				
Shad.....					55	15			6,234	1,391
Striped bass.....									820	219
Sturgeon.....									71	17
Suckers.....					2,731	292			2,125	212
Sunfish.....					179	18				
White perch.....									1,016	123
Yellow perch.....					5	1				
Crabs: Hard.....							3,650	165	2,000	250
Lobsters.....							22,000	5,505		
Clams, surf or skimmers.....							21,600	2,025		
Conchs.....							9,576	798		
Sandworms.....							300	300		
Total.....	758	122	90,100	1,362	20,436	2,256	95,173	10,555	21,823	3,297

## Fisheries of New York, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Saratoga		Suffolk		Ulster		Westchester	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore			59,900	\$2,050				
Alewives			540,450	6,266	28,690	\$1,179	455	\$25
Bluefish			526,885	53,725				
Bonito			186,589	13,733				
Butterfish			734,791	57,698				
Carp	1,290	\$153	20,250	3,225	45,178	6,455	9,974	1,312
Catfish and bullheads	50	5			1,223	264	1,453	234
Cod			1,069,776	42,003				
Eels			551,063	64,298	966	153	12,265	1,371
Flounders			5,165,480	171,216				
Grayfish			1,250	38				
Haddock			229,475	9,887				
Hake			22,218	741				
Herring, sea			32,456	674				
King whiting or "kingfish"			14,021	1,821				
Mackerel			269,275	14,655				
Menhaden			4,599,640	19,423				
Minnnows			147,000	4,200	300	100		
Mummichog			58,700	2,718				
Pike or pickerel					50	10	40	11
Pollock			95,095	2,568				
Scup or porgy			432,831	21,917				
Sea bass			174,151	17,628				
Sea robin			14,654	315				
Shad			2,158	579	77,831	11,231	21,215	4,345
Sharks			450	23				
Silversides			239,325	9,525				
Skates			26,913	330				
Smelt			2,750	780	350	88		
Spot			3,878	309				
Squeteagues or "sea trout," gray			712,118	60,546				
Striped bass			56,593	8,878			910	244
Sturgeon					511	191	828	192
Suckers	1,175	135			6,710	774	6,840	831
Sunfish					747	68	422	51
Swordfish			91,450	12,950			8,000	907
Tautog			59,077	4,561				
Tomcod			120,050	4,751	155	17	500	35
Tuna or "horse mackerel"			19,380	2,286				
Whitebait			95,800	7,140				
White perch			12,000	2,220	2,457	186	4,340	422
Whiting			349,267	10,367				
Yellow perch					1,205	138		
Crabs:								
Hard			152,409	7,669				
Soft			3,096	774				
Lobsters			165,916	46,590			225	90
Shrimp			49,410	12,235				
Squid			533,984	21,757				
Clams:								
Hard, public			591,408	269,743			6,144	2,830
Hard, private			45,780	17,922				
Soft, public			344,925	45,088				
Surf or skimmers			57,320	14,330				
Mussels			66,000	3,300				
Oysters:								
Market, public, spring			8,767	2,166				
Market, public, fall			7,507	1,854				
Market, private, spring			3,588,382	905,771				
Market, private, fall			3,367,168	847,448				
Seed, public, spring			132,720	17,475				
Seed, public, fall			88,515	12,635				
Seed, private, spring			724,878	128,006				
Seed, private, fall			117,600	18,550				
Scallops:								
Bay			390,663	113,441				
Sea			297,528	46,103				
Bloodworms			11,455	15,038				
Sandworms			26,302	27,618				
Total	2,515	293	27,508,892	3,211,557	166,373	20,854	73,611	12,900

## Industries related to the fisheries of New York, 1930

## TRANSPORTING

Item	Nassau County	Suffolk County	Total
	Number	Number	Number
Persons engaged on vessels.....	15	46	61
Vessels, motor—			
5 to 10 tons.....	1	13	14
11 to 20 tons.....	1	2	3
21 to 30 tons.....	3	3	3
31 to 40 tons.....	2	2	4
Total.....	4	20	24
Net tonnage.....	93	264	357

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Albany, Dutch- ess, and Orange Counties	Bronx County	Kings and Queens Counties	Nassau County	New York County	Suffolk County	Total
Establishments.....	5	4	22	11	178	26	246
Persons engaged:							
Proprietors.....	4	6	23	13	187	24	257
Salaried employees.....	12	10	51	6	579	19	677
Wage earners—							
Average for season.....	125	34	152	40	1,209	285	1,845
Average for year.....	124	34	146	26	1,159	197	1,686
Paid to salaried employees.....	\$45,893	\$62,750	\$203,703	\$9,600	\$2,166,945	\$61,930	\$2,550,821
Paid to wage earners.....	85,396	58,660	254,517	29,420	2,187,755	253,473	2,869,221
Total salaries and wages.....	131,289	121,410	458,220	39,020	4,354,700	315,403	5,420,042

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Buffalofish, smoked..... pounds..	742,452	\$312,043
Butterfish, smoked..... do.....	565,548	168,355
Chubs, smoked..... do.....	1,096,923	374,444
Ciscoes, smoked..... do.....	1,133,405	445,501
Cod, fresh fillets..... do.....	1,842,400	297,591
Eels, smoked..... do.....	2,531	868
Flounders, fresh fillets..... do.....	254,000	58,170
Haddock:		
Fresh fillets..... do.....	3,103,463	535,925
Smoked fillets..... do.....	106,500	24,300
Finnan haddie..... do.....	755,500	93,622
Hake, fresh fillets..... do.....	147,000	19,777
Herring, sea, smoked..... do.....	176,951	33,949
Lake trout, smoked..... do.....	48,683	15,183
Mackerel, smoked..... do.....	133,181	22,988
Salmon, smoked..... do.....	5,081,491	1,918,417
Shad, smoked..... do.....	61,859	12,444
Sturgeon:		
Smoked..... do.....	1,846,724	1,386,646
Caviar, canned..... standard cases..	7,993	1,002,945
Tullibee, smoked..... pounds..	763,760	217,857
Whitefish:		
Smoked..... do.....	150,719	47,540
Caviar, canned..... standard cases..	373	14,154
Marine-shell products:		
Buttons..... gross..	748,718	626,874
Novelties..... (1)		131,184
Oysters, fresh-shucked..... gallons..	252,192	661,816

<sup>1</sup> Data not available.



## Industries related to the fisheries of New York, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED—Continued

Item	Quantity	Value
Unclassified products:		
Smoked <sup>2</sup> .....pounds.....	42,500	\$9,750
Canned <sup>3</sup> .....	(1)	174,113
Miscellaneous <sup>4</sup> .....	(1)	381,145
Total.....		8,987,601

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 504]

Scallops, bay, fresh-shucked.....gallons.....	39,501	\$129,633
Scallops, sea, fresh-shucked.....do.....	140,677	282,529
Total.....do.....	180,178	412,162

<sup>1</sup> Data not available.<sup>2</sup> Includes smoked cod filets, and kippered herring.<sup>3</sup> Includes canned salmon roe and caviar; canned spiced and soured salmon; canned pickled and smoked eels; canned pickled mussels; canned turtle soup and meat; canned terrapin meat and stew; and canned hard-clam products.<sup>4</sup> Includes fresh pollock filets; shucked scallops; fish meal; and fresh-water mussel-shell buttons.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 457 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## NEW JERSEY

## Fisheries of New Jersey, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines	Gill nets				Lines	
	Men-haden	Other		Anchor	Drift	Run-around	Stake	Hand	Trawl
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	21	137			22			38	70
On boats and shore—									
Regular.....			74	4	122	129	41	193	280
Casual.....			170	6	174	19	70	85	53
Total.....	21	137	244	10	318	148	111	316	403
Vessels:									
Motor—									
5 to 10 tons.....		2			3			1	3
11 to 20 tons.....		10			2			6	12
21 to 30 tons.....		3						1	
61 to 70 tons.....	1								
Total.....	1	15			5			8	15
Net tonnage.....	70	236			51			114	172
Boats:									
Motor.....			20	4	121	70	35	165	159
Other.....			82	2	58		29	13	
Accessory boats.....	2	21			3		14	12	
Apparatus:									
Number.....	1	15	102	5	862	90	1,340	555	824
Length, yards.....	456	5,880	11,898						
Square yards.....				5,940	658,830	405,674	161,823		
Hooks, baits, or snoods.....								793	503,450

## Fisheries of New Jersey, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Lines—Contd.		Pound nets	Weirs	Stop nets	Fyke nets	Dip nets	Cast nets	Drag nets
	Troll	Trot, with baits or snoods							
	Number	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>									
On vessels.....	5		253						
On boats and shore—									
Regular.....	70	4	138	7	20	41	18		4
Casual.....	35	3	19	23	86	85	19	4	2
Total.....	110	7	410	30	106	126	37	4	6
<b>Vessels:</b>									
Motor—									
5 to 10 tons.....			38						
11 to 20 tons.....	1								
Total.....	1		38						
Net tonnage.....	11		230						
<b>Boats:</b>									
Motor.....	81	3	23	4	9	32	10		3
Other.....		1	1	16	50	50	23	1	
Accessory boats.....			12						
<b>Apparatus:</b>									
Number.....	304	4	181	83	60	1,772	36	4	6
Square yards.....					34,704				
Yards at mouth.....									17
Hooks, baits, or snoods.....	316	1,775							

  

Item	Otter trawls		Pots			Spears	Dredges	
	Fish	Shrimp	Crab	Eel	Lobster		Clam	Crab
	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>								
On vessels.....	141	11					180	17
On boats and shore—								
Regular.....	50			76	257	43	10	
Casual.....	1		1	41	20	17	2	1
Total.....	192	11	1	117	277	60	192	18
<b>Vessels:</b>								
Motor—								
5 to 10 tons.....	12	2					5	5
11 to 20 tons.....	16	1					12	2
21 to 30 tons.....	1						2	
31 to 40 tons.....	2							
41 to 50 tons.....	1						1	
51 to 60 tons.....	1							
61 to 70 tons.....	1							
71 to 80 tons.....	1							
Total.....	35	3					20	7
Net tonnage.....	640	27					310	69
<b>Boats:</b>								
Motor.....	21			64	156	8	6	1
Other.....				26		51		
Accessory boats.....				6				
<b>Apparatus:</b>								
Number.....	61	3	4	5,299	33,920	60	56	53
Yards at mouth.....	1,331	72					62	59

## Fisheries of New Jersey, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Dredges—Con.		Tongs	Rakes	Forks	Hoes	Gaffs	By hand	Total, exclusive of duplication
	Oyster	Scallop							
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	2,687	41							3,292
On boats and shore—									
Regular.....	19		551	488	15	46	8	88	1,747
Casual.....	6		326	211	3	30	24	76	1,177
Total.....	2,712	41	877	699	18	76	32	164	6,216
Vessels:									
Motor—									
5 to 10 tons.....	43	2							106
11 to 20 tons.....	93								128
21 to 30 tons.....	23	1							28
31 to 40 tons.....	8								10
41 to 50 tons.....	4								5
51 to 60 tons.....	4	1							5
61 to 70 tons.....	1								2
71 to 80 tons.....	1								2
Total.....	177	4							286
Net tonnage.....	3,096	96							4,434
Sail—									
5 to 10 tons.....	18								18
11 to 20 tons.....	20								20
21 to 30 tons.....	15								15
31 to 40 tons.....	8								8
41 to 50 tons.....	5								5
51 to 60 tons.....	4								4
61 to 70 tons.....	5								5
71 to 80 tons.....	1								1
91 to 100 tons.....	1								1
Total.....	77								77
Net tonnage.....	2,085								2,085
Total vessels.....	254	4							363
Total net tonnage.....	5,181	96							6,519
Boats:									
Motor.....	16		521	416	4	12		37	1,379
Other.....			318	254	17	58	1	84	750
Accessory boats.....			37	14					121
Apparatus:									
Number.....	537	9	868	667	19	74	32		
Yards at mouth.....	634	29							

## CATCH: BY GEAR

Species	Purse seines				Haul seines		Gill nets	
	Menhaden		Other				Anchor	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore.....								
Alewives.....					40,986	\$878		
Bluefish.....			322,457	33,951	1,062	190	950	\$122
Bonito.....			908	81				
Butterfish.....			15,670	1,248				
Carp.....					25,601	2,938		
Catfish and bullheads.....					11,340	988		
Cod.....			4,860	59				
Croaker.....			132,340	2,976	44,889	1,633		
Eels.....					1,050	113		
Flounders.....			372	21	48,900	4,138		
Herring, sea.....					1,500	30		
King whiting or "kingfish".....			20	2	1,605	182		
Mackerel.....			160	13				
Menhaden.....	3,663,000	\$19,250	997,285	8,387			3,510	27
Minnows.....					18,000	220		

## Fisheries of New Jersey, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Purse seines				Haul seines		Gill nets	
	Menhaden		Other				Anchor	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Mummichog.....								
Scup.....			3,343,693	\$63,223				
Sea bass.....			251,145	5,213				
Shad.....					10,748	3,811	156	\$46
Spanish mackerel.....			778	54				
Spot.....					4,852	273		
Squeteague or "sea trout," gray.....			2,239,720	56,381	71,885	5,879	450	26
Striped bass.....					7,803	2,025		
Sturgeon.....					128	51		
Suckers.....					23,397	2,290		
White perch.....					27,475	2,764		
Yellow perch.....					4,800	344		
Total.....	3,663,000	\$19,250	7,309,458	171,612	362,021	28,947	5,066	221

Species	Gill nets—Continued						Lines	
	Drift		Runaround		Stake		Hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	3,648	\$148			2,204	\$62		
Bluefish.....	14,812	1,511	259,603	\$21,374	25,689	3,866	1,425,052	\$164,635
Bonito.....							114,752	5,239
Butterfish.....	27,102	2,219	2,520	402				
Carp.....	430	48					290	44
Catfish and bullheads.....					200	14		
Cero.....							20,000	2,000
Cod.....							136,642	3,347
Croaker.....	69,965	2,070	200	8	30	3	28,566	1,168
Dolphin.....							332	24
Eels.....							6,420	641
Flounders.....			8	1			32,665	2,206
Hake.....			462	5				
Herring, sea.....			14	1				
King whiting or "kingfish".....	50	3			500	75	100	8
Mackerel.....	434,026	15,294	164,000	6,400				
Menhaden.....	20,000	200	22,065	243				
Pilotfish.....							414	17
Scup.....	2,350	61	1,000	40			71,010	1,416
Sea bass.....			2,500	75			270,934	7,403
Shad.....	144,419	27,159			44,829	6,469		
Skates.....							3,750	95
Snapper, red.....							4,000	400
Spanish mackerel.....							1,891	132
Spot.....	89,870	4,529	2,743	119	2,500	175	900	45
Squeteague or "sea trout," gray.....	223,900	9,711	189,604	7,787	9,406	905	77,392	3,529
Striped bass.....					5,784	1,547	16,820	817
Sturgeon.....	995	521						
Tautog.....							21,999	879
Tuna or "horse mackerel".....							800	80
White perch.....					46,942	6,008		
Yellow perch.....					1,010	71		
Total.....	1,031,567	63,474	644,719	36,455	139,094	19,195	2,234,729	194,251

## Fisheries of New Jersey, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Lines—Continued						Pound nets	
	Trawl		Troll		Trot, with baits or snoods		Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value		
Albacore.....							31,064	\$506
Bluefish.....			334,677	\$30,822			576,219	56,064
Bonito.....							114,586	7,841
Butterfish.....							2,340,296	173,985
Cod.....	6,403,463	\$194,515					935,563	30,815
Croaker.....							511,972	20,805
Cusk.....	6,500	65					1,900	19
Dolphin.....							800	16
Drum:								
Black.....							6,784	126
Red or redfish.....							64,666	11,635
Eels.....							10,278	1,028
Flounders.....	8,000	800					401,303	29,370
Goosefish.....							37,892	1,118
Grayfish.....							11,440	229
Haddock.....	15	1					5,782	204
Hagfish.....							7,200	72
Hake.....	14,000	440					205,855	3,510
Herring, sea.....							587,533	5,875
King whiting or "kingfish".....							61,148	6,785
Mackerel.....							55,742	3,699
Menhaden.....							1,208,850	13,226
Mullet.....							150	6
Pilotfish.....							2,046	106
Pollock.....							2,964	111
Scup.....							2,733,907	87,513
Sea bass.....							1,218,246	61,332
Sea robin.....							117,747	1,946
Shad.....							23,559	3,641
Sharks.....							175,669	3,699
Skates.....	31,636	907					204,905	3,366
Spanish mackerel.....			250	13			12,920	1,297
Spot.....							437,336	17,340
Squeteague or "sea trout," gray.....							8,054,464	264,131
Striped bass.....							5,105	971
Sturgeon.....							280	200
Tautog.....							133,650	4,462
Thimble-eyed mackerel.....							35,722	1,115
Tuna or "horse mackerel".....							36,762	2,393
White perch.....							2,020	80
Whiting.....							3,754,942	59,428
Crabs:								
Hard.....					15,058	\$1,333		
King.....							1,247,000	11,489
Soft.....					148	55		
Squid.....							1,233,326	32,882
Turtles:								
Loggerhead.....							800	24
Snapper.....							1,800	27
Total.....	6,463,614	196,728	334,927	30,835	15,206	1,388	26,612,193	924,487

Species	Weirs		Stop nets		Fyke nets		Dip nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			4,284	\$690	1,413,000	\$14,150		
Carp.....			71,889	9,716				
Catfish and bullheads.....			1,190	111	23,617	1,848		
Croaker.....	1,560	\$60						
Eels.....					41,312	5,891		
Flounders.....	1,500	105			157,330	6,897		
Herring, sea.....					70,800	758		
Spot.....	1,620	81						
Squeteague or "sea trout," gray.....	1,880	94						
Striped bass.....					1,350	401		
Suckers.....			3,786	490	392	47		
White perch.....					68,800	8,250		
Yellow perch.....					173,400	14,218		
Crabs:								
Hard.....							23,000	\$1,419
King.....	3,967,500	15,903						
Soft.....							19,016	7,318
Turtles, snapper.....					1,700	196		
Total.....	3,974,060	16,243	81,149	11,007	1,951,701	52,656	42,016	8,737

Fisheries of New Jersey, 1930—Continued

CATCH: BY GEAR—Continued

Species	Cast nets		Drag nets		Otter trawls			
					Fish		Shrimp	
					Pounds	Value	Pounds	Value
Bluefish					1,223	\$127		
Butterfish					8,233	755		
Carp	2,222	\$400						
Cod					298,843	6,933		
Croaker					650,285	21,770		
Drum:								
Black					120	9		
Red or redfish					258	21		
Eels					25	3		
Flounders					2,276,274	104,312		
Grunts					150	6		
Hake					2,430	47		
King whiting or "kingfish"					5,800	483		
Mackerel					1,800	36		
Menhaden					3,300	17		
Mullet					190	16		
Scup					1,412,081	31,013		
Sea bass					691,991	19,000		
Shad					3	1		
Sharks					800	96		
Skates					800	12		
Spot					2,795	83		
Squeteague or "sea trout," gray					228,991	9,401		
Sturgeon					2,805	1,015		
Tautog					7,507	218		
White perch					4,119	124		
Whiting					9,000	140		
Lobsters					2,200	555		
Shrimp			21,168	\$5,292	51,700	2,061	172,658	\$7,132
Squid					6,198	137		
Total	2,222	400	21,168	5,292	5,669,921	198,391	172,658	7,132

Species	Pots						Spears	
	Crab		Eel		Lobster			
	Pounds	Value	Pounds	Value	Pounds	Value		
Eels			323,234	\$32,965	1,050	\$84	156,380	\$17,883
Sea bass					1,111,333	41,337		
Tautog					18,810	556		
Crabs, hard	148	\$6			9,570	698		
Lobsters					1,008,379	229,555		
Total	148	6	323,234	32,965	2,149,142	272,230	156,380	17,883

Species	Dredges							
	Clam		Crab		Oyster		Scallop	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard			204,280	\$16,851				
Clams:								
Hard, public	100,592	\$6,469						
Hard, private	88,590	16,650			3,552	\$1,475		
Surf or skimmer	131,670	15,281						
Oysters:								
Market, public, fall					1,812	270		
Market, private, spring					3,445,557	540,516		
Market, private, fall					7,654,070	1,158,462		
Seed, public, spring					18,444,424	2,401,056		
Seed, private, spring					186,200	15,630		
Scallops, sea							164,100	\$33,242
Total	320,852	38,400	204,280	16,851	29,735,615	4,117,409	164,100	33,242

## Fisheries of New Jersey, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Tongs		Rakes		Forks	
	Pounds	Value	Pounds	Value	Pounds	Value
Clams:						
Hard, public.....	814, 856	\$375, 155	575, 687	\$235, 745		
Hard, private.....	4, 672	2, 083	54, 096	4, 850		
Soft, public.....			135, 787	18, 581	124, 831	\$17, 205
Mussels.....	200	2				
Oysters:						
Market, public, spring.....	36, 166	5, 414	109	16		
Market, public, fall.....	112, 476	14, 709	218	34		
Market, private, spring.....	200, 160	44, 892	7, 564	1, 819		
Market, private, fall.....	333, 180	74, 782	18, 176	4, 533		
Seed, public, spring.....	138, 914	15, 378	38, 632	4, 948		
Seed, public, fall.....	82, 804	9, 959				
Seed, private, spring.....	106, 555	13, 636	123, 738	10, 860		
Seed, private, fall.....	4, 000	300				
Total.....	1, 833, 983	556, 310	954, 007	281, 386	124, 831	17, 205

Species	Hoes		Gaffs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value
Crabs:						
King.....					1, 300	\$156
Soft.....	80, 660	\$7, 800				
Clams:						
Hard, public.....	6, 080	871			64, 341	29, 858
Soft, public.....	234, 679	32, 250			133, 331	19, 772
Mussels.....					4, 000	280
Oysters:						
Market, public, spring.....					1, 327	241
Market, public, fall.....					6, 720	1, 600
Market, private, spring.....					2, 890	725
Market, private, fall.....					4, 570	975
Seed, private, spring.....					22, 850	1, 918
Terrapin, diamond-back.....			215	\$414	5, 826	6, 658
Turtles:						
Loggerhead.....			105	7		
Snapper.....			3, 930	358		
Total.....	327, 419	40, 921	4, 250	779	247, 155	62, 163

## OPERATING UNITS: BY COUNTIES

Item	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Gloucester
Fishermen:							
On vessels.....	86	3	3		336	2, 663	
On boats and shore—							
Regular.....	292	2	64	2	410	81	1
Casual.....	160	20	74	9	260	172	51
Total.....	538	25	141	11	1, 006	2, 916	52
Vessels:							
Motor—							
5 to 10 tons.....	2				32	36	
11 to 20 tons.....	14	1	1		17	92	
21 to 30 tons.....	2				3	23	
31 to 40 tons.....					2	8	
41 to 50 tons.....					1	4	
51 to 60 tons.....					1	4	
61 to 70 tons.....					1	1	
71 to 80 tons.....					1	1	
Total.....	18	1	1		58	169	
Net tonnage.....	250	15	11		846	3, 033	
Sail—							
5 to 10 tons.....						18	
11 to 20 tons.....						20	
21 to 30 tons.....						15	
31 to 40 tons.....						8	
41 to 50 tons.....						5	
51 to 60 tons.....						4	

## Fisheries of New Jersey, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Gloucester
Vessels—Continued.							
Sail—Continued.							
61 to 70 tons.....						5	
71 to 80 tons.....						1	
91 to 100 tons.....						1	
Total.....						77	
Net tonnage.....						2,085	
Total vessels.....	18	1	1		58	246	
Total net tonnage.....	250	15	11		846	5,118	
Boats:							
Motor.....	224	7	87		324	103	8
Other.....	184		34	4	156	77	20
Accessory boats.....	28	10			45	11	
Apparatus:							
Purse seines—							
Menhaden.....					1		
Length, yards.....					456		
Other.....	4				11		
Length, yards.....	1,600				4,280		
Haul seines.....	22		19	4	14	12	3
Length, yards.....	1,818		1,980	445	853	1,410	245
Gill nets—							
Anchor.....			1				
Square yards.....			840				
Drift.....	214		21		472	100	16
Square yards.....	47,720		23,195		211,148	88,500	13,530
Runaround.....						4	
Square yards.....						4,400	
Stake.....	64	7	6		6	60	
Square yards.....	3,072	16,360	198		600	7,672	
Lines—							
Hand.....	39				177	44	
Hooks.....	70				335	80	
Trawl.....	178				344	14	
Hooks.....	114,200				228,200	9,650	
Troll.....	17				283	4	
Hooks.....	17				295	4	
Trot, with baits or snoods.....						3	
Baits or snoods.....						775	
Pound nets.....	2				93		
Weirs.....					65	18	
Stop nets.....			7	1		19	8
Square yards.....			5,550	45		15,800	2,500
Fyke nets.....	4		106		96	185	130
Dip nets.....	13				6	2	
Cast nets.....							4
Otter trawls—							
Fish.....	19				42		
Yards at mouth.....	471				860		
Shrimp.....					3		
Yards at mouth.....					72		
Pots—							
Crab.....					4		
Eel.....	12	315			81	20	
Lobster.....					508		
Spears.....	9				1		
Dredges—							
Clam.....					6	28	
Yards at mouth.....					4	36	
Crab.....		10					
Yards at mouth.....		8					
Oyster.....	4		6			496	
Yards at mouth.....	4		6			594	
Scallop.....						4	
Yards at mouth.....						16	
Tongs.....	325		83		134	101	
Rakes.....	273		63		121		
Hoes.....	14						
Gaffs.....					3	8	6





## Fisheries of New Jersey, 1930—Continued

## CATCH: BY COUNTIES

Species	Atlantic		Bergen		Burlington		Camden		Cape May	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore									50	\$3
Alewives					2,454	\$62	96	\$5	4,000	200
Bluefish	114,247	\$16,223							780,985	68,270
Bonito									20,480	1,464
Butterfish	28,940	2,175							942,307	59,040
Carp					1,947	290	7,400	565		
Catfish and bullheads					1,470	277	565	58		
Cero									20,000	2,000
Cod	2,380,381	61,848							3,091,981	87,208
Croaker	107,475	2,662							1,021,530	35,937
Dolphin									207	11
Drum:										
Black									6,904	135
Red or redfish									64,924	11,656
Eels	55,333	5,055	21,500	\$975	2,540	279			41,912	5,510
Flounders	1,162,650	44,765							1,278,237	70,887
Goosefish									24,564	984
Grunts									150	6
Hake									5,315	91
Herring, sea	20,000	215							31,099	310
King whiting or "kingfish"	4,560	422							40,258	4,213
Mackerel	176,600	5,658							193,914	8,545
Menhaden									4,833,023	29,353
Minnows	16,000	200			2,000	20				
Mullet									340	22
Mummichog	16,000	200								
Pilotfish	300	12							1,360	55
Pollock									200	6
Scup or porgy	500,000	9,900							5,597,253	123,965
Sea bass	703,500	14,605							1,126,343	47,814
Sea robin									10,000	100
Shad	1,050	230	41,500	5,684	4,865	983	2,421	592	7,606	1,035
Sharks	500	20							64,906	1,322
Skates	4,450	108							90,808	2,501
Snapper, red									4,000	400
Spanish mackerel									15,801	1,486
Spot	9,050	362							215,679	9,195
Squeteague or "sea trout," gray	431,200	17,432							5,689,205	179,435
Striped bass	5,641	1,107			1,203	602			16	4
Sturgeon									2,805	1,015
Suckers					19,463	2,456	30	3		
Tautog									58,416	2,224
Thimble-eyed mackerel									21,467	625
Tuna or "horse mackerel"									14,792	573
White perch	33,087	3,630			3,100	620			4,269	136
Whiting	10,800	108							90,032	982
Crabs:										
Hard	2,600	230	25,000	2,250					18,616	975
King									4,641,800	26,892
Soft	86,660	7,800								
Lobsters									2,200	555
Shrimp									224,358	9,193
Squid	880	44							388,658	11,451
Clams:										
Hard, public	501,438	232,673			143,600	64,300			207,471	107,136
Hard, private	6,208	2,788							80	20
Surf or skimmer									131,670	15,281
Mussels									4,200	282
Oysters:										
Market, public, spring	4,057	965							5,111	1,043
Market, public, fall	8,305	2,085							9,038	2,194
Market, private, spring	164,958	38,781			76,496	15,795			3,310	825
Market, private, fall	257,092	60,666			151,583	31,187			7,090	1,575
Seed, public, spring	21,942	2,768			8,400	2,350			16,800	1,260
Seed, private, spring	136,793	16,771			182,700	15,225			24,850	2,198
Terrapin, diamond-back									333	599
Turtles, snapper									1,300	156
Total	6,972,697	552,508	88,000	8,909	601,821	134,446	10,512	1,223	31,104,023	940,353

## Fisheries of New Jersey, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Cumberland		Gloucester		Hudson		Hunterdon		Mercer	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	3,500	\$89	9,252	\$1,071					8,500	\$55
Bluefish.....	18,518	1,848								
Butterfish.....	300	21								
Carp.....	32,220	4,728	7,703	1,217			300	\$36	4,000	480
Catfish and bullheads.....	10,100	969	2,667	282			50	5		
Cod.....	8,460	480								
Croaker.....	62,486	1,963								
Eels.....	5,880	551	540	68	20,000	\$2,000			600	60
Flounders.....	75	8								
King whiting or "kingfish".....	50	3								
Scup or porgy.....	2,550	65								
Shad.....	42,982	7,817	2,238	437			3,035	1,049	5,013	2,115
Spot.....	66,950	3,142								
Squeteague or "sea trout," gray.....	92,769	4,050								
Striped bass.....	19,070	1,255								
Sturgeon.....									128	51
Suckers.....	340	51	142	15			3,100	230	4,500	72
Tautog.....	12,000	480								
White perch.....	3,850	330								
Crabs:										
Hard.....	13,086	1,198								
King.....	574,000	656								
Clams:										
Hard, public.....	79,632	3,410								
Hard, private.....	88,590	16,650								
Oysters:										
Market, public, spring.....	28,434	3,663								
Market, public, fall.....	103,883	12,334								
Market, private, spring.....	3,214,855	486,529								
Market, private, fall.....	7,408,143	1,103,705								
Seed, public, spring.....	18,574,828	2,415,004								
Seed, public, fall.....	82,804	9,959								
Seed, private, spring.....	8,000	600								
Seed, private, fall.....	4,000	300								
Scallops, sea.....	58,500	9,800								
Terrapin, diamond-back.....	5,708	6,453								
Turtles:										
Loggerhead.....	105	7								
Snapper.....	780	72	500	50						
Total.....	30,627,448	4,098,190	23,042	3,140	20,000	2,000	6,485	1,320	22,741	2,833

Species	Middlesex		Monmouth		Ocean		Salem		Union	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Albacore.....			27,464	\$452	3,600	\$54				
Alewives.....					1,435,800	14,418	520	\$28		
Bluefish.....	13,278	\$1,245	1,777,021	201,567	256,095	23,333			1,600	\$176
Bonito.....			147,242	7,789	61,724	3,852			800	56
Butterfish.....	20	2	732,479	57,986	689,775	59,385				
Carp.....							46,862	5,830		
Catfish and bullheads.....					14,110	750	7,385	620		
Cod.....			1,148,238	45,104	1,150,311	41,029				
Croaker.....			44,286	1,744	202,830	8,115	1,200	72		
Cusk.....			1,900	19	6,500	65				
Dolphin.....			800	16	125	13				
Eels.....	2,950	295	238,638	28,824	148,161	14,767	1,695	224		
Flounders.....	8	1	240,384	18,813	244,998	13,376				
Goosefish.....			13,328	134						
Grayfish.....			11,440	229						
Haddock.....			5,797	205						
Hagfish.....					7,200	72				
Hake.....			141,766	2,790	75,666	1,121				
Herring, sea.....	14	1	414,250	4,141	194,484	1,997				
King whiting or "kingfish".....			7,411	1,007	16,944	1,893				
Mackerel.....			267,981	10,100	17,233	1,139				
Menhaden.....	8,100	55	890,196	9,872	186,691	2,070				

## Fisheries of New Jersey, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Middlesex		Monmouth		Ocean		Salem		Union	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Pilotfish.....			800	\$56						
Pollock.....			60	1	2,704	\$104				
Scup or porgy.....			552,843	20,163	911,395	29,173				
Sea bass.....			456,323	24,758	1,259,983	47,183				
Sea robin.....			68,125	1,425	39,622	421				
Shad.....			16,405	2,727	8,926	1,228	87,673	\$7,230		
Sharks.....			52,957	1,773	58,106	680				
Skates.....			82,517	1,124	63,316	647				
Spanish mackerel.....			28	8	10	2				
Spot.....	343	\$15	149,264	6,485	101,330	3,446				
Squeteague or "sea trout," gray.....	18,838	922	1,919,697	75,829	2,945,433	80,139	550	37		
Striped bass.....			5,089	967	5,843	1,826				
Sturgeon.....			280	200			995	521		
Tautog.....			67,318	1,899	44,232	1,512				
Thimble-eyed mackerel.....			13,962	478	293	12				
Tuna or "horse mackerel".....			6,370	574	16,400	1,326				
White perch.....					105,050	12,510				
Whiting.....			2,833,775	48,782	829,335	9,696				
Yellow perch.....					179,210	14,633				
Crabs:										
Hard.....	9,332	700	180,758	14,754			2,664	200		
Soft.....			12,368	4,375	6,600	2,925	196	73		
Lobsters.....	1,275	370	953,598	211,635	53,506	17,550				
Shrimp.....					21,168	5,292				
Squid.....			229,470	4,590	620,516	16,934				
Clams:										
Hard, public.....	7,104	1,420	107,097	15,907	515,214	223,252				
Hard, private.....			53,536	4,600	2,496	1,000				
Soft, public.....			628,184	87,722	444	86				
Oysters:										
Market, private, spring.....			6,712	1,235	189,840	44,787				
Market, private, fall.....					186,088	41,619				
Seed, private, spring.....					87,000	7,250				
Scallops, sea.....			105,600	23,542						
Turtles:										
Loggerhead.....			800	24						
Snapper.....			1,800	27			3,050	276		
Total.....	61,262	5,026	14,616,357	946,452	12,966,307	752,682	152,790	25,111	2,400	\$232

## Industries related to the fisheries of New Jersey, 1930

## TRANSPORTING

Item	Atlantic County	Cape May County	Cumberland County	Monmouth County	Ocean County	Total
Persons engaged:						
On vessels.....	Number	Number	Number	Number	Number	Number
On boats.....	5		26	2	2	35
Total.....			117			117
Total.....	5		143	2	2	152
Vessels, motor:						
5 to 10 tons.....	2		2		1	5
11 to 20 tons.....			1	1		2
21 to 30 tons.....			2			2
41 to 50 tons.....			1			1
Total.....	2		6	1	1	10
Net tonnage.....	13		127	13	6	159
Boats.....		1	175			176

## Industries related to the fisheries of New Jersey, 1930—Continued

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Atlantic and Burlington Counties	Bergen and Hudson Counties	Camden and Gloucester Counties	Cape May County
Establishments.....	15	7	4	22
Persons engaged:				
Proprietors.....	21	5	5	26
Salaried employees.....	5	9	5	17
Wage earners—				
Average for season.....	36	63	89	104
Average for year.....	26	53	68	62
Paid to salaried employees.....	\$20,260	\$22,940	\$16,300	\$52,230
Paid to wage earners.....	35,500	69,157	75,747	76,498
Total salaries and wages.....	55,760	92,097	92,047	128,728

Item	Cumberland County	Essex and Passaic Counties	Monmouth County	Ocean County	Total
Establishments.....	30	14	15	17	124
Persons engaged:					
Proprietors.....	54	17	18	19	165
Salaried employees.....	60	31	6	8	141
Wage earners—					
Average for season.....	734	361	101	48	1,536
Average for year.....	298	351	43	28	929
Paid to salaried employees.....	\$82,587	\$113,145	\$10,778	\$27,020	\$345,260
Paid to wage earners.....	175,882	345,994	73,015	45,521	897,314
Total salaries and wages.....	258,469	459,139	83,793	72,541	1,242,574

## PRODUCTS MANUFACTURED

Item	Quantity	Value
King crabs, dry scrap.....	tons.. 458	\$17,857
Clams, soft, fresh-shucked.....	gallons.. 35,064	51,766
Marine-shell products:		
Buttons.....	gross.. 907,015	1,149,840
Novelties.....	( <sup>1</sup> )	343,244
Oysters:		
Fresh-shucked.....	gallons.. 439,824	952,651
Shell products—		
Poultry feed.....	tons.. 7,008	72,267
Lime.....	do.. 1,618	8,158
Miscellaneous <sup>2</sup> .....	( <sup>1</sup> )	1,053,477
Total.....		3,649,260

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 49]

Eels, smoked.....	pounds.. 19,617	\$7,847
Scallops, sea, fresh-shucked.....	gallons.. 18,000	33,000
Total.....		40,847

<sup>1</sup> Data not available.<sup>2</sup> Includes eod and flounder fillets; spiced carp; smoked butterfish, carp, chub, cisco, eels, herring, mackerel, salmon, salmon trout, shad, domestic and Russian sturgeon, lake trout, tullibee, whitefish, and kippered herring; canned hard-clam chowder; king crab meal; menhaden products; and buttons from fresh-water mussels.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 119 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 49 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

PENNSYLVANIA

*Fisheries of Pennsylvania, 1930*

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets, drift	Lines, hand	Fyke nets	Total, exclusive of duplication
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Fishermen, on boats and shore, casual.....	37	19	1	1	52
Boats:					
Motor.....		5			5
Other.....	10	5	1	1	14
Apparatus:					
Number.....	11	11	1	30	
Length, yards.....	1,380				
Square yards.....		15,690			
Hooks, baits, or snoods.....			1		

CATCH: BY GEAR

Species	Haul seines		Gill nets, drift		Lines, hand		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			2,000	\$100				
Carp.....	893	\$97						
Catfish and bullheads.....	125	13					1,300	\$150
Eels.....					865	\$200		
Shad.....	2,112	842	2,743	622				
Sturgeon.....	182	182						
Suckers.....	6,525	597						
Total.....	9,837	1,731	4,743	722	865	200	1,300	150

OPERATING UNITS: BY COUNTIES

Item	Bucks	Delaware	Philadelphia
	<i>Number</i>	<i>Number</i>	<i>Number</i>
Fishermen on boats and shore, casual.....	41	9	2
Boats:			
Motor.....		4	1
Other.....	12	1	1
Apparatus:			
Haul seines.....	11		
Length, yards.....	1,380		
Gill nets, drift.....	5	5	1
Square yards.....	4,110	10,530	1,050
Lines, hand.....			1
Hooks.....			1
Fyke nets.....		30	

## Fisheries of Pennsylvania, 1930—Continued

## CATCH: BY COUNTIES

Species	Bucks		Delaware		Philadelphia	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			2,000	\$100		
Carp.....	893	\$97				
Catfish and bullheads.....	125	13	1,300	150		
Eels.....					865	\$200
Shad.....	2,720	1,053	2,015	363	120	48
Sturgeon.....	182	182				
Suckers.....	6,525	597				
Total.....	10,445	1,942	5,315	613	985	248

## Industries related to the fisheries of Pennsylvania

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Berks, Delaware, and Lehigh Counties	Philadelphia County	Total
Establishments.....	3	53	56
Persons engaged:			
Proprietors.....	5	81	86
Salaried employees.....	8	116	124
Wage earners—			
Average for season.....	52	488	540
Average for year.....	48	405	453
Paid to salaried employees.....	\$34,734	\$520,193	\$554,927
Paid to wage earners.....	36,873	571,478	608,351
Total salaries and wages.....	71,607	1,091,671	1,163,278

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Herring, sea, smoked.....	112,000 pounds	\$9,240
Mackerel, smoked.....	7,600 do	1,600
Shad, smoked.....	87,375 do	20,644
Whitefish, smoked.....	35,000 do	11,750
Hard clams, fresh-shucked.....	9,234 gallons	23,044
Oysters:		
Fresh-shucked.....	103,605 do	268,097
Shell products—		
Poultry feed.....	5,738 tons	61,091
Lime.....	1,752 do	8,629
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	1,623,110
Total.....		2,027,205

<sup>1</sup> Includes spiced alewives and herring; smoked alewives, butterfish, carp, chub, ciscoes, cod fillets, haddock fillets, herring bloaters, kippered herring, Nova Scotia herring, salmon, kippered salmon, sturgeon, lake trout, tullibee from Canada, Russian sturgeon, and finnan haddie; fish scrap; marine-shell products; and fresh-water mussel-shell products.

<sup>2</sup> Data not available.

## DELAWARE

## Fisheries of Delaware, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines, men-haden	Haul seines	Gill nets			Lines		
			Drift	Run-around	Stake	Hand	Trawl	Trot, with baits or snoods
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	570							
On boats and shore—								
Regular.....		124	37	42	31	31	8	
Casual.....		229	71	31	40	11	2	1
<b>Total</b> .....	570	353	108	73	71	42	10	1
<b>Vessels:</b>								
<b>Steam—</b>								
41 to 50 tons.....	1							
81 to 90 tons.....	1							
101 to 110 tons.....	3							
111 to 120 tons.....	1							
121 to 130 tons.....	1							
161 to 170 tons.....	2							
171 to 180 tons.....	4							
181 to 190 tons.....	1							
<b>Total</b> .....	14							
Net tonnage.....	1,904							
<b>Motor—</b>								
61 to 70 tons.....	1							
101 to 110 tons.....	1							
<b>Total</b> .....	2							
Net tonnage.....	172							
<b>Total, vessels</b> .....	16							
<b>Total net tonnage</b> .....	2,076							
<b>Boats:</b>								
Motor.....		1	39	12	7	13	4	
Other.....		93	14	22	27	5	1	1
Accessory boats.....	51	6	3	1	4			
<b>Apparatus:</b>								
Number.....	16	87	79	45	209	52	14	1
Length, yards.....	6,528	23,970						
Square yards.....			211,379	40,000	23,424			
Hooks, baits, or snoods.....						104	6,100	50

Item	Pound nets	Stop nets	Fyke nets	Dip nets	Cast nets	Pots		Spears
						Eel	Lobster	
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On boats and shore—								
Regular.....	16	2	22	20		18	11	
Casual.....	25	12	27	16	7	16	2	6
<b>Total</b> .....	41	14	49	36	7	34	13	6
<b>Boats:</b>								
Motor.....			3	1		6	4	2
Other.....	15	9	15	21	4	17		3
Accessory boats.....	2		2			2		
<b>Apparatus:</b>								
Number.....	67	9	320	36	7	775	185	6
Square yards.....		3,368						



## Fisheries of Delaware, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Dredges		Tongs	Rakes	Gaffs	By hand	Total, exclusive of duplication
	Clam	Oyster					
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels.....	30	90					666
On boats and shore—							
Regular.....			67	5			197
Casual.....			13		1	10	374
Total.....	30	90	80	5	1	10	1,237
Vessels:							
Steam—							
41 to 50 tons.....							1
81 to 90 tons.....							3
101 to 110 tons.....							1
111 to 120 tons.....							1
121 to 130 tons.....							2
161 to 170 tons.....							4
171 to 180 tons.....							1
181 to 190 tons.....							1
Total.....							14
Net tonnage.....							1,904
Motor—							
5 to 10 tons.....	1	2					2
11 to 20 tons.....	1	2					3
21 to 30 tons.....	2	2					3
61 to 70 tons.....							1
101 to 110 tons.....							1
Total.....	4	6					9
Net tonnage.....	66	95					289
Sail—							
5 to 10 tons.....		3					3
11 to 20 tons.....	1	7					7
Total.....	1	10					10
Net tonnage.....	14	133					133
Total vessels.....	5	16					33
Total net tonnage.....	80	228					2,326
Boats:							
Motor.....			2	3			68
Other.....			70				192
Accessory boats.....			18	1			86
Apparatus:							
Number.....	10	32	80	6	1	10	
Yards at mouth.....	10	39					

## CATCH: BY GEAR

Species	Purse seines, menhaden		Haul seines		Gill nets			
					Drift		Runaround	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			3,039,201	\$6,188	30,533	\$389		
Bluefish.....			3,750	371	17,500	1,114		
Carp.....			56,184	5,017	2,000	240		
Catfish and bullheads.....			24,295	2,250				
Croaker.....			398,350	9,992	449,800	9,200	163,880	\$5,324
Eels.....			4,282	510				
Flounders.....			28,950	1,998				
Gizzard shad.....			950	7				
King whiting or "kingfish".....			3,080	119				
Menhaden.....	41,960,142	\$307,112						
Mullet.....			1,800	130			63,000	4,170
Shad.....			1,016	168	46,229	9,424		
Spot.....			3,960	101	122,500	6,526	51	5
Squeteagues or "sea trout," gray.....			713,350	25,892	315,000	6,817	87,800	2,680
Striped bass.....			25,250	5,585	13,500	3,645		
Sturgeon.....					15,313	6,253		
White perch.....			96,775	15,148	19,900	3,936		
Yellow perch.....			32,035	3,155				
Yellowtail.....			2,940	84				
Total.....	41,960,142	307,112	4,436,168	76,715	1,032,275	47,544	314,731	12,170

## Fisheries of Delaware, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Gill nets—Con.				Lines			
	Stake		Hand		Trawl		Trot, with baits or snoods	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	88,926	\$2,268						
Bluefish.....	4,900	343	4,860	\$486				
Carp.....	14,000	2,040						
Catfish and bullheads.....	931	126						
Cod.....					97,144	\$3,600		
Croaker.....			112,900	4,188				
Eels.....							2,605	\$443
Flounders.....	68,550	4,897						
Scup.....			27,000	2,160				
Sea bass.....			20,250	1,620				
Shad.....	7,201	1,282						
Spot.....			20,250	1,620				
Squeteagues or "sea trout," gray.....	41,900	490	75,975	4,518				
Striped bass.....	57,494	12,090						
Suckers.....	150	9						
Tautog.....			74,000	2,300				
White perch.....	55,030	9,411						
Total.....	339,082	32,956	335,235	16,892	97,144	3,600	2,605	443

Species	Pound nets		Stop nets		Fyke nets		Dip nets		Cast nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	34,706	\$891			600	\$6				
Carp.....	1,688	212	4,659	\$674	630	38			5,175	\$734
Catfish and bullheads.....	7,333	775	775	72	3,273	279			1,310	145
Eels.....	2,818	393			44,387	5,158				
Flounders.....	7,393	525			27,660	2,083				
Squeteagues or "sea trout," gray.....	400	40			300	30				
Striped bass.....	1,453	351			4,330	778				
White perch.....	6,234	799			32,032	5,821				
Yellow perch.....	2,350	229	330	26	13,045	1,279				
Crabs:										
King.....	762,500	990								
Soft.....							23,800	\$4,850		
Turtles, snapper.....					2,550	133				
Total.....	826,875	5,205	5,764	772	128,807	15,605	23,800	4,850	6,485	879

Species	Pots				Spears		Dredges			
	Eel		Lobster				Clam		Oyster	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value		
Carp.....					1,500	\$90				
Catfish and bullheads.....					1,000	114				
Eels.....	38,499	\$4,354			998	138				
Lobsters.....			11,750	\$2,620						
Clams:										
Hard, public.....							6,903	\$2,020		
Hard, private.....							6,003	2,001		
Oysters:										
Market, private, spring.....							28,120	3,967		
Market, private, fall.....							29,712	4,171	201,926	\$27,618
Seed, public, spring.....							38,250	2,550	549,000	39,600
Total.....	38,499	4,354	11,750	2,620	3,498	342	108,988	14,709	750,926	67,218

## Fisheries of Delaware, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Tongs		Rakes		Gaffs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, king.....							206, 260	\$27
Clams, hard, public.....	9, 600	\$1, 020	2, 000	\$750				
Mussels.....	19, 500	1, 875						
Oysters:								
Market, public, fall.....	166, 467	18, 942						
Market, private, fall.....	1, 875	213						
Seed, public, spring.....	176, 850	11, 220						
Seed, public, fall.....	75, 374	4, 501						
Turtles, snapper.....					100	\$5		
Total.....	449, 666	37, 771	2, 000	750	100	5	206, 260	27

## OPERATING UNITS: BY COUNTIES

Item	Kent	New Castle	Sussex
Fishermen:	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	90		576
On boats and shore—			
Regular.....	118	1	78
Casual.....	49	71	254
Total.....	257	72	908
Vessels:			
Steam—			
41 to 50 tons.....			1
81 to 90 tons.....			1
101 to 110 tons.....			3
111 to 120 tons.....			1
121 to 130 tons.....			1
161 to 170 tons.....			2
171 to 180 tons.....			4
181 to 190 tons.....			1
Total.....			14
Net tonnage.....			1, 904
Motor—			
5 to 10 tons.....	2		
11 to 20 tons.....	2		
21 to 30 tons.....	2		
61 to 70 tons.....			1
101 to 110 tons.....			1
Total.....	6		3
Net tonnage.....	93		196
Sail—			
5 to 10 tons.....	3		
11 to 20 tons.....	7		
Total.....	10		
Net tonnage.....	133		
Total vessels.....	16		17
Total net tonnage.....	226		2, 100
Boats:			
Motor.....	17	16	35
Other.....	80	26	86
Accessory boats.....	21	4	61
Apparatus:			
Purse seines, menhaden.....			16
Length, yards.....			6, 528
Haul seines.....	24	15	48
Length, yards.....	8, 010	1, 530	14, 430
Gill nets—			
Drift.....	11	29	39
Square yards.....	35, 000	133, 889	42, 490
Runaround.....	4		41
Square yards.....	14, 000		26, 000
Stake.....	46	7	156
Square yards.....	9, 490	2, 800	11, 134

## Fisheries of Delaware, 1930—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Kent	New Castle	Sussex
Apparatus—Continued.			
Lines—	Number	Number	Number
Hand.....	20		32
Hooks.....	40		64
Trawl.....	6		8
Hooks.....	3, 100		3, 000
Trot, with baits or snoods.....		1	
Baits or snoods.....		50	
Pounds nets.....	23	15	29
Stop nets.....	2	7	
Square yards.....	3, 200	168	
Fyke nets.....	45	58	217
Dip nets.....			36
Cast nets.....	3	4	
Pots—			
Eel.....	127		648
Lobster.....			185
Spears.....			6
Dredges—			
Clam.....	10		
Yards at mouth.....	10		
Oyster.....	30		2
Yards at mouth.....	37		2
Tongs.....	69		11
Rakes.....	6		
Gaffs.....		1	
By hand.....	10		

## CATCH: BY COUNTIES

Species	Kent		New Castle		Sussex	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	1, 700	\$34			3, 192, 266	\$9, 708
Bluefish.....					31, 010	2, 314
Carp.....	3, 859	596	45, 809	\$6, 375	36, 168	2, 074
Catfish and bullheads.....	3, 319	410	17, 664	1, 722	17, 934	1, 629
Cod.....	24, 144	590			73, 000	3, 010
Croaker.....	190, 250	5, 798	750	84	933, 930	22, 822
Eels.....	10, 367	1, 064	12, 506	1, 500	70, 716	8, 432
Flounders.....					132, 553	9, 503
Gizzard shad.....			950	7		
King whiting or "kingfish".....	1, 400	70			1, 680	49
Menhaden.....					41, 960, 142	307, 112
Mullet.....	1, 000	50			63, 800	4, 250
Scup.....					27, 000	2, 160
Sea bass.....					20, 250	1, 620
Shad.....	7, 201	1, 282	36, 479	7, 774	10, 766	1, 818
Spot.....					146, 761	8, 250
Squeteague or "sea trout," gray.....	363, 025	18, 198	750	84	870, 950	22, 186
Striped bass.....	37, 200	8, 750	520	94	64, 307	13, 605
Sturgeon.....			15, 313	6, 253		
Suckers.....	150	9				
Tautog.....					74, 000	2, 300
White perch.....	51, 825	6, 853	2, 825	294	155, 321	27, 968
Yellow perch.....	100	9	3, 915	361	43, 745	4, 319
Yellowtail.....					2, 040	84
Crabs:						
King.....	968, 760	1, 265				
Soft.....					23, 800	4, 850
Lobsters.....					11, 750	2, 620
Clams:						
Hard, public.....	18, 503	3, 790				
Hard, private.....	6, 003	2, 001				
Mussels.....	19, 500	1, 875				
Oysters:						
Market, public, fall.....	86, 675	8, 068			79, 792	10, 874
Market, private, spring.....	28, 120	3, 967				
Market, private, fall.....	210, 263	29, 002			23, 250	3, 000
Seed, public, spring.....	753, 300	52, 650			10, 800	720
Seed, public, fall.....	64, 800	3, 795			10, 574	706
Turtles, snapper.....	2, 550	133	100	5		
Total.....	2, 854, 014	150, 259	137, 581	24, 553	48, 089, 205	477, 983

*Industries related to the fisheries of Delaware, 1930*

## TRANSPORTING IN KENT COUNTY

Persons engaged on vessels.....	5
Vessels, motor.....	1
Net tonnage.....	9

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Kent County	New Castle County	Sussex County	Total
Establishments.....	4	5	9	18
Persons engaged:				
Proprietors.....	8	5	10	23
Salaried employees.....	4	3	15	22
Wage earners—				
Average for season.....	34	16	283	333
Average for year.....	18	9	103	130
Paid to salaried employees.....	\$7,752	\$6,500	\$28,840	\$43,092
Paid to wage earners.....	15,047	10,682	61,365	87,094
Total, salaries and wages.....	22,799	17,182	90,205	130,186

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Oysters, fresh-shucked.....gallons..	78,080	\$153,584
Miscellaneous <sup>1</sup> .....	(?)	603,675
Total.....		757,259

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 39]

King crabs, dry scrap.....tons..	178	\$7,104
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<sup>1</sup> Includes shucked hard clams; marine and domestic shell products; canned sturgeon caviar; oyster-shell products; and menhaden products.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 5 have also been included as fishermen and among the total persons engaged in the preparation of fishermen's manufactured products, 39 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

VESSEL FISHERIES AT NEW YORK CITY AND GROTON, CONN.<sup>1</sup>

During 1931 fishing vessels of 5 net tons capacity or greater landed 51,854,000 pounds of fishery products at New York City and Groton, Conn. This is 9 per cent less than during the previous year. The landings consisted of bluefish, 1,788,000 pounds; cod, 5,368,000 pounds; flounders, 8,438,000 pounds; haddock, 28,502,000 pounds; halibut, 47,000 pounds; mackerel, 1,685,000 pounds; scup or porgies and sea bass, 696,000 pounds; tilefish, 2,782,000 pounds; squeteague or weakfish, 37,000 pounds; and miscellaneous species, 2,511,000 pounds.

<sup>1</sup> Statistics on the landings at New York City are collected by J. H. Matthews, executive secretary, Middle Atlantic Fisheries Association and forwarded to this bureau where they are combined with Groton landings. The statistics for the two ports are combined to avoid disclosure of individual enterprise.

## SHAD FISHERY OF THE HUDSON RIVER

The shad fishery of the Hudson River in 1931 was prosecuted by 252 fishermen, who used 25 motor boats, 107 other boats, 104 drift gill nets, having a total area of 315,298 square yards, 19 stake gill nets having a total area of 19,167 square yards, and 2 haul seines having a combined length of 349 yards. The total catch was 125,943 shad, having a weight of 414,611 pounds and a value to the fishermen of \$49,781. This is an increase of slightly over 100 per cent in number and 49 per cent in value as compared with 1930. The average price per pound received by the fishermen in 1931 was about 12 cents as compared with 16 cents received in 1930.

About 73 per cent of the catch in number was taken with drift gill nets, 25 per cent with stake gill nets, and 1 per cent with haul seines. The remainder was taken incidentally with gear used mainly for other species of fish.

With the exception of some fishing with stake gill nets from one town in New Jersey, the fishing was prosecuted entirely from points in New York.

*Shad fishery of the Hudson River, 1931*

Item	New York			New Jersey			Total		
	Number	Pounds	Value	Number	Pounds	Value	Number	Pounds	Value
Fishermen:									
On boats and shore—									
Regular.....	5			2			7		
Casual.....	224			21			245		
Total.....	229			23			252		
Boats:									
Motor.....	22			3			25		
Other.....	101			6			107		
Apparatus:									
Gill nets—									
Drift.....	104						104		
Square yards.....	315,298						315,298		
Stake.....	15			4			19		
Square yards.....	12,167			7,000			19,167		
Haul seines.....	2						2		
Length, yards.....	349						349		
Shad caught:									
With drift gill nets.....	92,353	303,563	\$36,546	21,900	72,000	\$8,941	92,353	303,563	\$36,546
With stake gill nets.....	9,975	33,795	3,587				31,875	105,795	12,528
With haul seines.....	1,270	3,815	437				1,270	3,815	437
Incidentally.....	445	1,438	270				445	1,438	270
Total.....	104,043	342,611	40,840	21,900	72,000	8,941	125,943	414,611	49,781

FISHERIES OF THE CHESAPEAKE BAY STATES <sup>8</sup>

The yield of fishery products in the Chesapeake Bay States (Maryland and Virginia) during 1930 amounted to 316,392,924 pounds, valued at \$11,472,050. This is an increase of 15 per cent in the catch but a decrease of 1 per cent in the value of the catch as compared with the quantity and its value for 1929. Of the total catch in 1930, 199,326,534 pounds, valued at \$4,391,493, were fish; and 117,066,390

<sup>8</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure" which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

pounds, valued at \$7,080,557, were shellfish and miscellaneous products. These fisheries gave employment to 19,391 fishermen, or 5 per cent more than in 1929. Of the total number of fishermen employed during 1930, 2,579 regular fishermen were engaged on vessels, and 10,635 regular and 6,177 casual fishermen were employed in the shore and boat fisheries.

*Fisheries of the Chesapeake Bay States, 1930*

SUMMARY OF CATCH

Product	Maryland		Virginia		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	16,680,888	\$873,469	182,645,646	\$3,518,024	199,326,534	\$4,391,493
Shellfish, etc.....	54,417,656	3,111,279	62,648,734	3,969,278	117,066,390	7,080,557
Total.....	71,098,544	3,984,748	245,294,380	7,487,302	316,392,924	11,472,050

OPERATING UNITS: BY STATES

Item	Maryland	Virginia	Total
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	1,127	1,452	2,579
On boats and shore—			
Regular.....	4,917	5,718	10,635
Casual.....	2,483	3,694	6,177
Total.....	8,527	10,864	19,391
<b>Vessels:</b>			
Steam.....		25	25
Net tonnage.....		2,902	2,902
Motor.....	2	85	87
Net tonnage.....	13	1,440	1,453
Sail.....	252	27	279
Net tonnage.....	2,796	219	3,015
Total vessels.....	254	137	391
Total net tonnage.....	2,809	4,561	7,370
<b>Boats:</b>			
Motor.....	3,687	4,530	8,217
Other.....	2,435	3,168	5,603
Accessory boats.....	20	62	82
<b>Apparatus:</b>			
Purse seines—			
Menhaden.....		31	31
Length, yards.....		8,720	8,720
Other.....	18		18
Length, yards.....	5,012		5,012
Haul seines.....	188	187	375
Length, yards.....	34,784	59,430	94,214
Gill nets—			
Anchor.....	11	1	12
Square yards.....	2,845	9,600	12,445
Drift.....	303	652	955
Square yards.....	447,800	663,042	1,110,842
Runaround.....	5		5
Square yards.....	5,920		5,920
Stake.....	2,564	16,453	19,017
Square yards.....	151,660	607,190	758,850
<b>Lines—</b>			
Hand.....	18		18
Hooks.....	36		36
Trot, with baits or snoods.....	1,510	1,386	2,896
Baits or snoods.....	977,035	662,440	1,639,475
Trot, with hooks.....	22		22
Hooks.....	3,450		3,450
Pound nets.....	692	2,262	2,954
Stop nets.....	6		6
Square yards.....	10,350		10,350
Fyke nets.....	2,388	1,084	3,472
Dip nets.....	1,393	712	2,105

## Fisheries of the Chesapeake Bay States, 1930—Continued

## OPERATING UNITS: BY STATES—Continued

Item	Maryland	Virginia	Total
Apparatus—Continued.	Number	Number	Number
Cast nets.....	3		3
Otter trawls.....		12	12
Yards at mouth.....		358	358
Pots, eel.....	12,652	640	13,292
Spears.....	18		18
Scrapes.....	1,232	618	1,850
Yards at mouth.....	1,232	618	1,850
Dredges—			
Crab.....		102	102
Yards at mouth.....		182	182
Oyster.....	710	256	966
Yards at mouth.....	898	293	1,191
Scallop.....		924	924
Yards at mouth.....		617	617
Tongs.....	4,849	4,820	9,669
Rakes.....	134	948	1,082
Picks.....	8	477	485

## CATCH: BY STATES

Species	Maryland		Virginia		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
Alewives.....	5,741,307	\$86,121	15,387,018	\$181,533	21,128,325	\$267,654
Black bass.....	19,179	3,263			19,179	3,263
Bluefish.....	267,611	26,031	230,006	16,182	497,617	42,213
Bonito.....	5,200	416	43,615	2,181	48,815	2,597
Butterfish.....	615,480	37,118	3,675,005	163,675	4,290,485	200,793
Cabio, or crab eater.....	200	10			200	10
Carp.....	226,240	22,038	242,750	11,757	468,990	33,795
Catfish and bullheads.....	398,983	19,500	407,787	15,471	806,770	34,971
Cod.....			50,103	1,200	50,103	1,200
Croaker.....	2,113,780	62,271	19,908,201	462,763	22,021,981	525,034
Drum:						
Black.....	40,000	500	24,370	517	64,370	1,017
Red or redfish.....	16,000	327	36,200	1,437	52,200	1,764
Eels.....	314,361	27,115	74,765	6,626	389,126	33,741
Flounders.....	102,375	5,011	559,564	26,014	661,939	31,025
Gizzard shad.....	31,999	764	135,750	3,234	167,749	3,998
Goldfish or "sand perch".....	12,665	621			12,665	621
Hake.....			1,422	42	1,422	42
Harvestfish.....			400	20	400	20
Hickory shad.....	6,550	229	83,900	2,828	90,450	3,057
King whiting or "kingfish".....	1,600	128	2,989	144	4,589	272
Mackerel.....	800	48	47,874	4,747	48,674	4,795
Menhaden.....			115,841,600	767,210	115,841,600	767,210
Mullet.....	22,150	1,181	93,000	3,910	115,150	5,091
Pigfish.....	400	20	68,700	3,444	69,100	3,464
Pike or pickerel.....	10,918	2,019	80	20	10,998	2,039
Pompano.....	100	25	2,000	400	2,100	425
Scup.....	60,000	2,400	403,514	20,461	463,514	22,861
Sea bass.....	20,200	1,212	191,573	14,479	211,773	15,691
Sea robin.....	600	6			600	6
Shad.....	998,436	149,742	6,183,009	989,125	7,181,445	1,138,867
Skates.....	800	8	1,800	27	2,600	35
Spanish mackerel.....	8,200	1,010	50,150	6,480	58,350	7,490
Spot.....	126,295	6,569	2,492,935	124,874	2,619,230	131,443
Squeteagues or "sea trout":						
Gray.....	3,753,647	172,258	15,512,389	580,708	19,266,036	752,966
Spotted.....	3,580	423	198,000	23,769	201,580	24,192
Striped bass.....	1,227,990	203,569	425,175	67,076	1,653,165	270,645
Sturgeon.....			4,590	1,380	4,590	1,380
Tautog.....	200	10	800	32	1,000	42
Tomcod.....	280	8			280	8
White perch.....	420,246	31,738	196,245	9,761	616,491	41,499
Whiting.....	5,000	200	21,707	897	26,707	1,097
Yellow perch.....	107,516	9,560	46,660	3,600	154,176	13,160
Total.....	16,680,888	873,469	182,645,646	3,518,024	199,326,534	4,391,493



## Fisheries of the Chesapeake Bay States, 1930—Continued

## CATCH: BY STATES—Continued

Species	Maryland		Virginia		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.						
Crabs:						
Hard.....	31,625,767	\$529,005	28,939,870	\$543,056	60,565,637	\$1,072,061
Soft.....	5,313,016	455,166	2,881,000	195,005	8,194,016	650,171
Squid.....	100,000	4,000	125,383	3,849	225,383	7,849
Clams, hard, public.....	80,8.0	40,400	1,212,736	391,771	1,293,536	432,171
Oysters: <sup>1</sup>						
Market, public, spring.....	4,574,673	544,278	1,581,175	185,490	6,155,848	729,768
Market, public, fall.....	10,648,311	1,272,071	4,843,530	567,473	15,491,841	1,839,544
Market, private, spring.....	489,125	65,015	2,980,752	346,317	3,469,877	411,332
Market, private, fall.....	1,393,860	188,608	10,212,420	1,182,665	11,606,280	1,371,273
Seed, public, spring.....	188,404	11,072	2,509,715	125,483	2,698,119	136,555
Seed, public, fall.....			5,537,205	280,605	5,537,205	280,605
Scallops, bay.....			1,824,948	147,564	1,824,948	147,564
Turtles, snapper.....	1,600	64			1,600	64
Terrapin, diamond-back.....	2,100	1,600			2,100	1,600
Total.....	54,417,656	3,111,279	62,648,734	3,969,278	117,066,390	7,080,557
Grand total.....	71,098,544	3,984,748	245,294,380	7,487,302	316,392,924	11,472,050

## PRODUCTION OF CERTAIN SHELLFISH IN NUMBERS AND BUSHELS

Product	Maryland		Virginia		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard.....number..	94,877,301	\$529,005	86,819,610	\$543,056	181,696,911	\$1,072,061
Soft.....do.....	15,939,048	455,166	8,643,000	195,005	24,582,048	650,171
Clams, hard.....bushels..	10,100	40,400	151,592	391,771	161,692	432,171
Oysters:						
Market, public, spring...do....	617,115	544,278	230,492	185,490	847,607	729,768
Market, public, fall.....do....	1,436,437	1,272,071	706,054	567,473	2,142,491	1,839,544
Market, private, spring...do....	65,982	65,015	434,512	346,317	500,494	411,332
Market, private, fall.....do....	188,029	188,608	1,488,691	1,182,665	1,676,720	1,371,273
Seed, public, spring...do....	37,681	11,072	501,943	125,483	539,624	136,555
Seed, public, fall.....do....			1,107,441	280,605	1,107,441	280,605
Scallops, bay.....do.....			304,158	147,564	304,158	147,564

<sup>1</sup> Statistics on oyster used in this table are based on yields of 7.413 pounds of meats to the bushel for market oysters in Maryland, 6.86 pounds for market oysters in Virginia, and 5 pounds for seed oysters in both States. In reports for previous years all oysters in both States have been computed on the basis of a uniform yield of 7 pounds to the bushel.

*Industries related to the fisheries of the Chesapeake Bay States, 1930*

Item	Maryland	Virginia	Total
Transporting:			
Persons engaged.....	Number 354	Number 501	Number 855
Vessels—			
Motor.....	151	253	404
Net tonnage.....	2,227	3,046	5,273
Sail.....	23	1	24
Net tonnage.....	707	30	737
Total vessels.....	174	254	428
Total net tonnage.....	2,934	3,076	6,010
Wholesale and manufacturing:			
Establishments.....	323	220	543
Persons engaged—			
Proprietors.....	509	303	812
Salaried employees.....	216	78	294
Wage earners:			
Average for season.....	6,121	4,448	10,569
Average for year.....	2,891	1,817	4,708
Salaries and wages paid.....	\$1,756,224	\$1,220,122	\$2,976,346
Products <sup>1</sup> .....	\$5,155,591	\$5,228,100	\$10,383,691
Fishermen's manufactured products:			
Persons engaged.....	52	479	531
Products.....	\$8,140	\$100,000	\$108,140

<sup>1</sup> These production figures are not comparable with those shown in previous bulletins, since packaged fresh and frozen fishery products are now included.

NOTE.—Of the total number of persons engaged in the preparation of fishermen's manufactured products, 528 have been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

**MARYLAND**

*Fisheries of Maryland, 1930*

OPERATING UNITS: BY GEAR

Item	Purse seines	Haul seines	Gill nets				Lines			Pound nets	Stop nets
			Anchor	Drift	Rumaround	Stake	Hand	Trot, with baits or snood	Trot, with hooks		
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:											
On vessels.....	74										
On boats and shore—											
Regular.....	46	294	18	74	14	74	18	1,317	10	510	1
Casual.....		285	2	374	2	83		160	3	176	10
Total.....	120	579	20	448	16	157	18	1,477	13	686	11
Vessels:											
Motor—5 to 10 tons.....	1										
Net tonnage.....	7										
Sail—											
5 to 10 tons.....	1										
11 to 20 tons.....	2										
21 to 30 tons.....	6										
31 to 40 tons.....	1										
Total.....	10										
Net tonnage.....	222										
Total vessels.....	11										
Total net tonnage.....	229										
Boats:											
Motor.....	20	90	9	166	5	64	9	1,233		236	3
Other.....	1	186	1	95	5	50		208	13	263	4
Accessory boats.....	20										
Apparatus:											
Number.....	18	188	11	303	5	2,564	18	1,510	22	692	6
Length, yards.....	5,012	34,784									10,350
Square yards.....			2,845	447,800	5,920	151,660					
Hooks, baits, or snoods.....							36	977,035	3,450		

## Fisheries of Maryland, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Fyke nets	Dip nets	Cast nets	Pots, eel	Spears	Scraper	Dredges, oyster	Tongs	Rakes	Picks	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:												
On vessels.....							1,085	3				1,127
On boats and shore—												
Regular.....	35	991		123	18	640	201	3,345	98		16	4,917
Casual.....	107	408	3	42		22		1,114	36	8	35	2,483
Total.....	142	1,399	3	165	18	662	1,286	4,462	134	8	51	8,527
Vessels:												
Motor—5 to 10 tons.....								1				2
Net tonnage.....								6				13
Sail—												
5 to 10 tons.....							194					194
11 to 20 tons.....							23					24
21 to 30 tons.....							18					21
31 to 40 tons.....							6					7
41 to 50 tons.....							4					4
51 to 60 tons.....							2					2
Total.....							247					252
Net tonnage.....							2,676					2,796
Total vessels.....							247	1				254
Total net tonnage.....							2,676	6				2,809
Boats:												
Motor.....	68	530		138	12		20	2,579	48		5	3,687
Other.....	60	961	3	6	6	584	88	368	37	8	46	2,435
Accessory boats.....												20
Apparatus:												
Number.....	2,388	1,393	3	12,652	18	1,232	710	4,849	134	8		
Yards at mouth.....						1,232	898					

## CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets			
	Pounds	Value	Pounds	Value	Anchor		Drift	
					Pounds	Value	Pounds	Value
Alewives.....			101,200	\$1,524				
Black bass.....			11,475	1,880				
Bluefish.....	88,136	\$8,818	31,300	2,830				
Carp.....			149,593	14,210				
Catfish and bullheads.....			114,825	5,554				
Croaker.....	73,218	1,957	620,200	20,982			8,400	252
Eels.....			1,960	149				
Flounders.....			9,700	507				
Gizzard shad.....			2,100	50				
Goldfish or "sand perch".....			9,665	491				
Hickory shad.....							500	20
Mullet.....			1,300	74	18,000	\$916		
Pike or pickerel.....			2,685	527				
Shad.....			2,837	397			225,625	33,602
Spot.....	2,700	177	44,000	2,697				
Squeteague or "sea trout":								
Gray.....	170,746	12,220	87,650	5,836			200	20
Spotted.....			2,400	288				
Striped bass.....	310,607	47,364	219,903	40,315	1,200	240	170,212	28,533
White perch.....			107,085	8,149	2,000	200	11,300	885
Yellow perch.....			15,835	1,431			400	40
Crabs, soft.....			48,314	5,566				
Total.....	645,407	70,536	1,584,027	113,457	21,200	1,356	463,446	64,076

Fisheries of Maryland, 1930—Continued

CATCH: BY GEAR—Continued

Species	Gill nets—Continued				Lines			
	Runaround		Stake		Hand		Trot, with baits or snoods	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			18,600	\$335				
Bluefish.....	49,800	\$4,784			40,000	\$4,000		
Bonito.....					2,000	160		
Catfish and bullheads.....			200	10				
Croaker.....			400	12	5,800	174		
Flounders.....					6,400	320		
Gizzard shad.....			684	27				
Mullet.....			300	24				
Scup or porgy.....					22,400	896		
Sea bass.....					20,000	1,200		
Shad.....			135,211	20,398				
Spanish mackerel.....	200	50						
Squeteagues or "sea trout," gray.....			1,500	120	32,000	1,600		
Striped bass.....	2,500	450	122,000	18,839				
White perch.....			10,800	820				
Yellow perch.....			1,200	120				
Crabs, hard.....							30,315,632	\$505,730
Total.....	52,500	5,284	290,895	40,705	128,600	8,350	30,315,632	505,730

Species	Lines—Contd.		Pound nets		Stop nets		Fyke nets	
	Trot, with hooks		Pounds	Value	Pounds	Value	Pounds	Value
	Pounds	Value						
Alewives.....			5,574,298	\$83,530			400	\$8
Black bass.....			250	46			7,454	1,337
Bluefish.....			58,375	5,599				
Bonito.....			3,200	256				
Butterfish.....			615,480	37,118				
Cabio or crab eater.....			200	10				
Carp.....			14,822	1,100	31,800	\$3,636	6,025	572
Catfish and bullheads.....	8,300	\$415	137,372	6,625			138,286	6,896
Croaker.....			1,405,462	38,869			300	25
Drum:								
Black.....			40,000	500				
Red or redfish.....			16,000	327				
Eels.....	1,840	147	19,014	1,561			23,087	2,057
Flounders.....			86,275	4,184				
Gizzard shad.....			26,915	633			2,300	54
Goldfish or "sand perch".....			400	16			2,600	114
Hickory shad.....			5,650	193			400	16
King whiting or "kingfish".....			1,600	128				
Mackerel.....			800	48				
Mullet.....			1,550	88			1,000	79
Pigfish.....			400	20				
Pike or pickerel.....			594	117			7,639	1,375
Pompano.....			100	25				
Scup or porgy.....			37,600	1,504				
Sea bass.....			200	12				
Sea robin.....			600	6				
Shad.....			634,763	95,345				
Skates.....			800	8				
Spanish mackerel.....			8,000	960				
Spot.....			79,595	3,695				
Squeteagues or "sea trout":								
Gray.....			3,461,551	152,462				
Spotted.....			1,180	135				
Striped bass.....			399,268	67,392			2,300	436
Autog.....			200	10				
Comcod.....			280	8				
White perch.....			198,740	15,063			90,321	6,621
Whiting.....			5,000	200				
Yellow perch.....			14,505	1,319			75,576	6,650
Quid.....			100,000	4,000				
Turtles, snapper.....	1,500	60					100	4
Total.....	11,640	622	12,951,039	523,112	31,800	3,636	357,788	26,244

## Fisheries of Maryland, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Dip nets		Cast nets		Pots, eel		Spears		Scrapes	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Carp.....			24,000	\$2,520						
Eels.....					251,860	\$21,957	16,600	\$1,244		
Crabs:										
Hard.....	89,650	\$1,585							1,220,485	\$21,690
Soft.....	2,064,758	179,236							3,199,944	270,364
Total.....	2,154,408	180,821	24,000	2,520	251,860	21,957	16,600	1,244	4,420,429	292,054

  

Species	Dredges, oyster		Tongs		Rakes		Picks		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams, hard public.....			72,360	\$36,180	6,400	\$3,200	720	\$360	1,320	\$660
Oysters:										
Market, public, spring.....	1,127,087	\$145,247	3,447,586	399,031						
Market, public, fall.....	2,683,550	347,213	7,964,761	924,858						
Market, private, spring.....	29,652	4,800	452,060	59,215	7,413	1,000				
Market, private, fall.....	51,150	7,780	1,320,470	177,828	22,240	3,000				
Seed, public, spring.....			188,404	11,072						
Terrapin, diamond-back.....									2,100	1,600
Total.....	3,891,439	505,040	13,445,641	1,608,184	36,053	7,200	720	360	3,420	2,260

## OPERATING UNITS: BY COUNTIES

Item	Anne Arundel	Baltimore	Calvert	Caroline	Cecil	Charles	Dorchester	Harford
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	7	110	20				397	
On boats and shore—								
Regular.....	384		129	3	9	98	730	
Casual.....	370	46	286	45	102	278	192	52
Total.....	761	156	435	48	111	376	1,319	52
Vessels:								
Motor—5 to 10 tons.....	2							
Net tonnage.....	13							
Sail—								
5 to 10 tons.....			2				88	
11 to 20 tons.....		3					4	
21 to 30 tons.....		7	1				3	
31 to 40 tons.....		4						
41 to 50 tons.....		3						
51 to 60 tons.....		1	1					
Total.....		18	4				95	
Net tonnage.....		545	88				786	
Total vessels.....	2	18	4				95	
Total net tonnage.....	13	545	88				786	
Boats:								
Motor.....	407	17	183	6	44	141	508	31
Other.....	139	20	148	21	41	62	258	11
Accessory boats.....		8						
Apparatus:								
Purse seines.....	2	4						
Length, yards.....	600	1,054						
Haul seines.....	50	6	17	4	9	31	6	2
Length, yards.....	1,688	1,400	3,675	900	2,000	4,655	1,850	1,400



## Fisheries of Maryland, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Kent	Prince Georges	Queen Annes	St. Marys	Somer-set	Talbot	Wicom-ico	Wor-ces-ter
Apparatus—Continued.								
Lines—Continued.	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Trot, with baits or snoods.....	245	-----	146	133	63	251	4	49
Baits or snoods.....	99,600	-----	78,600	94,000	60,000	187,800	2,250	38,650
Trot, with hooks.....	10	-----	-----	-----	-----	-----	-----	-----
Hooks.....	3,000	-----	-----	-----	-----	-----	-----	-----
Pound nets.....	37	8	17	77	61	96	20	38
Fyke nets.....	727	71	119	-----	-----	44	12	48
Dip nets.....	28	-----	91	258	623	82	-----	5
Cast nets.....	3	-----	-----	-----	-----	-----	-----	-----
Pots, eel.....	336	30	1,110	-----	320	4,835	-----	240
Spears.....	-----	-----	-----	-----	-----	18	-----	-----
Scrapes.....	-----	-----	-----	-----	1,160	-----	-----	-----
Yards at mouth.....	-----	-----	-----	-----	1,160	-----	-----	-----
Dredges, oyster.....	-----	-----	-----	12	278	54	-----	40
Yards at mouth.....	-----	-----	-----	12	351	73	-----	34
Tongs.....	366	-----	659	938	203	545	331	146
Rakes.....	-----	-----	-----	-----	-----	-----	-----	134
Picks.....	-----	-----	-----	-----	-----	-----	-----	8

## CATCH: BY COUNTIES

Species	Anne Arundel		Baltimore		Calvert		Caroline	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	406,494	\$5,250	53,000	\$1,560	450,800	\$5,641	10,800	\$168
Black bass.....	600	120	200	40	-----	-----	100	18
Bluefish.....	31,425	2,968	19,250	1,929	200	20	-----	-----
Butterfish.....	80	8	-----	-----	200	30	-----	-----
Carp.....	13,022	1,293	19,900	1,990	6,400	512	11,700	1,146
Catfish and bullheads.....	20,388	918	56,436	2,822	17,300	865	12,900	645
Croaker.....	114,234	3,372	3,124	94	111,600	2,486	2,000	60
Eels.....	11,344	1,244	11,900	1,190	50	5	2,000	160
Flounders.....	8,081	358	1,000	53	2,900	174	-----	-----
Gizzard shad.....	17,975	386	-----	-----	-----	-----	-----	-----
Mullet.....	-----	-----	-----	-----	400	20	-----	-----
Pike or pickerel.....	3,354	671	400	100	150	30	-----	-----
Shad.....	25,969	3,894	500	75	71,800	10,526	1,150	172
Spot.....	18,795	968	1,200	72	1,600	86	-----	-----
Squeteagues or "sea trout":								
Gray.....	149,201	9,467	25,259	2,020	51,100	3,452	3,400	272
Spotted.....	200	24	-----	-----	-----	-----	-----	-----
Striped bass.....	68,340	13,276	115,455	18,720	41,450	7,559	12,500	2,500
White perch.....	11,590	993	23,600	1,744	25,800	2,104	14,650	938
Yellow perch.....	6,700	670	8,000	724	800	80	1,500	150
Crabs:								
Hard.....	2,770,000	56,620	132,000	3,960	671,400	10,071	-----	-----
Soft.....	42,699	5,401	-----	-----	150,927	13,584	-----	-----
Oysters:								
Market, public, spring.....	825,200	107,538	136,636	18,432	206,660	28,098	-----	-----
Market, public, fall.....	1,343,517	173,938	252,205	34,022	482,638	71,617	-----	-----
Market, private, spring.....	-----	-----	-----	-----	103,693	13,988	-----	-----
Market, private, fall.....	-----	-----	-----	-----	219,625	32,589	-----	-----
Turtles, snapper.....	-----	-----	-----	-----	-----	-----	1,600	64
Total.....	5,889,208	389,377	860,065	89,547	2,617,493	203,537	74,300	6,291

## Fisheries of Maryland, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Cecil		Charles		Dorchester		Harford	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	112,000	\$1,680	16,000	\$400	908,008	\$13,660	223,000	\$3,945
Black bass.....	4,294	774	4,675	809				
Bluefish.....			600	60	25,400	2,184		
Carp.....	59,530	6,709	44,450	3,185	3,713	321	2,800	280
Catfish and bullheads.....	52,550	2,627	67,835	3,006	27,034	1,352	5,700	285
Croaker.....			6,550	405	201,878	5,238		
Eels.....	19,937	1,994	2,410	160	65,240	5,995	10,200	1,020
Flounders.....			400	32	25,294	1,095		
Gizzard shad.....	2,100	63	7,500	138	3,524	141		
Goldfish or "sand perch".....			9,765	500				
Hickory shad.....	1,000	35						
Mullet.....			1,700	121	400	32		
Pike or pickerel.....	1,659	313	325	63			200	50
Shad.....	87,032	12,527	23,805	3,833	120,099	17,990	42,016	5,882
Spot.....			600	12	12,500	731		
Squeteagues or "sea trout", gray.....			19,100	1,530	41,300	2,478		
Striped bass.....	26,306	4,734	56,985	7,511	116,088	19,484	11,800	2,200
White perch.....	48,621	3,699	41,445	3,266	88,500	6,456	8,200	656
Yellow perch.....	10,676	908	8,665	772			3,200	256
Crabs:								
Hard.....			585,200	8,758	9,639,532	151,502		
Soft.....			1,200	150	446,409	37,254		
Oysters:								
Market, public, spring.....			16,160	2,143	827,120	99,755		
Market, public, fall.....			97,885	15,477	2,010,546	247,113		
Market, private, spring.....			8,354	1,240	84,382	10,308		
Market, private, fall.....			74,397	12,043	180,136	23,900		
Total.....	425,705	36,063	1,096,006	65,614	14,827,103	646,989	307,116	14,574

Species	Kent		Prince Georges		Queen Annes		St. Marys	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	400,509	\$6,008	800	\$16	67,200	\$1,024	526,600	\$8,433
Black bass.....	1,310	202	8,000	1,300				
Bluefish.....	29,486	2,853			16,300	1,630	7,550	707
Butterfish.....	1,500	150			1,200	120		
Carp.....	42,000	4,616	13,825	1,232	2,500	238	600	48
Catfish and bullheads.....	58,140	2,907	18,500	844	19,500	980	200	8
Croaker.....	85,294	2,559			102,400	3,682	60,800	1,707
Eels.....	10,410	833	2,950	274	21,400	1,708	800	64
Flounders.....	1,400	70			2,000	116	5,200	339
Goldfish or "sand perch".....			2,900	121				
Hickory shad.....							2,850	86
Mullet.....			850	52				
Pike or pickerel.....	3,430	522	1,100	220	300	50		
Shad.....	206,183	30,926	2,839	469	16,000	2,400	97,666	15,185
Spot.....	12,600	756			12,400	850	4,100	169
Squeteagues or "sea trout":								
Gray.....	275,487	17,220	3,100	248	29,100	2,451	41,000	2,124
Spotted.....							180	15
Striped bass.....	474,183	73,139	5,400	850	60,600	10,674	98,300	10,588
White perch.....	65,700	4,645	8,600	620	21,340	1,696	19,750	1,647
Yellow perch.....	31,080	2,586	7,170	660	16,500	1,496	3,125	248
Crabs:								
Hard.....	2,684,800	40,272			1,804,200	27,263	1,432,000	26,280
Soft.....	33,941	4,073			56,700	6,329	98,510	10,820
Oysters:								
Market, public, spring.....	290,775	23,074			627,696	63,227	126,132	13,375
Market, public, fall.....	850,086	75,322			1,539,495	154,916	549,437	59,503
Market, private, spring.....							9,637	1,145
Market, private, fall.....					8,836	960	41,142	5,000
Seed, public, spring.....	188,404	11,072						
Total.....	5,746,718	303,805	76,034	6,906	4,425,727	281,810	3,125,579	166,491



## Fisheries of Maryland, 1930—Continued

CATCH: BY COUNTIES—Continued

Species	Somerset		Talbot		Wicomico		Worcester	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	482,000	\$6,830	1,997,896	\$29,974	74,200	\$1,294	12,000	\$240
Bluefish.....	42,200	4,196	46,400	4,604	400	40	48,400	4,840
Bonito.....							5,200	416
Butterfish.....	10,000	600			2,500	210	600,000	36,000
Cabio or crab eater.....							200	10
Carp.....			2,600	212	2,400	192	800	64
Catfish and bullheads.....	6,200	310	16,400	936	16,100	805	3,800	190
Croaker.....	611,100	20,344	302,000	6,940	106,200	3,186	406,600	12,198
Drum:								
Black.....							40,000	500
Red or redfish.....	1,000	27					15,000	300
Eels.....	5,800	580	126,400	10,010	200	16	23,320	1,862
Flounders.....	10,100	462	2,400	132	3,800	190	39,800	1,990
Gizzard shad.....	900	36						
Hickory shad.....	1,500	60			1,200	48		
King whiting or "kingfish".....							1,600	128
Mackerel.....							800	48
Mullet.....					800	40	18,000	916
Pigfish.....							400	20
Pompano.....							100	25
Scup or porgy.....							60,000	2,400
Sea bass.....							20,200	1,212
Sea robin.....							600	6
Shad.....	110,800	16,619	163,701	24,555	18,876	3,189	10,000	1,500
Skates.....							800	8
Spanish mackerel.....	200	50					8,000	960
Spot.....	9,600	476	2,700	177	8,200	492	42,000	1,680
Squeteagues or "sea trout":								
Gray.....	110,100	5,606	146,200	10,160	22,100	1,432	2,837,200	113,808
Spotted.....	3,200	384						
Striped bass.....	17,000	3,064	109,443	17,697	13,740	2,513	400	60
Tautog.....							200	10
Tomcod.....							280	8
White perch.....	10,750	702	21,700	1,774	10,000	798		
Whiting.....							5,000	200
Yellow perch.....			10,100	1,010				
Crabs:								
Hard.....	3,013,635	54,906	7,871,400	128,941	71,600	1,432	950,000	19,000
Soft.....	4,392,387	369,875	71,563	5,998			18,680	1,682
Squid.....							100,000	4,000
Clams, hard, public.....							80,800	40,400
Oysters:								
Market, public, spring.....	537,635	73,416	783,495	88,623	197,164	26,597		
Market, public, fall.....	1,267,119	172,852	1,702,640	192,747	552,743	74,564		
Market, private, spring.....	69,193	9,334			75,983	8,200	137,883	20,800
Market, private, fall.....	153,197	20,666	74,871	9,090	269,463	29,080	372,133	55,280
Terrapin, diamond-back.....	1,800	1,300	300	300				
Total.....	10,867,416	762,795	13,452,209	533,880	1,447,669	154,308	5,860,196	322,761

## Industries related to the fisheries of Maryland, 1930

## TRANSPORTING

Item	Anne Arundel County	Baltimore County	Calvert County	Dorchester County	St. Marys County	Somerset County	Talbot County	Total
	Number	Number	Number	Number	Number	Number	Number	Number
Persons engaged on vessels.....	49	20	19	76	9	153	28	354
Vessels:								
Motor—								
5 to 10 tons.....	15	1	5	13	1	31	7	73
11 to 20 tons.....	6	1	1	9		23	4	44
21 to 30 tons.....	2		2	3		12	2	21
31 to 40 tons.....			1	3		5		9
41 to 50 tons.....		1		3				4
Total.....	23	3	9	31	1	71	13	151
Net tonnage.....	260	75	126	554	9	1,045	158	2,227
Sail—								
5 to 10 tons.....				1		1	1	3
11 to 20 tons.....	1			1	1	3		6
21 to 30 tons.....				2	2		1	5
31 to 40 tons.....				1		1		2
41 to 50 tons.....		1		1		1		3
51 to 60 tons.....		2						2
71 to 80 tons.....		1						1
81 to 90 tons.....		1						1
Total.....	1	5		6	3	6	2	23
Net tonnage.....	12	303		152	63	146	31	707
Total vessels.....	24	8	9	37	4	77	15	174
Total net tonnage.....	272	378	126	706	72	1,191	189	2,934

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Anne Arundel County	Baltimore County	Calvert County	Caroline and Dorchester Counties	Cecil and Harford Counties	Kent County	Queen Annes County
Establishments.....	11	60	9	35	7	11	14
Persons engaged:							
Proprietors.....	17	81	11	47	6	15	17
Salaried employees.....	4	133	1	22	3	2	
Wage earners—							
Average for season.....	293	714	137	1,552	143	108	280
Average for year.....	180	363	79	633	27	54	153
Paid to salaried employees.....	\$6,293	\$210,705	\$1,129	\$36,028	\$790	\$2,340	
Paid to wage earners.....	79,773	334,519	32,810	302,476	10,980	28,336	859,255
Total, salaries and wages.....	86,066	545,224	33,939	338,504	11,740	28,676	90,255

Item	Charles and St. Marys Counties	Somerset County	Talbot County	Wicomico County	Worcester County	Total
Establishments.....	7	137	19	6	7	223
Persons engaged:						
Proprietors.....	9	261	31	5	9	309
Salaried employees.....	1	41	6	3		216
Wage earners—						
Average for season.....	142	1,749	777	179	47	6,121
Average for year.....	47	808	269	68	30	2,891
Paid to salaried employees.....	\$600	\$42,643	\$4,265	\$1,490		\$396,214
Paid to wage earners.....	21,865	418,228	126,277	19,421	\$18,050	1,468,990
Total, salaries and wages.....	22,465	460,871	130,542	20,901	18,050	1,736,224





## Fisheries of Virginia, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Pots, eel	Scrapes	Dredges			Tongs	Rakes	Picks	By hand	Total, exclu- sive of dupli- cation
			Crab	Oyster	Scallop					
Vessels—Continued.										
Motor—										
5 to 10 tons.....			38	6		4				51
11 to 20 tons.....			6	9						24
21 to 30 tons.....			1	1						3
41 to 50 tons.....				1						1
61 to 70 tons.....										1
71 to 80 tons.....										3
131 to 140 tons.....										1
181 to 190 tons.....										1
Total.....			45	17		4				85
Net tonnage.....			389	233		29				1,440
Sail—										
5 to 10 tons.....				24						24
11 to 20 tons.....				3						3
Total.....				27						27
Net tonnage.....				219						219
Total vessels.....			45	44		4				137
Total net tonnage.....			389	452		29				4,561
Boats:										
Motor.....	8		6	56	348	2,928	73		12	4,530
Other.....		256		28	193	748	858	421	438	3,168
Accessory boats.....										62
Apparatus:										
Number.....	640	618	102	256	924	4,820	948	477		31,627
Yards at mouth.....		618	182	293	617					

## CATCH: BY GEAR

Species	Purse seines, menhaden		Haul seines		Gill nets			
					Anchor		Drift	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			33,400	\$668			18,400	\$359
Bluefish.....			19,600	1,896			4,000	360
Butterfish.....			5,300	265				
Carp.....			126,300	5,947				
Catfish and bullheads.....			139,100	5,191				
Croaker.....			931,000	23,781	18,000	\$540	316,400	8,390
Drum, red or redfish.....			10,275	410			1,200	36
Flounders.....			33,150	1,618				
Gizzard shad.....			61,700	1,406			6,000	200
Hickory shad.....			1,200	48			13,100	524
Menhaden.....	114,953,600	\$762,190						
Mullet.....							90,900	3,825
Pigfish.....			44,000	2,208			13,000	650
Pike or pickerel.....			80	20				
Pompano.....			2,000	400				
Shad.....			14,100	2,115			758,498	115,582
Spanish mackerel.....			16,300	2,445			6,000	850
Spot.....			1,749,000	87,623			95,800	4,523
Squeteagues or "sea trout":								
Gray.....			641,300	40,734			30,600	1,801
Spotted.....			194,800	23,385				
Striped bass.....			65,860	9,919			45,300	7,195
White perch.....			53,000	2,841				
Whiting.....			3,600	148				
Yellow perch.....			5,460	372				
Total.....	114,953,600	762,190	4,150,525	213,440	18,000	540	1,399,198	144,295

## Fisheries of Virginia, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Gill nets, stake		Lines, trot with baits or snoods		Pound nets	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	2,000	\$38			15,220,718	\$178,205
Bluefish					206,166	13,898
Bonito					43,615	2,181
Butterfish					3,668,698	163,360
Carp					15,850	780
Catfish and bullheads					32,300	1,583
Cod					49,743	1,193
Croaker	5,000	150			17,492,421	390,002
Drum:						
Black					24,370	517
Red or redfish					24,725	991
Eels					28,800	2,624
Flounders	8,500	425			258,450	11,741
Gizzard shad	600	20			12,150	356
Harvestfish or "starfish"					400	20
Hickory shad	1,000	20			67,800	2,196
King whiting or "kingfish"					2,400	120
Mackerel					47,874	4,747
Menhaden					888,000	5,020
Mullet	2,000	80			100	5
Pigfish	100	6			11,600	580
Scup or porgy					91,997	3,680
Sea bass					20,207	1,390
Shad	710,967	111,109			4,639,844	751,259
Skates					1,800	27
Spanish mackerel					27,850	3,185
Spot	2,500	163			589,235	28,671
Squeteagues or "sea trout":						
Gray	25,500	1,742			14,660,362	528,790
Spotted					3,200	384
Striped bass	63,000	10,310			192,550	31,001
Sturgeon					2,000	600
Tautog					800	32
White perch					58,100	3,046
Whiting					17,255	707
Crabs, hard			20,113,470	\$373,069		
Squid					125,345	3,847
Total	821,167	124,063	20,113,470	373,069	58,526,725	2,136,738

Species	Fyke nets		Dip nets		Otter trawls		Pots, eel	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	112,500	\$2,263						
Bluefish	200	24			40	\$4		
Butterfish	500	25			507	25		
Carp	100,600	5,030						
Catfish and bullheads	236,387	8,697						
Cod					360	7		
Croaker	182,600	5,417			962,780	34,483		
Eels	5,965	514					40,000	\$3,488
Flounders	10,000	485			249,464	11,745		
Gizzard shad	55,300	1,252						
Hake					1,422	42		
Hickory shad	800	40			589	24		
King whiting or "kingfish"					311,517	16,781		
Scup or porgy					171,366	13,089		
Sea bass								
Shad	59,600	9,060						
Spot	1,400	74			55,000	3,820		
Squeteagues or "sea trout," gray	28,200	2,150			126,427	5,491		
Striped bass	58,465	8,651						
Sturgeon					2,590	780		
White perch	84,550	3,850			595	24		
Whiting	800	40			52	2		
Yellow perch	41,200	3,228						
Crabs:								
Hard			308,400	\$5,397				
Soft			897,040	75,967				
Squid					38	2		
Total	979,067	50,800	1,205,440	81,364	1,882,747	86,319	40,000	3,488

## Fisheries of Virginia, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Scrapes		Dredges							
			Crab		Oyster		Scallops			
			Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs:										
Hard.....	1,024,000	\$15,360	7,494,000	\$149,230	-----	-----	-----	-----	-----	-----
Soft.....	1,983,960	119,038	-----	-----	-----	-----	-----	-----	-----	-----
Oysters:										
Market, public, spring.....	-----	-----	-----	-----	81,634	\$11,900	-----	-----	-----	-----
Market, public, fall.....	-----	-----	-----	-----	296,557	43,130	-----	-----	-----	-----
Market, private, spring.....	-----	-----	-----	-----	940,314	111,876	-----	-----	-----	-----
Market, private, fall.....	-----	-----	-----	-----	3,287,751	393,033	-----	-----	-----	-----
Scallops, bay.....	-----	-----	-----	-----	-----	-----	1,824,948	\$147,564	-----	-----
Total.....	3,007,960	134,398	7,494,000	149,230	4,606,256	559,939	1,824,948	147,564	-----	-----

Species	Tongs		Rakes		Picks		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams, hard, public.....	1,018,424	\$321,592	132,400	\$44,075	18,712	\$7,204	43,200	\$18,900
Oysters:								
Market, public, spring.....	1,492,681	173,090	6,860	500	-----	-----	-----	-----
Market, public, fall.....	4,526,393	522,843	20,580	1,500	-----	-----	-----	-----
Market, private, spring.....	1,896,680	223,588	133,468	10,103	-----	-----	10,290	750
Market, private, fall.....	6,356,188	747,073	537,611	40,309	-----	-----	30,870	2,250
Seed, public, spring.....	2,509,715	125,483	-----	-----	-----	-----	-----	-----
Seed, public, fall.....	5,537,205	280,605	-----	-----	-----	-----	-----	-----
Total.....	23,337,286	2,394,274	830,919	96,487	18,712	7,204	84,360	21,900

## OPERATING UNITS: BY COUNTIES

Item	Acco-	Alex-	Caro-	Charles	Ches-	Din-	Eliza-	Essex	Fair-
	mac	andria	line	City	ter-	widdie	beth		fax
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....	41	-----	-----	-----	-----	-----	96	-----	-----
On boats and shore—									
Regular.....	1,255	-----	-----	231	-----	-----	344	-----	-----
Casual.....	282	18	10	-----	14	10	-----	144	36
Total.....	1,578	18	10	231	14	10	440	144	36
Vessels:									
Motor—									
5 to 10 tons.....	1	-----	-----	-----	-----	-----	15	-----	-----
11 to 20 tons.....	-----	-----	-----	-----	-----	-----	9	-----	-----
21 to 30 tons.....	-----	-----	-----	-----	-----	-----	1	-----	-----
Total.....	1	-----	-----	-----	-----	-----	25	-----	-----
Net tonnage.....	6	-----	-----	-----	-----	-----	279	-----	-----
Sail, 5 to 10 tons.....	9	-----	-----	-----	-----	-----	-----	-----	-----
Net tonnage.....	62	-----	-----	-----	-----	-----	-----	-----	-----
Total vessels.....	10	-----	-----	-----	-----	-----	25	-----	-----
Total net tonnage.....	68	-----	-----	-----	-----	-----	279	-----	-----
Boats:									
Motor.....	768	10	-----	2	5	2	114	45	26
Other.....	782	-----	5	165	4	7	26	61	14
Apparatus:									
Haul seines.....	8	-----	-----	9	3	-----	-----	7	5
Length, yards.....	3,280	-----	-----	2,700	600	-----	-----	1,960	840
Gill nets—									
Anchor.....	1	-----	-----	-----	-----	-----	-----	-----	-----
Square yards.....	9,600	-----	-----	-----	-----	-----	-----	-----	-----
Drift.....	4	8	5	231	7	-----	11	10	6
Square yards.....	7,600	14,400	6,000	254,100	4,200	-----	9,900	7,000	10,800
Stake.....	145	-----	-----	40	-----	330	-----	-----	-----
Square yards.....	2,400	-----	-----	1,320	-----	6,600	-----	-----	-----
Lines, trot, with baits or snoods.....	267	-----	-----	-----	-----	-----	14	-----	-----
Baits or snoods.....	146,800	-----	-----	-----	-----	-----	10,500	-----	-----

## Fisheries of Virginia, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Acco- mac	Alex- andria	Caro- line	Charles City	Ches- ter field	Din- widdie	Eliza- beth City	Essex	Fair- fax
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Apparatus—Continued.									
Pound nets.....	326						365	6	
Fyke nets.....	5	11	2	21				4	340
Dip nets.....	290								
Otter trawls.....							5		
Yards at mouth.....							150		
Pots, eel.....	640								
Scrapes.....	618								
Yards at mouth.....	618								
Dredges—									
Crab.....							32		
Yards at mouth.....							56		
Oyster.....	122						8	6	
Yards at mouth.....	130						13	6	
Scallop.....	697								
Yards at mouth.....	465								
Tongs.....	819						60	106	
Rakes.....	474								
Picks.....	168								

Item	Glou- cester	Hen- rico	Isle of Wight	James City	King and Queen	King George	King Wil- liam	Lan- caster	Ma- thews
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....	3							322	18
On boats and shore—									
Regular.....	193		402	101		29		295	308
Casual.....	334	200			57	59	83	522	378
Total.....	530	200	402	101	57	88	83	1,139	704
Vessels:									
Steam—									
61 to 70 tons.....								2	
81 to 90 tons.....								1	
91 to 100 tons.....								1	
141 to 150 tons.....								1	
Total.....								5	
Net tonnage.....								463	
Motor—									
5 to 10 tons.....	1							2	2
11 to 20 tons.....								2	2
61 to 70 tons.....								1	
71 to 80 tons.....								3	
Total.....	1							8	4
Net tonnage.....	8							329	36
Total vessels.....	1							13	4
Total net tonnage.....	8							792	36
Boats:									
Motor.....	338	20	279	39		40	10	439	363
Other.....	126	150	91	40	49	38	68	33	32
Accessory boats.....								18	
Apparatus:									
Purse seines, menhaden.....								9	
Length, yards.....								2,430	
Haul seines.....		20	3	2		2	2	3	
Length, yards.....		4,000	600	600		1,300	400	600	
Gill nets—									
Drift.....	18		12	19	42		54	3	10
Square yards.....	13,200		4,800	19,200	37,800		54,000	1,800	11,000
Stake.....		1,700	8,400	2,620		237			
Square yards.....		51,000	278,640	78,600		54,550			
Lines, trot, with baits or snoods.....	78		77			17		86	130
Baits or snoods.....	44,800		38,500			4,250		34,400	104,000
Pound nets.....	95		20			25		231	463
Fyke nets.....	12		136	54	4	46	8	8	
Dip nets.....									147
Dredges—									
Oyster.....								8	8
Yards at mouth.....								11	11
Tongs.....	450		336	15		29	20	510	194



## Fisheries of Virginia, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Middlesex	Nansemond	New Kent	Norfolk	Northampton	Northumberland	Prince George	Princess Anne
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	5			25	3	767		
On boats and shore—								
Regular.....	200	50	68	95	589	505		66
Casual.....	543	121		111	30	418	37	
Total.....	748	171	68	232	622	1,690	37	66
Vessels:								
Steam—								
71 to 80 tons.....						1		
81 to 90 tons.....						4		
91 to 100 tons.....						2		
101 to 110 tons.....						3		
111 to 120 tons.....						2		
131 to 140 tons.....						2		
151 to 160 tons.....						2		
161 to 170 tons.....						2		
171 to 180 tons.....						1		
191 to 200 tons.....						1		
Total.....						20		
Net tonnage.....						2,439		
Motor—								
5 to 10 tons.....	1							
11 to 20 tons.....				3	1			
21 to 30 tons.....				1				
41 to 50 tons.....				1				
131 to 140 tons.....						1		
181 to 190 tons.....						1		
Total.....	1			5	1	2		
Net tonnage.....	8			114	11	317		
Sail, 5 to 10 tons.....							8	
Net tonnage.....							58	
Total vessels.....	1			5	1	30		
Total net tonnage.....	8			114	11	2,814		
Boats:								
Motor.....	474	76	16	20	331	377	16	31
Other.....	6	28	39	169	513	400	13	12
Accessory boats.....						44		
Apparatus:								
Purse seines, menhaden.....						22		
Length, yards.....						6,290		
Haul seines.....	9		3	7	15		6	2
Length, yards.....	2,700		800	2,750	5,020		1,800	500
Gill nets—								
Drift.....	2	1	60		45		32	
Square yards.....	1,200	300	60,000		15,960		25,600	
Stake.....		1,180		90				
Square yards.....		57,200		7,200				
Lines, trot, with baits or snoods.....	97	21	89		106	264		
Baits or snoods.....	24,250	4,200		35,600	54,600	83,200		
Pound nets.....	21			13	131	368		6
Fyke nets.....		21	14		1		35	
Dip nets.....						275		
Otter trawls.....				1				
Yards at mouth.....				30				
Dredges—								
Crab.....					2			
Yards at mouth.....					3			
Oyster.....	2			8		30		
Yards at mouth.....	3			12		34		
Scallop.....					227			
Yards at mouth.....					152			
Tongs.....	628	130		127	229	251		46
Rakes.....					304			
Picks.....					309			

Fisheries of Virginia, 1930—Continued  
 OPERATING UNITS: BY COUNTIES—Continued

Item	Prince William	Richmond	Spotsylvania	Stafford	Surry	Warwick	Westmoreland	York
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels.....							51	120
On boats and shore—								
Regular.....	42				39	302	154	450
Casual.....	38	108	13	36		4	70	18
Total.....	80	108	13	36	39	306	275	588
Vessels:								
Motor—								
5 to 10 tons.....							2	27
11 to 20 tons.....								7
21 to 30 tons.....								1
Total.....								
Net tonnage.....							2	35
							15	317
Sail—								
5 to 10 tons.....							7	
11 to 20 tons.....							3	
Total.....								
Net tonnage.....							10	
							99	
Total vessels.....								22
Total net tonnage.....							114	35
								317
Boats:								
Motor.....	31	35	13	15	26	166	95	308
Other.....	10	35		4	10	13	46	179
Apparatus:								
Haul seines.....	14			4	9		7	47
Length, yards.....	1,680			600	2,700		1,200	22,800
Gill nets—								
Drift.....	18	16		5	8		4	21
Square yards.....	30,062	26,720		9,000	8,400		4,800	25,200
Stake.....	1			20	1,384	306		
Square yards.....	1,000			9,320	44,960	14,400		
Lines, trot, with baits or snoods.....		1	6	2		8	64	59
Baits or snoods.....		400	1,480	460		4,000	25,600	45,400
Pound nets.....		30		6		56	64	36
Fyke nets.....	207	6	40	44	18	17	19	11
Otter trawls.....								6
Yards at mouth.....								178
Dredges—								
Crab.....								68
Yards at mouth.....								123
Oyster.....		2					62	
Yards at mouth.....		2					71	
Tongs.....		62				273	139	396
Rakes.....								170

CATCH: BY COUNTIES

Species	Accomac		Alexandria		Caroline		Charles City	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	898,900	\$13,484			1,500	\$30	16,800	\$336
Bluefish.....	57,000	4,231						
Bonito.....	6,800	340						
Butterfish.....	1,537,975	61,864						
Carp.....							43,000	2,150
Catfish and bullheads.....			1,800	\$72	300	15	28,800	864
Cod.....	20,800	624						
Croaker.....	2,159,130	64,794						
Drum:								
Black.....	20,370	407						
Red or reddfish.....	10,800	431						
Eels.....	56,900	4,840			200	10		
Flounders.....	40,100	1,891						

## Fisheries of Virginia, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Accomac		Alexander		Caroline		Charles City	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Gizzard shad.....							24,200	\$484
Harvestfish or "starfish".....	400	\$20						
Mackerel.....	3,200	320						
Mullet.....	100	5						
Pigfish.....	1,400	79						
Scup or porgy.....	27,100	1,084						
Sea bass.....	11,300	678						
Shad.....	304,600	45,700	5,940	\$990	1,200	\$240	539,700	80,955
Skates.....	1,800	2						
Spanish mackerel.....	1,600	16 <sup>0</sup>						
Spot.....	45,700	2,363						
Squeteagues or "sea trout":								
Gray.....	5,543,661	160,688						
Spotted.....	300	45						
Striped bass.....	8,650	1,675					34,900	5,236
Sturgeon.....	1,000	300						
Tautog.....	800	32						
White perch.....	5,000	338			500	25	6,150	185
Whiting.....	15,500	620						
Yellow perch.....			2,400	192				
Crabs:								
Hard.....	5,881,670	132,896						
Soft.....	2,511,000	158,565						
Squid.....	8,800	352						
Clams, hard, public.....	368,976	157,044						
Oysters:								
Market, public, spring.....	144,623	19,582						
Market, public, fall.....	386,547	51,848						
Market, private, spring.....	892,246	100,920						
Market, private, fall.....	2,676,738	302,760						
Scallops, bay.....	1,442,988	121,900						
Total.....	25,094,474	1,421,907	10,140	1,254	3,700	320	693,550	90,210

Species	Chesterfield		Dinwiddie		Elizabeth City		Essex	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	3,000	\$60			730,000	\$7,300	14,400	\$288
Bluefish.....					17,500	1,750		
Bonito.....					1,000	50		
Butterfish.....					565,000	22,600		
Carp.....	4,700	165					13,500	675
Catfish and bullheads.....	3,200	96					20,100	1,005
Cod.....					6,300	126		
Croaker.....					7,798,000	162,040	20,500	615
Flounders.....					68,650	3,793		
Gizzard shad.....	2,300	46			200	10		
Hickory shad.....					9,000	360		
Scup or porgy.....					128,000	8,240		
Sea bass.....					34,000	3,300		
Shad.....	11,400	1,710	4,400	\$660	730,000	109,500	1,500	225
Spanish mackerel.....					18,250	1,825		
Spot.....					151,000	6,160	1,400	70
Squeteagues or "sea trout," gray.....					793,200	24,774		
Striped bass.....	1,400	210	800	120	13,000	1,560		
Sturgeon.....					1,000	300		
White perch.....	1,200	60			3,650	108	7,200	576
Crabs, hard.....					2,576,000	48,160		
Clams, hard, public.....					113,600	35,500		
Oysters:								
Market, public, spring.....					17,664	1,545	36,907	5,380
Market, public, fall.....					32,928	2,880	115,687	16,864
Market, private, spring.....					114,130	13,308	31,597	4,606
Market, private, fall.....					255,528	24,751	178,277	25,988
Seed, public, spring.....					65,001	3,250		
Seed, public, fall.....					130,003	6,500		
Total.....	27,200	2,347	5,200	780	14,372,604	489,690	441,068	56,292

## Fisheries of Virginia, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Fairfax		Gloucester		Henrico		Isle of Wight	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			46,600	\$498	8,000	\$160	70,000	\$1,400
Bluefish.....			1,800	180				
Butterfish.....			8,900	445				
Carp.....					10,000	500	43,500	2,175
Catfish and bullheads.....	93,687	\$3,744			8,500	255	43,000	1,290
Croaker.....			2,993,200	59,876			164,000	4,920
Drum:								
Black.....			600	18				
Red or redfish.....			200	10				
Eels.....							1,500	120
Flounders.....			9,000	450			18,500	925
Gizzard shad.....			1,800	90	9,000	180	25,000	500
Hickory shad.....			5,300	164			1,000	20
King whiting or "kingfish".....			2,400	120				
Mullet.....							8,500	340
Shad.....	3,900	630	132,600	19,890	38,000	5,700	349,400	52,410
Spot.....			75,600	3,780				
Squeteagues or "sea trout," gray.....			1,666,400	50,040			45,000	3,150
Striped bass.....			400	60	8,400	1,260	44,200	6,630
White perch.....	12,400	744	2,200	132			33,000	1,030
Yellow perch.....	18,000	1,440	500	40	2,000	100		
Crabs, hard.....			1,420,000	22,400			192,500	3,012
Clams, hard, public.....			40,960	12,800				
Oysters:								
Market, public, spring.....			116,599	13,089			252,530	22,086
Market, public, fall.....			235,806	26,470			757,605	55,219
Market, private, spring.....			54,880	6,355			222,950	19,500
Market, private, fall.....			164,640	19,065			668,850	58,500
Seed, public, spring.....			105,002	5,250			722,514	36,125
Seed, public, fall.....			215,004	10,750			1,806,297	90,315
Total.....	127,987	6,558	7,300,391	251,972	83,900	8,155	5,469,846	359,665

Species	James City		King and Queen		King George		King William	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	25,800	\$516	1,200	\$36	22,600	\$408	2,800	\$56
Carp.....	21,500	1,075						
Catfish and bullheads.....	18,500	555	1,500	75	13,200	528	2,200	110
Croaker.....	8,400	252	500	15			2,000	64
Flounders.....							800	48
Gizzard shad.....	14,800	296						
Hickory shad.....			10,800	432			3,000	120
Shad.....	255,900	38,835	17,940	2,691	12,840	2,175	28,650	4,295
Squeteagues or "sea trout," gray.....	8,000	800	600	30			500	25
Striped bass.....	25,500	3,825	2,400	360	18,260	3,539	2,200	210
White perch.....	9,600	422	1,200	60	8,000	480	1,800	90
Yellow perch.....			800	64	2,600	208	500	40
Crabs, hard.....					102,000	2,040		
Oysters:								
Market, public, spring.....					4,445	648	4,802	420
Market, public, fall.....					13,459	1,962	15,092	1,760
Market, private, spring.....							61,740	7,200
Market, private, fall.....							185,220	21,600
Seed, public, spring.....	35,001	1,750						
Seed, public, fall.....	65,001	3,250						
Total.....	488,002	51,576	36,940	3,763	197,404	11,988	311,304	36,038

Species	Lancaster		Mathews		Middlesex		Nansemond	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	1,496,500	\$14,971	1,626,000	\$16,260	51,500	\$1,030	1,600	\$32
Bluefish.....	9,460	757	21,250	1,700				
Butterfish.....	480,000	33,600	2,100	105				
Carp.....	1,800	90			12,000	480		
Catfish and bullheads.....	2,500	125			2,000	80	400	20
Croaker.....	301,200	9,036	1,226,400	24,688	256,500	5,305	49,200	1,476
Eels.....	2,800	224						
Flounders.....	50,400	2,040	25,800	1,032	1,200	60		
Gizzard shad.....	1,000	40	950	36			6,600	220
Hickory shad.....	2,200	88						

## Fisheries of Virginia, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Lancaster		Matthews		Middlesex		Nansemond	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Menhaden	30,578,600	\$202,804						
Pigfish			1,700	\$85				
Pike or pickerel					80	\$20		
Shad	930,884	126,221	1,100,030	220,060	48,200	7,230	35,800	\$8,950
Spanish mackerel			800	80				
Spot	90,600	4,530	48,200	1,648	16,000	800		
Squeteagues or "sea trout," gray	315,400	9,474	1,322,700	39,761	27,700	1,385		
Striped bass	21,750	3,262	1,400	210	20,500	3,075	400	60
White perch	9,200	552	700	42	11,000	330	200	20
Whiting	1,200	60						
Yellow perch	700	70						
Crabs:								
Hard	856,400	12,846	2,175,000	32,625	730,000	14,600	105,000	2,100
Soft			50,000	4,440				
Oysters:								
Market, public, spring	206,417	30,090	38,690	5,076	239,675	34,938	70,315	6,090
Market, public, fall	564,647	82,310	195,236	25,614	719,010	104,812	210,945	15,375
Market, private, spring	59,682	8,700	20,580	2,400	129,201	18,834	161,896	14,160
Market, private, fall	1,222,315	178,180	322,420	37,600	258,389	37,666	620,144	45,200
Seed, public, spring					20,000	1,000	16,500	825
Seed, public, fall					40,001	2,000	64,001	3,200
Total	37,205,655	720,070	8,179,956	413,462	2,582,956	233,645	1,343,001	97,668

Species	New Kent		Norfolk		Northampton		Northumberland	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	7,200	\$144	19,500	\$293	57,600	\$897	9,762,711	\$114,289
Bluefish			440	44	92,156	4,720	10,400	832
Bonito					35,815	1,791		
Butterfish			10,507	525	1,016,823	40,673	21,400	1,498
Carp	12,000	600						
Catfish and bullheads	6,000	180						
Cod			3,360	67	19,643	383		
Croaker			596,780	13,883	1,174,291	35,311	1,292,400	35,932
Drum, black					2,400	72		
Eels					9,865	1,163	1,800	144
Flounders			10,064	545	57,750	2,852	38,800	1,675
Gizzard shad	6,500	140						
Hake			1,422	42				
Hickory shad	800	40					51,800	1,604
King whiting or "kingfish"			589	24				
Mackerel					44,674	4,427		
Menhaden					48,000	340	85,215,000	564,066
Mullet					84,400	3,565		
Pigfish			200	10	1,400	70		
Scup or porgy			13,517	541	64,897	2,596		
Sea bass			7,366	589	8,907	712		
Shad	61,800	10,070	32,450	5,841	13,407	2,061	1,037,023	162,143
Spanish mackerel					200	20		
Spot			1,417,000	70,850	122,135	7,416	4,100	222
Squeteagues or "sea trout":								
Gray			118,527	5,706	5,007,351	245,970	338,900	12,572
Spotted			44,500	5,340				
Striped bass	7,500	1,125			6,065	923	78,600	13,848
Sturgeon			90	30				
White perch	2,300	115	595	24			2,000	112
Whiting			3,252	130	1,755	87		
Yellow perch	100	10						
Crabs:								
Hard			1,441,800	26,045	1,316,100	25,572	3,472,500	52,087
Soft							320,000	32,000
Squid			38	2	116,545	3,495		
Clams, hard, public					105,600	40,007		
Oysters:								
Market, public, spring					2,278	232	62,928	9,173
Market, public, fall					6,846	698	235,346	34,252
Market, private, spring			678,008	74,068	142,098	10,362	110,446	16,100
Market, private, fall			2,134,592	233,932	511,639	37,306	475,398	69,300
Seed, public, spring					55,001	2,750		
Seed, public, fall			125,003	10,000	110,002	5,500		
Scallops, bay					381,960	25,664		
Total	104,200	12,424	6,659,600	448,531	10,617,603	507,635	102,531,552	1,121,849

Fisheries of Virginia, 1930—Continued

CATCH: BY COUNTIES—Continued

Species	Prince George		Princess Anne		Prince William		Richmond		Spotsylvania	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	21,500	\$430					74,000	\$1,480		
Bluefish			2,400	\$240						
Butterfish			12,000	600						
Carp	25,500	1,275					4,250	210		
Catfish and bullheads	16,500	495			30,600	\$1,224	18,200	910	14,000	\$560
Croaker			107,000	2,140			19,000	760		
Eels							1,500	105		
Flounders			1,800	90						
Gizzard shad	15,000	340								
Shad	42,200	6,575	110,000	19,800	6,608	1,042	14,850	2,228		
Spot			151,200	7,560			1,500	75		
Squeteagues or "sea trout":										
Gray			17,000	850						
Spotted			3,200	384						
Striped bass	8,350	1,252			8,200	1,640				
White perch	6,700	335			13,600	816	13,950	698		
Yellow perch					5,460	432			8,400	588
Crab, hard							3,500	70	36,000	720
Oysters:										
Market, public, spring							32,269	4,704		
Market, public, fall							96,808	14,112		
Market, private, spring			132,741	29,025			138,030	18,109		
Market, private, fall			265,139	57,975			201,856	26,608		
Total	135,750	10,702	802,480	118,664	64,468	5,154	619,713	70,069	58,400	1,868

Species	Stafford		Surry		Warwick		Westmoreland		York	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			20,500	\$410	74,000	\$1,110	291,307	\$5,200	41,500	\$415
Bluefish					500	25			17,600	1,728
Butterfish									19,800	1,740
Carp			40,600	1,530			10,400	832		
Catfish and bullheads	11,600	\$580	43,600	1,308			27,600	1,380		
Croaker			6,200	186	53,000	1,060	21,800	436	1,658,700	39,974
Drum:										
Black									1,000	20
Red or redfish									25,200	996
Eels									200	20
Flounders					10,000	500			226,700	10,113
Gizzard shad	2,000	60	25,600	768	400	16	400	8		
Pigfish									64,000	3,200
Pompano									2,000	400
Scup or porgy									170,000	8,000
Sea bass									130,000	9,200
Shad	2,205	378	78,200	11,730	81,000	13,230	38,382	6,660	112,000	18,300
Spanish mackerel									29,300	4,395
Spot									368,500	19,400
Squeteagues or "sea trout":										
Gray					20,800	1,248	28,050	709	258,600	14,526
Spotted									150,000	18,000
Striped bass	2,700	405	14,700	2,205	16,240	2,436	35,260	5,440	43,400	6,510
Sturgeon									2,500	750
White perch	6,000	348	12,300	615	6,300	504	19,000	950	500	50
Yellow perch	1,800	144					3,400	272		
Crabs, hard	9,000	135			62,400	1,248	960,000	14,400	7,600,000	152,100
Clams, hard, public									583,600	146,420
Oysters:										
Market, public, spring					64,724	5,661	30,774	4,486	255,535	22,350
Market, public, fall					194,172	16,983	296,791	43,264	766,605	73,050
Market, private, spring									30,527	2,670
Market, private, fall					911,519	45,575			71,275	6,234
Seed, public, spring					1,823,537	91,175			579,177	28,958
Seed, public, fall									1,158,356	57,917
Total	35,305	2,050	241,700	18,752	3,318,592	180,771	1,763,164	84,037	14,366,575	647,436

## Industries related to the fisheries of Virginia, 1930

## TRANSPORTING

Item	Accomac County	Elizabeth City County	Gloucester County	Isle of Wight County	King and Queen County	Lancaster County	Mathews County	Middlesex County
Persons engaged on vessels.....	Number 95	Number 18	Number 23	Number 8	Number 11	Number 83	Number 57	Number 40
Vessels:								
Motor—								
5 to 10 tons.....	36	3	6	2	3	21	18	9
11 to 20 tons.....	10	5	6	2	1	14	11	6
21 to 30 tons.....	4					3		2
31 to 40 tons.....	2				1			1
71 to 80 tons.....						2		
Total.....	52	8	12	4	5	40	29	18
Net tonnage.....	577	95	123	42	72	585	287	244
Sail—								
21 to 30 tons.....							1	
Net tonnage.....							30	
Total vessels.....	52	8	12	4	5	40	30	18
Total net tonnage.....	577	95	123	42	72	585	317	244

Item	Nansemond County	Norfolk County	Northampton County	Northumberland County	Richmond County	Westmoreland County	York County	Total
Persons engaged on vessels.....	Number 26	Number 5	Number 14	Number 74	Number 15	Number 2	Number 30	Number 501
Vessels:								
Motor—								
5 to 10 tons.....	8	2	8	25	5		9	155
11 to 20 tons.....	5			9	1	1	6	77
21 to 30 tons.....				3				12
31 to 40 tons.....					1			5
71 to 80 tons.....								2
81 to 90 tons.....				1				1
101 to 110 tons.....				1				1
Total.....	13	2	8	39	7	1	15	253
Net tonnage.....	121	19	59	561	85	19	157	3,046
Sail—								
21 to 30 tons.....								1
Net tonnage.....								30
Total vessels.....	13	2	8	39	7	1	15	254
Total net tonnage.....	121	19	59	561	85	19	157	3,076

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Accomac County	Arlington and Westmoreland Counties	Elizabeth City County	Essex and Richmond Counties	Gloucester, King William, and Mathews Counties	Isle of Wight County	Lancaster County
Establishments.....	77	4	20	5	4	3	30
Persons engaged:							
Proprietors.....	96	4	29	9	5	6	41
Salaried employees.....	7	1	16		2	1	3
Wage earners—							
Average for season.....	600	16	495	94	105	63	823
Average for year.....	297	7	241	29	52	22	262
Paid to salaried employees.....	\$6, 110	\$1, 020	\$30, 916		\$1, 190	\$1, 040	\$11, 000
Paid to wage earners.....	190, 847	4, 735	151, 515	\$13, 040	28, 060	11, 680	130, 599
Total salaries and wages..	196, 957	5, 755	182, 431	13, 040	29, 250	12, 720	141, 599

## Industries related to the fisheries of Virginia, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## OPERATING UNITS, SALARIES, AND WAGES—Continued

Item	Middlesex County	Norfolk County	Northampton County	Northumberland County	Warwick and York Counties	Total
Establishments.....	7	15	18	29	8	220
Persons engaged:						
Proprietors.....	8	24	28	43	10	303
Salaried employees.....	1	37	4	5	1	78
Wage earners—						
Average for season.....	127	883	409	791	42	4,448
Average for year.....	41	441	153	245	27	1,817
Paid to salaried employees.....	\$150	\$63,209	\$4,620	\$20,400	\$1,200	\$140,855
Paid to wage earners.....	22,348	303,012	60,278	138,335	24,818	1,079,267
Total salaries and wages.....	22,498	366,221	64,898	158,735	26,018	1,220,122

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Alewives:		
Salted.....pounds..	6,207,590	\$197,178
Canned.....standard cases..	38,239	114,540
Roë, canned.....do.....	36,677	185,133
Scrap, dry.....tons..	860	41,004
Oil.....gallons..	31,389	6,673
Butterfish, pandressed.....pounds..	63,986	7,610
Croaker:		
Pandressed.....do.....	858,705	83,926
Fresh fillets.....do.....	23,000	2,825
Flounders, pandressed.....do.....	85,565	10,032
Haddock, fresh fillets.....do.....	249,581	43,050
Menhaden:		
Dry scrap and meal.....tons..	14,325	698,439
Oil.....gallons..	1,682,733	338,377
Spot, pandressed.....pounds..	34,445	4,451
Squeteague:		
Pandressed.....do.....	802,309	85,014
Fresh fillets.....do.....	213,435	35,285
Whiting, pandressed.....do.....	88,445	6,023
Crab meat, packaged (fresh-cooked).....do.....	1,364,334	510,562
Oysters:		
Fresh-shucked.....gallons..	1,384,836	2,340,024
Shell products—		
Poultry feed.....tons..	18,519	166,444
Lime.....do.....	10,798	62,186
Lime, "burned".....do.....	9,847	89,290
Scallops, bay, fresh-shucked.....gallons..	64,526	84,967
Unclassified products:		
Packaged <sup>1</sup> .....	( <sup>2</sup> )	73,478
Oil <sup>3</sup> .....gallons..	8,435	1,847
By-products <sup>4</sup> .....tons..	1,542	39,742
Total.....		5,228,100

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 479]

Scallops, bay, fresh-shucked.....gallons..	136,000	\$100,000
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<sup>1</sup> Includes fresh cod and shad fillets, pandressed bluefish and haddock, shucked hard clams, and canned crab meat.

<sup>2</sup> Data not available.

<sup>3</sup> From mixed species.

<sup>4</sup> Includes crab scrap and miscellaneous fish scrap and meal.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 479 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.



## SHAD AND ALEWIFE FISHERIES OF THE POTOMAC RIVER

The catch of shad in the Potomac River in 1931 amounted to 294,425 roes, and 331,074 bucks, having a combined weight of 2,061,036 pounds, and a total value to the fishermen of \$193,505. The catch of alewives for the same season amounted to 18,380,850 in number with a total weight of 7,352,340 pounds, and a value to the fishermen of \$55,460. These figures indicate an increase of 243 per cent in the weight and 97 per cent in the value of shad as compared with 1930 and 136 per cent in the weight and 12 per cent in the value of the alewives. About 70 per cent of the shad were taken in pound nets, nearly 30 per cent in gill nets, and the remainder incidentally with haul seines. More than 99 per cent of the alewives were taken in pound nets. The remainder were taken in gill nets and haul seines.

*Shad and alewife fisheries of the Potomac River, 1931*

Item	Maryland			Virginia			Total		
	Number	Pounds	Value	Number	Pounds	Value	Number	Pounds	Value
Fishermen on boats and shore—									
Regular.....	51			324			375		
Casual.....	131			175			306		
Total.....	182			499			681		
Boats:									
Motor.....	53			165			218		
Other.....	55			130			185		
Apparatus:									
Pound nets.....	64			341			405		
Gill nets.....	700			764			1,464		
Square yards.....	266,955			215,190			482,145		
Haul seines.....				2			2		
Length, yards.....				2,100			2,100		
Shad caught:									
With pound nets.....	10,037	33,308	\$3,786	428,528	1,398,837	\$143,527	438,565	1,432,145	\$147,313
With gill nets.....	90,380	304,210	20,645	95,354	320,631	25,220	185,734	624,841	45,865
With haul seines.....				1,200	4,050	327	1,200	4,050	327
Total.....	100,417	337,518	24,431	525,082	1,723,518	169,074	625,499	2,061,036	193,505
Alewives caught:									
With pound nets.....	977,750	391,100	3,851	17,343,100	6,937,240	51,204	18,320,850	7,328,340	55,055
With gill nets.....				55,000	22,000	385	55,000	22,000	385
With haul seines.....				5,000	2,000	20	5,000	2,000	20
Total.....	977,750	391,100	3,851	17,403,100	6,961,240	51,609	18,380,850	7,352,340	55,460

## TRADE IN FRESH, FROZEN, SMOKED, AND PACKAGED FISHERY PRODUCTS IN WASHINGTON, D. C.

The municipal fish wharf and market in Washington, D. C., is located in the southwestern part of the city on an arm of the Potomac River. At the present time 16 fishery firms have stalls in the market, 3 firms are in private buildings across the street, and 4 firms have stalls in the new Center Market. Altogether the 23 above firms employed 120 persons who received \$89,542 in salaries and wages during 1931. Of the total employees, 103 were regularly employed. These firms conduct a wholesale and retail business, chiefly wholesale however.

During the year 1931 the receipts of fresh and frozen fishery products as received at the municipal wharf amounted to 9,305,465

pounds. This is an increase of 4 per cent as compared with the year 1930, and an increase of 11 per cent as compared with the 5-year average.

During the year 1931 four firms in Washington, D. C., smoked fishery products which amounted to 268,000 pounds, valued at \$27,885. Of this amount, 240,000 pounds valued at \$20,950 consisted of herring; 25,050 pounds valued at \$6,815 were whitefish while the remainder, 3,000 pounds, valued \$120, were alewives or "river herring." There were two firms which shucked oysters mostly for select retail trade. Their production amounted to 7,600 gallons, valued at \$16,720. Most of the smoked fish and shucked oysters were marketed in the city.

*Fishery products received at municipal fish wharf and market, Washington, D. C., 1931*

Species	January	February	March	April	May	June	July
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Alewives (river herring).....	14,500	47,400	156,900	302,700	154,800	8,200	-----
Black bass.....	7,600	14,700	29,500	26,400	2,400	6,800	8,200
Bluefish.....	200	1,400	1,100	400	13,700	9,900	15,700
Butterfish.....	100	800	1,800	3,800	45,100	60,124	65,700
Carp.....	16,050	5,200	15,000	5,700	12,700	5,900	2,840
Catfish.....	5,500	7,500	17,800	18,900	10,100	7,900	700
Cod.....	1,600	3,200	4,000	2,000	1,000	300	400
Croaker.....	45,800	41,000	40,500	276,600	193,400	199,900	332,000
Drum, red or redfish.....	3,500	1,000	-----	-----	100	440	150
Eels.....	200	200	200	1,300	1,400	200	-----
Flounders.....	35,800	49,700	53,700	26,600	19,900	10,000	14,800
Gizzard shad.....	10,900	9,800	2,200	1,400	-----	-----	-----
Haddock.....	44,160	54,730	75,070	60,660	36,610	29,470	29,730
Hake.....	200	-----	200	1,900	3,500	-----	-----
Halibut.....	5,300	4,400	9,300	8,800	5,700	7,300	5,800
Hickory shad or "jacks".....	700	6,300	4,900	2,400	100	-----	-----
Hogfish.....	-----	-----	-----	500	400	-----	-----
Kingfish or "king mackerel".....	-----	-----	-----	1,600	500	-----	-----
King whiting or "kingfish".....	-----	500	600	-----	-----	-----	-----
Mackerel.....	35,400	42,600	32,800	14,100	18,300	25,510	25,900
Mullet.....	6,600	10,100	1,400	400	-----	200	600
Perch.....	11,150	8,000	25,900	33,000	6,300	2,600	1,200
Pike or pickerel.....	900	1,100	1,500	1,000	600	800	500
Pollock.....	1,300	1,300	800	1,000	2,000	2,500	1,200
Pompano.....	-----	600	-----	200	-----	-----	-----
Salmon.....	1,000	3,500	1,800	1,500	3,700	4,700	4,700
Scup or porgy.....	7,800	26,000	27,700	8,300	3,600	4,200	1,700
Sea bass.....	-----	-----	-----	-----	100	-----	-----
Shad.....	34,900	13,800	55,800	234,140	377,600	7,000	-----
Sheepshead.....	-----	-----	200	-----	-----	-----	-----
Skates.....	-----	-----	100	-----	-----	-----	-----
Smelt.....	1,200	2,825	4,530	1,200	-----	-----	-----
Snapper, red.....	200	800	200	200	200	300	100
Spot.....	1,000	-----	-----	-----	400	10,800	31,400
Squeteagues or "sea trout".....	106,400	54,100	37,500	32,900	280,400	235,500	187,000
Striped bass.....	3,700	4,300	12,800	38,000	8,100	2,500	3,900
Sturgeon.....	-----	-----	-----	100	150	-----	-----
Swordfish.....	-----	-----	400	-----	-----	100	500
Tilefish.....	600	800	500	400	200	-----	100
Whitefish.....	-----	100	100	100	-----	800	900
Whiting.....	-----	2,800	-----	-----	-----	-----	-----
Crabs:							
Hard.....	-----	-----	-----	525	16,425	76,275	103,950
Soft.....	-----	-----	-----	2,205	12,420	11,745	11,115
Oyster.....	-----	5	-----	-----	-----	-----	-----
Crab meat.....	2,000	1,795	2,990	5,925	15,505	25,905	26,730
Lobsters (alive).....	150	400	850	4,350	4,050	3,750	1,800
Lobsters (cooked).....	-----	-----	750	-----	-----	-----	-----
Lobster meat.....	-----	125	100	190	125	20	325
Shrimp.....	5,100	6,300	8,600	4,800	8,400	8,300	4,300
Squid.....	2,900	-----	-----	-----	300	100	-----
Clams, hard.....	5,152	3,968	5,024	6,400	6,944	6,656	7,072
Oysters:							
In the shell (meat).....	32,333	17,115	15,393	3,549	21	-----	-----
Opened (meat).....	78,522	64,838	60,401	16,345	-----	-----	-----
Scallops.....	960	80	560	640	640	280	-----
Frogs.....	-----	13	-----	84	134	95	15
Terrapin.....	1,024	144	-----	80	-----	-----	-----
Turtles.....	872	-----	144	416	968	620	96
Total.....	533,273	515,338	711,612	1,153,709	1,268,992	777,690	891,123

*Fishery products received at municipal fish wharf and market, Washington, D. C., 1931—Continued*

Species	August	September	October	November	December	Total
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Alewives (river herring).....						684,500
Black bass.....	3,900	4,200	4,300	2,200	3,800	114,000
Bluefish.....	13,400	18,700	34,300	11,500	5,600	125,900
Butterfish.....	48,500	40,300	41,100	78,500	25,718	411,542
Carp.....	1,500	11,500	7,500	8,000	9,600	101,900
Catfish.....	700	7,900	15,300	22,000	16,400	130,700
Cod.....	500	500	800	1,000	2,800	18,100
Croaker.....	180,600	148,400	76,300	59,600	89,500	1,683,600
Drum, red or redfish.....			30	200		5,420
Eels.....		200	1,500	2,000	3,400	10,600
Flounders.....	9,700	17,100	21,500	33,000	29,900	321,700
Gizzard shad.....			400	240	8,800	33,740
Haddock.....	14,180	16,270	24,895	24,030	32,300	442,105
Hake.....				800	5,800	12,400
Halibut.....	4,700	5,900	6,600	5,000	3,600	72,400
Hickory shad or "jacks".....						14,400
Hogfish.....	200	200				1,300
Kingfish or "king mackerel".....	600	200		200	4,400	7,500
King whiting or "kingfish".....			1,500	2,600		5,200
Mackerel.....	15,600	19,400	11,800	10,400	14,200	266,010
Mullet.....	400	4,400	8,600	11,900	4,400	49,000
Perch.....	2,500	5,400	8,100	6,700	10,800	121,650
Pike or pickerel.....	600	2,000	1,700	1,100	500	12,300
Pollock.....	2,400	400	2,100	1,200	400	16,600
Pompano.....						800
Salmon.....	2,400	3,600	3,100	3,100	1,600	34,700
Scup or porgy.....	500	400			1,200	81,400
Sea bass.....						100
Shad.....						723,240
Sheepshead.....				200		400
Skates.....						100
Smelt.....				60	705	10,520
Snapper, red.....	500	1,100	400	600	300	4,900
Spot.....	51,200	115,400	125,400	15,800	4,200	355,600
Squeteagues or "sea trout".....	133,300	208,600	278,600	223,500	108,800	1,886,600
Striped bass.....	2,600	6,600	22,900	17,700	12,600	135,700
Sturgeon.....			80	200		530
Swordfish.....	600	800	500			2,900
Tilefish.....	400			300	200	3,500
Whitefish.....	900	1,900	900	800	600	7,100
Whiting.....						2,800
Crabs:						
Hard.....	60,750	51,450	10,050	75		319,500
Soft.....	12,195	15,795	9,270	135		74,880
Oyster.....						5
Crab meat.....	14,285	12,645	11,450	5,835	4,875	129,940
Sea crawfish or "spiny lobster".....				150	50	200
Lobsters (alive).....	650	750	2,850	1,350	650	21,600
Lobsters (cooked).....						750
Lobster meat.....	100	30	135	50		1,200
Shrimp.....	5,200	3,900	7,900	5,800	3,400	72,000
Squid.....			100	400	2,400	6,200
Clams, hard.....	6,720	6,880	5,920	3,552	4,096	168,384
Oysters:						
In the shell (meat).....		2,044	26,355	50,442	105,413	252,665
Opened (meat).....		2,686	48,781	63,149	98,411	433,133
Scallops.....	160	240	720	1,280	1,080	6,640
Frogs.....			12			353
Terrapin.....			600			1,848
Turtles.....	4					3,120
Total.....	592,444	737,790	824,348	676,648	622,498	9,305,465

<sup>1</sup> 8,548 bushels.

<sup>2</sup> 36,095 bushels.

<sup>3</sup> 49,501 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 8¾ pounds to a gallon.

## FISHERIES OF THE SOUTH ATLANTIC AND GULF STATES <sup>9</sup>

The yield of fishery products in the South Atlantic and Gulf States (North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas) during 1930 amounted to 417,759,466

<sup>9</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure" which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

pounds, valued at \$11,064,819. This is a decrease of 22 per cent in the volume of the catch and 26 per cent in its value as compared with the previous year. Of the total catch in 1930, 301,218,657 pounds, valued at \$5,277,727, were fish, and 116,540,809 pounds, valued at \$5,787,092, were shellfish and miscellaneous products. These fisheries gave employment to 23,590 fishermen or a decrease of 11 per cent as compared with the previous year. Of the total number of fishermen employed during 1930, 3,454 regular fishermen were engaged on vessels and 15,965 regular and 4,171 casual fishermen were employed in the boat and shore fisheries.

*Fisheries of the South Atlantic and Gulf States, 1930*

SUMMARY OF CATCH

Product	North Carolina		South Carolina		Georgia	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	163, 145, 785	\$1, 469, 682	1, 017, 836	\$83, 337	25, 610, 484	\$181, 160
Shellfish, etc.....	5, 792, 920	366, 799	4, 087, 761	169, 522	9, 262, 037	355, 134
Total.....	168, 938, 705	1, 836, 481	5, 105, 597	252, 859	34, 872, 521	536, 294

Product	Florida		Alabama		Mississippi	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	99, 740, 175	\$2, 829, 759	3, 761, 479	\$192, 423	1, 671, 153	\$87, 787
Shellfish, etc.....	20, 674, 961	1, 815, 993	3, 351, 760	123, 045	14, 064, 377	652, 347
Total.....	120, 415, 136	4, 645, 752	7, 113, 239	315, 468	15, 735, 530	740, 134

Product	Louisiana		Texas		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Fish.....	1, 954, 586	\$114, 678	4, 317, 159	\$318, 901	301, 218, 657	\$5, 277, 727
Shellfish, etc.....	47, 931, 314	1, 845, 679	11, 375, 679	458, 573	116, 540, 809	5, 787, 092
Total.....	49, 885, 900	1, 960, 357	15, 692, 838	777, 474	417, 759, 466	11, 064, 819

OPERATING UNITS: BY STATES

Item	North Carolina	South Carolina	Georgia	Florida	Alabama	Mississippi	Louisiana	Texas	Total
Fishermen:									
On vessels.....	1, 159	39	144	867	142	555	370	178	3, 454
On boats and shore—									
Regular.....	2, 693	705	371	6, 176	469	1, 355	2, 775	1, 421	15, 965
Casual.....	1, 353	756	472	737	55	193	238	367	4, 171
Total.....	5, 205	1, 500	987	7, 780	666	2, 103	3, 383	1, 966	23, 590
Vessels:									
Steam.....			3						3
Net tonnage.....			166						166
Motor.....	110	10	24	98	30	125	148	44	589
Net tonnage.....	2, 140	124	195	3, 174	335	1, 678	1, 074	535	9, 255
Sail.....	67			6		5			78
Net tonnage.....	631			527		66			1, 224
Total vessels.....	177	10	27	104	30	130	148	44	670
Total net tonnage.....	2, 771	124	361	3, 701	335	1, 744	1, 074	535	10, 645

## Fisheries of the South Atlantic and Gulf States, 1930—Continued

## OPERATING UNITS: BY STATES—Continued

Item	North Carolina	South Carolina	Georgia	Florida	Alabama	Mississippi	Louisiana	Texas	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Boats:									
Motor.....	1,375	51	178	2,332	185	401	997	431	5,950
Other.....	1,586	969	421	3,220	183	615	1,073	498	8,565
Accessory boats.....	123		12	21	13				169
Apparatus:									
Purse seines—									
Menhaden.....	52		3	17					72
Length, yards.....	13,335		900	4,960					19,195
Other.....	4			2					6
Length, yards.....	700			600					1,300
Haul seines—									
Common.....	580	21	16	173	8	45	138	63	1,044
Length, yards.....	80,708	3,535	1,850	64,220	5,900	9,220	27,875	11,250	204,558
Long.....	87			80					167
Length, yards.....	84,630			64,200					148,850
Gill nets—									
Anchor.....	2,529	282	27	42				2	2,882
Square yards.....	1,287,852	82,000	6,090	25,200				2,000	1,401,142
Drift.....	170	157	146	212					685
Square yards.....	172,203	160,790	275,045	330,450					938,488
Runaround.....	426	27	45	2,213			1	102	2,814
Square yards.....	198,979	13,000	14,310	2,812,854			30	23,854	3,063,027
Stake.....	11,229		105	2				383	11,719
Square yards.....	741,300		54,540	1,080				95,294	892,214
Trammel nets.....				180	84	55	50	80	449
Square yards.....				129,568	28,692	17,785	13,712	26,651	216,408
Lines—									
Hand.....	98	127	8	1,579	149	167	147	459	2,734
Hooks.....	396	460	16	2,809	271	201	152	678	4,983
Troll.....	15			1,309	2			8	1,334
Hooks.....	15			1,814	2			8	1,839
Trot, with baits or snoods.....	177	6	6	8	14	66	288	33	598
Baits or snoods.....	122,800	4,800	1,950	1,700	2,475	20,795	58,370	4,300	217,190
Trot, with hooks.....	14		68	241	177		3	36	539
Hooks.....	840		3,400	106,740	17,900		300	5,500	134,680
Pound nets.....	2,343			52					2,395
Weirs.....	4								4
Wheels.....	50								50
Fyke nets.....	847		60	2,950	119				3,976
Dip nets—									
Common.....	244	10		62					316
Drop.....				31		232	1,700		1,963
Cast nets.....			40	44		54	3		141
Otter trawls—									
Fish.....	4								4
Yards at mouth.....	74								74
Shrimp.....	52	36	182	327	138	363	940	264	2,302
Yards at mouth.....	908	675	3,774	5,689	1,800	4,607	12,213	3,855	33,521
Box traps.....	10								10
Wire baskets.....				520					520
Turtle traps.....	30								30
Pots—									
Crab.....			30	1,383					1,413
Eel.....	1,502			90					1,592
Sea crawfish.....				2,533					2,533
Spears.....	54	30		26	21	76		175	382
Dredges—									
Clam.....				1			72		73
Yards at mouth.....							72		72
Crab.....	80								80
Yards at mouth.....	107								107
Oyster.....	243	2				437		38	720
Yards at mouth.....	241	3				443		37	724
Scallop.....	328			2					330
Yards at mouth.....	318			2					320
Tongs.....	450	77	108	420	116	440	526	330	2,497
Rakes.....	643	47	6						696
Forks.....				58					58
Grabs.....		501	84						585
Hooks—									
Sea crawfish and stone crab.....				2,000					2,000
Sponge.....				283					283
Diving apparatus.....				55					55

## Fisheries of the South Atlantic and Gulf States, 1930—Continued

## CATCH: BY STATES

Species	North Carolina		South Carolina		Georgia	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
Alewives.....	9, 838, 727	\$68, 308	2, 000	\$10		
Black bass.....	106, 413	15, 545				
Bluefish.....	842, 935	41, 781	100	10	1, 012	\$227
Bonito.....	18, 850	470				
Bowfin.....	19, 230	568				
Butterfish.....	182, 560	4, 301				
Carp.....	470, 189	32, 409				
Catfish and bullheads.....	460, 072	20, 307	2, 000	40	228, 000	7, 100
Cero.....	9, 000	680				
Cod.....	1, 500	45				
Crappie.....	650	110				
Croaker.....	5, 108, 310	75, 419	2, 000	60	15, 500	310
Drum:						
Black.....			500	25	1, 000	30
Red or redfish.....		2, 474	8, 350	466	5, 250	210
Eels.....	142, 260	10, 787				
Flounders.....	349, 800	17, 458	30, 025	2, 266	8, 800	613
Garfish.....	100	6				
Gizzard shad.....	38, 991	614				
Groupers.....					7, 354	441
Grunts.....	18, 000	360	8, 000	640	390	32
Harvestfish or "starfish".....	343, 300	10, 111				
Hickory shad.....	323, 960	13, 857	7, 500	330	25, 500	2, 010
Jewfish.....					4, 629	232
King whiting or "kingfish".....	272, 350	11, 165	38, 080	3, 451	38, 250	1, 463
Menhaden.....	134, 051, 240	535, 631			24, 701, 250	94, 100
Mullet.....	2, 386, 350	91, 434	412, 000	20, 972	176, 800	9, 795
Pigfish.....	94, 200	1, 596	725	22		
Pike or pickerel.....	9, 970	1, 137				
Pinfish or sailors choice.....	31, 900	480	2, 000	80		
Pompano.....	8, 600	907	100	15		
Porgies.....	1, 000	30	100	8		
Sea bass.....	173, 250	7, 975	197, 250	15, 587	22, 840	2, 085
Shad.....	1, 172, 161	209, 989	214, 492	32, 365	274, 755	54, 751
Sharks.....			10, 000	200		
Sheepshead.....	11, 615	585	100	10	700	42
Skates.....			1, 000	50		
Snappers:						
Mangrove.....			3, 000	240	200	16
Red.....	4, 750	195			29, 854	2, 462
Spadefish.....	430	17				
Spanish mackerel.....	131, 165	11, 776				
Spot.....	2, 326, 790	38, 334	28, 300	669	11, 950	219
Squeteagues or "sea trout":						
Gray.....	2, 333, 127	82, 613	24, 000	1, 720	3, 000	130
Spotted.....	694, 309	58, 271	10, 900	1, 090	48, 450	3, 892
Squirrelfish.....	150	6	350	18		
Striped bass.....	450, 876	60, 550			500	100
Sturgeon.....	2, 600	840	14, 964	2, 993	4, 500	900
Suckers.....	15, 650	724				
Sunfish.....	8, 797	185				
Tripletail.....	500	19				
White perch.....	442, 208	32, 992				
Yellow perch.....	96, 200	6, 621				
<b>Total.....</b>	<b>163, 145, 785</b>	<b>1, 469, 682</b>	<b>1, 017, 836</b>	<b>83, 337</b>	<b>25, 610, 484</b>	<b>181, 160</b>
<b>SHELLFISH, ETC.</b>						
Crabs: <sup>1</sup>						
Hard.....	1, 159, 500	18, 995	26, 000	780	228, 000	4, 560
Soft.....	378, 580	57, 068				
Stone.....	350	11				
Shrimp.....	1, 298, 610	40, 752	792, 733	31, 814	8, 852, 712	334, 576
Clams, hard, public <sup>2</sup> .....	316, 720	40, 680	11, 200	1, 400	2, 240	350
Oysters: <sup>1</sup>						
Market, public, spring.....	1, 166, 258	72, 725	1, 742, 057	58, 887	29, 978	2, 740
Market, public, fall.....	1, 039, 416	82, 423	683, 960	25, 914	21, 161	1, 440
Market, private, spring.....			546, 078	33, 363	50, 709	3, 423
Market, private, fall.....			276, 414	14, 988	57, 537	3, 005
Scallops, bay.....	431, 826	53, 923				
Octopus.....	1, 000	150	3, 500	290		
Terrapin, diamond-back.....	90	45	5, 819	2, 086	19, 700	5, 040

See footnotes at end of table.

## Fisheries of the South Atlantic and Gulf States, 1930—Continued

## CATCH: BY STATES—Continued

Species	North Carolina		South Carolina		Georgia	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.—continued						
Turtles:						
Loggerhead.....	70	\$2				
Snappers.....	500	25				
Total.....	5,792,920	366,799	4,087,761	\$169,522	9,262,037	\$355,134
Grand total.....	168,938,705	1,836,481	5,105,597	252,859	34,872,521	536,294
Species	Florida		Alabama		Mississippi	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Alewives.....	365,732	\$5,486				
Amberjack.....	21,220	667				
Black bass.....	333,086	31,615				
Bluefish.....	1,153,547	65,954	20,654	\$926	19,191	\$1,047
Blue runner or hardtail.....	754,245	14,000	2,205	63		
Bonito.....	1,190	24				
Buffalofish.....			100,855	5,503	14,969	680
Cabio or crab eater.....	10,307	437	2,200	100	1,837	98
Catfish and bullheads.....	4,346,231	192,912	90,904	6,001	61,422	2,792
Cero.....	9,950	480				
Cigarfish.....	58,412	1,752				
Crappie.....	898,976	34,389				
Crevalle.....	90,356	2,459	2,558	70	9,957	272
Croaker.....	33,020	735	7,447	247	11,275	397
Dolphin.....	5,000	500				
Drum:						
Black.....	34,624	893	11,693	569	20,755	972
Red or redfish.....	1,023,884	34,033	104,334	6,107	122,030	6,721
Eels.....	17,143	856				
Flounders.....	119,611	6,252	24,180	1,960	68,989	6,001
Groupers.....	3,064,802	92,194	177,945	5,338	71,093	2,133
Grunts.....	21,883	657				
Hickory shad.....	29,616	888				
Hogfish.....	2,000	100				
Jewfish.....	26,050	782	5,021	151	1,274	38
Kingfish or "king mackerel".....	3,685,865	175,006				
King whiting or "kingfish".....	153,133	5,165	5,798	199	5,604	183
Menhaden.....	40,414,170	176,446				
Mojarro.....	81,275	2,508				
Mullet.....	22,021,806	669,468	2,205,378	86,007	801,755	32,120
Muttonfish.....	225,039	15,446				
Paddlefish or spoonbill cat.....			2,251	125		
Permit.....	14,882	449				
Pigfish.....	62,155	1,601				
Pinfish or sailors choice.....	78,050	1,524				
Pompano.....	573,353	111,716	5,062	790	791	228
Porgies.....	55,033	1,643				
Porkfish.....	600	36				
Sea bass.....	48,640	3,206				
Shad.....	879,732	129,014				
Sharks.....	2,187,500	3,500				
Sheepshead.....	872,133	29,768	17,569	988	30,517	1,735
Snappers:						
Mangrove.....	121,820	4,847				
Red.....	5,035,702	427,140	847,918	67,833	188,725	15,875
Snook or sergeantfish.....	368,109	11,275				
Spadefish.....	48,561	1,445	110	3		
Spanish mackerel.....	6,140,217	294,175	5,808	338	1,355	88
Spot.....	142,556	4,012	1,561	66		
Squeteagues or "sea trout":						
Gray.....	599,200	43,355	6,587	246	107,167	3,720
Spotted.....	2,790,566	202,541	105,981	8,268	125,112	12,344
Sturgeon.....	8,410	1,259	1,816	297	73	22
Sunfish.....	434,183	13,043				
Tenpounder.....	181,361	5,213	5,369	215	4,725	142
Tripletail.....	4,869	168	275	13	2,537	179
Turbot.....	900	54				
Yellowtail.....	89,470	6,671				
Total.....	99,740,175	2,829,759	3,761,479	192,423	1,671,153	87,787

## Fisheries of the South Atlantic and Gulf States, 1930—Continued

## CATCH: BY STATES—Continued

Species	Florida		Alabama		Mississippi	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH, ETC.						
Crabs: <sup>1</sup>						
Hard.....	111, 295	\$4, 103	79, 968	\$1, 142	\$673, 281	\$11, 129
Soft.....			780	195	5, 800	1, 740
Stone.....	307, 550	26, 630				
Sea crawfish or spiny lobster.....	288, 309	26, 731				
Shrimp.....	16, 848, 576	635, 506	2, 982, 200	97, 219	8, 489, 050	318, 871
Clams: <sup>2</sup>						
Hard, public.....	687, 888	44, 540				
Hard, private.....	23, 688	1, 890				
Conchs.....	20, 000	200				
Oysters: <sup>3</sup>						
Market, public, spring.....	790, 168	51, 468	40, 144	3, 755	3, 959, 190	260, 061
Market, public, fall.....	878, 242	81, 104	225, 506	17, 723	937, 056	60, 546
Market, private, spring.....	35, 545	3, 063	4, 080	480		
Market, private, fall.....	79, 298	6, 563	17, 064	1, 896		
Scallops, bay.....	21, 867	2, 139				
Terrapin, diamond-back.....	406	83	2, 018	635		
Turtles:						
Green.....	21, 550	1, 078				
Soft-shell.....	11, 578	235				
Sponges:						
Grass.....	82, 918	26, 556				
Sheepswool.....	370, 465	858, 699				
Velvet.....	682	409				
Wire.....	3, 781	2, 041				
Yellow.....	91, 155	42, 955				
Total.....	20, 674, 961	1, 815, 993	3, 351, 760	123, 045	14, 064, 377	652, 347
Grand total.....	120, 415, 136	4, 645, 752	7, 113, 239	315, 468	15, 735, 530	740, 134

Species	Louisiana		Texas		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Alewives.....					10, 206, 459	\$73, 804
Amberjack.....					21, 220	667
Black bass.....					439, 499	47, 160
Bluefish.....			165	\$14	2, 037, 604	109, 959
Blue runner or hardtail.....					756, 450	14, 063
Bonito.....					20, 040	494
Bowfin.....					19, 230	568
Buffalofish.....					115, 824	6, 183
Butterfish.....					182, 560	4, 301
Cabio or crab eater.....					14, 344	635
Carp.....					470, 189	32, 409
Catfish and bullheads.....	89, 143	\$3, 213	97, 572	4, 380	5, 375, 344	236, 745
Cero.....					18, 950	1, 160
Cigarfish.....					58, 412	1, 752
Cod.....					1, 200	45
Crappie.....					899, 626	34, 499
Crevalle.....	165	15	154	4	103, 190	2, 820
Croaker.....	59, 863	4, 205	31, 913	1, 095	5, 269, 328	82, 468
Dolphin.....					5, 000	500
Drum:						
Black.....	166, 436	6, 451	1, 051, 968	33, 656	1, 286, 976	42, 596
Red or redfish.....	334, 882	25, 959	872, 597	72, 446	2, 616, 377	148, 416
Eels.....					159, 403	11, 643
Flounders.....	23, 067	2, 083	71, 297	7, 083	695, 769	43, 716
Garfish.....	1, 320	120			1, 420	126
Gizzard shad.....					38, 991	614
Groupers.....	3, 500	105	20, 855	630	3, 345, 549	100, 841
Grunts.....					48, 273	1, 689
Harvestfish or "starfish".....					343, 300	10, 111
Hickory shad.....					386, 576	17, 085
Hogfish.....					2, 000	100
Jewfish.....	6, 000	180	1, 430	56	44, 404	1, 439
Kingfish or "king mackerel".....			3, 080	120	3, 688, 945	175, 126
King whiting or "kingfish".....	54, 367	1, 704	15, 730	572	583, 312	23, 902
Menhaden.....					199, 166, 660	806, 177
Mojarro.....					81, 275	2, 508
Mullet.....	8, 972	311	7, 921	232	28, 020, 982	910, 339
Muttonfish.....					225, 039	15, 446
Paddlefish or spoonbill cat.....					2, 251	125
Permit.....					14, 882	449
Pigfish.....					157, 080	3, 219
Pike or pickerel.....					9, 970	1, 137

See footnotes at end of table.



## Fisheries of the South Atlantic and Gulf States, 1930—Continued

## CATCH: BY STATES—Continued

Species	Louisiana		Texas		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH—continued						
Pinfish or sailors choice.....					111,950	\$2,084
Pompano.....	1,112	\$301	13,010	\$2,963	602,028	116,920
Porgies.....					56,133	1,681
Porkfish.....					600	36
Sea bass.....					441,980	28,853
Shad.....					2,541,140	426,119
Sharks.....	300,000	1,400			2,497,500	5,100
Sheepshead.....	102,124	5,993	42,251	1,933	1,077,009	41,054
Skates.....					1,000	50
Snappers:						
Mangrove.....					125,020	5,103
Red.....	76,400	6,112	929,578	75,385	7,112,927	595,092
Snook or sergeantfish.....			39,446	2,816	407,555	14,091
Spadefish.....			550	20	49,651	1,485
Spanish mackerel.....	1,800	108	74,289	4,176	6,354,634	310,661
Spot.....	9,704	290			2,520,861	43,590
Squeteagues or "sea trout":						
Gray.....	323,329	9,809			3,396,410	141,593
Spotted.....	387,101	45,864	1,043,353	111,320	5,205,772	443,590
Squirrelfish.....					500	24
Striped bass.....					457,376	60,650
Sturgeon.....					32,363	6,311
Suckers.....					15,650	724
Sunfish.....					442,980	13,228
Tenpounder.....					191,455	5,570
Tripletail.....	5,301	455			13,482	834
Turbot.....					900	54
White perch.....					442,208	32,992
Yellow perch.....					96,200	6,621
Yellowtail.....					89,470	6,671
Total.....	1,954,586	114,678	4,317,159	318,901	301,218,657	5,277,727
SHELLFISH, ETC.						
Crabs: <sup>1</sup>						
Hard.....	4,185,995	63,457	29,046	1,063	6,493,085	105,229
Soft.....	145,732	58,068			530,892	117,071
Stone.....					307,900	26,641
Sea crawfish or spiny lobster.....					288,309	26,731
Shrimp.....	38,664,487	1,159,626	10,189,318	377,016	88,117,686	2,995,380
Clams: <sup>2</sup>						
Hard, public.....					1,018,018	86,970
Hard, private.....					23,688	1,890
Conchs.....					20,000	200
Oysters: <sup>3</sup>						
Market, public, spring.....	271,464	11,751	515,752	35,888	8,515,011	497,275
Market, public, fall.....	406,668	24,940	633,819	43,396	4,825,828	337,486
Market, private, spring.....	1,797,832	201,657	3,040	475	2,437,284	242,461
Market, private, fall.....	2,370,336	311,698	4,704	735	2,805,353	338,885
Scallops, bay.....					453,693	56,062
Octopus.....					4,500	440
Terrapin, diamond-back.....	38,750	12,980			66,783	20,869
Turtles:						
Green.....					21,550	1,078
Loggerhead.....	50,050	1,502			50,120	1,504
Snappers.....					500	25
Soft-shell.....					11,578	235
Sponges:						
Grass.....					82,918	26,556
Sheepswool.....					370,465	858,699
Velvet.....					682	409
Wire.....					3,781	2,041
Yellow.....					91,155	42,955
Total.....	47,931,314	1,845,679	11,375,679	458,573	116,540,809	5,787,092
Grand total.....	49,885,900	1,960,357	15,692,838	777,474	417,759,466	11,064,819

<sup>1</sup> Statistics on hard crabs used in this table are based on 4 pounds per dozen in North Carolina, South Carolina, and Georgia; 6.45 pounds in Florida; 7 pounds in Alabama, Mississippi, and Texas; and 6.34 pounds in Louisiana. In reports for previous years, hard crabs in these States have been computed at 4 pounds per dozen.

<sup>2</sup> Statistics on hard clams used in this table are based on 8 pounds of meats per bushel in Florida, and 10 pounds in the other States. In reports for previous years, all hard clams in these States have been computed on the basis of a uniform yield of 8 pounds of meats to the bushel.

<sup>3</sup> Statistics on market oysters used in this table are based on yields of 5.36 pounds of meats per bushel in North Carolina, 4.61 pounds in South Carolina, 4.41 pounds in Georgia, 3.34 pounds in Florida, 3.23 pounds in Alabama, 1.91 pounds in Mississippi, 3.99 pounds in Louisiana, and 4.65 pounds in Texas. In reports for previous years, all oysters have been computed on the basis of a uniform yield of 7 pounds of meats to the bushel.

*Fisheries of the South Atlantic and Gulf States, 1930—Continued*

## PRODUCTION OF CERTAIN SHELLFISH IN NUMBERS AND BUSHELS

Product	North Carolina		South Carolina		Georgia	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard.....number..	3, 478, 500	\$18, 995	78, 000	\$780	684, 000	\$4, 560
Soft.....do.....	1, 135, 740	57, 068				
Clams, hard, public.....bushels..	31, 672	40, 680	1, 120	1, 400	224	350
Oysters:						
Market, public, spring....do....	217, 505	72, 725	377, 870	58, 887	6, 800	2, 740
Market, public, fall....do....	193, 849	82, 423	148, 358	25, 914	4, 800	1, 440
Market, private, spring....do....			118, 450	33, 363	11, 502	3, 423
Market, private, fall....do....			59, 957	14, 988	13, 051	3, 005
Scallops, bay.....do.....	71, 971	53, 923				

  

Product	Florida		Alabama		Mississippi	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard.....number..	206, 988	\$4, 103	137, 088	\$1, 142	1, 154, 196	\$11, 129
Soft.....do.....			2, 340	195	17, 400	1, 740
Clams:						
Hard, public.....bushels..	85, 986	44, 540				
Hard, private.....do.....	2, 961	1, 890				
Oysters:						
Market, public, spring....do....	236, 577	51, 468	12, 440	3, 755	2, 070, 706	260, 061
Market, public, fall....do....	263, 096	81, 104	69, 881	17, 723	490, 092	60, 546
Market, private, spring....do....	10, 672	3, 063	1, 264	450		
Market, private, fall....do....	23, 742	6, 563	5, 288	1, 896		
Scallops, bay.....do.....	3, 644	2, 139				

  

Product	Louisiana		Texas		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
Crabs:						
Hard.....number..	7, 794, 780	\$63, 457	49, 785	\$1, 063	13, 583, 337	\$105, 229
Soft.....do.....	437, 196	58, 068			1, 592, 676	117, 071
Clams:						
Hard, public.....bushels..					119, 002	86, 970
Hard, private.....do.....					2, 961	1, 890
Oysters:						
Market, public, spring....do....	68, 087	11, 751	110, 938	35, 888	3, 100, 923	497, 275
Market, public, fall....do....	101, 998	24, 940	136, 334	43, 396	1, 408, 408	337, 486
Market, private, spring....do....	450, 924	201, 657	654	475	593, 466	242, 461
Market, private, fall....do....	594, 516	311, 698	1, 012	735	697, 566	338, 885
Scallops, bay.....do.....					75, 615	56, 062

## Industries related to the fisheries of the South Atlantic and Gulf States, 1930

Item	North Carolina	South Carolina	Georgia	Florida	Alabama
Transporting:					
Persons engaged—	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	54	184		51	12
On boats.....	5	7		47	18
Total.....	59	191		98	30
Vessels—					
Motor.....	33	13		24	6
Net tonnage.....	315	138		379	55
Sail.....		40		3	
Net tonnage.....		368		41	
Total vessels.....	33	53		27	6
Total net tonnage.....	315	506		420	55
Boats.....	3	33		41	3
Wholesale and manufacturing:					
Establishments.....	71	32	29	224	21
Persons engaged—					
Proprietors.....	90	30	25	279	31
Salaried employees.....	26	27	27	106	16
Wage earners:					
Average for season.....	1,052	1,327	1,090	1,837	492
Average for year.....	305	491	407	861	218
Salaries and wages paid.....	\$233,924	\$259,398	\$253,445	\$900,298	\$138,240
Manufactured products <sup>1</sup> .....	\$836,751	\$882,538	\$629,668	\$1,995,751	\$329,990
Fishermen's manufactured products:					
Persons engaged.....	417	37		240	46
Products.....	\$130,219	\$28,937		\$46,277	\$7,699

Item	Mississippi	Louisiana	Texas	Total
Transporting:				
Persons engaged—	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....			133	437
On boats.....	26	246	3	349
Total.....	26	379	3	796
Vessels—				
Motor.....		65	1	142
Net tonnage.....		525	6	1,418
Sail.....				43
Net tonnage.....				469
Total vessels.....		65	1	185
Total net tonnage.....		525	6	1,827
Boats.....	13	128		221
Wholesale and manufacturing:				
Establishments.....	53	102	55	587
Persons engaged—				
Proprietors.....	72	133	66	726
Salaried employees.....	37	100	35	374
Wage earners:				
Average for season.....	2,546	3,821	1,370	13,535
Average for year.....	1,056	1,783	727	5,848
Salaries and wages paid.....	\$475,692	\$938,868	\$264,176	\$3,464,041
Manufactured products <sup>1</sup> .....	\$2,141,119	\$4,618,333	\$886,255	\$12,320,405
Fishermen's manufactured products:				
Persons engaged.....	61		210	1,011
Products.....	\$9,658		\$42,375	\$265,165

<sup>1</sup> These production figures are not comparable with those shown in previous bulletins since packaged fresh and frozen fishery products are now included.

NOTE.—Of the total number of persons employed on transporting craft, 408 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 904 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## NORTH CAROLINA

## Fisheries of North Carolina, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines		Haul seines		Gill nets			
	Men-haden	Other	Com-mon	Long	Anchor	Drift	Run-around	Stake
	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>								
On vessels.....	734		18	138	81			
On boats and shore—								
Regular.....	56	28	1,092	308	310	189	193	324
Casual.....	8		500	19	93	20	117	97
<b>Total.....</b>	<b>798</b>	<b>28</b>	<b>1,610</b>	<b>465</b>	<b>484</b>	<b>209</b>	<b>310</b>	<b>421</b>
<b>Vessels:</b>								
<b>Motor—</b>								
5 to 10 tons.....	8		6	34	15			
11 to 20 tons.....	5			2	1			
21 to 30 tons.....	3							
31 to 40 tons.....	10							
41 to 50 tons.....	6							
51 to 60 tons.....	6							
61 to 70 tons.....	3							
71 to 80 tons.....	2							
81 to 90 tons.....	1							
<b>Total.....</b>	<b>44</b>		<b>6</b>	<b>36</b>	<b>16</b>			
<b>Net tonnage.....</b>	<b>1,634</b>		<b>37</b>	<b>249</b>	<b>114</b>			
<b>Boats:</b>								
Motor.....	8	4	241	93	176	81	84	219
Other.....		8	540	55	140	75	137	123
Accessory boats.....	104		2	15				
<b>Apparatus:</b>								
Number.....	52	4	580	87	2,529	170	426	11,229
Length, yards.....	13,335	700	80,708	84,650				
Square yards.....					1,287,852	172,203	198,979	741,300

Item	Lines				Pound nets	Weirs	Wheels	Fyke nets	Dip nets, common	Otter trawls	
	Hand	Troll	Trot, with baits or snoods	Trot, with hooks						Fish	Shrimp
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	
<b>Fishermen:</b>											
On vessels.....	15									12	
On boats and shore—											
Regular.....	4	15	104	8	499	1	6	42	133		
Casual.....	40		72	1	207		10	11	111		
<b>Total.....</b>	<b>59</b>	<b>15</b>	<b>176</b>	<b>9</b>	<b>706</b>	<b>1</b>	<b>16</b>	<b>53</b>	<b>244</b>	<b>12</b>	
<b>Vessels:</b>											
<b>Motor—</b>											
5 to 10 tons.....	4										
11 to 20 tons.....										3	
21 to 30 tons.....										1	
<b>Total.....</b>	<b>4</b>									<b>4</b>	
<b>Net tonnage.....</b>	<b>29</b>									<b>70</b>	
<b>Boats:</b>											
Motor.....	12	15	99		285	1	6	33	10		
Other.....	10		60	9	248		20	27	202		
Accessory boats.....	2										
<b>Apparatus:</b>											
Number.....	98	15	177	14	2,343	4	50	847	244	4	
Yards at mouth.....										74	
Hooks, baits, or snoods.....	396	15	122,800	840							

## Fisheries of North Carolina, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Box traps	Turtle traps	Pots, eel	Spears	Dredges			Tongs	Rakes	By hand	Total, exclusive of duplication
					Crab	Oyster	Scallop				
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:											
On vessels.....						220		3			1, 15
On boats and shore—											
Regular.....		1	34	6	40	65	155	216	271	100	2, 69
Casual.....	10		20	48		41	29	261	327	95	1, 35
Total.....	10	1	54	54	40	326	184	480	598	195	5, 20
Vessels:											
Motor—											
5 to 10 tons.....						7					6
11 to 20 tons.....						1					1
21 to 30 tons.....											1
31 to 40 tons.....											1
41 to 50 tons.....											1
51 to 60 tons.....											1
61 to 70 tons.....											1
71 to 80 tons.....											1
81 to 90 tons.....											1
Total.....						8					11
Net tonnage.....						68					2, 14
Sail—											
5 to 10 tons.....						49		1			5
11 to 20 tons.....						14					1
21 to 30 tons.....						3					3
Total.....						66		1			6
Net tonnage.....						624		7			63
Total vessels.....						74		1			17
Total net tonnage.....						692		7			2, 77
Boats:											
Motor.....	4	1	16		40	39	134	192	58		1, 37
Other.....	4		35	54		26	10	201	441	80	1, 58
Accessory boats.....											12
Apparatus:											
Number.....	10	30	1, 502	54	80	243	328	480	643		
Yards at mouth.....					107	241	318				

## CATCH: BY GEAR

Species	Purse seines				Haul seines			
	Menhaden		Other		Common		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....					1, 998, 727	\$10, 208	164, 900	\$1, 14
Black bass.....					56, 143	8, 005	32, 770	4, 91
Bluefish.....					198, 650	10, 631	120, 200	4, 99
Bonito.....					7, 850	237		
Bowfin.....					4, 929	123	2, 301	5
Butterfish.....					2, 600	90	3, 385	91
Carp.....					182, 225	12, 622	123, 864	9, 08
Catfish and bullheads.....					91, 350	3, 082	59, 322	2, 30
Cod.....					400	8		
Croaker.....					733, 000	10, 080	2, 024, 760	32, 22
Drum, red or redfish.....					21, 800	472	91, 050	1, 32
Eels.....					100	7	1, 610	12
Flounders.....					35, 450	1, 668	13, 800	70
Gizzard shad.....					5, 900	113	7, 591	12
Harvestfish.....					15, 750	420	170, 500	5, 42
Hickory shad.....					45, 710	1, 517	8, 000	28
King whiting or "kingfish".....					70, 050	2, 723	13, 800	48
Menhaden.....	133, 656, 440	\$534, 478					394, 800	1, 15
Mullet.....		79, 010	2, 288		923, 240	36, 160	277, 200	3, 49
Pigfish.....					7, 500	151	71, 700	1, 19

Fisheries of North Carolina, 1930—Continued

CATCH: BY GEAR—Continued

Species	Purse seines				Haul seines			
	Menhaden		Other		Common		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Pike or pickerel					4,330	\$472	1,190	\$145
Pinfish							30,000	450
Pompano					900	128	2,200	221
Porgies					1,000	30		
Sea bass					47,200	2,760		
Shad					48,411	9,086	10,450	2,089
Sheepshead					2,300	112	3,590	179
Spadefish							380	16
Spanish mackerel					9,150	608	1,815	146
Spot					840,250	13,234	662,000	11,563
Squeteagues or "sea trout":								
Gray					399,450	15,968	419,937	16,370
Spotted					251,000	21,535	229,409	17,303
Striped bass			10,000	\$1,500	151,486	11,493	52,040	9,470
Sunfish					6,275	131	1,722	35
White perch					178,962	13,051	98,246	6,115
Yellow perch					23,600	1,326	11,400	718
Crabs:								
Soft					207,796	33,363		
Stone					350	11		
Shrimp					94,250	3,497		
Turtles, loggerhead					70	2		
Total	133,735,450	\$536,766	10,000	1,500	6,658,154	225,124	5,133,932	134,778

Species	Gill nets							
	Anchor		Drift		Runaround		Stake	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	451,000	\$3,880	21,000	\$105	4,000	\$23	195,200	\$1,179
Bluefish	79,000	3,360	71,000	3,240	56,350	3,257	246,150	11,244
Bonito	1,000	33	10,000	200				
Butterfish	2,100	69						
Carp	3,750	295					1,500	23
Catfish and bullheads	10,800	532					600	30
Cod	300	15						
Croaker	622,000	10,260	71,000	870	47,000	810	156,950	1,966
Drum, red or redfish	6,200	171	2,000	40	900	50	4,100	50
Eels	300	21						
Flounders	3,100	165	1,000	40	6,000	293	4,350	169
Gizzard shad	10,000	143						
Harvestfish	1,000	30						
Hickory shad	38,900	2,505					73,700	2,799
King whiting or "kingfish"	130,500	5,820	1,000	40			700	26
Mullet	8,600	448	355,000	12,525	536,200	22,138	195,950	13,795
Pigfish	4,700	92			300	3	2,800	57
Pompano			100	10	100	10	100	13
Sea bass					10,000	500		
Shad	310,500	53,687	52,200	10,280	4,800	770	250,450	45,115
Sheepshead			350	15	450	33		
Spanish mackerel	7,000	560	30,500	2,940	50,000	5,000	3,500	222
Spot	199,500	3,128	85,500	1,560	154,000	2,760	110,050	2,056
Squeteagues or "sea trout":								
Gray	198,000	8,005	22,000	880	18,200	659	117,190	4,772
Spotted	20,000	2,100	11,000	900	50,700	4,671	105,450	91,211
Squirrelfish							100	5
Striped bass	84,200	13,660	100	20	1,000	120	33,350	4,675
Sturgeon			1,500	600				
Suckers	5,500	220						
White perch	27,200	2,712					1,600	136
Yellow perch	3,400	340						
Total	2,228,550	112,251	735,250	34,265	940,000	41,097	1,503,790	97,543

## Fisheries of North Carolina, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Lines							
	Hand		Troll		Trot, with baits or snoods		Trot, with hooks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	7,750	\$745						
Catfish and bullheads.....	1,000	100					23,100	\$693
Cero.....	2,000	120	7,000	\$560				
Crappie.....	250	50						
Drum, red or redfish.....	1,000	20						
Eels.....	500	25						
Flounders.....	200	8						
Grunts.....	18,000	390						
Pigfish.....	500	10						
Pinfish.....	500	8						
Sea bass.....	116,000	4,710						
Sheepshead.....	250	12						
Snapper, red.....	4,750	190						
Spanish mackerel.....			15,000	1,200				
Squirrelfish.....	50	1						
Crabs, hard.....					1,146,500	\$18,745		
Octopus.....	1,000	150						
Total.....	153,750	6,514	22,000	1,760	1,146,500	18,745	23,100	693

  

Species	Pound nets		Weirs		Wheels		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
	Alewives.....	6,799,500	\$50,107			135,000	\$825	39,400
Black bass.....							17,500	2,625
Bluefish.....	11,535	555						
Bowfin.....	1,300	36					10,700	357
Butterfish.....	146,475	3,227						
Carp.....	51,350	2,213	5,000	\$250			102,500	7,917
Catfish and bullheads.....	145,700	7,395					128,200	6,170
Cod.....	300	12						
Crappie.....	400	60						
Croaker.....	1,113,600	13,358						
Drum, red or redfish.....	18,000	343						
Eels.....	4,000	332					3,250	300
Flounders.....	110,400	5,109					13,300	1,187
Garfish.....	100	6						
Gizzard shad.....	10,500	143					5,000	91
Harvestfish.....	156,050	4,241						
Hickory shad.....	157,150	6,726					500	30
King whiting or "kingfish".....	16,000	664						
Mullet.....	9,050	416					2,100	168
Pigfish.....	6,700	84						
Pike or pickerel.....	1,000	150					3,450	370
Pinfish.....	1,400	22						
Pompano.....	5,200	525						
Sea bass.....	50	5						
Shad.....	493,650	88,622					1,200	240
Sheepshead.....	4,675	234						
Spadefish.....	50	1						
Spanish mackerel.....	14,200	1,100						
Spot.....	270,490	3,933						
Squeteagues or "sea trout":								
Gray.....	1,118,350	34,615						
Spotted.....	24,950	2,371						
Striped bass.....	106,350	15,569					16,350	3,643
Sturgeon.....	1,100	240						
Suckers.....	8,300	401					1,150	33
Sunfish.....	500	13					300	6
Tripletail.....	500	19						
White perch.....	89,000	8,185					47,200	2,793
Yellow perch.....	8,700	626			6,000	900	42,100	2,486
Turtle, snapper.....	200	10						
Total.....	10,906,775	251,668	5,000	250	141,000	1,725	454,200	29,149

## Fisheries of North Carolina, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Dip nets, common		Otter trawls				Box traps	
			Fish		Shrimp			
			Pounds	Value	Pounds	Value		
Alewives.....	20,000	\$100						
Bluefish.....			2,300	\$256	50,000	\$3,500		
Cod.....			200	10				
Croaker.....			340,000	5,850				
Flounders.....			80,000	3,800	54,200	2,690		
King whiting or "kingfish".....			15,200	608	25,100	802		
Shad.....	500	100						
Spot.....			5,000	100				
Squeteagues or "sea trout":								
Gray.....			9,700	435	30,300	909		
Spotted.....					1,800	180		
Striped bass.....	1,000	150					1,000	\$250
Suckers.....							700	70
Yellow perch.....							1,000	225
Crabs, soft.....	99,974	15,032						
Shrimp.....					1,204,360	37,255		
Total.....	121,474	15,382	452,400	11,059	1,365,760	45,336	2,700	545

Species	Turtle traps		Pots, eel		Spears		Dredges			
							Crab		Oyster	
							Pounds	Value	Pounds	Value
Eels.....			132,500	\$9,977	28,000	\$1,620				
Flounders.....										
Crabs, soft.....							60,000	\$7,200		
Oysters:										
Market, public, spring.....									796,388	\$49,652
Market, public, fall.....									720,599	60,413
Turtles, snapper.....	300	\$15								
Total.....	300	15	132,500	9,977	28,000	1,620	60,000	7,200	1,516,987	110,065

Species	Dredges—Scallop		Tongs		Rakes		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
	Crabs:							
Hard.....	13,000	\$250						
Soft.....	10,810	1,473						
Clams, hard, public.....			35,200	\$3,775	243,120	\$31,480	38,400	\$5,425
Oysters:								
Market, public, spring.....			364,508	22,673			5,362	400
Market, public, fall.....			254,366	18,592			64,451	3,418
Scallops, bay.....	256,656	32,030			175,170	21,893		
Terrapin, diamond-back.....							90	45
Total.....	280,466	33,753	654,074	45,040	418,290	53,373	108,303	9,288

## OPERATING UNITS: BY COUNTIES

Item	Beaufort	Bertie	Brunswick	Camden	Carteret	Chowan	Craven	Currituck
Fishermen:								
On vessels.....	56		179		788	3	3	
On boats and shore—								
Regular.....	151	25	81	8	1,102		11	278
Casual.....	93	15	51		248	169	70	1
Total.....	300	40	311	8	2,138	172	84	279



## Fisheries of North Carolina, 1930—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Beaufort	Bertie	Brunswick	Camden	Carteret	Chowan	Craven	Currituck
<b>Vessels:</b>								
Motor—	Number	Number	Number	Number	Number	Number	Number	Number
5 to 10 tons.....			4		52		1	
11 to 20 tons.....					7			
21 to 30 tons.....					3	1		
31 to 40 tons.....			4		6			
41 to 50 tons.....			2		4			
51 to 60 tons.....			1		5			
61 to 70 tons.....			1		2			
71 to 80 tons.....					2			
81 to 90 tons.....			1					
Total.....			13		81	1	1	
Net tonnage.....			477		1,502	21	5	
Sail—								
5 to 10 tons.....	18				13			
11 to 20 tons.....	2				6			
21 to 30 tons.....	2							
Total.....	22				19			
Net tonnage.....	213				185			
Total vessels.....	22		13		100	1	1	
Total net tonnage.....	213		477		1,687	21	5	
<b>Boats:</b>								
Motor.....	93	16	26	5	490	45	45	116
Other.....	91	16	45	5	495	45	31	119
Accessory boats.....			18		97		2	
<b>Apparatus:</b>								
Purse seines—								
Menhaden.....			9		43			
Length, yards.....			2,335		11,000			
Haul seines—								
Common.....	13		9		305		4	101
Length, yards.....	3,950		1,500		21,945		900	18,550
Long.....		1			42		1	12
Length, yards.....		1,600			48,900		900	10,200
Gill nets—								
Anchor.....				90	102	200	14	183
Square yards.....				21,300	92,275	150,000	4,800	58,025
Drift.....					85			
Square yards.....					75,283			
Runaround.....	7		42		108		4	
Square yards.....	2,820		16,212		83,214		2,000	
Stake.....	712	3			1,696		378	110
Square yards.....	47,100	400			110,160		14,970	9,900
Lines—								
Hand.....					28			
Hooks.....					56			
Troll.....					15			
Hooks.....					15			
Trot, with baits or smoods.....	86							
Baits or smoods.....	63,600							
Trot, with hooks.....			2					
Hooks.....			240					
Pound nets.....	192	80			142	507	43	
Wheels.....		5					20	
Fyke nets.....				75		4		473
Dip nets, common.....					231			
Otter trawls—								
Fish.....						1		
Yards at mouth.....						20		
Shrimp.....			30		21			
Yards at mouth.....			495		396			
Pots, eel.....	45				50	150	40	860
Spears.....					19			
<b>Dredges—</b>								
Crab.....					80			
Yards at mouth.....					107			
Oyster.....	64				36			
Yards at mouth.....	54				44			
Scallop.....					328			
Yards at mouth.....					318			
Tongs.....			10		208			
Rakes.....			15		347			

## Fisheries of North Carolina, 1930—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Dare	Gates	Hertford	Hyde	Lenoir	Martin	New Hanover	Onslow
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	3			3				3
On boats and shore—								
Regular.....	589		6	81		18	140	4
Casual.....		20		25	35	22	50	115
<b>Total</b> .....	<b>592</b>	<b>20</b>	<b>6</b>	<b>109</b>	<b>35</b>	<b>40</b>	<b>190</b>	<b>122</b>
<b>Vessels:</b>								
Motor—5 to 10 tons.....	1							1
Net tonnage.....	7							8
Sail—5 to 10 tons.....				1				
Net tonnage.....				6				
<b>Boats:</b>								
Motor.....	229	2	2	46	4	8	45	45
Other.....	189	20	3	32	16	26	90	50
<b>Apparatus:</b>								
Purse seines—Other.....	4							
Length, yards.....	700							
Haul seines—								
Common.....	67				4	3	22	22
Length, yards.....	19,800				300	950	3,520	2,042
Long.....	27			2				
Length, yards.....	19,850			1,400				
Gill nets—								
Anchor.....	560							14
Square yards.....	222,950							15,000
Drift.....		20		10		12	42	
Square yards.....		2,000		11,660		850	82,410	
Runaround.....	14			11			70	140
Square yards.....	8,400			12,833			10,300	53,200
Stake.....	6,473			695	15	2		
Square yards.....	474,570			44,700	600	78		
Lines—								
Hand.....					20			50
Hooks.....					40			300
Trot, with baits or snoods.....	7			2				
Baits or snoods.....	5,600			1,600				
Trot, with hooks.....						7	5	
Hooks.....						350	250	
Pound nets.....	807	10	17	95				
Weirs.....						4		
Wheels.....						15		
Fyke nets.....	8	25				2		
Dip nets, common.....						12		
Box traps.....					10			
Turtle traps.....				30				
Pots, eel.....	100			5		16		
Spears.....								20
Dredges—								
Oyster.....	14			41				
Yards at mouth.....	14			32				
Tongs.....	26			30				55
Rakes.....	6						50	25

Item	Pamlico	Pasquotank	Pender	Perquimans	Pitt	Tyrrell	Washington
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	102	19					
On boats and shore—							
Regular.....	32	39	7	43	2	48	28
Casual.....	149		190		10	40	50
<b>Total</b> .....	<b>283</b>	<b>58</b>	<b>197</b>	<b>43</b>	<b>12</b>	<b>88</b>	<b>78</b>
<b>Vessels:</b>							
Motor—							
5 to 10 tons.....	6	2					
11 to 20 tons.....		4					
<b>Total</b> .....	<b>6</b>	<b>6</b>					
Net tonnage.....	41	79					

## Fisheries of North Carolina, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Pamlico	PaIquo-tank	Pender	Perquimans	Pitt	Tyrrell	Washington
Vessels—Continued.							
Sail—	Number	Number	Number	Number	Number	Number	Number
5 to 10 tons.....	18						
11 to 20 tons.....	5	1					
21 to 30 tons.....	1						
Total.....	24	1					
Net tonnage.....	216	11					
Total vessels.....	30	7					
Total net tonnage.....	257	90					
Boats:							
Motor.....	89	19	4	23	1	36	16
Other.....	66	20	145	23	2	36	2
Accessory boats.....	6						
Apparatus:							
Haul seines—							
Common.....	8		19		1		2
Length, yards.....	1,900		2,850		600		1,600
Long.....	2						
Length, yards.....	1,800						
Gill nets—							
Anchor.....		556		425		265	120
Square yards.....		214,120		317,050		131,411	60,920
Runaround.....			30				
Square yards.....			10,000				
Stake.....	445	60				640	
Square yards.....	12,950	2,400				23,472	
Lines—							
Trot with baits or snoods.....	82						
Baits or snoods.....	52,000						
Pound nets.....	179	22		62		120	67
Fyke nets.....		124				134	
Dip nets, common.....							1
Otter trawls—							
Fish.....		3					
Yards at mouth.....		54					
Shrimp.....			1				
Yards at mouth.....			17				
Pots, eel.....	40	36		100		60	
Spears.....			15				
Dredges—							
Oyster.....	80	8					
Yards at mouth.....	88	9					
Tongs.....	91		60				
Rakes.....			200				

## CATCH: BY COUNTIES

Species	Beaufort		Bertie		Brunswick		Camden	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	391,000	\$1,964	1,188,000	\$5,940			16,000	\$175
Black bass.....							2,500	375
Bluefish.....					50,000	\$3,500		
Bowfin.....							1,200	24
Butterfish.....	15,000	300						
Carp.....	19,200	565					8,000	640
Catfish and bullheads.....	14,200	630	1,000	50	2,100	63	3,000	120
Croaker.....	187,000	1,910			32,000	320		
Drum, red or redfish.....					1,800	108		
Eels.....	10,000	1,000					600	45
Flounders.....	17,800	819			54,200	2,680	100	5
Gizzard shad.....							500	8
Hickory shad.....	16,700	481					500	25
King whiting or "kingfish".....					26,100	862		
Menhaden.....					24,325,200	121,344		
Mullet.....	32,700	1,358			237,510	9,188	1,500	120
Pigfish.....	500	15						
Pike or pickerel.....							250	25
Pompano.....	100	10						
Sea bass.....					17,200	860		

## Fisheries of North Carolina, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Beaufort		Bertie		Brunswick		Camden	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Shad.....	65,550	\$15,182	11,400	\$1,760	3,800	\$570	1,500	\$300
Sheepshead.....	150	12			300	21		
Spot.....	12,000	230			14,000	280		
Squeteagues or "sea trout":								
Gray.....	69,000	2,070			31,000	930		
Spotted.....	4,500	450			11,800	1,180		
Striped bass.....	7,300	755	3,500	425			3,000	600
White perch.....	4,400	440	22,000	1,630			6,800	430
Yellow perch.....	3,100	205					2,500	125
Crabs, hard.....	761,200	8,782						
Shrimp.....					453,500	13,305		
Clams, hard, public.....					20,800	3,100		
Oysters:								
Market, public, spring.....	86,711	8,230						
Market, public, fall.....	153,970	17,250			5,898	550		
Total.....	1,872,081	62,658	1,225,900	9,805	25,287,208	158,871	47,950	3,017

Species	Carteret		Chowan		Craven		Currituck	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	37,000	\$420	3,172,800	\$28,529	127,500	\$836	16,900	\$418
Black bass.....							89,213	12,965
Bluefish.....	446,800	20,355	500	40	16,350	327	4,500	225
Bonito.....	11,000	233					1,000	30
Bowfin.....							13,980	463
Butterfish.....	32,785	1,076			49,000	980	1,000	50
Carp.....			4,500	210			352,689	26,518
Catfish and bullheads.....			60,000	3,000			165,572	6,979
Cero.....	9,000	680						
Cod.....			200	10			300	15
Croaker.....	2,435,750	41,374	75,000	1,400	217,810	2,178	65,000	1,300
Drum, red or redfish.....	66,050	1,108			1,000	10	1,000	40
Eels.....	1,000	100	3,400	292	20,000	1,400	52,110	3,769
Flounders.....	31,750	1,508	20,100	806	14,300	419	13,250	947
Gizzard shad.....			4,000	40			11,991	210
Grunts.....	18,000	360						
Harvestfish.....	231,000	7,560					1,000	30
Hickory shad.....	48,200	1,570	16,400	1,200	3,500	105	3,000	175
King whiting or "kingfish".....	142,200	5,624	1,200	48			7,500	375
Menhaden.....	109,726,040	414,287						
Mullet.....	926,440	25,748			121,100	8,432	2,800	196
Pigfish.....	84,700	1,437					850	11
Pike or pickerel.....							7,820	868
Pinfish.....	31,500	473						
Pompano.....	2,650	261					200	30
Sea bass.....	110,050	4,405						
Shad.....	41,000	7,690	72,350	13,175	53,150	10,655	22,800	3,839
Sheepshead.....	4,890	232					400	23
Snapper, red.....	2,750	155						
Spadefish.....	380	16						
Spanish mackerel.....	108,165	10,124					850	85
Spot.....	1,392,350	22,943	5,000	100	76,000	1,270	16,000	330
Squeteagues or "sea trout":								
Gray.....	695,690	28,292	5,000	200	91,537	2,146	18,000	960
Spotted.....	206,550	14,942			29,809	3,577	18,000	1,640
Squirrelfish.....	50	1						
Striped bass.....	17,290	1,644	19,800	3,910	16,350	2,438	61,822	11,999
Suckers.....			8,000	380			500	10
Sunfish.....							7,597	158
White perch.....	400	20	10,500	900			202,448	11,590
Yellow perch.....			3,500	280	6,000	900	57,350	3,132
Crabs:								
Hard.....	13,000	250						
Soft.....	378,580	57,068						
Shrimp.....	799,860	25,650						
Clams, hard, public.....	184,000	23,125						

## Fisheries of North Carolina, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Carteret		Chowan		Craven		Currituck	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Oysters:								
Market, public, spring.....	589,820	29,820						
Market, public, fall.....	379,683	26,014						
Scallops, bay.....	431,826	53,923						
Octopus.....	1,000	150						
Terrapin, diamond-back.....	90	45						
Turtles, loggerhead.....							70	\$2
Total.....	119,639,289	\$30,683	\$3,482,250	\$54,520	843,406	\$35,673	1,217,512	89,382

Species	Dare		Gates		Hertford		Hyde	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	206,400	\$3,278	40,000	\$600	103,000	\$575	58,000	\$950
Black bass.....	13,500	2,025						
Bluefish.....	194,685	11,979					127,400	5,096
Bonito.....	6,850	207						
Bowfin.....	1,300	26	500	10				
Butterfish.....	23,775	660					54,500	1,105
Carp.....	47,150	2,016	300	15			1,000	20
Catfish and bullheads.....	47,000	1,810	6,200	260				
Cod.....	700	20						
Crappie.....			400	60				
Croaker.....	460,550	7,802					599,000	5,830
Drum, red or redfish.....	22,100	494					42,000	610
Eels.....	9,100	690	200	16			1,000	100
Flounders.....	79,800	3,984					2,500	125
Garfish.....	100	6						
Gizzard shad.....	2,500	45						
Harvestfish.....	38,700	1,049					72,600	1,472
Hickory shad.....	132,500	6,105	1,000	60			17,750	425
King whiting or "kingfish".....	43,950	1,476					6,400	320
Mullet.....	79,200	3,246					196,500	6,000
Pigfish.....	3,650	68						
Pike or pickerel.....	1,200	174						
Pinfish.....	400	7						
Pompano.....	5,650	606						
Shad.....	578,400	95,498	4,950	800	500	75	10,700	1,840
Sheepshead.....	1,350	72					3,225	161
Spadefish.....	50	1						
Spanish mackerel.....	8,050	791					8,100	476
Spot.....	219,240	3,807					161,200	3,224
Squeteagues or "sea trout":								
Gray.....	746,450	27,085					355,250	11,735
Spotted.....	346,050	29,157					43,100	3,556
Squirrelfish.....	100	5						
Striped bass.....	136,200	19,705	400	74			2,200	80
Sturgeon.....	700	140					400	100
Suckers.....			200	8				
Sunfish.....	1,200	27						
Tripletail.....	500	19						
White perch.....	26,750	1,365	2,500	260	1,000	100		
Yellow perch.....	6,350	3,222	200	16				
Crabs, hard.....	50,000	800					13,300	133
Clams, hard, public.....	1,600	400					800	100
Oysters:								
Market, public, spring.....	179,856	9,625					70,526	6,672
Market, public, fall.....	33,244	2,800					65,550	6,208
Turtles, snapper.....							300	15
Total.....	3,756,850	239,392	56,850	2,179	104,500	750	1,913,301	56,347

## Fisheries of North Carolina, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Lenoir		Martin		New Hanover		Onslow	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			214,000	\$1,220				
Carp.....	1,000	\$50	16,000	800				
Catfish and bullheads.....	1,000	100	13,500	405	10,000	\$300		
Crappie.....	250	50						
Croaker.....					2,100	42	12,000	\$130
Drum, red or redfish.....					600	24		
Eels.....	500	25	15,000	750				
Flounders.....					4,500	225	7,000	490
Hickory shad.....	3,000	150						
King whiting or "kingfish".....					1,000	100	30,000	1,800
Mullet.....					330,000	16,500	169,000	6,305
Porgies.....					1,000	30		
Sea bass.....					40,000	2,400	6,000	310
Shad.....	2,000	400	1,500	300	48,000	9,600		
Snapper, red.....							2,000	40
Spanish mackerel.....					6,000	300		
Spot.....					143,000	2,860	15,000	175
Squeteagues or "sea trout":								
Gray.....							2,500	85
Spotted.....					1,000	100	8,500	1,025
Striped bass.....	4,000	1,000	6,000	825				
Sturgeon.....					1,500	600		
Suckers.....	700	70						
White perch.....			2,000	200				
Yellow perch.....	1,000	225						
Crabs, stone.....							350	11
Shrimp.....					43,250	1,297		
Clams, hard, public.....					56,000	8,750	12,000	1,125
Oysters:								
Market, public, spring.....							16,086	1,000
Market, public, fall.....							16,086	1,000
Total.....	13,450	2,070	268,000	4,500	687,950	43,128	296,522	13,496

Species	Pamlico		Pasquotank		Pender		Perquimans	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....	75,000	\$668	101,500	\$1,580			180,000	\$1,600
Black bass.....			1,200	180				
Bluefish.....	900	43	1,800	216				
Bowfin.....			1,250	15			1,000	30
Butterfish.....	6,500	130						
Carp.....	700	13	3,150	237			5,500	275
Catfish and bullheads.....			64,800	2,695			33,000	1,960
Croaker.....	752,000	8,530	265,100	4,453	5,000	\$150		
Drum, red or redfish.....	10,500	80						
Eels.....	5,000	400	4,750	330			15,100	1,510
Flounders.....	27,200	1,193	62,700	3,157	5,000	250	2,100	90
Gizzard shad.....			15,000	258			5,000	53
Hickory shad.....	14,500	485	10,000	530			17,500	1,360
King whiting or "kingfish".....			14,000	560				
Mullet.....	100,400	8,030	2,700	216	185,000	5,975	1,500	120
Pigfish.....	4,500	65						
Pike or pickerel.....			700	70				
Shad.....	73,000	14,800	61,300	10,257			85,000	16,885
Sheepshead.....	1,300	64						
Spot.....	148,000	1,680			125,000	1,435		
Squeteagues or "sea trout":								
Gray.....	314,000	8,875	4,700	235				
Spotted.....	25,000	2,650						
Striped bass.....	1,100	43	25,000	4,800			60,000	9,000
Suckers.....			450	15			5,800	241
White perch.....			18,700	1,586			52,000	5,200
Yellow perch.....			4,300	226			500	50
Crabs, hard.....	322,000	9,030						
Shrimp.....					2,000	500		
Clams, hard, public.....					41,520	4,080		
Oysters:								
Market, public, spring.....	208,245	15,278	15,014	2,100				
Market, public, fall.....	376,942	27,521	8,043	1,080				
Total.....	2,466,787	99,578	686,157	34,796	363,520	12,390	464,000	38,374

## Fisheries of North Carolina, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Pitt		Tyrrell		Washington	
	Pounds	Value	Pounds	Value	Pounds	Value
Alwives.....	70,000	\$350	1,798,400	\$8,992	2,043,227	\$10,213
Carp.....	1,000	50	10,000	1,000		
Catfish and bullheads.....			28,700	1,435	10,000	500
Eels.....			4,500	360		
Flounders.....			7,500	750		
Hickory shad.....	1,200	36			38,210	1,150
Shad.....	2,250	461	13,400	2,680	19,611	3,222
Striped bass.....			12,100	1,855	80,814	1,397
White perch.....	1,000	100	12,800	1,280	78,910	7,891
Yellow perch.....			11,400	1,140		
Turtles, snapper.....					200	10
Total.....	75,450	997	1,898,800	19,492	2,270,972	24,383

## Industries related to the fisheries of North Carolina, 1930

## TRANSPORTING

Item	Beaufort County	Bertie County	Carteret County	Craven County	Dare County	Hyde County	Pasquotank County	Washington County	Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Persons engaged:									
On vessels.....	13		20	3	8	2	6	2	54
On boats.....		1		4					5
Total.....	13	1	20	7	8	2	6	2	59
Vessels, motor:									
5 to 10 tons.....	4		14	2	1			1	22
11 to 20 tons.....	2		2	1	3	1	1		10
21 to 30 tons.....							1		1
Total.....	6		16	3	4	1	2	1	33
Net tonnage.....	61		117	25	43	16	47	6	315
Boats.....		1		2					3

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Beaufort County	Brunswick County	Carteret County	Craven and Pamlico Counties	New Hanover Counties	Washington, Pasquotank, and Bertie Counties	Total
Establishments.....	10	3	36	11	5	6	71
Persons engaged:							
Proprietors.....	11	4	47	13	5	10	90
Salaried employees.....	1	3	18	1		3	26
Wage earners—							
Average for season.....	159	134	323	213	3	220	1,052
Average for year.....	66	22	127	59		31	305
Paid to salaried employees.....	\$4,080	\$5,595	\$25,010	\$500		\$13,577	\$48,762
Paid to wage earners.....	28,335	15,952	93,443	28,014	\$1,150	18,268	185,162
Total salaries and wages.....	32,415	21,547	118,453	28,514	1,150	31,845	233,924

## Industries related to the fisheries of North Carolina, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Alewives, salted.....pounds.....	795, 000	\$24, 500
Menhaden products:		
Acid scrap.....tons.....	3, 379	83, 414
Dry scrap.....do.....	2, 894	133, 149
Meal.....do.....	1, 457	76, 909
Oil.....gallons.....	308, 472	51, 877
Mullet, salted.....pounds.....	666, 660	42, 109
Spot, salted.....do.....	172, 000	10, 220
Oysters:		
Fresh-shucked.....gallons.....	112, 539	140, 465
Canned.....standard cases.....	9, 945	49, 529
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	224, 579
Total.....		836, 751

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 417]

Alewives:		
Salted.....pounds.....	2, 245, 800	\$38, 971
Corned.....do.....	1, 505, 800	27, 280
Mullet, salted.....do.....	143, 200	10, 828
Sturgeon roe, fresh.....do.....	140	140
Scallops, bay, fresh-shucked.....gallons.....	47, 000	53, 000
Total.....		130, 219

<sup>1</sup> Includes fresh-cooked crab meat; cooked and canned shrimp; pickled alewives; fresh fillets of butterfish, croaker, and squeteague; canned alewife roe; and oyster-shell products.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 1 has also been included as a fisherman, and among the total persons engaged in the preparation of fishermen's manufactured products, 344 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries, exclusive of duplication.

## SOUTH CAROLINA

## Fisheries of South Carolina, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets			Lines		Dip nets, common
		Anchor	Drift	Run-around	Hand	Trot, with baits or snoods	
	Number	Number	Number	Number	Number	Number	Number
Fishermen:					21		
On vessels.....							
On boats and shore—							
Regular.....	18	40	50	27	91	6	10
Casual.....	288	191	230		15		
Total.....	306	231	280	27	127	6	10
Vessels, motor:					2		
5 to 10 tons.....					1		
11 to 20 tons.....							
Total vessels.....					3		
Total net tonnage.....					29		
Boats:					9		
Motor.....	3	1	10				
Other.....	79	201	172	27	40		10
Apparatus:						6	10
Number.....	21	282	157	27	127		
Length, yards.....	3, 535						
Square yards.....		82, 000	160, 790	13, 000			
Hooks, baits, or snoods.....					460	4, 800	



## Fisheries of South Carolina, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Otter trawls, shrimp	Spears	Dred- ges, oyster	Tongs	Rakes	Grabs	By hand	Total, exclu- sive of dupli- cation
Fishermen:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	19		6					39
On boats and shore—								
Regular.....	52	30		27	15	451	40	705
Casual.....	6			50	32	50	9	756
Total.....	77	30	6	77	47	501	49	1,500
Vessels, motor:								
5 to 10 tons.....	3							5
11 to 20 tons.....	4		1					5
Total vessels.....	7		1					10
Total net tonnage.....	88		19					124
Boats:								
Motor.....	29							51
Other.....		30		45	31	477	7	969
Apparatus:								
Number.....	36	30	2	77	47	501		
Yards at mouth.....	675		3					

## CATCH: BY GEAR

Species	Haul seines		Gill nets					
			Anchor		Drift		Runaround	
	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>
Alewives.....					2,000	\$10		
Croaker.....	1,000	\$10						
Drum, red or redfish.....	7,350	377						
Flounders.....	2,000	100					725	\$36
Hickory shad.....			3,250	\$145	4,250	185		
King whiting or "kingfish".....	3,080	201						
Mullet.....	358,000	18,272					54,000	2,700
Shad.....			89,837	15,428	122,310	16,589		
Spot.....	11,200	324					17,000	340
Squeteagues or "sea trout":								
Gray.....	2,000	100						
Spotted.....	7,400	740					2,300	230
Sturgeon.....			8,464	1,693	6,500	1,300		
Terrapin, diamond-back.....	1,619	598						
Total.....	393,649	20,722	101,571	17,266	135,060	18,084	74,025	3,306

## Fisheries of South Carolina, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Lines				Dip nets, common		Otter trawls, shrimp		Spears	
	Hand		Trot, with baits or snoods							
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	100	\$10								
Catfish and bullheads.....	2,000	40								
Croaker.....	1,000	50								
Drum:										
Black.....	500	25								
Red or redfish.....	1,000	89								
Flounders.....	300	30					2,000	\$100	25,000	\$2,000
Grunts.....	8,000	640								
King whiting or "kingfish".....	30,000	3,000					5,000	250		
Pigfish.....	725	22								
Pinfish.....	2,000	80								
Pompano.....	100	15								
Porgies.....	100	8								
Sea bass.....	197,250	15,587								
Shad.....					2,325	\$348				
Sharks.....	10,000	200								
Sheepshead.....	100	10								
Skates.....	1,000	50								
Snapper, mangrove.....	3,000	240								
Spot.....	100	5								
Squeteagues or "sea trout":										
Gray.....	20,000	1,600					2,000	20		
Spotted.....	1,200	120								
Squirrelfish.....	350	18								
Crabs, hard.....			26,000	\$780						
Shrimp.....							792,733	31,814		
Octopus.....	3,500	290								
Total.....	282,325	22,129	26,000	780	2,325	348	801,733	32,184	25,000	2,000

Species	Dredges, oyster		Tongs		Rakes		Grabs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams, hard, public.....					11,200	\$1,400				
Oysters:										
Market, public, spring.....							1,738,968	\$58,387	3,089	\$500
Market, public, fall.....			9,221	\$750	6,915	450	661,370	23,714	6,454	1,000
Market, private, spring.....	115,255	\$10,000	43,566	2,363			387,257	21,000		
Market, private, fall.....			22,853	1,238			253,561	13,750		
Terrapin, diamond-back.....									4,200	1,488
Total.....	115,255	10,000	75,640	4,351	18,115	1,850	3,041,156	116,851	13,743	2,988

## OPERATING UNITS: BY COUNTIES

Item	Beaufort	Charleston	Colleton	Georgetown	Horry
	Number	Number	Number	Number	Number
Fishermen:					
On vessels.....		39			
On boats and shore—					
Regular.....	326	256		100	23
Casual.....	74	143	129	230	180
Total.....	400	438	129	330	203
Vessels, motor:					
5 to 10 tons.....		5			
11 to 20 tons.....		5			
Total vessels.....		10			
Total net tonnage.....		124			

## Fisheries of South Carolina, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Beaufort	Charleston	Colleton	Georgetown	Horry
	Number	Number	Number	Number	Number
Boats:					
Motor.....		35	1	12	3
Other.....	372	230	109	188	70
Apparatus:					
Haul seines.....	2	2		4	13
Length, yards.....	135	100		800	2,500
Gill nets—					
Anchor.....	60	40	142	40	
Square yards.....	12,000	16,000	35,400	18,600	
Drift.....	20	17	20	100	
Square yards.....	10,000	24,100	24,000	102,690	
Runaround.....				27	
Square yards.....				13,000	
Lines—					
Hand.....		92		20	15
Hooks.....		360		40	60
Trot, with baits or snoods.....		6			
Baits or snoods.....		4,800			
Dip nets, common.....					10
Otter trawls, shrimp.....		35		1	
Yards at mouth.....		655		20	
Spears.....				30	
Dredges, oyster.....		2			
Yards at mouth.....		3			
Tongs.....	10	17			50
Rakes.....				15	32
Grabs.....	316	185			

## CATCH: BY COUNTIES

Species	Beaufort		Charleston		Colleton		Georgetown		Horry	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....							2,000	\$10		
Bluefish.....			100	\$10						
Catfish and bullheads.....			2,000	40						
Croaker.....			1,000	50			1,000	10		
Drum:										
Black.....			500	25						
Red or redfish.....			1,000	89			3,250	162	4,100	\$215
Flounders.....			2,300	130			26,025	2,051	1,700	85
Grunts.....			8,000	640						
Hickory shad.....	500	\$50					7,000	280		
King whiting or "kingfish".....			35,000	3,250			450	27	2,630	174
Mullet.....							104,000	5,200	308,000	15,772
Pigfish.....								725		22
Pinfish.....							1,000	50	1,000	30
Pompano.....			100	15						
Porgies.....			100	8						
Sea bass.....			182,000	14,560			4,000	240	11,250	787
Shad.....	13,927	2,785	20,750	3,882	54,700	\$9,965	122,790	15,385	2,325	348
Sharks.....			10,000	200						
Sheepshead.....			100	10						
Skates.....			1,000	50						
Snapper, mangrove.....			3,000	240						
Spot.....			100	5			18,200	364	10,000	300
Squeteagues or "sea trout":										
Gray.....			22,000	1,620					2,000	100
Spotted.....							4,800	480	6,100	610
Squirrelfish.....			350	18						
Sturgeon.....					8,464	1,693	6,500	1,300		
Crabs, hard.....			26,000	780						
Shrimp.....			780,233	31,189			12,500	625		
Clams, hard, public.....							4,800	600	6,400	800
Oysters:										
Market, public, spring.....	1,157,797	38,835	584,260	20,052						
Market, public, fall.....	564,095	20,514	103,730	4,200			6,915	450	9,220	750
Market, private, spring.....	15,905	863	530,173	32,500						
Market, private, fall.....	22,853	1,238	253,561	13,750						
Octopus.....			3,500	290						
Terrapin, diamond-back.....	4,019	1,411	1,800	675						
Total.....	1,779,096	65,696	2,572,657	128,278	63,164	11,658	325,230	27,234	365,450	19,993

## Industries related to the fisheries of South Carolina, 1930

## TRANSPORTING

Item	Beaufort County	Charleston County	Total
Persons engaged:	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	78	28	106
On boats.....	7		7
Total.....	85	28	113
Vessels:			
Motor—			
5 to 10 tons.....		7	7
11 to 20 tons.....	1	5	6
Total.....	1	12	13
Net tonnage.....	13	125	138
Sail—			
5 to 10 tons.....	26	3	29
11 to 20 tons.....	9	1	10
21 to 30 tons.....	1		1
Total.....	36	4	40
Net tonnage.....	330	38	368
Total vessels.....	37	16	53
Total net tonnage.....	343	163	506
Boats.....	28	5	33

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Beaufort County	Charleston County	Georgetown County	Total
Establishments.....	17	12	3	32
Persons engaged:				
Proprietors.....	18	12	3	33
Salaried employees.....	8	13	3	24
Wage earners—				
Average for season.....	833	460	34	1,327
Average for year.....	286	191	14	491
Paid to salaried employees.....	\$26,271	\$42,248	\$1,405	\$69,924
Paid to wage earners.....	95,908	80,276	13,290	189,474
Total salaries and wages.....	122,179	122,524	14,695	259,398

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Shrimp, canned.....standard cases..	40,108	\$245,688
Oysters:		
Fresh-shucked.....gallons..	32,943	38,750
Canned.....standard cases..	93,288	408,465
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	189,635
Total.....		882,538

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 37]

Mullet, salted.....pounds..	360,000	\$28,800
Sturgeon roe, salted.....do..	182	137
Total.....	360,182	28,937

<sup>1</sup> Includes menhaden and oyster-shell products.<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 74 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 37 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.



## Fisheries of Georgia, 1930—Continued

CATCH: BY GEAR

Species	Purse seines, menhaden		Haul seines		Gill nets			
	Pounds	Value	Pounds	Value	Anchor		Drift	
Croaker.....			1,000	\$20				
Flounders.....			300	24				
Hickory shad.....					2,600	\$208	15,700	\$1,226
Menhaden.....	24,701,250	\$94,100						
Mullet.....			30,000	1,500			5,000	250
Shad.....					15,800	3,160	223,705	44,541
Spot.....			1,200	24				
Squeteagues or "sea trout", spotted.....			1,300	130				
Sturgeon.....							4,500	900
Terrapin, diamond-back.....			19,700	5,040				
Total.....	24,701,250	94,100	53,500	6,738	18,400	3,368	248,905	46,917

Species	Gill nets—Continued				Lines			
	Runaround		Stake		Hand		Trot, with baits or snoods	
Bluefish.....								
Croaker.....	14,500	\$290			1,012	\$227		
Drum:								
Black.....	1,000	30						
Red or redfish.....	5,250	210						
Flounders.....	5,300	365						
Groupers.....					7,354	441		
Grunts.....					390	32		
Hickory shad.....			7,200	\$576				
Jewfish.....					4,629	232		
King whiting or "kingfish".....	16,250	363						
Mullet.....	72,800	4,245						
Sea bass.....	2,000	80			20,840	2,005		
Shad.....			35,250	7,050				
Sheepshead.....	700	42						
Snapper:								
Mangrove.....					200	16		
Red.....					29,854	2,462		
Spot.....	3,750	55						
Squeteagues or "sea trout":								
Gray.....	3,000	130						
Spotted.....	47,150	3,762						
Striped bass.....			500	100				
Crabs, hard.....							154,000	\$3,080
Total.....	171,700	9,572	42,950	7,726	64,279	5,415	154,000	3,080

Species	Lines—Trot, with hooks		Fyke nets		Cast nets		Otter trawls, shrimp	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	16,000	\$740	212,000	\$6,360				
Flounders.....							3,200	\$224
King whiting or "kingfish".....							22,000	1,100
Mullet.....					69,000	\$3,800		
Spot.....							7,000	140
Crabs, hard.....							7,000	140
Shrimp.....							8,852,712	334,576
Total.....	16,000	740	212,000	6,360	69,000	3,800	8,891,912	336,180

## Fisheries of Georgia, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Pots, crab		Tongs		Rakes		Crabs	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, hard.....	67,000	\$1,340						
Clams, hard, public.....					2,240	\$350		
Oysters:								
Market, public, spring.....			29,978	\$2,740				
Market, public, fall.....			21,161	1,440				
Market, private, spring.....			18,957	2,060			31,752	\$1,363
Market, private, fall.....			18,975	1,356			38,562	1,649
Total.....	67,000	1,340	89,071	7,596	2,240	350	70,314	3,012

## OPERATING UNITS: BY COUNTIES

Item	Bryan	Bullock	Camden	Charles- ton	Chatham	Glynn
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....			94		24	24
On boats and shore—						
Regular.....			50		68	180
Casual.....	55	16	44	18	212	56
Total.....	55	16	188	18	304	260
Vessels:						
Steam—						
41 to 50 tons.....			1			
51 to 60 tons.....			1			
61 to 70 tons.....			1			
Total.....			3			
Net tonnage.....			166			
Motor—						
5 to 10 tons.....			2		7	11
11 to 20 tons.....					2	1
Total.....			2		9	12
Net tonnage.....			18		79	88
Total vessels.....			5		9	12
Total net tonnage.....			184		79	88
Boats:						
Motor.....			27		62	68
Other.....	29	8	20	9	165	102
Accessory boats.....			9		3	
Apparatus:						
Purse seines, menhaden.....			3			
Length, yards.....			900			
Haul seines.....					4	12
Length, yards.....					300	1,550
Gill nets—						
Anchor.....	5					13
Square yards.....	1,900					1,610
Drift.....	26	8	22	9	31	25
Square yards.....	83,200	3,056		2,700	162,505	8,100
Runaround.....					20	22
Square yards.....					4,390	9,170
Stake.....					75	
Square yards.....					49,080	
Lines—						
Hand.....					8	
Hooks.....					16	
Trot, with baits or snoods.....						6
Baits or snoods.....						1,950
Trot, with hooks.....					68	
Hooks.....					3,400	
Cast nets.....					20	20
Otter trawls, shrimp.....			27		54	80
Yards at mouth.....			540		1,080	1,736
Pots, crab.....						30
Tongs.....					46	20
Rakes.....					6	
Grabs.....					84	

Fisheries of Georgia, 1930—Continued  
 OPERATING UNITS: BY COUNTIES—Continued

Item	Liberty	Long	McIntosh	Screven	Tattnall	Wayne
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....			2			
On boats and shore—						
Regular.....	22		51			
Casual.....		6	30	3	20	12
Total.....	22	6	83	3	20	12
Vessels:						
Motor—						
5 to 10 tons.....			1			
Total net tonnage.....			10			
Boats:						
Motor.....	1		19		1	
Other.....	20	3	32	3	18	12
Apparatus:						
Gill nets—						
Anchor.....		6		3		
Square yards.....		1, 180		1, 400		
Drift.....			13			12
Square yards.....			13, 300			2, 184
Runaround.....			3			
Square yards.....			750			
Stake.....					30	
Square yards.....					5, 460	
Fyke nets.....			60			
Otter trawls, shrimp			20			
Yards at mouth.....	1		20			
Shad.....	18		400			
Tongs.....	20		22			

CATCH: BY COUNTIES

Species	Bryan		Bullock		Camden		Charlton	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Hickory shad.....	2, 900	\$232	700	\$56	1, 200	\$96		
Menhaden.....					24, 701, 250	94, 100		
Shad.....	43, 400	8, 680	2, 800	360	18, 500	3, 700	12, 300	\$2, 460
Shrimp.....					1, 052, 000	41, 980		
Total.....	46, 300	8, 912	3, 500	416	25, 772, 950	139, 876	12, 300	2, 460

Species	Chatham		Glynn		Liberty		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	1, 012	\$227						
Catfish and bullheads.....	16, 000	740						
Croaker.....	3, 200	64	12, 300	\$246				
Drum:								
Black.....			1, 000	30				
Red or redfish.....			5, 250	210				
Flounders.....	300	15	8, 500	598				
Groupers.....	7, 354	441						
Grunts.....	390	32						
Hickory shad.....	6, 500	490	7, 700	616			600	\$48
Jewfish.....	4, 629	232						
King whiting or "kingfish".....	15, 000	300	23, 250	1, 163				
Mullet.....	91, 500	5, 440	76, 300	3, 815				
Sea bass.....	20, 840	2, 005	2, 000	80				
Shad.....	95, 005	19, 001	71, 500	14, 300			2, 100	420
Sheepshead.....			700	42				
Snapper:								
Mangrove.....	200	16						
Red.....	29, 854	2, 462						
Spot.....	2, 000	20	9, 950	199				
Squeteagues or "sea trout":								
Gray.....	1, 000	30	2, 000	100				
Spotted.....	150	12	48, 300	3, 880				



## Fisheries of Georgia, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Chatham		Glynn		Liberty		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Striped bass	500	\$100						
Sturgeon	1,500	300						
Crabs, hard			228,000	\$4,560				
Shrimp	2,897,614	114,904	3,642,098	145,684	54,000	\$2,160		
Clams, hard, public	2,240	350						
Oysters:								
Market, public, spring	10,140	690	4,408	300				
Market, public, fall	3,527	240	17,634	1,200				
Market, private, spring	33,075	1,423			17,634	2,000		
Market, private, fall	57,537	3,005						
Terrapin, diamond-back	14,500	4,000	5,200	1,040				
Total	3,315,567	156,539	4,166,090	178,063	71,634	4,160	2,700	\$46

Species	McIntosh		Screven		Tattnall		Wayne	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads	212,000	\$6,360						
Hickory shad	3,800	304			1,200	\$96	900	\$7
Mullet	9,000	540						
Shad	12,000	2,400	1,900	\$380	11,250	2,250	4,000	80
Sturgeon	3,000	600						
Shrimp	1,207,000	29,848						
Oysters, market, public, spring	15,430	1,750						
Total	1,462,230	41,802	1,900	380	12,450	2,346	4,900	872

## Industries related to the fisheries of Georgia, 1930

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Camden County	Chatham County	Glynn County	Liberty County	McIntosh County	Total
Establishments	4	13	6	3	3	29
Persons engaged:						
Proprietors	2	11	6	3	3	25
Salaried employees	4	20	2	1		27
Wage earners—						
A verage for season	212	292	336	33	217	1,090
A verage for year	92	198	74	9	34	407
Paid to salaried employees	\$5,000	\$61,040	\$6,700	\$900	\$1,901	\$75,541
Paid to wage earners	40,850	72,611	40,639	4,753	19,051	177,904
Total salaries and wages	45,850	133,651	47,339	5,653	20,952	253,445

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Shrimp, canned	standard cases	75,744
Oysters, canned	do	4,293
Miscellaneous <sup>1</sup>	( <sup>2</sup> )	172,18
Total		629,66

<sup>1</sup> Includes cooked peeled shrimp, crab meat, canned clam chowder, canned terrapin soup and meat products; and fresh-shucked oysters.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore they can not be correlated directly with the catch within the State.



## Fisheries of Florida, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Cast nets	Otter trawls, shrimp	Wire baskets	Pots			Spears	Dredges clam
				Crab	Eel	Sea crawfish		
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....		51						
On boats and shore—								
Regular.....		703	37	17	2	89	7	12
Casual.....	44	10	8	2			19	
Total.....	44	764	45	19	2	89	26	12
Vessels:								
Motor—								
5 to 10 tons.....		11						
11 to 20 tons.....		11						
Total.....		22						
Net tonnage.....		236						
Boats:								
Motor.....		305		13	2	68		
Other.....	19		45	12		29		
Apparatus:								
Number.....	44	327	520	1,383	90	2,533	26	
Yards at mouth.....		5,689						

  

Item	Dredges, scallop	Tongs	Forks	Hooks		Diving outfits	By hand	Total, exclusive of duplication
				Sea crawfish	Sponge			
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....								867
On boats and shore—								
Regular.....	3	389	46	50	334	412	39	6,176
Casual.....		31	12				96	737
Total.....	3	420	58	50	334	412	135	7,780
Vessels:								
Motor—								
5 to 10 tons.....								23
11 to 20 tons.....								30
21 to 30 tons.....								4
31 to 40 tons.....								4
41 to 50 tons.....								10
51 to 60 tons.....								7
61 to 70 tons.....								13
71 to 80 tons.....								3
81 to 90 tons.....								1
91 to 100 tons.....								1
101 to 110 tons.....								1
151 to 160 tons.....								1
Total.....								98
Net tonnage.....								3,174
Sail—								
51 to 60 tons.....								1
61 to 70 tons.....								3
131 to 140 tons.....								1
141 to 150 tons.....								1
Total.....								6
Net tonnage.....								527
Total vessels.....								104
Total net tonnage.....								3,701
Boats:								
Motor.....	1	131	3	50		55		2,332
Other.....		176	20	25	283		32	3,220
Accessory boats.....								21
Apparatus:								
Number.....	2	420	58	2,000	283	55		
Yards at mouth.....	2							

## Fisheries of Florida, 1930—Continued

## CATCH: BY GEAR

Species	Purse seines				Haul seines			
	Menhaden		Other		Common		Long	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....								
Black bass.....					15,899	\$1,490	362,800	\$5,442
Bluefish.....					251,204	7,054	193,308	19,174
Blue runner or hardtail.....					59,071	720		
Bonito.....					1,190	24		
Catfish and bullheads.....					396,056	16,874	2,902,291	124,824
Cigarfish.....					58,412	1,752		
Crappie.....					3,674	239	653,670	26,321
Crevalle.....					14,274	271		
Croaker.....					14,685	278		
Drum:								
Black.....					5,627	139		
Red or redfish.....					149,974	4,732	603	30
Flounders.....					48,848	2,044		
Hickory shad.....							28,428	852
Kingfish or "king mackerel".....					5,479	144		
King whiting or "kingfish".....					29,053	966		
Menhaden.....	39,863,848	\$169,956			50,322	1,490		
Mojarro.....					44,275	1,208		
Mullet.....			50,000	\$1,500	3,843,223	119,396		
Permit.....					11,450	325		
Pigfish.....					18,480	545		
Pinfish or sailors choice.....					200	6		
Pompano.....					66,690	11,528		
Sea bass.....					1,320	36		
Shad.....					295,000	35,400	143,647	17,316
Sheepshead.....					147,032	4,450		
Snapper, mangrove.....					21,549	617		
Snook or sergeantfish.....					240,644	6,673		
Spadefish.....					48,528	1,444		
Spanish mackerel.....					1,068,972	44,318		
Spot.....					9,530	246		
Squeteagues or "sea trout":								
Gray.....					13,133	700		
Spotted.....					415,838	27,837		
Sunfish.....					7,117	214	342,392	10,290
Tenpounder.....					158,689	4,595		
Yellowtail.....					400	20		
Turtles, soft-shell.....							11,578	235
Total.....	39,863,848	169,956	50,000	1,500	7,515,838	297,775	4,638,717	204,484

Species	Gill nets							
	Anchor		Drift		Runaround		Stake	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack.....					220	\$11		
Bluefish.....			9,732	\$708	683,954	44,188		
Blue runner or hardtail.....					77,834	1,510		
Catfish and bullheads.....					58,414	2,976		
Crevalle.....					74,862	2,134		
Croaker.....					16,835	412		
Drum:								
Black.....					27,017	700		
Red or redfish.....			1,000	50	630,191	20,720		
Eels.....					600	40		
Flounders.....					42,844	2,144		
Groupers.....					5,000	400		
Hickory shad.....			1,188	36				
Kingfish or "king mackerel".....					29,480	2,340		
King whiting or "kingfish".....			30,000	1,200	37,000	1,197		
Mojarro.....					35,000	1,200		
Mullet.....			98,111	4,853	17,225,111	518,878		
Muttonfish.....					44,035	2,703		
Permit.....					3,432	124		
Pigfish.....					43,675	1,056		
Pinfish or sailors choice.....					77,410	1,498		
Pompano.....					192,894	40,369		
Shad.....			439,384	75,963			1,701	\$335
Sharks.....	2,187,500	\$3,500						
Sheepshead.....					502,007	16,695		

## Fisheries of Florida, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Gill nets							
	Anchor		Drift		Runaround		Stake	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Snapper:								
Mangrove.....					59,931	\$2,414		
Red.....					2,094	209		
Snook or sergeantfish.....					104,485	3,792		
Spadefish.....					33	1		
Spanish mackerel.....			9,892	\$540	4,913,459	240,510		
Spot.....					133,026	3,766		
Squeteagues or "sea trout":								
Gray.....			1,200	120	510,458	36,870		
Spotted.....					1,503,508	105,300		
Sturgeon.....			3,191	310	4,207	765		
Tenpounder.....					22,672	618		
Yellowtail.....					400	16		
Crabs, hard.....					600	210		
Turtles, green.....	21,550	\$1,078						
Total.....	2,209,050	4,578	593,698	83,780	27,062,688	1,055,766	1,701	\$335

Species	Trammel nets		Lines							
			Hand		Troll		Trot, with baits or snoods			
			Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack.....			21,000	\$656						
Bluefish.....	2,210	\$84	7,200	720	137,200	\$10,944				
Blue runner or hardtail.....			2,200	40						
Cabio or crab eater.....			7,761	344						
Cero.....					9,950	480				
Crevalle.....			1,000	50	220	4				
Dolphin.....			5,000	500						
Drum:										
Black.....			1,980	54						
Red or redfish.....	15,598	550	206,326	7,376						
Flounders.....	2,145	135	790	28						
Groupers.....			3,059,582	91,788						
Grunts.....			21,883	657						
Hogfish.....			2,000	100						
Jewfish.....			26,050	782						
Kingfish or "king mackerel".....					3,592,500	169,336				
King whiting or "kingfish".....	880	24	3,000	120						
Mullet.....	775,342	23,261								
Muttonfish.....			176,004	12,443	5,000	300				
Pinfish or sailors choice.....			440	20						
Pompano.....	307,639	58,704								
Porgies.....			54,233	1,627						
Porkfish.....			600	36						
Sea bass.....			47,320	3,170						
Sheepshead.....	13,909	574	206,265	7,943						
Snapper:										
Mangrove.....			39,460	1,784						
Red.....			5,033,608	426,931						
Snook or sergeantfish.....			22,980	810						
Spanish mackerel.....			33,695	1,820	48,997	3,430				
Squeteagues or "sea trout":										
Gray.....			72,709	5,515						
Spotted.....	77,971	5,747	674,937	55,060						
Tripletail.....			4,869	168						
Turbot.....			900	54						
Yellowtail.....			88,670	6,635						
Crabs, hard.....							68,200	\$2,816		
Total.....	1,195,694	89,079	9,822,372	627,231	3,793,867	184,494	68,200	2,816		

## Fisheries of Florida, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Lines—Trot, with hooks		Pound nets		Fyke nets		Dip nets— Common	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives.....			2, 932	\$44				
Black bass.....					123, 879	\$10, 951		
Bluefish.....			62, 047	2, 256				
Blue runner or hardtail.....			615, 140	11, 730				
Cabio or crab eater.....			2, 546	93				
Catfish and bullheads.....	608, 900	\$29, 227	235, 640	11, 445	32, 400	1, 428		
Crapple.....			25, 340	1, 520	216, 292	6, 309		
Drum, red or redfish.....			18, 892	515				
Groupers.....			220	6				
Kingfish or "king mackerel".....			58, 406	3, 186				
Menhaden.....			500, 000	5, 000				
Mullet.....			1, 019	30				
Pompano.....			6, 130	1, 115				
Porgies.....			800	16				
Sheepshead.....			2, 920	106				
Snapper, mangrove.....			880	32				
Spanish mackerel.....			65, 202	3, 557				
Squeteagus or "sea trout": Spotted.....			118, 312	8, 597				
Sturgeon.....			1, 012	184				
Sunfish.....			36, 480	1, 094	48, 194	1, 445		
Sea crawfish or spiny lobster.....							140, 333	\$11, 227
Total.....	608, 900	29, 227	1, 753, 918	50, 526	420, 765	20, 133	140, 333	11, 227

Species	Dip nets— Drop		Cast nets		Otter trawls, shrimp		Wire baskets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....							112, 530	\$6, 138
Croaker.....					1, 500	\$45		
Drum, red or redfish.....					1, 300	60		
Eels.....							543	16
Flounders.....					4, 700	199		
King whiting or "kingfish".....					53, 200	1, 658		
Mojarro.....			2, 000	\$100				
Mullet.....			29, 000	1, 550				
Squeteagus or "sea trout": Gray.....					1, 700	150		
Crabs, hard.....	4, 095	\$117						
Sea crawfish or spiny lobster.....	10, 000	1, 000						
Shrimp.....					16, 848, 576	635, 506		
Total.....	14, 095	1, 117	31, 000	1, 650	16, 910, 976	637, 618	113, 073	6, 154

Species	Pots						Spears	
	Crab		Eel		Sea crawfish			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eels.....			16, 000	\$800				
Flounders.....							20, 374	\$1, 702
Crabs: Hard.....	38, 400	\$960						
Stone.....	190, 050	12, 670			114, 500	\$13, 660		
Sea crawfish or spiny lobster.....					137, 976	14, 504		
Total.....	228, 450	13, 630	16, 000	800	252, 476	28, 164	20, 374	1, 702

Species	Dredges				Tongs		Forks	
	Clam		Scallop					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Clams: Hard, public.....	565, 528	\$35, 346			21, 000	\$1, 050	97, 928	\$7, 630
Hard, private.....					21, 000	1, 050		
Oysters: Market, public, spring.....					723, 697	46, 342		
Market, public, fall.....					808, 603	75, 739		
Market, private, spring.....					11, 237	1, 213		
Market, private, fall.....					14, 478	1, 563		
Scallops, bay.....			3, 975	\$188				
Total.....	565, 528	35, 346	3, 975	188	1, 600, 015	126, 957	97, 928	7, 630



*Fisheries of Florida, 1930—Continued*  
OPERATING UNITS: BY COUNTIES—Continued

Item	Dixie	Duval	Escambia	Franklin	Glades	Gulf	Hendry	Hillsborough
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....		10	329	26		60		15
On boats and shore—								
Regular.....	20	197	174	497	122	123	5	84
Casual.....	8	50	6	14		6		8
<b>Total</b> .....	<b>28</b>	<b>257</b>	<b>509</b>	<b>537</b>	<b>122</b>	<b>189</b>	<b>5</b>	<b>107</b>
<b>Vessels:</b>								
<b>Motor—</b>								
5 to 10 tons.....		1		6				
11 to 20 tons.....		1	4	1				3
21 to 30 tons.....			1					
31 to 40 tons.....						1		
41 to 50 tons.....			7					
51 to 60 tons.....			6					
61 to 70 tons.....			9			1		
71 to 80 tons.....			3					
91 to 100 tons.....			1					
101 to 110 tons.....			1					
<b>Total</b> .....		<b>2</b>	<b>32</b>	<b>7</b>		<b>2</b>		<b>3</b>
Net tonnage.....		<b>18</b>	<b>1,744</b>	<b>51</b>		<b>96</b>		<b>36</b>
<b>Sail—</b>								
51 to 60 tons.....			1					
61 to 70 tons.....			3					
131 to 140 tons.....			1					
141 to 150 tons.....			1					
<b>Total</b> .....			<b>6</b>					
Net tonnage.....			<b>527</b>					
<b>Total vessels</b> .....		<b>2</b>	<b>38</b>	<b>7</b>		<b>2</b>		<b>3</b>
<b>Total net tonnage</b> .....		<b>18</b>	<b>2,271</b>	<b>51</b>		<b>96</b>		<b>36</b>
<b>Boats:</b>								
Motor.....	5	81	53	181	41	21	2	34
Other.....	28	121	34	102	44	8	3	67
<b>Apparatus:</b>								
Purse seines—								
Menhaden.....						10		
Length, yards.....						2,960		
Haul seines—								
Common.....		12	5	10		8		
Length, yards.....		3,000	1,770	3,750		3,200		
Long.....						19		
Length, yards.....						18,000	1	900
Gill nets—								
Drift.....		143		6				
Square yards.....		200,200		6,000				
Runaround.....	15	17	12	33		9		50
Square yards.....	5,375	23,800	72,000	21,090		24,000		37,085
Trammel nets.....			26					
Square yards.....			13,520					
Lines—								
Hand.....	28	35	393	57		6		42
Hooks.....	28	70	1,115	114		6		63
Trot, with baits or snoods.....		6						
Baits or snoods.....		900						
Trot, with hooks.....		38		20	1			
Hooks.....		12,400		1,800	500			
Pound nets.....							3	
Fyke nets.....					1,700	100		
Dip nets, drop.....			6					
Cast nets.....		25						
Otter trawls, shrimp.....		16	4	65				
Yards at mouth.....		320	48	771				
Wire baskets.....				520				
Spears.....				9				
Dredges, scallop.....				2				
Yards at mouth.....				2				
Tongs.....			29	196				



## Fisheries of Florida, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Indian River	Jefferson	Lee	Levy	Manatee	Martin	Monroe	Nassau
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels.....							5	179
On boats and shore—								
Regular.....	54	11	88	153	119	30	493	121
Casual.....		8	42	28	8	10	18	23
Total.....	54	19	130	181	127	40	516	323
Vessels:								
Motor—								
5 to 10 tons.....							1	3
11 to 20 tons.....								5
31 to 40 tons.....								1
41 to 50 tons.....								1
51 to 60 tons.....								1
81 to 90 tons.....								1
151 to 160 tons.....								1
Total.....							1	13
Net tonnage.....							6	475
Boats:								
Motor.....	30	3	56	68	56	20	146	38
Other.....	29	18	113	149	94	5	333	41
Accessory boats.....								19
Apparatus:								
Purse seines—								
Menhaden.....								7
Length, yards.....								2,000
Haul seines—								
Common.....			6		7			
Length, yards.....			2,100		1,850			
Gill nets—								
Anchor.....							42	
Square yards.....							25,200	
Drift.....								10
Square yards.....								2,250
Runaround.....	49	11	80	90	100	30	89	2
Square yards.....	47,700	6,425	58,190	36,365	126,200	36,000	166,150	1,800
Stake.....								2
Square yards.....								1,080
Trammel nets.....			4	12	7			
Square yards.....			5,000	2,025	4,640			
Lines—								
Hand.....	5	18	48	49	26		68	30
Hooks.....	10	18	48	49	26		68	60
Troll.....	30		24	20	30	20	102	
Hooks.....	30		24	20	30	40	102	
Pound nets.....				12				
Dip nets, common.....							62	
Otter trawls, shrimp.....								44
Yards at mouth.....								880
Pots—								
Crab.....					60			
Sea crawfish.....							253	
Tongs.....				33				
Forks.....					1			
Hooks, sponge.....							232	

Item	Ocala	Okechobee	Palm Beach	Pasco	Pinellas	Putnam	St. Johns	St. Lucie
	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:								
On vessels.....					62		20	2
On boats and shore—								
Regular.....	120	37	250	28	805	244	210	184
Casual.....			18		119			
Total.....	120	37	268	28	986	244	230	186
Vessels:								
Motor—								
5 to 10 tons.....					2		4	
11 to 20 tons.....					4		4	1
21 to 30 tons.....					1			
31 to 40 tons.....					2			
Total.....					9		8	1
Net tonnage.....					172		99	16

Fisheries of Florida, 1930—Continued

OPERATING UNITS: BY COUNTIES—Continued

Item	Oka- loosa	Okee- chobee	Palm Beach	Pasco	Pinellas	Put- nam	St. Johns	St. Lucie
<b>Boats:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Motor.....	29	8	130	14	167	80	77	92
Other.....	28	27	25	28	294	151	19	40
<b>Apparatus:</b>								
Haul seines—								
Common.....	14				10			
Length, yards.....	5,600				4,150			
Long.....		8				50		
Length, yards.....		6,400				37,700		
Gill nets—								
Drift.....					14	38	1	
Square yards.....					8,400	113,000	600	
Runaround.....	2		84	28	260		6	126
Square yards.....	712		168,000	17,460	451,760		3,000	207,940
Trammel nets.....	32				3			
Square yards.....	17,088				2,250			
Lines—								
Hand.....	56				181		10	
Hooks.....	112				283		20	
Troll.....			210		86			168
Hooks.....			420		121			168
Trot, with hooks.....		2				36		
Hooks.....		600				11,640		
Pound nets.....						37		
Fyke nets.....		1,030				120		
Cast nets.....			15					
Otter trawls, shrimp.....							85	51
Yards at mouth.....							1,700	740
Pots—								
Crab.....					1,285			
Eel.....						90		
Sea crawfish.....							40	
Spears.....	2							
Tongs.....	2							6
Forks.....					12		15	
Hooks, sponge.....					51			
Diving outfits.....					55			

Item	Santa Rosa	Sara- sota	Semi- nole	Taylor	Volusia	Wa- kulla	Walton
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....					4		
On boats and shore—							
Regular.....	12	204	98	66	140	167	10
Casual.....	6	35		45	23	35	
Total.....	18	239	98	111	167	202	10
<b>Vessels:</b>							
Motor—							
5 to 10 tons.....					1		
11 to 20 tons.....					1		
Total.....					2		
Net tonnage.....					16		
<b>Boats:</b>							
Motor.....	6	101		16	64	42	3
Other.....	5	207	98	111	65	131	5
<b>Apparatus:</b>							
Haul seines—							
Common.....		24	20		2	4	
Length, yards.....		8,400	3,600		300	1,200	
Long.....					2		
Length, yards.....					1,200		
Gill nets—							
Runaround.....		220		62	23	117	
Square yards.....		390,740		23,450	17,250	60,050	
Trammel nets.....	5	10				40	5
Square yards.....	2,200	25,500				14,000	1,500

## Fisheries of Florida, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Santa Rosa	Sarasota	Seminole	Taylor	Volusia	Wa-kulla	Walton
Apparatus—Continued.							
Lines—	Number	Number	Number	Number	Number	Number	Number
Hand.....		41		85	12		
Hooks.....		41		85	24		
Troll.....		221					
Hooks.....		221					
Trot, with baits or snoods.....					2		
Baits or snoods.....					800		
Trot, with hooks.....			98				
Hooks.....			58,800				
Cast nets.....					4		
Otter trawls, shrimp.....					48		
Yards at mouth.....					960		
Spears.....	8						
Tongs.....	8				30	12	
Forks.....					15		

## CATCH: BY COUNTIES

Species	Bay		Brevard		Broward		Charlotte	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....	143,902	\$2,904	83,230	\$6,363	2,000	\$200	93,025	\$5,197
Blue runner or hardtail.....	4,950	90					18,535	341
Bonito.....							990	18
Cabio or crab eater.....							6,545	298
Catfish and bullheads.....			32,000	1,280				
Cigarfish.....	30,000	900						
Crevalle.....			4,200	126	1,000	50	11,880	221
Croaker.....			1,500	45			5,885	120
Dolphin.....					5,000	500		
Drum:								
Black.....			7,515	220			440	12
Red or redfish.....	5,230	167	43,585	2,043			171,590	6,918
Flounders.....	3,850	252	1,700	44			32,230	1,178
Groupers.....	711,571	21,350			10,000	300	5,720	172
Grunts.....							4,300	129
Jewfish.....							2,600	78
Kingfish or "king mackerel".....			1,800	90	140,000	8,100	37,114	1,707
King whiting or "kingfish".....			10,100	354			7,040	192
Menhaden.....	25,000	750						
Mojarro.....							44,275	1,208
Mullet.....	544,328	18,078	1,379,870	35,075			3,762,776	112,883
Muttonfish.....					5,000	750	24,804	1,057
Permit.....							12,352	370
Pigfish.....			4,189	84			16,880	506
Pinfish or sailors choice.....			52,270	895				
Pompano.....	1,354	246	13,256	2,816			128,587	23,146
Porgies.....	8,800	264						
Sheepshead.....	5,665	172	69,698	2,172			158,115	5,885
Snapper:								
Mangrove.....			1,500	75			37,939	1,140
Red.....	870,940	69,678						
Snook or sergeantfish.....			4,000	160			94,644	2,581
Spadefish.....							46,306	1,389
Spanish mackerel.....	533,407	20,350	26,000	1,820	500	75	458,062	20,826
Spot.....			62,808	1,592			5,830	159
Squeteagues or "sea trout":								
Gray.....			332,619	22,787				
Spotted.....	62,346	4,374					613,888	43,044
Tenpounder.....	90,000	2,700						
Tripletail.....							1,100	40
Yellowtail.....							6,600	312
Crabs, hard.....			39,000	1,170				
Sea crawfish or spiny lobster.....					15,000	3,000		
Shrimp.....	10,000	800	405,000	16,200				
Oysters:								
Market, public, spring.....	70,932	5,994					4,250	375
Market, public, fall.....	92,582	8,169					7,140	525
Total.....	3,214,857	157,238	2,575,840	95,411	178,500	12,975	5,821,442	232,027

## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Citrus		Clay		Collier		Dade	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack							2,500	\$100
Black bass			15,899	\$1,490				
Bluefish	7,855	\$286			1,925	\$88	15,000	1,500
Blue runner or hardtail					15,675	285	7,000	140
Catfish and bullheads			444,708	19,397				
Cero							5,000	300
Crappie			3,674	239				
Crevalle					1,650	36	5,000	150
Drum:								
Black					440	12		
Red or redfish	54,682	1,491			90,640	2,472	7,000	280
Flounders	682	37			880	38		
Groupers	2,250	68			3,500	105	30,000	900
Grunts					2,500	75	7,000	210
Hogfish							2,000	100
Jewfish					400	12	8,000	240
Kingfish or "king mackerel"	1,896	103					900,000	40,500
King whiting or "kingfish"					1,650	30		
Mullet	1,150,695	34,521			771,344	15,427	450,000	9,500
Muttonfish							100,000	7,000
Permit					880	24		
Pigfish	660	18			2,300	69		
Pompano	198	36			75,930	15,186	8,000	1,600
Porgies							8,000	240
Sheepshead	13,676	505			106,132	3,037	2,000	80
Snapper:								
Mangrove	12,633	345					3,000	180
Red							14,000	1,120
Snook or sergeantfish					50,283	1,371		
Spanish mackerel	1,320	72			159,049	7,230	900,000	45,000
Spot					440	8		
Squeteagues or "sea trout":								
Gray							24,000	2,400
Spotted	131,416	10,247			79,838	4,860		
Sunfish			7,117	214				
Tenpounder	22,491	613						
Tripletail					440	12		
Yellowtail					4,900	245	40,000	3,200
Crabs, stone							103,000	12,800
Sea crawfish or spiny lobster							90,000	9,000
Clams, hard, public					645,528	40,346		
Oysters:								
Market, public, spring	18,923	1,270						
Market, public, fall	57,410	3,853						
Total	1,476,787	53,465	471,398	21,340	2,016,324	90,962	2,730,500	136,540

Species	Dixie		Duval		Escambia		Franklin	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack			220	\$11			1,400	\$42
Bluefish	2,640	\$96	4,500	450	46,215	\$1,337	63,685	2,252
Blue runner or hardtail					25,931	236	2,200	40
Cabio or crab eater					314	13		
Catfish and bullheads			69,000	3,450			218,592	11,086
Crevalle			233	10				
Croaker			3,000	90	2,200	40		
Drum:								
Black			2,500	75	2,107	57	440	12
Red or redfish	5,280	192	3,000	190	6,633	181	29,585	813
Eels							543	16
Flounders	1,650	90	1,296	65	1,556	113	10,345	652
Groupers					1,312,024	39,353	299,226	8,977
Jewfish					2,095	63	1,800	54
Kingfish or "king mackerel"					2,439	44		
King whiting or "kingfish"			48,700	1,948	423	8	3,300	90
Menhaden							7,000	210
Mullet	132,410	5,296	97,833	4,892	363,592	10,908	960,050	28,801
Pigfish	500	15			660	12		
Pompano	2,970	540	1,133	226	10,266	1,867	1,606	292
Porgies					9,313	282	6,000	180
Sea bass			44,000	3,080			1,320	36

## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Dixie		Duval		Escambia		Franklin	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Shad.....			262,875	\$48,817				
Sheepshead.....	5,060	\$230	1,000	80	4,423	\$201	2,183	\$65
Snapper, red.....			10,936	1,093	2,902,878	256,221	374,761	30,081
Snook or sergeantfish.....			1,360	136				
Spadefish.....					62	1	220	4
Spanish mackerel.....	3,740	204	3,000	300	315,941	9,479	45,236	1,628
Spot.....	220	6	12,960	390	80	1	440	12
Squeteagues or "sea trout":								
Gray.....			6,200	520	66	1		
Spotted.....	38,108	2,771	26,809	2,680	9,692	705	74,380	5,410
Sturgeon.....							3,041	276
Tenpounder.....							17,359	495
Tripletail.....							2,009	80
Crabs, hard.....			48,400	2,420	4,095	117		
Shrimp.....			1,145,714	45,828	14,718	1,472	1,564,261	61,853
Oysters:								
Market, public, spring.....					62,492	5,514	523,637	29,386
Market, public, fall.....					72,830	6,435	515,577	51,202
Scallops, bay.....							3,975	188
Total.....	192,578	9,440	1,794,669	116,751	5,173,045	334,661	4,734,171	234,233

  

Species	Glades		Gulf		Hendry		Hillsborough	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Black bass.....	155,935	\$14,035			5,400	\$432		
Bluefish.....			77,000	\$2,800			220	\$12
Blue runner or hardtail.....			300,000	6,000				
Catfish and bullheads.....	1,191,330	47,653			84,000	3,360		
Crappie.....	499,410	14,802			5,100	153		
Crevalle.....							932	17
Croaker.....			880	8				
Drum, red or redfish.....			7,700	280			36,803	1,346
Flounders.....			3,850	185			17,622	960
Groupers.....							209,185	6,282
Grunts.....							37	1
Kingfish or "king mackerel".....			1,100	50				
Menhaden.....			6,123,440	29,076				
Mullet.....			411,350	16,454			542,605	17,278
Pompano.....			21,102	2,891			3,175	597
Porgies.....							1,200	36
Sheepshead.....			2,750	100			21,233	782
Snapper:								
Mangrove.....							660	18
Red.....							225,123	18,010
Snook or sergeantfish.....							24,585	670
Spadefish.....							33	1
Spanish mackerel.....			248,094	13,532			1,760	96
Spot.....			220	6			134	2
Squeteagues or "sea trout":								
Gray.....							2,233	61
Spotted.....			34,585	2,563			136,373	10,108
Sunfish.....	103,652	3,109			8,200	246		
Tenpounder.....			12,000	240			181	5
Total.....	1,950,327	79,599	7,244,071	74,185	102,700	4,191	1,224,094	56,282

## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Indian River		Jefferson		Lee		Levy	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	6,700	\$804			4,765	\$217	89,133	\$3,245
Blue runner or hardtail					990	18	320,552	5,828
Cabio or crab eater							2,546	93
Crevalle	9,800	294						
Croaker	3,000	68			1,650	30		
Drum:								
Black	3,600	108					2,640	72
Red or redfish	6,300	287	10,175	\$370	49,665	1,355	76,667	2,091
Eels	600	40						
Flounders					2,035	92	2,970	162
Groupers							8,710	261
Kingfish or "king mackerel"	4,000	240			26,769	1,217	208,103	11,351
King whiting or "kingfish"	16,500	570			440	8		
Mullet	300,669	9,020	171,050	6,862	756,349	25,744	892,958	26,788
Muttonfish	18,000	720						
Pigfish	2,800	84			1,200	36		
Pinfish or sailors choice	11,600	232						
Pompano	18,233	4,257			17,600	3,520	19,957	3,647
Porgies							1,050	21
Sea bass							3,320	90
Sheepshead	7,300	292	4,840	188	64,361	1,996	40,979	1,540
Snapper, mangrove	12,400	739	990	36	2,600	96	2,930	112
Snook or sergeantfish	27,000	1,080			20,582	561		
Spanish mackerel	22,997	1,610			89,476	4,067	79,294	4,411
Spot	42,000	1,260	220	6			704	13
Squeteagues or "sea trout":								
Gray	83,695	8,370						
Spotted			39,138	2,846	138,838	7,819	314,947	23,794
Sturgeon							5,219	949
Yellowtail					1,720	64		
Oysters:								
Market, public, spring					1,275	112	12,446	980
Market, public, fall					2,550	225	15,773	1,242
Total	597,194	30,075	226,413	10,308	1,182,865	47,177	2,100,898	86,690

Species	Manatee		Martin		Monroe		Nassau	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	16,297	\$1,131	32,449	\$4,543	16,720	\$900	800	\$80
Blue runner or hardtail	2,090	38			11,789	214		
Cabio or crab eater	660	24						
Cero					4,950	180		
Crevalle	990	18	15,000	600	1,980	36		
Croaker	1,320	36	500	15			100	4
Drum:								
Black	440	12	500	15	440	12		
Red or redfish	135,918	4,952	2,000	80	22,770	633	100	3
Flounders	990	54			550	25	3,000	150
Groupers	2,500	75			27,000	810		
Grunts	400	12			5,700	171		
Jewfish					8,800	264		
Kingfish or "king mackerel"	5,720	312	59,585	2,979	852,340	31,012		
King whiting or "kingfish"			600	24			20,250	610
Menhaden							34,242,408	145,920
Mojarro			15,000	600				
Mullet	1,402,800	52,352	364,617	10,939	524,208	11,884		
Muttonfish			24,035	1,923	46,200	3,636		
Permit	1,100	40						
Pigfish	1,000	40			600	18		
Pinfish or sailors choice					440	20		
Pompano	22,980	4,160	35,004	8,751	2,382	325		
Porgies	800	24			1,500	45		
Porkfish					600	36		
Shad							14,301	2,825
Sharks					2,187,500	3,500		
Sheepshead	64,790	2,407	7,530	452	21,450	691		
Snapper:								
Mangrove	1,760	64	5,000	300	16,500	900		
Red					27,000	2,160	7,000	490
Snook or sergeantfish	65,112	1,887	3,000	180				
Spanish mackerel	209,981	11,562			1,136,503	42,255		
Spot	440	12	8,000	320	880	32	200	8

## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Dixie		Duval		Escambia		Franklin	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Shad			262, 875	\$48, 817				
Sheepshead	5, 060	\$230	1, 000	80	4, 423	\$201	2, 183	\$65
Snapper, red			10, 936	1, 093	2, 902, 878	256, 221	374, 761	30, 081
Snook or sergeantfish			1, 360	136				
Spadefish					62	1	220	4
Spanish mackerel	3, 740	204	3, 000	300	315, 941	9, 479	45, 236	1, 628
Spot	220	6	12, 960	390	80	1	440	12
Squeteagues or "sea trout":								
Gray			6, 200	520	66	1		
Spotted	38, 108	2, 771	26, 809	2, 680	9, 692	705	74, 380	5, 410
Sturgeon							3, 041	276
Tenpounder							17, 359	495
Tripletail							2, 009	80
Crabs, hard			48, 400	2, 420	4, 095	117		
Shrimp			1, 145, 714	45, 828	14, 718	1, 472	1, 564, 261	61, 853
Oysters:								
Market, public, spring					62, 492	5, 514	523, 637	29, 386
Market, public, fall					72, 830	6, 435	515, 577	51, 202
Scallops, bay							3, 975	188
Total	192, 578	9, 440	1, 794, 669	116, 751	5, 173, 045	334, 661	4, 734, 171	234, 233

  

Species	Glades		Gulf		Hendry		Hillsborough	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Black bass	155, 935	\$14, 035			5, 400	\$432		
Bluefish			77, 000	\$2, 800			220	\$12
Blue runner or hardtail			300, 000	6, 000				
Catfish and bullheads	1, 191, 330	47, 653			84, 000	3, 360		
Crappie	499, 410	14, 802			5, 100	153		
Crevalle							932	17
Croaker			880	8				
Drum, red or redfish			7, 700	280			36, 803	1, 346
Flounders			3, 850	185			17, 622	960
Groupers							209, 185	6, 282
Grunts							37	1
Kingfish or "king mackerel"			1, 100	50				
Menhaden			6, 123, 440	29, 076				
Mullet			411, 350	16, 454			542, 605	17, 278
Pompano			21, 102	2, 891			3, 175	597
Porgies							1, 200	36
Sheepshead			2, 750	100			21, 233	782
Snapper:								
Mangrove							660	18
Red							225, 123	18, 010
Snook or sergeantfish							24, 585	670
Spadefish							33	1
Spanish mackerel			248, 094	13, 532			1, 760	96
Spot			220	6			134	2
Squeteagues or "sea trout":								
Gray							2, 233	61
Spotted			34, 585	2, 563			136, 373	10, 108
Sunfish	103, 652	3, 109			8, 200	246		
Tenpounder			12, 000	240			181	5
Total	1, 950, 327	79, 599	7, 244, 071	74, 185	102, 700	4, 191	1, 224, 094	56, 282

## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Indian River		Jefferson		Lee		Levy	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	6,700	\$804			4,765	\$217	89,133	\$3,245
Blue runner or hardtail					990	18	320,552	5,828
Cabio or crab eater							2,546	93
Crevalle	9,800	294						
Croaker	3,000	68			1,650	30		
Drum:								
Black	3,600	108					2,640	72
Red or redfish	6,300	287	10,175	\$370	49,665	1,355	76,667	2,091
Eels	600	40						
Flounders					2,035	92	2,970	162
Groupers							8,710	261
Kingfish or "king mackerel"	4,000	240			26,769	1,217	208,103	11,351
King whiting or "kingfish"	16,500	570			440	8		
Mullet	300,669	9,020	171,050	6,862	756,349	25,744	892,958	26,788
Muttonfish	18,000	720						
Pigfish	2,800	84			1,200	36		
Pinfish or sailors choice	11,600	232						
Pompano	18,233	4,257			17,600	3,520	19,957	3,647
Porgies							1,050	21
Sea bass							3,320	90
Sheepshead	7,300	292	4,840	188	64,361	1,996	40,979	1,540
Snapper, mangrove	12,400	739	990	36	2,600	96	2,930	112
Snook or sergeantfish	27,000	1,080			20,582	561		
Spanish mackerel	22,997	1,610			89,476	4,067	79,294	4,411
Spot	42,000	1,260	220	6			704	13
Squeteagues or "sea trout":								
Gray	83,695	8,370						
Spotted			39,138	2,846	138,838	7,819	314,947	23,794
Sturgeon							5,219	949
Yellowtail					1,720	64		
Oysters:								
Market, public, spring					1,275	112	12,446	980
Market, public, fall					2,550	225	15,773	1,242
Total	597,194	30,075	226,413	10,308	1,182,865	47,177	2,100,898	86,690

Species	Manatee		Martin		Monroe		Nassau	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish	16,207	\$1,131	32,449	\$4,543	16,720	\$900	800	\$80
Blue runner or hardtail	2,090	38			11,789	214		
Cabio or crab eater	660	24						
Cero					4,950	180		
Crevalle	990	18	15,000	600	1,980	36		
Croaker	1,320	36	500	15			100	4
Drum:								
Black	440	12	500	15	440	12		
Red or redfish	135,918	4,952	2,000	80	22,770	633	100	3
Flounders	990	54			550	25	3,000	150
Groupers	2,500	75			27,000	810		
Grunts	400	12			5,700	171		
Jewfish					8,800	264		
Kingfish or "king mackerel"	5,720	312	59,585	2,979	852,340	31,012		
King whiting or "kingfish"			600	24			20,250	610
Menhaden							34,242,408	145,920
Mojarro			15,000	600				
Mullet	1,402,800	52,352	364,617	10,939	524,208	11,884		
Muttonfish			24,035	1,923	46,200	3,636		
Permit	1,100	40						
Pigfish	1,000	40			600	18		
Pinfish or sailors choice					440	20		
Pompano	22,980	4,160	35,004	8,751	2,382	325		
Porgies	800	24			1,500	45		
Porkfish					600	36		
Shad							14,301	2,825
Sharks					2,187,500	3,500		
Sheepshead	64,790	2,407	7,530	452	21,450	691		
Snapper:								
Mangrove	1,760	64	5,000	300	16,500	900		
Red					27,000	2,160	7,000	490
Snook or sergeantfish	65,112	1,887	3,000	180				
Spanish mackerel	209,981	11,562			1,136,503	42,255		
Spot	440	12	8,000	320	880	32	200	8



## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Manatee		Martin		Monroe		Nassau	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Squeteagues or "sea trout":								
Gray							2,500	\$250
Spotted	184,850	\$13,845	11,762	\$1,176	46,156	\$2,663	15,000	1,500
Sturgeon							150	34
Tripletail					1,320	36		
Turbot					900	54		
Yellowtail					36,250	2,850		
Crabs, stone	45,000	3,000			14,500	1,160		
Sea crawfish or spiny lobster					180,000	14,400		
Shrimp							3,229,533	129,179
Clams:								
Hard, public	9,600	1,200						
Hard, private							2,688	840
Conchs					20,000	200		
Oysters:								
Market, public, spring							64,224	4,954
Market, public, fall							64,820	5,000
Market, private, spring							24,308	1,850
Market, private, fall							64,820	5,000
Turtles, green					21,550	1,078		
Sponges:								
Grass					20,908	6,710		
Sheepswool					50,520	63,121		
Velvet					682	409		
Wire					490	110		
Yellow					29,814	7,372		
Total	2,177,457	97,257	584,582	32,897	5,341,892	199,922	37,756,202	298,697

Species	Okaloosa		Okeechobee		Palm Beach		Pasco	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Amberjack	100	\$4						
Black bass			56,166	\$4,493				
Bluefish	28,861	866			226,000	\$18,300	1,760	\$96
Blue runner or hardtail	18,400	184			10,000	200		
Bonito	200	6						
Catfish and bullheads			567,200	22,768				
Cigarfish	28,412	852						
Crappie			143,464	4,304				
Crevalle					10,000	300		
Croaker					2,000	60		
Drum:								
Black	200	6						
Red or redfish	6,344	302			1,000	50	20,350	555
Flounders	5,119	425						
Groupers	51,847	1,555			5,000	400		
Jewfish	700	21						
Kingfish or "king mackerel"	1,500	30			655,000	32,750		
King whiting or "kingfish"	500	10			3,000	90		
Menhaden	16,322	490						
Mojarro					2,000	100		
Mullet	236,703	7,101			14,000	700	500,752	15,023
Muttonfish					7,000	360		
Pompano	11,269	2,254			16,500	3,550		
Porgies	14,970	449						
Sheepshead	3,700	195			1,000	40	880	32
Snapper:								
Mangrove					1,500	75	7,150	260
Red	34,516	2,761						
Snook or sergeantfish					2,000	80		
Spadefish	400	8						
Spanish mackerel	160,574	4,817			650,000	39,000	4,950	225
Spot	900	18						
Squeteagues or "sea trout":								
Gray					1,500	120		
Spotted	23,542	1,727					17,586	1,279
Sunfish			47,375	1,421				
Tenpounder	32,180	965						
Oysters, market, public, fall	5,100	450						
Total	682,359	25,496	814,205	32,986	1,607,500	96,175	553,428	17,470

Fisheries of Florida, 1930—Continued

CATCH: BY COUNTIES—Continued

Species	Pinellas		Putnam		St. Johns		St. Lucie	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Alewives			365, 732	\$5, 486				
Amberjack	17, 000	\$510						
Black bass			97, 286	10, 925				
Bluefish	109, 826	6, 463			4, 350	\$435	25, 000	\$2, 750
Blue runner or hardtail	243	4					5, 000	100
Cabio or crab eater	242	9						
Catfish and bullheads			1, 383, 401	66, 118				
Crappie			241, 128	14, 519				
Crevalle	1, 171	27					20, 000	400
Croaker							3, 000	60
Drum:								
Black	462	13					10, 000	200
Red or redfish	57, 022	1, 742	603	30	160	6	15, 000	300
Eels			16, 000	800				
Flounders	8, 754	392			4, 800	197		
Groupers	379, 742	11, 390						
Grunts	146	5						
Hickory shad			29, 616	888				
Jewfish	1, 655	50						
Kingfish or "king mackerel"	101, 268	5, 524			22, 000	1, 980	500, 000	25, 000
King whiting or "kingfish"					3, 250	97	10, 000	300
Mojarro							20, 000	600
Mullet	2, 127, 345	64, 893	5, 278	211	9, 500	475		
Pigfish	3, 410	93						
Pinfish or sailors choice					10, 000	300		
Pompano	27, 272	4, 969			3, 200	640	40, 000	8, 000
Porgies	2, 500	75						
Shad			306, 156	41, 692	1, 400	280		
Sheepshead	27, 683	1, 085			5, 540	322	30, 000	1, 200
Snapper:								
Mangrove	8, 170	300						
Red	566, 454	45, 317			2, 094	209		
Snook or sergeantfish	15, 631	426					40, 000	1, 600
Spadefish	220	6						
Spanish mackerel	392, 095	20, 300			640	64	425, 000	25, 500
Spot	440	12						
Squeteagues or "sea trout":								
Gray	8, 767	259					15, 000	1, 200
Spotted	316, 633	24, 136			26, 050	2, 600		
Sunfish			249, 839	7, 513				
Tenpounder	7, 150	195						
Crabs, stone	145, 050	9, 670						
Sea crawfish or spiny lobster					3, 309	331		
Shrimp					5, 743, 500	229, 740	2, 272, 450	63, 898
Clams, hard, public	4, 848	727			4, 152	778		
Oysters:								
Market, public, spring					972	60	10, 371	1, 120
Market, public, fall					2, 269	140	10, 195	1, 155
Scallops, bay	15, 295	1, 657						
Terrapin, diamond-back					406	83		
Turtles, soft-shell			11, 578	235				
Sponges:								
Grass	62, 010	19, 846						
Sheepswool	319, 945	795, 578						
Wire	3, 291	1, 931						
Yellow	61, 341	35, 583						
Total	4, 793, 081	1, 053, 187	2, 706, 617	148, 417	5, 847, 592	238, 737	3, 451, 016	133, 383

Species	Santa Rosa		Sarasota		Seminole		Taylor	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish			25, 839	\$1, 879			8, 580	\$312
Blue runner or hardtail			9, 240	252				
Catfish and bullheads					300, 000	\$15, 000		
Crevalle			1, 320	24				
Croaker			3, 850	70				
Drum:								
Black			1, 100	22				
Red or redfish	3, 520	\$160	79, 564	2, 195			32, 395	1, 178
Flounders	9, 262	840	4, 125	182			1, 650	90
Groupers			6, 527	196				

## Fisheries of Florida, 1930—Continued

## CATCH: BY COUNTIES—Continued

Species	Santa Rosa		Sarasota		Seminole		Taylor	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Grunts			1,800	\$54				
Kingfish or "king mackerel"			165,231	12,017				
Mullet	143,800	\$4,314	1,521,895	45,657			360,100	\$14,404
Permit			550	15				
Pigfish			7,490	217				
Pompano			86,744	17,348			4,180	760
Porgies			900	27				
Shad					295,000	\$35,400		
Sheepshead	440	20	170,147	4,749			15,950	725
Snapper, mangrove			3,388	93			3,300	90
Snook or sergeantfish			19,912	543				
Spadefish			1,320	36				
Spanish mackerel			269,958	19,632			2,640	120
Spot			550	15			990	20
Squeteagues or "sea trout":								
Spotted	4,180	380	169,217	12,298			108,446	7,587
Clams, hard, public			1,760	264				
Oysters:								
Market, public, spring	7,208	636						
Market, public, fall	13,260	1,170						
Scallops, bay			2,597	294				
Total	181,670	7,520	2,555,024	118,079	595,000	50,400	538,231	25,286

Species	Volusia		Wakulla		Walton	
	Pounds	Value	Pounds	Value	Pounds	Value
Black bass	2,400	\$240				
Bluefish	400	40	14,960	\$408		
Blue runner or hardtail			1,650	30		
Catfish and bullheads	56,000	2,800				
Crappie	6,200	372				
Crevalle	5,200	156				
Croaker	1,200	36	2,935	53		
Drum:						
Black	1,800	45				
Red or redfish	7,816	292	33,137	1,004	1,650	\$75
Flounders	200	8	330	9	165	12
King whiting or "kingfish"	26,500	810			880	24
Mullet	281,800	8,754	1,750,729	52,522	90,400	2,712
Pigfish	20,466	409				
Pinfish or sailors choice	3,740	77				
Pompano	400	80			55	12
Sheepshead	1,100	44	11,188	421	1,320	60
Snapper, mangrove	400	24				
Spot	4,100	120				
Squeteagues or "sea trout":						
Gray	122,620	7,387				
Spotted			155,502	11,309	11,275	820
Sunfish	18,000	540				
Crabs, hard	19,800	396				
Shrimp	2,463,400	86,536				
Clams:						
Hard, public	22,000	1,225				
Hard, private	21,000	1,050				
Oysters:						
Market, public, spring	5,618	607	7,820	460		
Market, public, fall	8,859	957	9,877	581		
Market, private, spring	11,237	1,213				
Market, private, fall	14,478	1,563				
Total	3,126,734	115,781	1,988,128	66,797	105,745	3,715

## Fisheries of Florida, 1930—Continued

## CATCH: BY DISTRICTS

Species	East Coast		West Coast		Lake Okeechobee	
	Pounds	Value	Pounds	Value	Pounds	Value
Alewives	365,732	\$5,486				
Amberjack	2,720	111	18,500	\$556		
Black bass	115,585	12,655			217,501	\$18,960
Bluefish	400,429	35,465	753,118	30,489		
Blue runner	22,000	440	732,245	13,560		
Bonito			1,190	24		
Cabio			10,307	437		
Catfish and bullheads	2,285,109	108,045	218,592	11,086	1,842,530	73,781
Cero	5,000	300	4,950	180		
Cigarfish			58,412	1,752		
Crappie	251,002	15,130			647,974	19,259
Crevalle	70,433	2,086	19,923	373		
Croaker	14,300	378	18,720	357		
Dolphin	5,000	500				
Drum:						
Black	25,915	663	8,709	230		
Red or redfish	86,564	3,561	937,320	30,472		
Eels	16,600	840	543	16		
Flounders	10,996	464	108,615	5,788		
Groupers	45,000	1,600	3,019,802	90,594		
Grunts	7,000	210	14,883	447		
Hickory shad	29,616	888				
Hogfish	2,000	100				
Jewfish	8,000	240	18,050	542		
Kingfish or "king mackerel"	2,282,385	111,639	1,403,480	63,367		
King whiting or "kingfish"	138,900	4,803	14,233	362		
Menhaden	34,242,408	145,920	6,171,762	30,526		
Mojarro	37,000	1,300	44,275	1,208		
Mullet	2,903,567	79,566	19,118,239	589,902		
Muttonfish	154,035	10,753	71,004	4,693		
Permit			14,882	449		
Pigfish	27,455	577	34,700	1,024		
Pinfish or sailors choice	77,610	1,504	440	20		
Pompano	135,726	29,920	437,627	81,796		
Porgies	8,000	240	47,033	1,403		
Porkfish			600	36		
Sea bass	44,000	3,080	4,640	126		
Shad	879,732	129,014				
Sharks			2,187,500	3,500		
Sheepshead	125,168	4,682	746,965	25,086		
Snapper:						
Mangrove	23,800	1,393	98,020	3,454		
Red or redfish	34,030	2,912	5,001,672	424,228		
Snook or sergeantfish	77,360	3,236	290,749	8,039		
Spadefish			48,561	1,445		
Spanish mackerel	2,028,137	113,369	4,112,080	180,806		
Spot	130,068	3,690	12,488	322		
Squeteagues or "sea trout":						
Gray	588,134	43,034	11,066	321		
Spotted	79,621	7,956	2,710,945	194,585		
Sturgeon	150	34	8,260	1,225		
Sunfish	274,956	8,267			159,227	4,776
Tenpounder			181,361	5,213		
Tripletail			4,869	168		
Turbot			900	54		
Yellowtail	40,000	3,200	49,470	3,471		
Crabs:						
Hard	107,200	3,986	4,095	117		
Stone	103,000	12,800	204,550	13,830		
Sea crawfish or spiny lobster	108,309	12,331	180,000	14,400		
Shrimp	15,259,597	571,381	1,588,979	64,125		
Clams:						
Hard, public	26,152	2,003	661,736	42,537		
Hard, private	23,688	1,890				
Conchs:			20,000	200		
Oysters:						
Market, public, spring	81,185	6,741	708,983	44,727		
Market, public, fall	86,143	7,252	792,099	73,852		
Market, private, spring	35,545	3,063				
Market, private, fall	79,298	6,563				
Scallops, bay			21,867	2,139		
Terrapin, diamond-back	406	83				
Turtles:						
Green			21,550	1,078		
Soft-shell	11,578	235				

## Fisheries of Florida, 1930—Continued

## CATCH: BY DISTRICTS—Continued

Species	East Coast		West Coast		Lake Okechobee	
	Pounds	Value	Pounds	Value	Pounds	Value
Sponges:						
Grass.....			82,918	\$26,556		
Sheepswool.....			370,465	858,699		
Velvet.....			682	409		
Wire.....			3,781	2,041		
Yellow.....			91,155	42,955		
Total.....	64,023,344	\$1,527,579	53,524,560	3,001,397	2,867,232	\$116,776

## Industries related to the fisheries of Florida, 1930

## TRANSPORTING

Item	Char- lotte County	Collier County	Escam- bia County	Lee County	Levy County	Nassau County	Monroe County	Pinellas County	Total
Persons engaged:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	17	2	2	8	2		13	7	51
On boats.....						1		46	47
Total.....	17	2	2	8	2	1	13	53	98
Vessels:									
Motor—									
5 to 10 tons.....	2				2		1	2	7
11 to 20 tons.....	3	1	1	3			4		12
21 to 30 tons.....				1			1	1	3
31 to 40 tons.....	1						1		2
Total.....	6	1	1	4	2		7	3	24
Net tonnage.....	107	16	12	69	16		124	35	379
Sail—									
5 to 10 tons.....								1	1
11 to 20 tons.....							1	1	2
Total.....							1	2	3
Net tonnage.....							16	25	41
Total vessels.....	6	1	1	4	2		8	5	27
Total net tonnage.....	107	16	12	69	16		140	60	420
Boats.....						3		38	41

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Bay County	Brevard and Indian River Counties	Char- lotte, Lee, and Collier Counties	Citrus and Pasco Counties	Clay County	Dade County	Duval County	Escam- bia and Okaloosa Counties
Establishments.....	10	13	8	8	3	9	13	4
Persons engaged:								
Proprietors.....	10	14	12	10	4	11	17	5
Salaried employees.....	3	3	9			5	18	9
Wage earners—								
Average for season.....	19	27	59	28	6	18	158	37
Average for year.....	17	13	54	16	6	18	88	37
Paid to salaried employees.....	\$5,700	\$2,720	\$31,952			\$12,520	\$83,146	\$40,992
Paid to wage earners.....	13,092	9,610	45,856	\$7,740	\$3,280	24,240	79,404	31,597
Total salaries and wages.....	18,792	12,330	77,808	7,740	3,280	36,760	162,550	72,589

## Industries related to the fisheries of Florida, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## OPERATING UNITS, SALARIES, AND WAGES—Continued

Item	Franklin County	Gulf County	Glades, Okeechobee, and Hendry Counties	Hillsborough County	Levy and Dixie Counties	Taylor and Wakulla Counties	Manatee County	Monroe County
Establishments.....	21	4	6	6	7	4	7	12
Persons engaged:								
Proprietors.....	24	4	6	8	9	6	11	11
Salaried employees.....	13	3	3	3	2			6
Wage earners—								
Average for season.....	465	42	14	7	16	7	9	52
Average for year.....	150	23	12	7	16	7	8	37
Paid to salaried employees.....	\$24,320	\$9,000	\$3,560	\$5,844	\$2,400		\$6,160	\$15,240
Paid to wage earners.....	69,093	17,415	7,240	4,910	8,834	\$4,510	5,890	34,858
Total salaries and wages.....	93,413	26,415	10,800	10,754	11,234	4,510	12,050	50,098

Item	Nassau County	Palm Beach County	Pi-nellas County	Put-nam and St. Johns Counties	Sara-sota County	St. Lucie County	Volusia and Semi-nole Counties	Total
Establishments.....	7	12	25	16	3	11	14	223
Persons engaged:								
Proprietors.....	11	20	39	15	3	13	16	279
Salaried employees.....	6	4	5	7	2	3		104
Wage earners—								
Average for season.....	411	15	77	282	10	42	11	1,812
Average for year.....	177	15	53	63	10	22	8	857
Paid to salaried employees.....	\$30,086	\$4,100	\$31,572	\$10,568	\$2,900	\$5,100		\$327,880
Paid to wage earners.....	95,375	12,380	35,651	28,099	7,646	15,250	\$4,748	566,718
Total salaries and wages.....	125,461	16,480	67,223	38,667	10,546	20,350	4,748	894,598

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Menhaden products:		
Acid scrap.....	tons.....	2,782
Dry scrap.....	do.....	4,736
Meal.....	do.....	7,142
Oil.....	gallons.....	481,948
Mullet:		
Dry-salted.....	pounds.....	370,067
Roe, salted.....	do.....	29,684
Spanish mackerel, dry-salted.....	do.....	70,100
Shrimp, canned.....	standard cases.....	69,372
Oysters, fresh-shucked.....	gallons.....	134,731
Unclassified products:		
Fresh and frozen fillets <sup>1</sup> .....	pounds.....	79,499
Fresh and frozen steaks and sticks <sup>2</sup> .....	do.....	163,428
Other fresh packaged and salted <sup>3</sup> .....	(4).....	4,670
Canned <sup>3</sup> .....	(4).....	228,322
By-products <sup>4</sup> .....	(4).....	233,060
Total.....		1,995,751

<sup>1</sup> Includes fresh fillets of snook, groupers, and red snapper; frozen fillets of amberjack, bluefish, flounders, groupers, mullet, Spanish mackerel, and red snapper.

<sup>2</sup> Includes fresh and frozen amberjack, grouper, and red snapper steaks; and frozen red snapper fish sticks.

<sup>3</sup> Includes fresh-cooked crab meat; fresh-shucked hard clams, conchs and bay scallops; and salted bluefish.

<sup>4</sup> Data not available.

<sup>5</sup> Includes canned hard clam products, oysters, and green turtle meat and soup.

<sup>6</sup> Includes oyster-shell products; shark hides, fins, teeth, and oil; fish scrap; shrimp meal; and novelties made from shells and fish scales.

*Industries related to the fisheries of Florida, 1930—Continued*

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 240]

Item	Quantity	Value
Mullet:		
Dry-salted.....pounds..	471, 600	\$23, 496
Roe, dry-salted.....do	43, 200	10, 800
Sturgeon roe, fresh.....do	10	5
Crab meat, packaged (fresh-cooked).....do	600	210
Oysters, fresh-shucked.....gallons..	6, 143	8, 548
Scallops, bay, fresh-shucked.....do	2, 247	3, 218
Total.....		46, 277

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 47 have also been included as fishermen. and among the total persons engaged in the preparation of fishermen's manufactured products, 228 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

*Sponge fishery of Florida, 1930*

OPERATING UNITS: BY GEAR

Item	Sponge hooks	Diving outfits	Total
	Number	Number	Number
Fishermen on boats and shore, regular.....	334	412	746
Boats:			
Motor.....		55	55
Other.....	283		283
Apparatus.....	283	55	

CATCH: BY GEAR

Sponges	Sponge hooks		Diving outfits		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Grass.....	76, 718	\$24, 572	6, 200	\$1, 984	82, 918	\$26, 556
Sheepswool.....	98, 513	182, 458	271, 952	676, 241	370, 465	858, 699
Velvet.....	682	409			682	409
Wire.....	490	110	3, 291	1, 931	3, 781	2, 041
Yellow.....	39, 015	12, 709	52, 140	30, 246	91, 155	42, 955
Total.....	215, 418	220, 258	333, 583	710, 402	549, 001	930, 660

## SPONGES SOLD AT THE EXCHANGE, TARPON SPRINGS, FLA.

During 1931 sponges handled on the exchange at Tarpon Springs, Fla., amounted to 372,771 pounds, valued at \$609,773. This is a decrease of 10 per cent in quantity and 24 per cent in value as compared with the quantity and value of the transactions on the exchange during 1930. A large part of this decrease may be attributed to the fact that there was an unusually large hold over on January 1, 1932.

It is estimated that the value of sponges sold outside the exchange during 1931 amounted to \$40,000. Of the total sponges sold on the exchange in 1931, 168,820 pounds, valued at \$522,156, were large wool; 30,837 pounds, valued at \$24,670, were small wool; 97,742 pounds, valued at \$39,096, were yellow; 62,982 pounds, valued at \$18,895, were grass; and 12,390 pounds, valued at \$4,956, were wire sponges.

## ALABAMA

## Fisheries of Alabama, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Trammel nets	Lines			
			Hand	Troll	Trot, with baits or snoods	Trot, with hooks
	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>						
On vessels.....	6	16	96			
On boats and shore—						
Regular.....	39	84	32	4	5	34
Casual.....		4	21		9	
<b>Total.....</b>	<b>45</b>	<b>104</b>	<b>149</b>	<b>4</b>	<b>14</b>	<b>34</b>
<b>Vessels, motor:</b>						
5 to 10 tons.....	1	4	3			
11 to 20 tons.....			7			
61 to 70 tons.....			1			
<b>Total.....</b>	<b>1</b>	<b>4</b>	<b>11</b>			
Net tonnage.....	9	32	186			
<b>Boats:</b>						
Motor.....	11	32	6	2		4
Other.....	3	77	14		14	34
Accessory boats.....	1	12				
<b>Apparatus:</b>						
Number.....	8	84	149	2	14	177
Length, yards.....	5,900					
Square yards.....		28,692				
Hooks, baits, or snoods.....			271	2	2,475	17,900

  

Item	Fyke nets	Otter trawls, shrimp	Spears	Tongs	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>						
On vessels.....		30				142
On boats and shore—						
Regular.....	29	246	4	112	14	469
Casual.....			17	4	18	55
<b>Total.....</b>	<b>29</b>	<b>276</b>	<b>21</b>	<b>116</b>	<b>32</b>	<b>666</b>
<b>Vessels, motor:</b>						
5 to 10 tons.....		14				21
11 to 20 tons.....		1				8
61 to 70 tons.....						1
<b>Total.....</b>		<b>15</b>				<b>30</b>
Net tonnage.....		117				335
<b>Boats:</b>						
Motor.....	4	123		47		185
Other.....	29			41		183
Accessory boats.....						13
<b>Apparatus:</b>						
Number.....	119	138	21	116		
Yards at mouth.....		1,800				



## Fisheries of Alabama, 1930—Continued

## CATCH: BY GEAR

Species	Haul seines		Trammel nets		Lines			
	Pounds	Value	Pounds	Value	Hand		Troll	
Bluefish.....	12,749	\$558	7,905	\$368				
Bluerunner or hardtail.....	2,205	63					2,200	\$100
Cabio.....								
Catfish and bullheads.....	1,105	51	9,644	474	1,375	\$100		
Crevalle.....	2,558	70						
Croaker.....	2,403	78	4,940	165	104	4		
Drum:								
Black.....	6,796	335	4,787	229	110	5		
Red or redfish.....	44,733	3,012	55,520	2,884	4,081	211		
Flounders.....			11,233	783				
Groupers.....					177,945	5,338		
Jewfish.....					5,021	151		
King whiting or "kingfish".....	2,520	95	2,838	88	440	16		
Mullet.....	757,220	29,332	1,448,158	56,675				
Pompano.....	171	33	4,891	757				
Sheepshead, salt-water.....	8,552	499	7,741	420	1,276	69		
Snapper, red.....					847,918	67,833		
Spadefish.....			110	3				
Spanish mackerel.....	484	48	5,324	290				
Spot.....	635	21	926	45				
Squeteagues or "sea trout":								
Gray.....	207	10	5,940	216	440	20		
Spotted.....	13,769	1,157	86,374	6,578	5,838	533		
Sturgeon.....	1,816	297						
Tenpounder.....	5,369	215						
Tripletail.....			55	2	220	11		
Total.....	863,292	35,874	1,656,386	69,977	1,044,768	74,291	2,200	100

Species	Lines—Continued				Fyke nets		Otter trawls, shrimp	
	Trot, with baits or snoods		Trot, with hooks					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish.....			61,176	\$3,339	39,679	\$2,164		
Catfish and bullheads.....			48,428	3,265	30,352	2,111		
Paddlefish.....			2,251	125				
Crabs, hard.....	79,968	\$1,142						
Shrimp.....							2,982,200	\$97,219
Total.....	79,968	1,142	111,855	6,729	70,031	4,275	2,982,200	97,219

Species	Spears		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value
Flounders.....	12,947	\$1,177				
Crabs, soft.....					780	\$195
Oysters:						
Market, public, spring.....			40,144	\$3,755		
Market, public, fall.....			225,506	17,723		
Market, private, spring.....			4,080	480		
Market, private, fall.....			17,064	1,896		
Terrapin, diamond-back.....					2,018	635
Total.....	12,947	1,177	286,794	23,854	2,798	830

## OPERATING UNITS: BY COUNTIES

Item	Baldwin		Mobile	
	Number	Value	Number	Value
Fishermen:				
On vessels.....	6		136	
On boats and shore—				
Regular.....	68		401	
Casual.....	14		41	
Total.....	88		578	

*Fisheries of Alabama, 1930—Continued*  
OPERATING UNITS: BY COUNTIES—Continued

Item	Baldwin	Mobile
	Number	Number
Vessels, motor:		
5 to 10 tons.....	2	19
11 to 20 tons.....		8
61 to 70 tons.....		1
Total.....	2	28
Net tonnage.....	16	319
Boats:		
Motor.....	26	159
Other.....	43	140
Accessory boats.....	2	11
Apparatus:		
Haul seines.....	1	7
Length, yards.....	500	5,400
Trammel nets.....	36	48
Square yards.....	13,285	15,407
Lines—		
Hand.....	9	140
Hooks.....	9	262
Troll.....	2	
Hooks.....	2	
Trot, with baits or snoods.....		14
Baits or snoods.....		2,475
Trot, with hooks.....	2	175
Hooks.....	400	17,500
Fyke nets.....		119
Otter trawls, shrimp.....	7	131
Yards at mouth.....	90	1,710
Spears.....	7	14
Tongs.....	19	97

## CATCH: BY COUNTIES

Species	Baldwin		Mobile	
	Pounds	Value	Pounds	Value
Bluefish.....	9,398	\$365	11,256	\$561
Blue runner or hardtail.....	825	22	1,380	41
Buffalofish.....			100,855	5,503
Cabio.....	2,200	100		
Catfish and bullheads.....	9,193	481	81,711	5,520
Crevalle.....	330	9	2,228	61
Croaker.....	2,877	96	4,570	151
Drum:				
Black.....	1,318	60	10,375	509
Red or redfish.....	30,674	1,518	73,660	4,589
Flounders.....	5,390	385	18,790	1,575
Groupers.....			177,945	5,338
Jewfish.....			5,021	151
King whiting or "kingfish".....	1,650	45	4,148	154
Mullet.....	716,461	28,425	1,488,917	57,582
Paddlefish.....			2,251	125
Pompano.....	4,061	662	1,001	128
Sheepshead, salt water.....	3,740	204	13,829	784
Snapper, red.....			847,918	67,833
Spadefish.....			110	3
Spanish mackerel.....	4,444	242	1,364	96
Spot.....	1,012	47	549	19
Squeteagues or "sea trout":				
Gray.....			6,587	246
Spotted.....	32,009	2,405	73,972	5,863
Sturgeon.....	1,816	297		
Tenpounder.....			5,369	215
Tripletail.....	55	2	220	11
Crabs:				
Hard.....			79,968	1,142
Soft.....			780	195
Shrimp.....	168,400	5,490	2,813,800	91,729
Oysters:				
Market, public, spring.....	3,570	315	36,574	3,440
Market, public, fall.....	10,761	949	214,745	16,774
Market, private, spring.....			4,080	480
Market, private, fall.....	17,064	1,896		
Terrapin, diamond-back.....	1,142	416	876	219
Total.....	1,028,390	44,431	6,084,849	271,037

## Industries related to the fisheries of Alabama, 1930

## TRANSPORTING

Item	Baldwin County	Mobile County	Total
Persons engaged:	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	6	6	12
On boats.....		18	18
Total.....	6	24	30
Vessels, motor:			
5 to 10 tons.....	2	3	5
11 to 20 tons.....	1		1
Total.....	3	3	6
Net tonnage.....	33	22	55
Boats.....		3	3

## WHOLESALE AND MANUFACTURING IN BALDWIN AND MOBILE COUNTIES

## OPERATING UNITS, SALARIES, AND WAGES

Establishments.....	21
Persons engaged:	
Proprietors.....	31
Salaried employees.....	16
Wage earners—	
Average for season.....	492
Average for year.....	218
Paid to salaried employees.....	\$52, 105
Paid to wage earners.....	86, 135
Total salaries and wages.....	138, 240

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Mullet, dry-salted.....pounds.....	45, 000	\$2, 450
Shrimp, canned.....standard cases.....	43, 942	246, 768
Oysters, fresh-shucked.....gallons.....	15, 209	18, 295
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	62, 477
Total.....		329, 990

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 46]

Sturgeon roe, fresh.....pounds.....	32	\$19
Oysters, fresh-shucked.....gallons.....	7, 259	7, 680
Total.....		7, 699

<sup>1</sup> Includes frozen red snapper filets; salted mullet roe; cooked shrimp; canned oysters; dry shrimp hulls; and oyster-shell products.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 18 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 42 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## MISSISSIPPI

## Fisheries of Mississippi, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Trammel nets	Lines		Dip nets, drop	Cast nets
			Hand	Trot, with baits or snoods		
	Number	Number	Number	Number	Number	Number
Fishermen:			16			
On vessels.....						
On boats and shore—						
Regular.....	272	96	37	54	2	
Casual.....		6	114	12	32	54
Total.....	272	102	167	66	34	54
Vessels:						
Motor—						
5 to 10 tons.....			1			
11 to 20 tons.....			1			
Total.....			2			
Net tonnage.....			25			
Boats:						
Motor.....	45	34	15	9	1	
Other.....	30	51	104	60	14	
Apparatus:						
Number.....	45	55	167	66	232	54
Length, yards.....	9,220					
Square yards.....		17,785				
Hooks, baits, or snoods.....			201	20,795		

Item	Otter trawls, shrimp	Spears	Dredges, oyster	Tongs	By hand	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....	225		530			555
On boats and shore—						
Regular.....	598	8	380	440		1,355
Casual.....	9	68			31	193
Total.....	832	76	910	440	31	2,103
Vessels:						
Motor—						
5 to 10 tons.....	35		41			44
11 to 20 tons.....	26		67			69
21 to 30 tons.....	3		10			11
31 to 40 tons.....			1			1
Total.....	64		119			125
Net tonnage.....	711		1,600			1,678
Sail—						
5 to 10 tons.....			1			1
11 to 20 tons.....			4			4
Total.....			5			5
Net tonnage.....			66			66
Total vessels.....	64		124			130
Total net tonnage.....	711		1,666			1,744
Boats:						
Motor.....	408		95	30		401
Other.....				406		615
Apparatus:						
Number.....	363	76	437	440		
Yards at mouth.....	4,607		443			

## Fisheries of Mississippi, 1930—Continued

CATCH: BY GEAR

Species	Haul seines		Trammel nets		Lines			
	Pounds	Value	Pounds	Value	Hand		Trot, with baits or snoods	
Bluefish			19,191	\$1,047				
Buffalofish					14,969	\$680		
Cabio or crab eater			1,100	60	737	38		
Catfish and bullheads			38,146	1,734	23,276	1,058		
Crevalle			9,847	269	110	3		
Croaker			6,105	221	5,170	176		
Drum:								
Black			19,270	901	1,485	71		
Red or redfish			112,972	6,227	9,058	494		
Flounders			31,886	2,542				
Grouper					71,093	2,133		
Jewfish					1,274	38		
King whiting or "kingfish"			5,604	183				
Mullet			790,735	31,629				
Pompano			791	228				
Sheepshead, salt-water			28,509	1,625	1,568	86		
Snapper, red					188,725	15,875		
Spanish mackerel			1,027	71	328	17		
Squeteagues or "sea trout":								
Gray			58,591	1,953	48,576	1,767		
Spotted			79,612	7,381	45,500	4,963		
Sturgeon			73	22				
Tenpounder			4,725	142				
Tripletail			1,540	124	997	55		
Crabs, hard							574,679	\$9,720
Shrimp	104,400	\$3,915						
Total	104,400	3,915	1,209,724	56,359	412,866	27,454	574,679	9,720

Species	Dip nets, drop		Cast nets		Otter trawls, shrimp		Spears	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounder					8,855	\$805	28,248	\$2,654
Mullet			11,020	\$491				
Sheepshead, salt-water			440	24				
Crabs, hard	98,602	\$1,409						
Shrimp			6,570	792	8,378,080	314,164		
Total	98,602	1,409	18,030	1,307	8,386,935	314,969	28,248	2,654

Species	Dredges, oyster		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, soft					5,800	\$1,740
Oysters:						
Market, public, spring, Mississippi	1,913,904	\$125,508	280,182	\$18,718		
Market, public, fall, Mississippi	68,820	4,313	171,794	12,380		
Market, public, spring, Louisiana	1,695,860	111,209	69,244	4,626		
Market, public, fall, Louisiana	673,832	42,224	22,610	1,629		
Total	4,352,416	283,254	543,830	37,353	5,800	1,740

## OPERATING UNITS: BY COUNTIES

Item	Hancock	Harrison	Jackson
	Number	Number	Number
Fishermen:			
On vessels		524	31
On boats and shore—			
Regular	41	1,126	188
Casual	38	107	48
Total	79	1,757	267

## Fisheries of Mississippi, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Hancock	Harrison	Jackson
<b>Vessels:</b>			
<b>Motor—</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>
5 to 10 tons.....		43	1
11 to 20 tons.....		66	3
21 to 30 tons.....		9	2
31 to 40 tons.....		1	
Total.....		119	6
Net tonnage.....		1,573	105
<b>Sail—</b>			
5 to 10 tons.....		1	
11 to 20 tons.....		4	
Total.....		5	
Net tonnage.....		66	
Total vessels.....		124	6
Total net tonnage.....		1,639	105
<b>Boats:</b>			
Motor.....	17	322	62
Other.....	47	467	101
<b>Apparatus:</b>			
Haul seines.....		44	1
Length, yards.....		9,020	200
Trammel nets.....	9	22	24
Square yards.....	3,006	8,354	6,425
<b>Lines—</b>			
Hand.....	26	67	74
Hooks.....	26	67	108
Trot, with baits or snoods.....		56	10
Baits or snoods.....		19,345	1,450
Dip nets, drop.....	232		
Cast nets.....		50	4
Otter trawls, shrimp.....		321	42
Yards at mouth.....		4,084	523
Spears.....	9	51	16
Dredges, oyster.....		429	8
Yards at mouth.....		435	8
Tongs.....	17	370	53

## CATCH: BY COUNTIES

Species	Hancock		Harrison		Jackson	
	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....					19,191	\$1,047
Buffalofish.....					14,969	680
Cabio or crab eater.....			1,837	\$98		
Catfish and bullheads.....	7,920	\$360	37,818	1,719	15,684	713
Crevalle.....			330	9	9,627	263
Croaker.....	550	20	5,115	181	5,610	196
<b>Drum:</b>						
Black.....	4,620	168	9,119	436	7,016	368
Red or redfish.....	16,830	918	43,510	2,373	61,690	3,430
Flounders.....	13,575	1,124	38,665	3,413	16,749	1,464
Groupers.....					71,093	2,133
Jewfish.....					1,274	38
King whiting or "kingfish".....	550	15	3,685	122	1,369	46
Mullet.....	48,500	1,940	86,789	3,521	666,466	26,659
Pompano.....			165	45	626	183
Sheepshead, salt-water.....	4,950	270	5,198	284	20,369	1,181
Snapper, red.....					188,725	15,875
Spanish mackerel.....	480	28	248	13	627	47
<b>Squeteagues or "sea trout":</b>						
Gray.....	26,850	798	37,356	1,360	42,961	1,562
Spotted.....	35,310	3,423	43,917	4,394	45,885	4,527
Sturgeon.....					73	22
Tenpounder.....					4,725	142
Tripletail.....	440	24	1,155	76	942	79
<b>Crabs:</b>						
Hard.....	98,602	1,409	501,249	8,646	73,430	1,074
Soft.....	1,320	396	4,480	1,344		
Shrimp.....			7,888,830	296,231	600,220	22,640
<b>Oysters:</b>						
Market, public, spring, Mississippi.....	31,990	2,856	1,981,886	129,110	135,982	9,893
Market, public, fall, Mississippi.....	57,120	4,896	134,858	8,474	48,636	3,414
Market, public, spring, Louisiana.....			1,765,776	115,033	43,556	3,169
Market, public, fall, Louisiana.....			696,442	43,762		
<b>Total.....</b>	<b>349,607</b>	<b>18,645</b>	<b>13,288,428</b>	<b>620,644</b>	<b>2,097,495</b>	<b>100,845</b>

*Industries related to the fisheries of Mississippi, 1930*

## TRANSPORTING IN HARRISON COUNTY

Persons engaged on boats.....	26
Boats.....	13

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Hancock and Harrison Counties	Jackson County	Total
Establishments.....	45	8	53
Persons engaged:			
Proprietors.....	60	12	72
Salaried employees.....	29	8	37
Wage earners—			
Average for season.....	2,375	171	2,546
Average for year.....	1,004	52	1,056
Paid to salaried employees.....	\$95,176	\$11,085	\$106,261
Paid to wage earners.....	350,934	18,497	369,431
Total salaries and wages.....	446,110	29,582	475,692

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Crab meat, packaged (fresh-cooked)..... pounds..	57,150	\$16,810
Shrimp:		
Packaged, cooked, and peeled..... do.....	193,145	59,594
Canned—		
Wet in tins and glass..... standard cases..	61,273	336,035
Dry in tins..... do.....	45,904	268,290
Oysters:		
Fresh-shucked..... gallons..	83,404	125,136
Canned..... standard cases..	224,921	1,034,362
Shell products—		
Poultry feed..... tons..	38,663	270,641
Lime..... do.....	7,733	5,126
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	25,125
Total.....		2,141,119

## FISHERMEN'S PREPARED PRODUCTS

[Number of persons engaged, 61]

Oysters, fresh-shucked..... gallons..	7,446	\$9,658
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<sup>1</sup> Includes salted mullet, canned shrimp gumbo soup, and shrimp meal.<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 26 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 57 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## LOUISIANA

## Fisheries of Louisiana, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets, run-around	Trammel nets	Lines		
				Hand	Trot, with baits or snoods	Trot, with hooks
<b>Fishermen:</b>						
On boats and shore—	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Regular.....	608	2	98	61	201	3
Casual.....	47	2	2	86	87	
<b>Total</b> .....	655	2	100	147	288	3
<b>Boats:</b>						
Motor.....	129	1	45	28	25	3
Other.....	177	1	51	100	259	
<b>Apparatus:</b>						
Number.....	138	1	50	147	288	3
Length, yards.....	27,875					
Square yards.....		30	13,712			
Hooks, baits, or snoods.....				152	58,370	300

Item	Dip nets, drop	Cast nets	Otter trawls, shrimp	Dredges, clam	Tongs	By hand	Total, exclusive of duplication
							<i>Number</i>
<b>Fishermen:</b>							
On vessels.....			249	147			370
On boats and shore—							
Regular.....	8	3	1,650	14	524	125	2,775
Casual.....	15				2	94	238
<b>Total</b> .....	23	3	1,899	161	526	219	3,383
<b>Vessels, motor;</b>							
5 to 10 tons.....			107	30			133
11 to 20 tons.....			8	10			15
Total vessels.....			115	40			148
Total net tonnage.....			780	370			1,074
<b>Boats:</b>							
Motor.....	11		825	4	3		997
Other.....	21				523		1,073
<b>Apparatus:</b>							
Number.....	1,700	3	940	72	526		
Yards at mouth.....			12,213	72			

## CATCH: BY GEAR

Species	Haul seines		Gill nets, runaround		Trammel nets		Lines—Hand	
	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>	<i>Pounds</i>	<i>Value</i>
Catfish and bullheads.....	24,400	\$856			35,443	\$1,199	27,700	\$1,030
Crevaille.....					165	15		
Croaker.....	29,860	1,972			25,903	1,905	4,100	328
<b>Drum:</b>								
Black.....	31,013	1,255			91,423	3,463	44,000	1,733
Red or redfish.....	65,322	5,017			176,640	13,776	92,920	7,166
Flounders.....	5,030	481			18,037	1,602		
Garfish.....					1,320	120		
Groupers.....							3,500	105
Jewfish.....							6,000	180
King whiting or "kingfish".....	21,450	675			32,917	1,029		
Mullet.....	7,809	269			110	10		
Pompano.....					1,112	301		
Sharks.....							300,000	1,400
Sheepshead, salt-water.....	19,430	1,150			65,994	3,818	16,700	1,025
Snapper, red.....							76,400	6,112
Spanish mackerel.....							1,800	108
Spot.....	6,000	179			3,704	111		
<b>Squeteagues or "sea trout":</b>								
Gray.....	68,150	2,106			164,379	4,943	90,800	2,760
Spotted.....	73,093	8,529	151	\$14	204,357	23,536	109,500	13,785
Tripletail.....					5,301	455		
Shrimp.....	677,810	21,624						
Turtles, loggerhead.....	50,050	1,052						
<b>Total</b> .....	1,079,417	45,615	151	14	826,805	56,283	773,420	35,732



## Fisheries of Louisiana, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Lines—Continued				Dip nets, drop		Cast nets	
	Trot, with baits or snoods		Trot, with hooks					
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....			1,600	\$128				
Mullet.....							1,053	\$32
Crabs, hard.....	4,044,995	\$60,637			141,000	\$2,820		
Total.....	4,044,995	60,637	1,600	128	141,000	2,820	1,053	32

Species	Otter trawls, shrimp		Dredges, oyster		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crabs, soft.....							145,732	\$58,068
Shrimp.....	37,986,677	\$1,138,002						
Oysters:								
Market, public, spring.....			266,664	\$11,111	4,800	\$640		
Market, public, fall.....			342,708	18,932	63,960	6,008		
Market, private, spring.....			184,800	9,748	1,613,032	191,909		
Market, private, fall.....			639,884	80,026	1,730,452	231,672		
Terrapin, diamond-back.....							38,750	12,980
Total.....	37,986,677	1,138,002	1,434,056	119,817	3,412,244	430,229	184,482	71,048

## OPERATING UNITS: BY PARISHES

Item	Cameron	Iberia	Jefferson Davis	Jefferson	La Fourche	Orleans
Fishermen:	Number	Number	Number	Number	Number	Number
On vessels.....				20	95	57
On boats and shore—						
Regular.....	9	14	4	721	568	158
Casual.....		10		40	2	19
Total.....	9	24	4	781	665	234
Vessels, motor:						
5 to 10 tons.....				8	44	15
11 to 20 tons.....				1	1	2
Total vessels.....				9	45	17
Total net tonnage.....				63	296	142
Boats:						
Motor.....	4	2	2	261	232	68
Other.....	4	19		166	168	61
Apparatus:						
Haul seines.....		1	1	37	10	22
Length, yards.....		100	75	13,225	1,680	2,660
Gill nets, runaround.....	1					
Square yards.....	30					
Trammel nets.....		1		10	4	7
Square yards.....		96		2,822	1,160	1,480
Lines—						
Hand.....				17		14
Hooks.....				17		19
Trot, with baits or snoods.....	2	6		40	7	
Baits or snoods.....	280	520		8,500	1,450	
Trot, with hooks.....	3					
Hooks.....	300					
Dip nets, drop.....						1,220
Cast nets.....	3					
Otter trawls, shrimp.....	1		2	222	272	39
Yards at mouth.....	11		27	2,830	3,564	543
Dredges, oyster.....				2	1	23
Yards at mouth.....				2	1	23
Tongs.....	5	14		70	150	

## Fisheries of Louisiana, 1930—Continued

## OPERATING UNITS: BY PARISHES—Continued

Item	Plaque-mines	St. Bernard	St. Charles	St. Mary	St. Tammany	Terrebonne	Vermilion
	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>							
On vessels.....	74			34	8	82	
On boats and shore—							
Regular.....	362	199	24	135	10	522	49
Casual.....	8	64		19	3	47	26
<b>Total.....</b>	<b>444</b>	<b>263</b>	<b>24</b>	<b>188</b>	<b>21</b>	<b>651</b>	<b>75</b>
<b>Vessel, motor:</b>							
5 to 10 tons.....	22			9	1	34	
11 to 20 tons.....	4			3	1	3	
<b>Total vessels.....</b>	<b>26</b>			<b>12</b>	<b>2</b>	<b>37</b>	
<b>Total net tonnage.....</b>	<b>189</b>			<b>114</b>	<b>22</b>	<b>248</b>	
<b>Boats:</b>							
Motor.....	137	49	12	37	2	172	19
Other.....	93	188		81	8	260	25
<b>Apparatus:</b>							
Haul seines.....	17	22		4		11	13
Length, yards.....	2,950	3,455		540		1,180	2,010
Trammel nets.....	8	14				5	1
Square yards.....	2,525	4,791				705	133
Lines—							
Hand.....		54				62	
Hooks.....		54				62	
Trot, with baits or snoods.....	7	135		83		2	6
Baits or snoods.....	1,350	29,920		15,800		250	300
Dip nets, drop.....					480		
Otter trawls, shrimp.....	134	24	12	44		188	2
Yards at mouth.....	1,704	308	157	583		2,461	25
Dredges, oyster.....	22			10	4	6	4
Yards at mouth.....	22			10	4	6	4
Tongs.....	55			26	4	200	2

## CATCH: BY PARISHES

Species	Cameron		Iberia		Jefferson Davis		Jefferson	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	1,600	\$128					2,000	\$60
Croaker.....			55	\$2	440	\$12	1,520	45
Drum:								
Black.....			137	12	55	2	8,330	250
Red or redfish.....			550	50	660	48	37,000	2,960
Flounders.....			30	6	110	10	4,540	363
King whiting or "kingfish".....			165	6	550	20	24,220	726
Mullet.....	1,053	32					3,060	92
Sharks.....							300,000	1,400
Sheepshead, salt-water.....			220	30			9,140	457
Spanish mackerel.....							600	36
Spot.....							1,500	44
Squeteagues or "sea trout":								
Gray.....			275	12			4,000	120
Spotted.....	151	14	220	40	715	78	57,803	5,780
Crabs:								
Hard.....	2,880	48	24,500	350			975,000	16,250
Soft.....							33,720	12,645
Shrimp.....	3,400	340	1,500	150	6,500	650	9,715,852	291,476
Oysters:								
Market, private, spring.....	19,600	1,470	49,512	8,254			310,800	38,850
Market, private, fall.....	24,400	1,830	86,004	14,334			413,496	51,687
Terrapin, diamond-back.....							38,750	12,980
Turtles, loggerhead.....							50,050	1,502
<b>Total.....</b>	<b>53,084</b>	<b>3,862</b>	<b>163,168</b>	<b>23,246</b>	<b>9,030</b>	<b>820</b>	<b>11,991,381</b>	<b>437,723</b>

## Fisheries of Louisiana, 1930—Continued

## CATCH: BY PARISHES—Continued

Species	LaFourche		Orleans		Plaquemines		St. Bernard	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads			14,400	\$432	10,430	\$312	10,300	\$309
Croaker	220	\$6	15,500	1,045	5,208	385	26,944	2,152
Drum:								
Black	13,200	360	9,860	394	24,400	976	84,020	3,360
Red or redfish	53,900	3,920	24,150	1,932	28,304	2,265	54,172	4,332
Flounders	4,400	320	780	78	2,544	254	3,804	382
Groupers			3,500	105				
Jewfish			6,000	180				
King whiting or "kingfish"			2,500	75	3,200	96	16,404	491
Mullet							1,200	48
Pompano			420	126			252	75
Sheepshead, salt-water	22,052	1,003	10,050	603	12,656	759	28,028	1,691
Snapper, red			76,400	6,112				
Spanish mackerel							1,200	72
Spot			900	27	2,600	78	4,704	141
Squeteagues or "sea trout":								
Gray	3,300	90	4,200	126	32,600	978	265,000	7,948
Spotted	20,511	1,908	7,882	1,019	36,704	4,405	186,392	23,984
Tripletail	2,255	205			2,496	150		
Crabs:								
Hard	391,200	6,520	46,800	936	150,000	2,500	853,680	14,228
Soft			8,520	4,260	4,960	1,860	94,132	37,653
Shrimp	11,082,026	332,060	1,414,332	42,430	5,505,043	165,150	1,132,000	33,960
Oysters:								
Market, public, spring			266,664	11,111				
Market, public, fall			165,888	8,294				
Market, private, spring	214,200	22,200	4,980	622	256,080	41,360		
Market, private, fall	297,280	28,260	361,440	45,180	489,848	71,749		
Total	12,104,544	396,852	2,445,166	125,087	6,567,073	293,277	2,762,232	130,826

Species	St. Charles		St. Mary		St. Tammany		Terrebonne		Vermilion	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads							48,213	\$1,822	2,200	\$150
Crevalle									165	15
Croaker			1,210	\$44			6,016	224	2,750	290
Drum:										
Black			1,320	96			24,344	933	770	68
Red or redfish							131,306	9,860	4,840	592
Flounders			50	8			6,479	612	330	50
Garfish									1,320	120
King whiting or "kingfish"							6,338	230	990	60
Mullet							3,549	129	110	10
Pompano							440	100		
Sheepshead, salt-water			880	80			15,248	970	3,850	400
Squeteagues or "sea trout":										
Gray			2,640	120			11,314	415		
Spotted			1,320	240			70,563	7,708	4,840	688
Tripletail									550	100
Crabs:										
Hard			1,570,730	19,469	94,200	\$1,884	5,005	72	72,000	1,200
Soft					4,400	1,650				
Shrimp	16,000	\$12,480	1,711,910	49,560			7,591,924	227,758	84,000	3,612
Oysters:										
Market, public, spring					4,800	640				
Market, public, fall			98,800	7,156	96,504	5,956			45,476	3,534
Market, private, spring			85,704	13,214			855,156	75,462	1,800	225
Market, private, fall			111,072	17,337			582,576	80,751	4,220	570
Total	16,000	12,480	3,585,636	107,324	199,904	10,130	9,358,471	407,046	230,211	11,684

## Industries related to the fisheries of Louisiana, 1930

## TRANSPORTING

Item	Iberia Parish	Jefferson Parish	La Fourche Parish	Orleans Parish	Plaquemines Parish	St. Mary Parish	St. Tammany Parish	Terrebonne Parish	Vermillion Parish	Total
Persons engaged:	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
On vessels.....		14	44	13	4	16		42		133
On boats.....	14	34	34		2	14	4	138	6	246
Total.....	14	48	78	13	6	30	4	180	6	379
Vessels, motor:										
5 to 10 tons.....		6	17	2	2	4		21		52
11 to 20 tons.....		1	4	4		4				13
Total.....		7	21	6	2	8		21		65
Net tonnage.....		58	169	73	13	76		136		525
Boats.....	7	17	17		1	7	2	74	3	128

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Calcasieu, Jefferson Davis, and Vermillion Parishes	Iberia Parish	Jefferson Parish	Lafayette and St. Martin Parishes	La-Fourche Parish	Orleans Parish
Establishments.....	5	3	16	3	7	10
Persons engaged:						
Proprietors.....	8	4	16	3	9	19
Salaried employees.....	1		13		5	32
Wage earners—						
Average for season.....	100	4	669	8	731	148
Average for year.....	18	4	310	6	254	84
Paid to salaried employees.....	\$100		\$32,617		\$13,672	\$132,611
Paid to wage earners.....	6,257	\$2,251	93,699	\$3,498	82,676	49,030
Total salaries and wages.....	6,357	2,251	126,316	3,498	96,348	181,641

Item	Plaquemines and St. Bernard Parishes	St. Charles Parish	St. Mary Parish	Terrebonne Parish	Total
Establishments.....	9	3	10	36	102
Persons engaged:					
Proprietors.....	2	6	11	55	133
Salaried employees.....	9		16	24	100
Wage earners—					
Average for season.....	849	6	315	991	3,821
Average for year.....	344	6	249	508	1,783
Paid to salaried employees.....	\$13,100		\$41,250	\$59,320	\$292,670
Paid to wage earners.....	97,452	\$1,814	141,453	168,068	646,198
Total salaries and wages.....	110,552	1,814	182,703	227,388	938,868

## Industries related to the fisheries of Louisiana, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Squeteague, sun-dried.....pounds..	27,717	\$8,7
Crab meat, packaged (fresh-cooked).....do.....	190,220	46,7
Shrimp:		
Sun-dried.....do.....	1,588,487	339,3
Canned—		
Wet in tins.....standard cases..	238,467	1,346,2
Wet in glass.....do.....	2,462	26,8
Dry in tins.....do.....	167,939	1,080,3
Meal.....tons.....	1,445	39,3
Oysters:		
Fresh-shucked.....gallons.....	242,712	413,3
Canned.....standard cases.....	43,819	214,8
Shell products—		
Poultry feed.....tons.....	116,880	1,012,7
Lime.....do.....	9,347	28,9
Miscellaneous <sup>1</sup> .....do.....	(?)	60,4
Total.....		4,618,3

<sup>1</sup> Includes shark skins, fins, meat, and oil; canned crabs; and fresh-packaged shrimp.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 242 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## TEXAS

## Fisheries of Texas, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets			Trammel nets	Lines	
		Anchor	Stake	Run-around		Hand	Trawl
	Number	Number	Number	Number	Number	Number	Number
Fishermen:							
On vessels.....					6	110	
On boats and shore—							
Regular.....	76	4	277	108	140	193	
Casual.....	78					156	
Total.....	154	4	277	108	146	459	
Vessels, motor:							
5 to 10 tons.....						4	
11 to 20 tons.....					1	7	
21 to 30 tons.....						2	
31 to 40 tons.....						1	
41 to 50 tons.....						2	
Total.....					1	16	
Net tonnage.....					11	298	
Boats:							
Motor.....	6	2	47	28	54	82	
Other.....	6		72	22	45	423	
Apparatus:							
Number.....	63	2	383	102	80	459	
Length, yards.....	11,250						
Square yards.....		2,000	95,294	23,854	26,651		
Hooks, baits, or snoods.....						678	

## Fisheries of Texas, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Lines—Contd.		Otter trawls, shrimp	Spears	Dredges, oyster	Tongs	By hand	Total, exclusive of duplication
	Trot, with baits or snoods	Trot, with hooks						
	Number	Number						
Fishermen:			84		18			178
On vessels.....								
On boats and shore—								
Regular.....	12	24	464	88	106	316	112	1,421
Casual.....	6			87		14	68	367
Total.....	18	24	548	175	124	330	180	1,966
Vessels, motor:								
5 to 10 tons.....			26		4			27
11 to 20 tons.....			6		1			12
21 to 30 tons.....								2
31 to 40 tons.....								1
41 to 50 tons.....								2
Total.....			32		5			44
Net tonnage.....			275		50			535
Boats:								
Motor.....	2	5	232	3	33	61		431
Other.....	14	17				219	122	498
Apparatus:								
Number.....	33	36	264	175	38	330		
Yards at mouth.....			3,855		37			
Hooks, baits, or snoods.....	4,300	5,500						

## CATCH: BY GEAR

Species	Haul seines		Gill nets					
			Anchor		Stake		Runaround	
			Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....							165	\$14
Catfish and bullheads.....	29,700	\$1,350	550	\$30	12,024	\$497	4,620	208
Crevalle.....							154	4
Croaker.....	12,980	434			1,540	42	7,680	272
Drum:								
Black.....	46,200	1,698	660	30	762,225	23,286	158,215	5,753
Red or redfish.....	77,154	6,010	2,860	260	324,856	28,127	57,117	4,184
Flounders.....	8,855	805			550	50	2,860	260
King whiting or "kingfish".....	7,920	288					4,180	152
Mullet.....	3,630	132			3,741	75	550	25
Pompano.....	6,270	1,425					1,375	313
Sheepshead.....	7,370	327	220	16	7,051	300	3,300	160
Snook or sergeantfish.....	15,840	1,142			19,081	1,388	3,300	186
Spadefish.....		550						
Spanish mackerel.....	2,420	132					6,600	360
Squeteague or "sea trout," spotted.....	116,170	11,873	2,200	300	302,252	32,974	109,742	10,252
Total.....	335,059	25,636	6,490	636	1,433,320	86,739	359,858	22,143

## Fisheries of Texas, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Trammel nets		Lines							
			Hand		Troll		Trot, with baits or snoods		Trot, with hooks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	11,924	\$550	22,584	\$1,027					16,170	\$71
Croaker.....	9,713	347								
Drum:										
Black.....	63,496	2,127	21,172	762						
Red or redfish.....	169,672	14,963	210,358	16,678					30,580	2,22
Flounders.....	1,035	97		100						
Groupers.....			20,855	630						
Jewfish.....			1,430	56						
Kingfish or "king mackerel"					3,080	\$120				
King whiting or "kingfish"										
Pompano.....	3,630	132								
Sheepshead.....	5,365	1,225								
Snapper, red.....	6,710	340	16,610	726					440	2
Snook or sergeantfish.....			929,578	75,385						
Spanish mackerel.....	1,225	100								
Squeteague or "sea trout," spotted	1,799	142	63,470	3,542						
Crabs, hard.....	236,149	26,272	276,840	29,649			29,046	\$1,063		
Total.....	510,718	46,295	1,563,997	128,555	3,080	120	29,046	1,063	47,190	2,96

Species	Otter trawls, shrimp		Spears		Dredges, oyster		Tongs		By hand	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders.....			56,987	\$5,771						
Sheepshead.....			550	40						
Shrimp.....	10,189,318	\$377,016								
Oysters:										
Market, public, spring.....					267,466	\$15,029	209,854	\$17,523	38,432	\$3,33
Market, public, fall.....					219,463	14,657	330,052	23,510	84,304	5,22
Market, private, spring.....							3,040	475		
Market, private, fall.....							4,704	735		
Total.....	10,189,318	377,016	57,447	5,811	486,929	29,686	547,650	42,243	122,736	8,56

## OPERATING UNITS: BY COUNTIES

Item	Aransas	Brazoria	Calhoun	Cameron	Galveston	Harris
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....	2		26		114	
On boats and shore—						
Regular.....	118	8	212	206	289	
Casual.....	16		58	20	117	
Total.....	136	8	296	226	520	
Vessels, motor:						
5 to 10 tons.....	1		6		7	
11 to 20 tons.....			2		8	
21 to 30 tons.....					2	
31 to 40 tons.....					1	
41 to 50 tons.....					2	
Total.....	1		8		20	
Net tonnage.....	7		70		337	

## Fisheries of Texas, 1930—Continued

## OPERATING UNITS: BY COUNTIES—Continued

Item	Aransas	Brazoria	Calhoun	Cameron	Galveston	Harris
Boats:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Motor.....	31	1	79	28	116	2
Other.....	46	5	40	44	117	3
Apparatus:						
Haul seines.....			2		45	
Length, yards.....			120		8,990	
Gill nets—						
Stake.....	58		10	186		
Square yards.....	9,280		1,000	62,124		
Runaround.....	12					
Square yards.....	1,940					
Trammel nets.....	11	1	18	14	13	
Square yards.....	1,430	450	9,561	3,500	4,458	
Lines—						
Hand.....	26		62	22	188	
Hooks.....	26		62	34	385	
Trot, with baits or snoods.....	9				20	
Baits or snoods.....	900				3,000	
Trot, with hooks.....	20					
Hooks.....	3,800					
Otter trawls, shrimp.....	13		60	8	80	
Yards at mouth.....	173		878	103	1,203	
Spears.....	22		36	9	28	
Dredges, oysters.....	2		14		8	
Yards at mouth.....	2		15		7	
Tongs.....	31	8	88		91	6

Item	Jefferson	Mata-gorda	Neuces	Refugio	San Patricio
Fishermen:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....		6	20		10
On boats and shore—					
Regular.....		127	354	2	99
Casual.....	4	15	89	6	42
Total.....	4	148	463	8	151
Vessels, motor:					
5 to 10 tons.....		1	7		5
11 to 20 tons.....		1	1		
Total.....		2	8		5
Net tonnage.....		25	61		35
Boats:					
Motor.....		44	88		42
Other.....	4	20	188	8	23
Apparatus:					
Haul seines.....			16		
Length, yards.....			2,140		
Gill nets—					
Anchor.....		2			
Square yards.....		2,000			
Stake.....			129		
Square yards.....			22,890		
Runaround.....			54		36
Square yards.....			11,900		10,014
Trammel nets.....		10	9		4
Square yards.....		4,252	1,800		1,200
Lines—					
Hand.....	4		113	6	38
Hooks.....	4		123	6	38
Troll.....			4		4
Hooks.....			4		4
Trot, with baits or snoods.....	4				
Baits or snoods.....	400				
Trot, with hooks.....			6	4	6
Hooks.....			800	250	650
Otter trawls, shrimp.....		26	40		37
Yards at mouth.....		391	563		544
Spears.....		25	25		30
Dredges, oysters.....		14			
Yards at mouth.....		13			
Tongs.....		40	64	2	



## Fisheries of Texas, 1930—Continued

## CATCH: BY COUNTIES

Species	Aransas		Brazoria		Calhoun	
	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	5,005	\$228	220	\$10	10,558	\$48
Croaker.....	2,970	108	220	8	1,980	7
Drum:						
Black.....	26,500	1,000	132	5	9,760	35
Red or redbfish.....	59,051	4,295	3,300	300	263,064	22,88
Flounders.....	3,960	360	55	5	6,957	63
King whiting or "kingfish".....	2,530	92	110	4	1,650	6
Pompano.....	690	162			220	5
Sheepshead.....	1,320	72	220	12	1,870	6
Snook or sergeantfish.....	840	48			825	7
Spanish mackerel.....	1,650	90			990	5
Squeteague or "sea trout," spotted.....	73,150	7,980	3,080	336	254,859	27,95
Crabs, hard.....	13,486	674				
Shrimp.....	633,804	24,200			1,216,139	48,64
Oysters:						
Market, public, spring.....	18,608	1,223	3,200	300	81,700	5,31
Market, public, fall.....	41,809	2,770	3,792	356	193,542	13,47
Total.....	885,373	43,302	14,329	1,336	2,044,114	120,11

Species	Cameron		Galveston		Harris		Jefferson	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Catfish and bullheads.....	6,524	\$237	12,620	\$575				
Croaker.....	4,103	149	9,900	360				
Drum:								
Black.....	518,956	14,153	5,216	237			150	\$8
Red or redbfish.....	225,580	20,507	56,144	5,104			880	80
Flounders.....	440	40	8,360	1,065				
Groupers.....			18,250	543				
Jewfish.....			660	18				
King whiting or "kingfish".....			4,840	176				
Mullet.....	3,741	75	3,630	132				
Pompano.....	935	213	1,320	300				
Sheepshead.....	6,831	248	9,020	517			110	6
Snapper, red.....	72,442	7,244	823,432	65,713				
Snook or sergeantfish.....	19,081	1,388	440	22				
Spadefish.....			550	20				
Spanish mackerel.....	809	88	4,620	252				
Squeteague or "sea trout," spotted.....	234,700	25,604	122,177	14,090			1,265	17
Crabs, hard.....			13,160	329			2,400	60
Shrimp.....	213,448	7,485	3,552,960	125,702				
Oysters:								
Market, public, spring.....	2,400	400	211,288	11,651	3,040	\$285		
Market, public, fall.....	3,360	420	75,340	7,073	3,520	330		
Market, private, spring.....			3,040	475				
Market, private, fall.....			4,704	735				
Total.....	1,313,350	78,251	4,941,671	235,089	6,560	615	4,805	32

Species	Matagorda		Neuces		Refugio		San Patricio	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bluefish.....			165	\$14				
Catfish and bullheads.....	4,180	\$212	53,900	2,450	2,365	\$108	2,200	\$80
Crevalle.....			154	4				
Croaker.....	1,650	60	7,240	198			3,850	140
Drum:								
Black.....	5,390	230	466,064	16,948			19,800	72
Red or redbfish.....	13,585	1,235	199,293	14,194	8,800	640	42,900	3,210
Flounders.....	7,965	1,020	38,060	3,460			5,500	50
Groupers.....			2,605	87				
Jewfish.....			220	8			550	30
Kingfish or "king mackerel".....			880	40			2,200	80
King whiting or "kingfish".....	2,750	100	2,200	80			1,650	60
Mullet.....							550	20
Pompano.....	220	50	8,580	1,950			1,045	230
Sheepshead.....	1,540	104	18,260	756	440	24	2,640	120
Snapper, red.....			33,704	2,428				
Snook or sergeantfish.....			15,400	1,120			2,860	160
Spanish mackerel.....	220	12	63,800	3,480			2,200	20
Squeteague or "sea trout," spotted.....	22,858	2,914	218,239	20,848	7,370	804	105,655	10,611
Shrimp.....	756,879	26,737	1,917,544	73,628			1,898,544	70,611
Oysters:								
Market, public, spring.....	129,212	11,210	65,664	5,472	640	40		
Market, public, fall.....	157,560	9,790	153,888	9,118	1,008	63		
Total.....	1,104,009	53,674	3,265,860	156,283	20,623	1,679	2,092,144	86,80

*Industries related to the fisheries of Texas, 1930*

TRANSPORTING IN MATAGORDA COUNTY

Persons engaged on vessels.....	3
Vessels.....	1
Net tonnage.....	6

WHOLESALE AND MANUFACTURING

OPERATING UNITS, SALARIES, AND WAGES

Item	Aransas County	Cal- houn County	Cam- eron County	Gal- veston and Bra- zorria Count- ies	Mata- gorda County	Nueces County	San Patricio County	Total
Establishments.....	4	11	6	13	7	10	4	55
Persons engaged:								
Proprietors.....	4	12	5	19	9	12	5	66
Salaried employees.....	4	6	6	6	3	8	2	35
Wage earners—								
Average for season.....	31	238	163	297	208	197	236	1,370
Average for year.....	16	90	87	179	91	95	169	727
Paid to salaried employees.....	\$4,620	\$7,080	\$7,870	\$25,536	\$3,320	\$8,270	\$4,890	\$61,586
Paid to wage earners.....	9,725	24,707	16,548	55,850	33,984	33,533	28,243	202,590
<b>Total salaries and wages.....</b>	<b>14,345</b>	<b>31,787</b>	<b>24,418</b>	<b>81,386</b>	<b>37,304</b>	<b>41,803</b>	<b>33,133</b>	<b>264,176</b>

PRODUCTS MANUFACTURED

Item	Quantity	Value
Shrimp:		
Packaged, headless—		
Fresh..... pounds..	112,000	\$17,000
Frozen..... do.....	1,485,387	266,878
Canned—		
Wet in tins..... standard cases..	45,788	276,828
Wet in glass..... do.....	12,092	131,370
Dry in tins..... do.....	9,151	55,426
Oysters, fresh-shucked..... gallons..	75,416	106,801
Miscellaneous <sup>1</sup> .....	(?)	31,952
<b>Total.....</b>		<b>886,255</b>

FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 210]

Crab meat, packaged (fresh-cooked)..... pounds..	577	\$144
Shrimp, fresh headless, packaged..... do.....	54,855	3,840
Oysters, fresh-shucked..... gallons..	34,169	38,391
<b>Total.....</b>		<b>42,375</b>

<sup>1</sup> Includes fresh-cooked crab meat; sun-dried shrimp; shrimp bran; cooked shrimp; canned oysters; and oyster-shell products.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 196 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

FISHERIES OF THE PACIFIC COAST STATES <sup>10</sup>

The yield of fishery products in the Pacific Coast States (Washington, Oregon, and California) during 1930 amounted to 833,388,643 pounds, valued at \$23,064,140. This is a decrease of 19 per cent in the volume of the catch and 8 per cent in the value of the catch as compared with the quantity and its value for 1929. Of the total catch in 1930, 806,753,999 pounds, valued at \$21,302,721, were fish; 22,790,435 pounds, valued at \$1,594,466, were shellfish and miscellaneous products; and 3,844,209 pounds, valued at \$166,953, were whale products. These fisheries gave employment to 19,574 fishermen or 2 per cent less than in 1929. Of the total number of fishermen employed during 1930, 6,165 were employed on vessels and 13,409 in the boat and shore fisheries.

*Fisheries of the Pacific Coast States, 1930*

## SUMMARY OF CATCH

Product	Washington		Oregon	
	Pounds	Value	Pounds	Value
Fish.....	106,171,839	\$7,678,561	25,484,812	\$2,180,428
Shellfish, etc.....	3,866,922	656,212	973,949	75,860
Total.....	110,038,761	8,334,773	26,458,761	2,256,288

  

Product	California		Total	
	Pounds	Value	Pounds	Value
Fish.....	675,007,348	\$11,443,732	806,753,999	\$21,302,721
Shellfish, etc.....	17,949,564	862,394	22,790,435	1,594,466
Whale products.....	3,844,209	166,953	3,844,209	166,953
Total.....	696,801,121	12,473,079	833,388,643	23,064,140

## OPERATING UNITS: BY STATES

Item	Washington				Oregon		
	Puget Sound district	Coastal district	Columbia River district	Total	Columbia River district	Coastal district	Total
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	2,265	14	12	2,291	66	16	82
On boats and shore.....	1,952	2,786	1,747	6,485	2,456	1,345	3,801
Total.....	4,217	2,800	1,759	8,776	2,522	1,361	3,883
<b>Vessels:</b>							
Steam.....	2			2			
Net tonnage.....	29			29			
Motor.....	338	7	6	351	28	7	35
Net tonnage.....	6,817	56	53	6,926	282	63	345
Sail.....	4			4			
Net tonnage.....	1,418			1,418			
Total vessels.....	344	7	6	357	28	7	35
Total net tonnage.....	8,264	56	53	8,373	282	63	345

<sup>10</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure" which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith. Data on the operating units and catch of the fisheries of the Pacific Coast States have been taken largely from statistics collected by the various State agencies. Supplementary surveys, compilations, and analyses have been made by agents of this bureau in order that the figures may be presented in a manner comparable with those of other sections.

## Fisheries of the Pacific Coast States, 1930—Continued

## OPERATING UNITS: BY STATES—Continued

Item	Washington				Oregon		
	Puget Sound district	Coastal district	Columbia River district	Total	Columbia River district	Coastal district	Total
<b>Boats:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Motor.....	1,068	301	890	2,259	1,315	863	2,178
Other.....	496	234	231	961	86	187	273
<b>Apparatus:</b>							
Purse seines—							
Salmon.....	197			197			
Length, yards.....	122,140			122,140			
Haul seines.....	92		57	149	41	2	43
Length, yards.....	8,644		16,044	24,688	23,273	866	24,139
Gill nets—							
Drift—							
Salmon.....	377	106	543	1,026	921	479	1,400
Square yards.....	644,670	199,192	1,292,883	2,136,745	2,910,360	602,920	3,513,280
Set—							
Salmon.....	19	271	271	561	183	941	1,124
Square yards.....	6,726	91,320	66,124	164,170	47,580	151,181	198,761
Lines—							
Trawl, set, and hand.....	21,906	13	55	21,974	392	95	487
Hooks.....	476,490	1,300	5,500	483,290	39,200	9,500	48,700
Troll.....	2,156	64	724	2,944	1,201	517	1,718
Hooks.....	9,720	224	3,258	13,202	5,400	2,326	7,726
Pound nets.....	123	100	381	604	61		61
Brush weirs.....	5			5			
Fish wheels.....			39	39			
Dip nets.....	9	30	122	161	184		184
Drag bag nets.....	51	2		53			
Length, yards.....	4,261	120		4,381			
Reef nets.....	2			2			
Beam trawls.....	33			33			
Yards at mouth.....	226			226			
Traps—							
Crab.....	2,369	4,095		6,464		6,690	6,690
Crawfish.....					986		986
Tongs and rakes.....	183	27		210		2	2
Shovels.....	228	2,664		2,892		246	246
Spears.....		14		14			

Item	California						Grand total
	Northern district	San Francisco district	Monte-rey district	Southern district		Total	
				San Pedro division	San Diego division		
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	24	345	557	2,025	841	3,792	6,165
On boats and shore.....	552	997	632	732	210	3,123	13,409
Total.....	576	1,342	1,189	2,757	1,051	6,915	19,574
<b>Vessels:</b>							
Steam.....		4				4	6
Net tonnage.....		153				153	182
Motor.....	10	30	52	254	117	463	849
Net tonnage.....	73	408	904	7,707	5,246	14,338	21,609
Sail.....		4				4	8
Net tonnage.....		1,722				1,722	3,140
Total vessels.....	10	38	52	254	117	471	863
Total net tonnage.....	73	2,283	904	7,707	5,246	16,213	24,931
<b>Boats:</b>							
Motor.....	206	538	237	405	119	1,505	5,942
Other.....	212	89	35	41	3	380	1,614

## Fisheries of the Pacific Coast States, 1930—Continued

## OPERATING UNITS: BY STATES—Continued

Item	California					Total	Grand total
	Northern district	San Francisco district	Monterey district	Southern district			
				San Pedro division	San Diego division		
Apparatus:							
Purse seines—	Number	Number	Number	Number	Number	Number	Number
Barracuda				33		33	33
Length, yards				14, 228		14, 228	14, 228
Salmon							197
Length, yards							122, 140
Sardine			5	78		83	83
Length, yards			2, 050	31, 747		33, 797	33, 797
Tuna				82		82	82
Length, yards				46, 625		46, 625	46, 625
Lampara nets—							
Sardine		19	62	39	17	137	137
Length, yards		4, 080	20, 756	17, 106	4, 790	46, 732	46, 732
Squid			52			52	52
Length, yards			10, 220			10, 220	10, 220
Other				52		52	52
Length, yards				21, 152		21, 152	21, 152
Haul seines	18	1		1		20	212
Length, yards	2, 685	100		100		2, 885	51, 712
Gill nets—							
Drift—							
Barracuda				38	19	57	57
Square yards				330, 904	94, 804	425, 708	425, 708
Salmon	166	197				363	2, 789
Square yards	158, 253	634, 088				792, 341	6, 442, 366
Sea bass		17	23			40	40
Square yards		38, 070	45, 322			83, 392	83, 392
Shad		133				133	133
Square yards		441, 226				441, 226	441, 226
Striped bass		160				160	160
Square yards		434, 720				434, 720	434, 720
Set—							
Salmon							1, 685
Square yards							362, 931
Sea bass				37	22	59	59
Square yards				152, 625	120, 450	273, 075	273, 075
Miscellaneous—							
Other	12	64	61	37	11	185	185
Square yards	8, 862	108, 177	83, 390	30, 905	6, 826	238, 160	238, 160
Trammel nets			8	35	18	61	61
Square yards			12, 480	255, 500	247, 572	515, 552	515, 552
Lines—							
Trawl, set, and hand	369	619	1, 954	1, 450	735	5, 127	27, 588
Hooks	57, 907	55, 843	140, 631	255, 987	115, 690	626, 058	1, 158, 048
Troll	857	936	1, 214	2, 215	1, 545	6, 767	11, 423
Hooks	4, 040	4, 780	4, 977	2, 215	1, 545	17, 537	38, 485
Pound nets							665
Brush weirs							5
Fish wheels							39
Fyke nets		2, 102				2, 102	2, 102
Dip nets	42					42	387
Bag nets, shrimp		16				16	16
Length, yards		8, 996				8, 996	8, 996
Drag bag nets							53
Length, yards							4, 381
Reef nets							2
Paranzella nets	1	10	1	4		16	16
Yards at mouth	17	170	17	67		271	271
Beam trawls		22				22	55
Yards at mouth		147				147	373
Traps—							
Crab	408	4, 086				4, 494	17, 548
Crawfish							986
Lobster				2, 865	1, 572	4, 437	4, 377
Octopus	10		141			151	151
Harpoons—							
Swordfish and turtle				22	24	46	46
Whale		4				4	4
Tongs and rakes		22	1			23	235
Shovels	9	28	8	61		106	3, 244
Abalone outfits			12	1		13	13
Spears							14

## Fisheries of the Pacific Coast States, 1930—Continued

## CATCH: BY STATES

Species	Washington		Oregon	
	Pounds	Value	Pounds	Value
<b>FISH</b>				
Carp.....	214, 729	\$6, 441		
Cod <sup>2</sup> .....	9, 977, 023	151, 190		
Dolly Varden trout.....	2, 348	185		
Flounders:				
" Sole".....	271, 575	10, 320	7, 723	\$257
Other.....	92, 161	2, 673	37, 722	1, 220
Grayfish.....	371, 180	1, 309		
Hake.....			265	3
Halibut.....	12, 688, 277	1, 534, 627	412, 644	47, 483
Herring.....	489, 092	2, 877	138, 756	2, 408
" Lingcod".....	1, 022, 303	38, 562	187, 510	4, 595
Perch.....	59, 853	2, 439	42, 405	945
Rockfishes.....	637, 082	23, 926	118, 688	3, 422
Sablefish.....	2, 780, 448	127, 790	190, 269	6, 209
Salmon.....	72, 746, 074	5, 526, 245	20, 865, 628	1, 925, 337
Shad.....	531, 815	10, 636	1, 311, 845	20, 240
Skates.....	1, 170	28		
Smelt.....	2, 140, 055	58, 248	194, 172	4, 219
Steelhead trout.....	2, 073, 990	178, 243	1, 879, 573	152, 519
Striped bass.....			15, 664	1, 942
Sturgeon.....	63, 194	2, 627	78, 782	3, 389
Tuna and tunalike fishes, albacore.....			3, 166	240
Other fish.....	9, 470	195		
<b>Total</b> .....	<b>106, 171, 839</b>	<b>7, 678, 561</b>	<b>25, 484, 812</b>	<b>2, 180, 428</b>
<b>SHELLFISH, ETC.</b>				
Crabs.....	1, 822, 438	115, 288	725, 532	44, 106
Crawfish.....			176, 800	17, 680
Shrimp.....	88, 149	6, 699		
Clams:				
Hard.....	514, 748	38, 599		
Razor.....	799, 516	152, 130	38, 372	7, 197
Soft.....			25, 068	1, 567
Octopus.....	86, 413	4, 148		
Oysters:				
Eastern, market.....	1, 970	1, 851		
Japanese, market.....	228, 318	82, 875		
Native, market.....	302, 659	250, 502	8, 177	5, 310
Scallops.....	11, 583	3, 564		
Squid.....	11, 128	556		
<b>Total</b> .....	<b>3, 866, 922</b>	<b>656, 212</b>	<b>973, 949</b>	<b>75, 860</b>
<b>Grand total</b> .....	<b>110, 038, 761</b>	<b>8, 334, 773</b>	<b>26, 458, 761</b>	<b>2, 256, 288</b>

Species	California <sup>1</sup>		Total	
	Pounds	Value	Pounds	Value
<b>FISH</b>				
Anchovies.....	319, 561	\$4, 214	319, 561	\$4, 214
Arracuda.....	4, 763, 766	379, 122	4, 763, 766	379, 122
Abrilla.....	509, 539	27, 090	509, 539	27, 090
Carp.....	69, 387	1, 490	284, 116	7, 931
Catfish.....	433, 191	58, 228	433, 191	58, 228
Cod <sup>2</sup> .....	9, 259, 119	150, 928	19, 236, 142	302, 118
Dolly Varden trout.....			2, 348	185
Flounders:				
els.....	20	2	20	2
California halibut.....	1, 066, 641	128, 930	1, 066, 641	128, 930
" Sole".....	10, 919, 053	659, 840	11, 198, 351	670, 417
Other.....	1, 019, 876	42, 768	1, 149, 759	46, 661
Lyngfish.....	48, 458	1, 805	48, 458	1, 805
Rayfish.....	647, 297	11, 671	1, 018, 477	12, 980
Hake.....	56, 088	561	56, 353	564
Halibut.....	36, 765	2, 720	36, 765	2, 720
Halibut.....	445, 077	49, 474	13, 545, 998	1, 631, 584
Hardhead.....	38, 857	5, 257	38, 857	5, 257
Herring.....	748, 948	7, 707	1, 376, 796	12, 992

<sup>1</sup> Taken off Pacific coast, including Latin America.

<sup>2</sup> The cod were taken off Alaska.

## Fisheries of the Pacific Coast States, 1930—Continued

## CATCH: BY STATES—Continued

Species	California		Total	
	Pounds	Value	Pounds	Value
FISH—continued				
Horse mackerel	368,828	\$11,142	368,828	\$11,142
Kingfish	457,158	11,143	457,158	11,143
"Lingcod"	1,263,643	54,909	2,503,456	98,066
Mackerel	16,531,364	241,569	16,531,364	241,569
Mullet	21,307	1,930	21,307	1,930
Perch	268,337	11,201	370,595	14,588
Pilchard or sardines	494,450,747	2,377,432	440,450,747	2,377,432
Pompano	2,223	1,113	2,223	1,111
Rock bass	508,163	32,417	508,163	32,417
Rockfishes	7,213,354	281,154	7,969,124	308,500
Sablefish	1,361,494	47,579	4,332,211	181,577
Salmon	6,062,894	528,765	99,614,596	7,980,343
Sculpin	89,656	9,017	89,656	9,017
Sea bass:				
Black	394,009	19,878	394,009	19,877
White or squeteague	1,626,422	144,482	1,626,422	144,481
Shad	1,199,459	45,314	3,043,119	82,199
Sheepshead	243,689	9,035	243,689	9,035
Skates	286,390	5,753	287,560	5,781
Smelt	1,057,680	54,262	3,391,907	116,721
Spanish mackerel	42,965	2,041	42,965	2,041
Splittail	18,528	555	18,528	555
Squawfish	5,207	300	5,207	300
Steelhead trout			3,953,563	330,761
Striped bass	866,808	90,387	882,472	92,321
Sturgeon			141,976	6,011
Suckers	1,990	100	1,990	100
Swordfish	562,729	75,495	562,729	75,495
Tomcod	23,172	926	23,172	926
Tuna and tunalike fishes:				
Albacore	283,117	23,651	286,283	23,801
Bluefin	21,921,282	1,238,017	21,921,282	1,238,017
Bonito	5,164,260	166,566	5,164,260	166,566
Skipjack or striped tuna	20,485,587	789,836	20,485,587	789,836
Yellowfin	56,654,181	3,396,217	56,654,181	3,396,217
Whitebait	179,438	11,927	179,438	11,927
Whitefish	225,102	12,960	225,102	12,960
Yellowtail	4,770,428	269,776	4,770,428	269,776
Other fish	134,094	5,056	143,564	5,255
Total	675,097,348	11,443,732	806,753,999	21,302,721
SHELLFISH, ETC.				
Crabs	1,992,396	239,886	4,540,366	399,281
Crawfish			176,800	17,680
Sea crawfish or spiny lobster	1,394,139	263,145	1,394,139	263,145
Shrimp	2,696,567	42,272	2,784,716	48,991
Abalone	647,316	130,331	647,316	130,331
Clams:				
Cockle	30,051	9,659	30,051	9,659
Hard			514,748	38,590
Pismo	21,772	9,610	21,772	9,610
Razor			837,888	159,321
Soft	37,303	9,474	62,371	11,041
Mixed	5,162	1,098	5,162	1,098
Mussels	33	6	33	6
Octopus	76,960	7,265	163,393	11,411
Oysters:				
Eastern, market	72,796	29,118	74,766	30,961
Japanese, market			228,318	82,871
Native, market	4,949	3,093	315,785	258,981
Scallops			11,583	3,561
Squid	10,969,462	117,372	10,980,590	117,971
Terrapin	58	7	58	7
Turtles	580	58	580	58
Total	17,949,564	862,394	22,790,435	1,594,461
WHALE PRODUCTS				
Whale oil	3,844,209	166,953	3,844,209	166,953
Grand total	696,891,121	12,473,079	833,388,443	23,004,181

## Industries related to the fisheries of the Pacific Coast States, 1930

Item	Washington	Oregon	California	Total
	Number	Number	Number	Number
Transporting:				
Persons engaged.....	160	48	41	249
Vessels—				
Steam			1	1
Net tonnage.....			33	33
Motor	64	27	7	98
Net tonnage.....	1,425	286	539	2,250
Total vessels.....	64	27	8	99
Total net tonnage.....	1,425	286	572	2,283
Wholesale and manufacturing:				
Establishments.....	104	54	151	309
Persons engaged—				
Proprietors.....	125	47	213	385
Salaried employees.....	194	73	630	897
Wage earners—				
Average for season.....	2,134	734	7,686	10,554
Average for year.....	982	459	3,639	5,080
Salaries and wages paid.....	\$1,797,902	\$792,978	\$6,046,115	\$8,636,995
Manufactured products <sup>1</sup> .....	\$11,150,491	\$5,087,826	\$29,720,076	\$45,958,393

<sup>1</sup> These production figures are not comparable with those shown in previous bulletins since packaged fresh and frozen products are now included.

## WASHINGTON

## Fisheries of Washington, 1930

## CATCH: BY DISTRICTS

Species	Puget Sound district		Coastal district		Columbia River district	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
Carp.....			6,483	\$194	208,246	\$6,247
Cod.....	9,977,023	\$151,190				
Dolly Varden trout.....	2,348	185				
Flounders:						
" Sole ".....	271,575	10,320				
Other.....	92,161	2,673				
Grayfish.....	371,180	1,309				
Halibut.....	12,684,759	1,534,287	3,518	340		
Herring.....	489,092	2,877				
" Lingcod ".....	961,206	37,951	61,097	611		
Perch.....	58,421	2,396	1,432	43		
Rockfishes.....	617,112	23,748	19,970	178		
Sablefish.....	2,780,448	127,790				
Salmon:						
Blueback, red or sockeye.....	23,134,160	2,100,949	1,393,838	204,894	295,032	50,155
Chinook or king.....	11,499,406	1,190,070	1,396,129	126,297	7,080,215	861,104
Chum or keta.....	10,120,120	104,340	1,382,844	6,914	579,842	2,898
Humpback or pink.....	271,705	8,030				
Silver or coho.....	10,699,117	626,574	2,047,855	90,312	2,845,811	153,708
Shad.....					531,815	10,636
Skates.....	1,170	28				
Smelt.....	416,999	28,355	115,640	5,782	1,607,416	24,111
Steelhead trout.....	95,004	13,269	108,910	7,187	1,870,076	157,787
Sturgeon.....	1,064	53	7,470	224	54,660	2,350
Other fish.....	9,470	195				
<b>Total.....</b>	<b>84,553,540</b>	<b>5,966,589</b>	<b>6,545,186</b>	<b>442,976</b>	<b>15,073,113</b>	<b>1,268,996</b>
<b>SHELLFISH</b>						
Crabs.....	443,278	23,574	1,379,160	91,714		
Shrimp.....	88,149	6,699				
Clams:						
Hard.....	507,983	37,759	6,765	840		
Razor.....			799,516	152,130		
Octopus.....	86,413	4,148				
Oysters:						
Eastern, market.....			1,970	1,851		
Japanese, market.....	69,646	33,463	158,672	49,412		
Native, market.....	294,466	244,404	8,193	6,098		
Scallops.....	11,583	3,564				
Squid.....	11,128	556				
<b>Total.....</b>	<b>1,512,646</b>	<b>354,167</b>	<b>2,354,276</b>	<b>302,045</b>		
<b>Grand total.....</b>	<b>86,066,186</b>	<b>6,320,756</b>	<b>8,899,462</b>	<b>745,021</b>	<b>15,073,113</b>	<b>1,268,996</b>



## Fisheries of the Puget Sound district of Washington, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines, salmon	Haul seines	Gill nets		Lines		Pound nets	Brush weirs
			Drift, salmon	Set, salmon	Trawl, set, and hand	Troll		
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	1,576	10	5	.....	699	116	24	.....
On boats and shore.....	50	272	422	13	58	586	195	10
Total.....	1,626	282	427	13	757	702	219	10
Vessels:								
Motor.....	190	3	3	.....	104	58	8	.....
Net tonnage.....	4,390	17	19	.....	2,179	415	181	.....
Sail.....	.....	.....	.....	.....	4	.....	.....	.....
Net tonnage.....	.....	.....	.....	.....	1,418	.....	.....	.....
Total vessels.....	190	3	3	.....	108	58	8	.....
Total net tonnage.....	4,390	17	19	.....	3,597	415	181	.....
Boats:								
Motor.....	7	57	366	3	97	438	22	.....
Other.....	.....	51	8	10	117	.....	118	4
Apparatus:								
Number.....	197	92	377	19	21,906	2,156	123	5
Length, yards.....	122,140	8,644	.....	.....	.....	.....	.....	.....
Square yards.....	.....	.....	944,670	6,726	.....	.....	.....	.....
Hooks.....	.....	.....	.....	.....	476,490	9,720	.....	.....
Item	Dip nets	Drag bag nets	Reef nets	Beam trawls	Traps, crab	Tongs and rakes	Shovels	Total, exclusive of duplication
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	.....	.....	.....	46	.....	.....	.....	2,265
On boats and shore.....	9	124	5	30	111	69	228	1,952
Total.....	9	124	5	76	111	69	228	4,217
Vessels:								
Steam.....	.....	.....	.....	2	.....	.....	.....	2
Net tonnage.....	.....	.....	.....	29	.....	.....	.....	29
Motor.....	.....	.....	.....	17	.....	.....	.....	338
Net tonnage.....	.....	.....	.....	204	.....	.....	.....	6,817
Sail.....	.....	.....	.....	.....	.....	.....	.....	4
Net tonnage.....	.....	.....	.....	.....	.....	.....	.....	1,418
Total vessels.....	.....	.....	.....	19	.....	.....	.....	344
Total net tonnage.....	.....	.....	.....	233	.....	.....	.....	8,294
Boats:								
Motor.....	.....	36	2	14	103	21	.....	1,068
Other.....	.....	18	2	.....	.....	174	.....	496
Apparatus:								
Number.....	9	51	2	33	2,369	183	228	.....
Length, yards.....	.....	4,261	.....	.....	.....	.....	.....	.....
Yards at mouth.....	.....	.....	.....	226	.....	.....	.....	.....

## Fisheries of the Puget Sound district of Washington, 1930—Continued

## CATCH: BY GEAR

Species	Purse seines		Haul seines		Gill nets			
	Pounds	Value	Pounds	Value	Drift		Set	
					Pounds	Value	Pounds	Value
<b>FISH</b>								
Dolly Varden trout.....			1,995	\$160				
Flounders:								
" Sole ".....			8,317	316			1,078	\$41
Other.....			11,007	319	54	\$2		
Grayfish.....			99,500	348			5,100	18
Herring.....			6,075	35				
" Lingcod ".....			1,900	49				
Perch.....			44,156	1,810				
Rockfishes.....	16	\$1	11,381	364				
Salmon:								
Blueback, red or sockeye.....	17,502,681	1,497,140	80,122	9,535	23,156	2,756		
Chinook or king.....	533,855	39,508	34,012	4,115	1,098,548	132,924		
Chum or keta.....	9,037,570	90,464			295,080	4,426		
Humpback or pink.....	232,100	6,959		835	2,715	73		
Silver or coho.....	4,896,778	275,664	29,272	2,166	521,824	38,615	1,016	75
Skates.....				376			76	2
Smelt.....			253,960	17,269				
Steelhead trout.....	702	70			25,047	3,507		
Sturgeon.....	168	8						
Other fish.....			754	16				
Total.....	32,203,870	1,909,814	583,662	36,538	1,966,424	182,303	7,270	136
<b>SHELLFISH</b>								
Octopus.....							1,686	81
Squid.....			11,128	556				
Grand total.....	32,203,870	1,909,814	594,790	37,094	1,966,424	182,303	8,956	217

Species	Lines				Pound nets		Brush weirs	
	Trawl, set, and hand		Troll		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
<b>FISH</b>								
Cod.....	9,977,023	\$151,190						
Dolly Varden trout.....	353	25						
Flounders:								
" Sole ".....	58	2			865	\$33		
Other.....					2,425	70		
Grayfish.....	140,550	492						
Halibut.....	12,664,547	1,532,297	19,688	\$1,928	524	62		
Herring.....	21,647	126			20,300	118	437,800	\$2,579
" Lingcod ".....	863,958	35,314	13,001	433				
Perch.....	1,100	45			185	8		
Rockfishes.....	582,357	22,643	11,035	345				
Sablefish.....	2,780,448	127,790						
Salmon:								
Blueback, red or sockeye.....			609	65	5,525,996	591,282		
Chinook or king.....			5,237,543	553,979	4,595,184	459,518		
Chum or keta.....					786,880	9,443		
Humpback or pink.....			380	10	35,675	963		
Silver or coho.....			2,965,035	161,517	2,282,480	148,361		
Skates.....	18	1						
Steelhead trout.....					69,255	9,692		
Sturgeon.....					896	45		
Other fish.....	423	8						
Total.....	27,032,482	1,869,933	8,247,291	718,277	13,320,665	1,219,595	437,800	2,579
<b>SHELLFISH</b>								
Octopus.....	84,319	4,047			408	20		
Grand total.....	27,116,801	1,873,980	8,247,291	718,277	13,321,073	1,219,615	437,800	2,579

## Fisheries of the Puget Sound district of Washington, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Dip nets		Drag bag nets		Reef nets		Beam trawls	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Flounders:								
" Sole" .....							261,257	\$9,928
Other .....							78,675	2,282
Grayfish .....			2,000	\$7			124,030	444
Herring .....	3,170	\$18	100	1				
" Lingcod" .....							82,347	2,155
Perch .....			12,797	525			183	8
Rockfishes .....			53	2			12,270	393
Salmon:								
Blueback, red or sockeye .....					1,596	\$171		
Chinook or king .....					264	29		
Chum or keta .....					590	7		
Silver or coho .....					2,712	176		
Skates .....							700	14
Smelt .....	481	32	162,558	11,054				
Other fish .....	225	5	3,953	80			4,115	86
Total .....	3,876	55	181,461	11,669	5,162	380	563,577	15,310
<b>SHELLFISH</b>								
Shrimp .....							88,149	6,699
Scallops .....							11,583	3,564
Total .....							99,732	10,263
Grand total .....	3,876	55	181,461	11,669	5,162	380	663,309	25,573

Species	Traps		Tongs and rakes		Shovels	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>SHELLFISH</b>						
Crabs .....	443,278	\$23,574				
Clams, hard .....					507,983	\$37,759
Oysters:						
Japanese, market .....			69,646	\$33,463		
Native, market .....			294,466	244,404		
Total .....	443,278	23,574	364,112	277,867	507,983	37,759

## Fisheries of the coastal district of Washington, 1930

## OPERATING UNITS: BY GEAR

Item	Gill nets		Lines		Pound nets	Dip nets
	Drift, salmon	Set, salmon	Set	Troll		
<b>Fishermen:</b>						
On vessels .....						
On boats and shore .....	130	190	13	10	61	30
Total .....	130	190	13	22	61	30
<b>Vessels:</b>						
Motor .....				6		
Net tonnage .....				48		
<b>Boats:</b>						
Motor .....	106	63	4	7	56	
Other .....		157	9		53	
<b>Apparatus:</b>						
Number .....	106	271	13	64	100	30
Square yards .....	199,192	91,302				
Hooks .....			1,300	224		

Fisheries of the coastal district of Washington, 1930—Continued

OPERATING UNITS: BY GEAR—Continued

Item	Drag bag nets	TRIPS, crab	Tongs and rakes	Shovels	Spears	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>						
On vessels.....			2			14
On boats and shore.....	8	121	21	2,664	14	2,786
<b>Total</b> .....	8	121	23	2,664	14	2,800
<b>Vessels:</b>						
Motor.....			1			7
Net tonnage.....			8			56
<b>Boats:</b>						
Motor.....	2	112	8			301
Other.....		9	17			234
<b>Apparatus:</b>						
Number.....	2	4,095	27	2,664	14	
Length, yards.....	120					

CATCH: BY GEAR

Species	Gill nets				Lines			
	Drift		Set <sup>1</sup>		Set		Troll	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Carp.....			6,483	\$194				
Halibut.....							3,518	\$340
"Lingcod".....							61,097	611
Perch.....					1,432	\$43		
Rockfishes.....							19,970	178
<b>Salmon:</b>								
Blueback, red or sockeye.....			1,393,838	204,894				
Chinook or king.....	286,097	\$13,160	86,411	3,975			841,024	100,763
Chum or keta.....	135,684	678	374,940	1,875				
Silver or coho.....	291,060	11,351	572,650	22,333			535,925	31,347
Steelhead trout.....	340	22	103,340	6,820				
Sturgeon.....	7,470	224						
<b>Total</b> .....	720,651	25,435	2,537,662	240,091	1,432	43	1,461,534	133,239

Species	Pound nets		Dip nets		Drag bag nets	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
<b>Salmon:</b>						
Chinook or king.....	182,597	\$8,399				
Chum or keta.....	872,220	4,361				
Silver or coho.....	648,220	25,281				
<b>Smelt</b> .....			105,600	\$5,280	10,040	\$502
Steelhead trout.....	5,230	345				
<b>Total</b> .....	1,708,267	38,386	105,600	5,280	10,040	502

Species	Traps		Tongs and rakes		Shovels	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>SHELLFISH</b>						
<b>Crabs</b> .....	1,379,160	\$91,714				
<b>Clams:</b>						
Hard.....					6,765	\$840
Razor.....					799,516	152,130
<b>Oysters:</b>						
Eastern, market.....			1,970	\$1,851		
Japanese, market.....			158,672	49,412		
Native, market.....			8,193	6,098		
<b>Total</b> .....	1,379,160	91,714	168,835	57,361	806,281	152,970

<sup>1</sup> Includes catch by spears.

## Fisheries of the Columbia River district of Washington, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines		Pound nets	Fish wheels	Dip nets	Total, exclusive of duplication
		Drift, salmon	Set, salmon	Set	Troll				
Fishermen:									
On vessels					12				12
On boats and shore	498	720	106	29	202	208	26	122	1,747
Total	498	720	106	29	214	208	26	122	1,759
Vessels:									
Motor					6				6
Net tonnage					53				53
Boats:									
Motor	44	543	60	20	166	141		68	890
Other	62		46	8		124			231
Apparatus:									
Number	57	543	271	55	724	381	39	122	
Length, yards	16,044								
Square yards		1,292,883	66,124						
Hooks				5,500	3,258				

## CATCH: BY GEAR

Species	Haul seines		Gill nets				Lines—Set	
			Drift		Set			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Carp	208,246	\$6,247						
Salmon:								
Blueback, red or sockeye	38,596	6,561	78,907	\$13,414	9,297	\$1,580		
Chinook or king	897,786	114,019	3,119,732	393,086	65,205	8,216	373	\$47
Chum or keta	14,447	72	187,761	938	2,977	15		
Silver or coho	17,147	823	188,789	9,062	2,754	132		
Shad	331,169	6,623	58,823	1,176	1,441	29		
Steelhead trout	255,355	21,705	397,104	33,754	48,551	4,127		
Sturgeon	10,059	432	24,029	1,033	4,908	211	1,972	85
Total	1,772,805	156,482	4,055,145	452,463	135,133	14,310	2,345	132

Species	Lines—Troll		Pound nets		Fish wheels		Dip nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Salmon:								
Blueback, red or sockeye			82,662	\$14,053	54,934	\$9,339	30,636	\$5,208
Chinook or king	385,302	\$55,483	2,284,487	249,009	173,537	21,866	153,793	19,378
Chum or keta			368,014	1,840	1,024	5	5,619	28
Silver or coho	1,594,381	98,852	1,036,224	44,558	2,596	112	3,920	169
Shad			121,751	2,435	18,631	373		
Smelt							1,607,416	24,111
Steelhead trout	260	22	1,061,073	89,130	26,861	2,256	80,872	6,793
Sturgeon			10,523	452	3,130	135	39	2
Total	1,979,943	154,357	4,964,734	401,477	280,713	34,086	1,882,295	55,689

## Industries related to the fisheries of Washington, 1930

## TRANSPORTING

Item	Puget Sound district	Coastal district	Columbia River district	Total
Persons engaged on vessels.....	137	2	21	160
Vessels motor:				
5 to 10 tons.....	8	2	10	20
11 to 20 tons.....	14		2	16
21 to 30 tons.....	13			13
31 to 40 tons.....	8			8
41 to 50 tons.....	5			5
51 to 60 tons.....	1			1
81 to 90 tons.....	1			1
Total.....	50	2	12	64
Net tonnage.....	1,291	16	118	1,425

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Establishments.....	64	32	10	106
Persons engaged:				
Proprietors.....	84	34	7	125
Salaried employees.....	146	26	22	194
Wage earners—				
Average for season.....	1,428	437	269	2,134
Average for year.....	775	76	131	982
Paid to salaried employees.....	\$521,037	\$63,324	\$64,875	\$649,236
Paid to wage earners.....	893,984	90,290	164,392	1,148,666
Total salaries and wages.....	1,415,021	153,614	229,267	1,797,902

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Cod:		
Salted <sup>1</sup> ..... pounds.....	3,092,877	\$151,190
Salted, packaged..... do.....	662,250	<sup>2</sup> 88,904
Hallibut steaks..... do.....	89,938	15,105
Herring, spiced..... do.....	18,300	3,480
Sablefish, salted..... do.....	118,509	8,872
Salmon:		
Fresh steaks..... do.....	34,917	5,565
Mild-cured..... do.....	4,124,000	884,514
Salted..... do.....	45,346	4,929
Kippered (chinook)..... do.....	2,371,258	479,347
Smoked..... do.....	126,062	33,327
Canned—		
Blueback, red or sockeye..... standard cases.....	376,244	5,074,410
Chinook or king..... do.....	101,018	1,592,754
Chum or keta..... do.....	79,763	284,531
Humpback or pink..... do.....	3,712	23,702
Silver or coho..... do.....	141,541	1,294,363
Steelhead trout..... do.....	6,457	86,917
Eggs—		
For food..... do.....	1,667	15,683
For bait..... do.....	2,837	76,931
Shad:		
Canned..... do.....	3,088	8,908
Roe, canned..... do.....	113	3,616
Clams:		
Hard—		
Fresh-shucked..... gallons.....	4,100	6,211
Canned, whole, minced, and juice..... standard cases.....	17,856	78,353
Razor—		
Canned, whole, minced, chowder, and juice..... do.....	45,153	416,349

<sup>1</sup> The cod were salted in Alaskan waters.

<sup>2</sup> This figure is included in the total, however, it should be explained that it represents a further manufacture of salted cod already included in the table.

## Industries related to the fisheries of Washington, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED—Continued

Item	Quantity	Value
Oysters:		
Western, fresh-shucked..... gallons	28,375	\$225,241
Japanese, fresh-shucked..... do	25,000	87,500
Unclassified products		
Packaged <sup>3</sup> .....	( <sup>4</sup> )	47,992
Canned <sup>5</sup> ..... standard cases	312	4,420
Meal, salmon and halibut <sup>6</sup> ..... tons	1,050	70,071
Oil, salmon and halibut..... gallons	122,458	29,973
Miscellaneous <sup>7</sup> .....	( <sup>4</sup> )	47,283
Total.....		11,150,491

<sup>3</sup> Includes fresh and frozen steaks of "lingcod" and rockfish; packaged fresh crab meat; and fresh-shucked eastern oysters and scallops.

<sup>4</sup> Data not available.

<sup>5</sup> Includes canned herring for bait and dog and cat food.

<sup>6</sup> Includes small amount of salmon-egg meal.

<sup>7</sup> Includes canned sturgeon and crabs; smoked herring; kippered sablefish; and mild-cured shad.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State.

## OREGON

## Fisheries of Oregon, 1930

## CATCH: BY DISTRICTS

Species	Columbia River district		Coastal district	
	Pounds	Value	Pounds	Value
FISH				
Flounders:				
"Sole".....	3,272	\$125	4,451	\$132
Other.....			37,722	1,220
Hake.....			265	3
Halibut.....	137,069	17,623	275,575	29,860
Herring.....			138,756	2,408
"Lingcod".....	53,907	1,868	133,603	2,727
Perch.....			42,405	945
Rockfishes.....	26,080	768	92,608	2,654
Sablefish.....	83,645	3,017	106,624	3,192
Salmon:				
Blueback, red or sockeye.....	279,674	47,575		
Chinook or king.....	10,548,627	1,334,326	1,315,782	112,330
Chum or keta.....	318,771	1,594	266,843	1,334
Silver or coho.....	3,580,402	210,810	4,555,529	217,368
Shad.....	832,518	16,651	479,327	9,589
Smelt.....	188,229	3,893	5,943	326
Steelhead trout.....	1,488,220	126,124	391,353	26,395
Striped bass.....			15,664	1,942
Sturgeon.....	74,581	3,207	4,201	182
Tuna, albacore.....	255	33	2,911	207
Total.....	17,615,250	1,767,614	7,869,562	412,814
SHELLFISH				
Crabs.....			725,532	44,106
Crawfish.....	176,800	17,680		
Clams:				
Razor.....			38,372	7,197
Soft.....			25,068	1,567
Oysters, native, market.....			8,177	5,310
Total.....	176,800	17,680	797,149	58,180
Grand total.....	17,792,050	1,785,294	8,666,711	470,994

*Fisheries of the Columbia River district of Oregon, 1930*

OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines		Pound nets	Dip nets	Traps, crawfish	Total, exclusive of duplication
		Drift, salmon	Set, salmon	Trawl and set	Troll				
Fishermen:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels				22	44				66
On boats and shore	530	1,310	86	58	290	37	184	58	2,456
Total	530	1,310	86	80	334	37	184	58	2,522
Vessels, motor				6	22				28
Net tonnage				65	217				282
Boats:									
Motor	32	921	84	46	248	22		46	1,315
Other	46		3	12		18		12	86
Apparatus:									
Number	41	921	183	392	1,201	61	184	986	
Length, yards	23,273								
Square yards		2,910,360	47,580						
Hooks				39,200	5,400				

CATCH: BY GEAR

Species	Haul seines		Gill nets		Lines—Trawl and set	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
Flounders; "Sole"					3,272	\$123
Halibut					137,069	17,623
"Lingcod"					53,907	1,868
Rockfishes					26,080	768
Sablefish					83,645	3,017
Salmon:						
Blueback, red or sockeye	76,154	\$12,946	165,579	\$28,179		
Chinook or king	1,887,311	237,801	7,428,041	935,933		
Chum or keta	23,827	119	252,314	1,262		
Silver or coho	49,488	2,375	353,808	16,983		
Shad	626,937	12,539	157,645	3,153		
Smelt			53,500	1,872		
Steelhead trout	479,589	40,765	631,949	53,716		
Sturgeon	1,556	67	41,181	1,771	29,491	1,268
Tuna, albacore					255	33
Total	3,144,862	306,612	9,084,017	1,042,869	333,719	24,702

Species	Lines—Troll		Pound nets		Dip nets		Traps	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Salmon:								
Blueback, red or sockeye			23,077	\$3,923	14,864	\$2,527		
Chinook or king	624,179	\$89,882	355,078	38,704	254,018	32,006		
Chum or keta			41,357	207	1,273	6		
Silver or coho	2,886,150	178,941	287,606	12,367	3,350	144		
Shad			47,851	957		85		
Smelt					134,729	2,021		
Steelhead trout	1,066	91	296,533	24,909	79,083	6,643		
Sturgeon			1,739	75		614		
<b>SHELLFISH</b>								
Crawfish							176,800	\$17,680
Total	3,511,395	268,914	1,053,241	81,142	488,016	43,375	176,800	17,680



## Fisheries of the coastal district of Oregon, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines		Traps, crab	Tongs	Shovels	Total, exclusive of duplication
		Drift, salmon	Set, salmon	Trawl and set	Troll				
Fishermen:									
On vessels.....				6	12				16
On boats and shore.....	6	640	319	2	138	223	2	246	1,345
Total.....	6	640	319	8	150	223	2	246	1,361
Vessels:									
Motor.....				2	6				7
Net tonnage.....				24	47				63
Boats:									
Motor.....	2	472	174	1	116	198	1		863
Other.....	2	7	161			25	2		187
Apparatus:									
Number.....	2	479	941	95	517	6,690	2	246	
Length, yards.....	866								
Square yards.....		602,920	151,181						
Hooks.....				9,500	2,326				

## CATCH: BY GEAR

Species	Haul seines		Gill nets		Lines				
					Trawl and set		Troll		
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	
FISH									
Flounders:									
" Sole ".....	475	\$12			3,976	\$120			
Other.....	6,104	232	19,321	\$563	12,297	425			
Hake.....	265	3							
Halibut.....					273,698	29,663	1,877	\$197	
Herring.....	6,822	120	131,934	2,288					
" Lingcod ".....					91,132	1,863	42,471	864	
Perch.....	3,229	98	39,176	847					
Rockfishes.....					71,722	2,084	20,886	570	
Sablefish.....					106,624	3,192			
Salmon:									
Chinook or king.....			1,035,324	\$5,686			280,458	26,664	
Chum or keta.....			266,813	1,334					
Silver or coho.....			2,957,095	119,864			1,598,434	97,504	
Shad.....			479,327	9,589					
Smelt.....	856	43	5,087	283					
Steelhead trout.....			390,348	26,325			1,005	70	
Striped bass.....	614	74	15,050	1,868					
Sturgeon.....			4,158	179	20	2	23	1	
Tuna, albacore.....					20	2	2,891	205	
Total.....	18,365	582	5,343,663	248,826	559,489	37,351	1,948,045	126,055	

Species	Traps		Tongs		Shovels	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH						
Crabs.....	725,532	\$44,106				
Clams:						
Razor.....					38,372	\$7,197
Soft.....					25,068	1,567
Oysters, native, market.....			8,177	\$5,310		
Total.....	725,532	44,106	8,177	5,310	63,440	8,764

*Industries related to the fisheries of Oregon, 1930*

## TRANSPORTING IN COLUMBIA RIVER DISTRICT

Persons engaged on vessels.....	48
Vessels, motor:	
5 to 10 tons.....	18
11 to 20 tons.....	9
Total.....	27
Net tonnage.....	286

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Columbia River district	Coastal district	Total
Establishments.....	35	19	54
Persons engaged:			
Proprietors.....	32	15	47
Salaried employees.....	56	17	73
Wage earners—			
Average for season.....	660	74	734
Average for year.....	409	50	459
Paid to salaried employees.....	\$199,844	\$55,685	\$255,529
Paid to wage earners.....	478,246	59,203	537,449
Total salaries and wages.....	678,090	114,888	792,978

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Salmon:		
Mild-cured..... pounds..	546,150	\$123,317
Canned—		
Blueback, red or sockeye..... standard cases..	5,923	124,383
Chinook or king..... do.....	206,276	3,227,599
Chum or keta..... do.....	8,649	29,671
Silver or coho..... do.....	106,868	1,138,930
Steelhead..... do.....	11,588	183,496
Shad:		
Canned..... do.....	7,364	26,114
Roe, canned..... do.....	813	26,004
Crab meat, packaged (fresh-cooked)..... pounds..	126,475	59,365
Clams, razor: Canned, whole, minced, and juice..... standard cases..	956	8,631
Oysters, western, fresh-shucked..... gallons..	9,530	70,884
Other products <sup>1</sup> .....	(?)	69,432
Total.....		5,087,826

<sup>1</sup> Includes salted sablefish; canned crabs; fresh-shucked eastern and Japanese oysters; canned salmon eggs (for bait); salmon meal; and salmon oil.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State.

## CALIFORNIA

## Fisheries of California, 1930

## CATCH: BY DISTRICTS

Species	Northern district		San Francisco district		Monterey district	
	Pounds	Value	Pounds	Value	Pounds	Value
FISH						
Anchovies.....			261,850	\$3,142	43,500	\$749
Barracuda.....					30	3
Carp.....			67,012	1,315		
Catfish.....	43,343	\$6,401	389,848	51,827		
Cod.....			9,259,119	150,928		
Eels.....			10	1		
Flounders:						
"California halibut".....					24,412	2,799
"Sole".....	1,569,399	95,889	8,059,671	493,201	904,119	53,843
Other.....	82,203	3,489	815,450	34,064	104,739	4,477
Grayfish.....	2,345	23	221,672	2,212	8,925	89
Hake.....			50,983	510	5,105	51
Halibut.....	413,958	46,519	31,119	2,955		
Hardhead.....			38,857	5,257		
Herring.....	103,183	1,692	601,927	5,437		
Horse mackerel.....					95,271	1,030
Kingfish.....			40,337	1,230	124,607	4,286
"Lingcod".....	511,979	20,067	581,902	24,514	196,354	10,150
Mackerel.....			12,362	371	1,363,106	42,489
Perch.....	32,426	1,296	112,486	5,639	14,957	694
Pilchard or sardine.....			48,468,957	195,812	259,097,933	1,177,617
Pompano.....					516	214
Rock bass.....					16	1
Rockfishes.....	253,568	8,480	1,027,496	34,321	2,825,970	98,261
Sablefish.....	627,051	26,387	461,348	12,421	267,589	8,366
Salmon.....	3,501,539	287,900	2,221,940	209,336	279,409	31,528
Sculpin.....	229	5			817	21
Sea bass, white or squeteague.....	216	7	48,334	3,513	45,677	3,069
Shad.....			1,199,459	45,314		
Skates.....	3,030	61	221,324	4,426	28,871	570
Smelt.....	72,893	4,528	198,406	10,937	339,963	18,105
Splittail.....			18,528	555		
Squawfish.....			5,207	300		
Striped bass.....			866,808	90,387		
Suckers.....			1,990	100		
Tomcod.....	712	28	22,460	898		
Tuna and tunalike fishes:						
Albacore.....					172,962	12,570
Bonito.....					1,166	58
Whitebait.....	144,754	8,974	31,633	2,688	2,996	261
Other fish.....	70,343	1,677	12,156	277	12,731	528
Total.....	7,433,171	513,423	75,350,651	1,393,888	265,961,741	1,471,829
SHELLFISH, ETC.						
Crabs.....	92,448	9,638	1,898,832	230,083	1,104	162
Shrimp.....			2,687,831	40,318	8,736	1,954
Abalone.....					631,795	126,359
Clams:						
Cockle.....	7	2	21,534	7,594		
Pismo.....					2,409	1,230
Soft.....			37,303	9,474		
Mixed.....	4,916	1,028	246	70		
Mussels.....			3	1	30	5
Octopus.....	5,141	410	8,578	740	63,003	6,069
Oysters:						
Eastern, market.....			72,796	29,118		
Native, market.....			4,949	3,093		
Squid.....					10,937,974	115,614
Terrapin.....			58	7		
Total.....	102,512	11,078	4,732,130	320,498	11,645,051	251,393
WHALE PRODUCTS						
Whale oil.....			3,844,209	166,953		
Grand total.....	7,535,683	524,501	83,926,990	1,881,339	277,606,792	1,723,222

## Fisheries of California, 1930—Continued

## CATCH: BY DISTRICTS—Continued

Species	Southern district—Off California			
	San Pedro division		San Diego division	
	Pounds	Value	Pounds	Value
FISH				
Anchovies.....	10, 311	\$284	3, 900	\$39
Barracuda.....	2, 554, 875	186, 151	958, 703	63, 107
Cabrilla.....			471	17
Carp.....	2, 375	175		
Eels.....	10	1		
Flounders:				
"California halibut".....	731, 066	93, 132	109, 465	11, 829
"Sole".....	379, 366	16, 324	6, 498	583
Other.....	17, 341	728	43	3
Flyingfish.....	48, 458	1, 805		
Grayfish.....	288, 167	8, 703	124, 633	582
Halfmoon.....	36, 765	2, 720		
Herring.....	259	13	43, 579	565
Horse mackerel.....	273, 557	10, 112		
Kingfish.....	289, 743	5, 548	2, 471	79
"Lingcod".....	3, 408	178		
Mackerel.....	14, 473, 352	184, 846	681, 280	13, 840
Mullet.....	11, 096	1, 055	9, 657	858
Perch.....	104, 431	3, 444	3, 377	98
Pilehard or sardine.....	182, 711, 875	977, 784	4, 171, 982	26, 219
Pompano.....	1, 351	757	356	142
Rock bass.....	345, 636	24, 459	130, 020	5, 644
Rockfishes.....	2, 044, 311	89, 218	1, 053, 604	50, 445
Sablefish.....	5, 506	405		
Salmon.....	6	1		
Sculpin.....	65, 567	7, 009	23, 043	1, 982
Sea bass:				
Black.....	103, 246	5, 292	84, 227	3, 600
White or squeteague.....	886, 685	80, 406	258, 373	18, 818
Sheepshead.....	203, 593	7, 470	37, 461	1, 454
Skates.....	31, 410	662	1, 755	34
Smelt.....	431, 409	19, 874	13, 927	739
Swordfish.....	196, 425	26, 609	365, 070	48, 732
Tuna and tunalike fishes:				
Albacore.....	107, 987	10, 857	2, 168	224
Bluefin.....	15, 443, 346	881, 976	155, 546	8, 556
Bonito.....	2, 624, 642	83, 143	1, 240, 688	38, 363
Skipjack or striped tuna.....	1, 109, 680	44, 387	1, 905, 595	76, 224
Yellowfin.....	12, 564	795	22, 989	1, 379
Whitebait.....	55	4		
Whitefish.....	115, 299	8, 630	99, 267	3, 836
Yellowtail.....	241, 838	13, 498	973, 121	39, 069
Other fish.....	33, 990	2, 338		
Total.....	225, 941, 001	2, 800, 793	12, 483, 269	417, 150
SHELLFISH, ETC.				
Crabs.....	12	3		
Sea crawfish or spiny lobster.....	267, 670	53, 160	106, 780	21, 074
Abalone.....	15, 521	3, 972		
Clams:				
Cockle.....	8, 510	2, 063		
Pismo.....	19, 363	8, 380		
Octopus.....	258	46		
Squid.....	30, 376	1, 672	1, 112	86
Total.....	341, 710	69, 296	107, 892	21, 160
Grand total.....	226, 282, 711	2, 870, 089	12, 591, 161	438, 310

## Fisheries of California, 1930—Continued

## CATCH: BY DISTRICTS—Continued

Species	Southern district—Off Latin America				Total southern district	
	San Pedro division		San Diego division		Pounds	Value
	Pounds	Value	Pounds	Value		
FISH						
Anchovies.....					14, 211	\$323
Barracuda.....	937, 715	\$96, 374	312, 443	\$33, 487	4, 763, 736	379, 119
Cabrilla.....	387, 394	22, 545	121, 674	4, 528	509, 539	27, 090
Carp.....					2, 375	175
Eels.....					10	1
Flounders:						
"California halibut".....	12, 562	1, 234	189, 136	19, 936	1, 042, 229	126, 131
"Sole".....					385, 864	16, 907
Other.....	100	7			17, 484	738
Flyingfish.....					48, 458	1, 805
Grayfish.....	1, 555	62			414, 355	9, 347
Halfmoon.....					36, 765	2, 720
Herring.....					43, 838	578
Horse mackerel.....					273, 557	10, 112
Kingfish.....					292, 214	5, 627
"Lingcod".....					3, 408	178
Mackerel.....			1, 264	23	15, 155, 896	198, 709
Mullet.....	554	37			21, 307	1, 950
Perch.....	660	30			108, 468	3, 572
Pilchard or sardine.....					186, 883, 857	1, 004, 003
Pompano.....					1, 707	899
Rock bass.....	13, 972	822	18, 519	1, 491	508, 147	32, 416
Rockfishes.....			8, 405	429	3, 106, 320	140, 092
Sablefish.....					5, 506	405
Salmon.....					6	1
Sculpin.....					88, 610	8, 991
Sea bass:						
Black.....	71, 152	3, 818	135, 384	7, 078	394, 009	19, 878
White or squeteague.....	128, 193	14, 426	258, 944	24, 243	1, 532, 195	137, 893
Sheepshead.....	377	15	2, 258	96	243, 689	9, 035
Skates.....					33, 165	696
Smelt.....			1, 082	79	446, 418	20, 692
Spanish mackerel.....	19, 620	1, 284	23, 345	757	42, 965	2, 041
Swordfish.....			1, 234	154	562, 729	75, 495
Tuna and tunalike fishes:						
Albacore.....					110, 155	11, 081
Bluefin.....	6, 150, 000	338, 341	172, 390	9, 144	21, 921, 282	1, 238, 017
Bonito.....	1, 214, 567	42, 123	83, 197	2, 879	5, 163, 094	166, 508
Skipjack or striped tuna.....	5, 737, 340	203, 878	11, 732, 972	465, 347	20, 485, 587	789, 836
Yellowfin.....	12, 537, 771	754, 534	44, 080, 857	2, 639, 509	56, 654, 181	3, 396, 217
Whitebait.....					55	4
Whitefish.....	360	24	10, 176	470	225, 102	12, 960
Yellowtail.....	2, 414, 674	111, 829	1, 140, 795	45, 380	4, 770, 428	209, 776
Other fish.....	4, 874	236			38, 864	2, 574
Total.....	29, 633, 440	1, 591, 619	58, 294, 075	3, 255, 030	326, 351, 785	8, 064, 592
SHELLFISH, ETC.						
Crabs.....					12	3
Sea crawfish or spiny lobster.....			1, 019, 689	188, 911	1, 394, 139	263, 145
Abalone.....					15, 521	3, 972
Clams:						
Cockle.....					8, 510	2, 063
Pismo.....					19, 363	8, 380
Octopus.....					258	46
Squid.....					31, 488	1, 758
Turtles.....			580	58	580	58
Total.....			1, 020, 269	188, 969	1, 469, 871	279, 425
Grand total.....	29, 633, 440	1, 591, 619	59, 314, 344	3, 443, 999	327, 821, 656	8, 344, 017

## Fisheries of California, 1930—Continued

## CATCH: BY WATERS

Species	Off California <sup>1</sup>		Off Latin America	
	Pounds	Value	Pounds	Value
<b>FISH</b>				
Anchovies.....	319,561	\$4,214		
Barracuda.....	3,513,608	249,261	1,250,158	\$129,861
Cabrillo.....	471	17	509,068	27,073
Carp.....	69,387	1,490		
Catfish.....	433,191	58,228		
Cod.....	9,259,119	150,928		
Eels.....	20	2		
Flounders:				
"California halibut".....	864,943	107,760	201,698	21,170
"Sole".....	10,919,053	659,840		
Other.....	1,019,776	42,761	100	7
Flyingfish.....	48,458	1,805		
Grayfish.....	645,742	11,609	1,555	62
Hake.....	56,088	561		
Halfmoon.....	36,765	2,720		
Halibut.....	445,077	49,474		
Hardhead.....	38,857	5,257		
Herring.....	748,948	7,707		
Horse mackerel.....	368,828	11,142		
Kingfish.....	457,158	11,143		
"Lingcod".....	1,293,643	54,909		
Mackerel.....	16,530,100	241,546	1,264	23
Mullet.....	20,753	1,913	554	37
Perch.....	267,677	11,171	660	30
Pilchard or sardine.....	494,450,747	2,377,432		
Pompano.....	2,223	1,113		
Rock bass.....	475,672	30,104	32,491	2,313
Rockfishes.....	7,204,949	280,725	8,405	429
Sablefish.....	1,361,494	47,579		
Salmon.....	6,002,894	528,765		
Sculpin.....	89,656	9,017		
Sea bass:				
Black.....	187,473	8,982		
White or squeteague.....	1,239,285	105,813	387,137	38,669
Shad.....	1,199,459	45,314		
Sheepshead.....	241,054	8,924	2,635	111
Skates.....	286,390	5,753		
Smelt.....	1,056,598	54,183	1,082	79
Spanish mackerel.....			42,965	2,041
Splittail.....	18,528	555		
Squawfish.....	5,207	300		
Striped bass.....	866,808	90,387		
Suckers.....	1,990	100		
Swordfish.....	561,495	75,341	1,234	154
Tomcod.....	23,172	926		
Tuna and tunalike fishes:				
Albacore.....	283,117	23,651		
Bluefin.....	15,598,892	890,532	6,322,390	347,485
Bonito.....	3,866,496	121,564	1,297,764	45,002
Skipjack or striped tuna.....	3,015,275	120,611	17,470,312	669,225
Yellowfin.....	35,553	2,174	56,618,628	3,394,043
Whitebait.....	179,438	11,927		
Whitefish.....	214,566	12,466	10,536	494
Yellowtail.....	1,214,959	52,567	3,555,469	157,209
Other fish.....	129,220	4,820	4,874	236
<b>Total.....</b>	<b>587,169,833</b>	<b>6,597,083</b>	<b>87,927,515</b>	<b>4,846,649</b>
<b>SHELLFISH, ETC.</b>				
Crabs.....	1,992,396	239,886		
Shrimp.....	2,696,567	42,272		
Sea crawfish or spiny lobster.....	374,450	74,234	1,019,689	188,911
Abalone.....	647,316	130,331		
Clams:				
Cockle.....	30,051	9,659		
Pismo.....	21,772	9,610		
Soft.....	37,303	9,474		
Mixed.....	5,162	1,098		
Mussels.....	33	6		
Octopus.....	76,980	7,265		
Oysters:				
Eastern, market.....	72,796	29,118		
Native, market.....	4,949	3,093		

<sup>1</sup> The catch of cod was taken in Alaska waters.

## Fisheries of California, 1930—Continued

## CATCH: BY WATERS—Continued

Species	Off California		Off Latin America	
	Pounds	Value	Pounds	Value
<b>SHELLFISH, ETC.—continued</b>				
Squid.....	10,969,462	\$117,372		
Terrapin.....	58	7		
Turtles.....			580	\$58
Total.....	16,929,295	673,425	1,020,269	188,969
<b>WHALE PRODUCTS</b>				
Whale oil.....	3,844,209	166,953		
Grand total.....	607,943,337	7,437,461	88,947,784	5,035,618

## Fisheries of the northern district of California, 1930

## OPERATING UNITS: BY GEAR

Item	Haul seines	Gill nets		Lines	
		Drift, salmon	Other	Set and hand	Troll
<b>Fishermen:</b>					
On vessels.....	Number	Number	Number	Number	Number
On boats and shore.....	32	251	13	16	14
Total.....	32	251	13	172	248
<b>Vessels:</b>					
Motor.....				7	7
Net tonnage.....				52	52
<b>Boats:</b>					
Motor.....	17		12	103	198
Other.....	4	166		17	
<b>Apparatus:</b>					
Number.....	18	166	12	369	857
Length, yards.....	2,685				
Square yards.....		158,253	8,862		
Hooks.....				57,907	4,040

Item	Dip nets	Paran-zella nets	Traps		Shovels	Total, exclusive of duplication
			Crab	Octopus		
<b>Fishermen:</b>						
On vessels.....	Number	Number	Number	Number	Number	Number
On boats and shore.....	42	6	28	1	9	24
Total.....	42	6	28	1	9	576
<b>Vessels:</b>						
Motor.....		2				10
Net tonnage.....		14				73
<b>Boats:</b>						
Motor.....			22	1		206
Other.....	42					212
<b>Apparatus:</b>						
Number.....	42	1	408	10	9	
Yards at mouth.....		17				

## Fisheries of the northern district of California, 1930—Continued

## CATCH: BY GEAR

Species	Haul seines		Gill nets		Lines			
	Pounds	Value	Pounds	Value	Set and hand		Troll	
					Pounds	Value	Pounds	Value
<b>FISH</b>								
Catfish.....					43,343	\$6,401		
Flounders:								
" Sole ".....					5,021	149		
Other.....	3,962	\$180						
Halibut.....					400,613	45,258	11,443	\$1,080
Herring.....	103,183	1,692						
" Lingcod ".....					246,597	10,040	45,227	1,221
Perch.....	31,561	1,262	801	\$32				
Rockfishes.....					159,395	5,530	5,583	115
Sablefish.....					618,754	26,180		
Salmon.....	30,436	1,515	667,975	64,354			2,803,128	222,031
Sculpin.....					229	5		
Sea bass, white or squeteague.....					216	7		
Smelt.....	39,559	2,323	25,881	1,790				
Whitebait.....	3,378	139	214	8				
Other fish.....			153	10	67,867	1,605	598	15
Total.....	212,079	7,111	695,024	66,194	1,542,035	95,175	2,865,979	224,462
<b>SHELLFISH</b>								
Octopus.....					953	75		
Grand total.....	212,079	7,111	695,024	66,194	1,542,988	95,250	2,865,979	224,462

Species	Dip nets		Paranzella nets		Traps		Shovels	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Flounders:								
" Sole ".....			1,564,378	\$95,740				
Other.....	42	\$2	78,199	3,307				
Grayfish.....			2,345	23				
Halibut.....			1,902	181				
" Lingcod ".....			220,155	8,806				
Perch.....	64	2						
Rockfishes.....			88,590	2,835				
Sablefish.....			8,297	207				
Skates.....			3,030	61				
Smelt.....	7,453	415						
Tomcod.....			712	28				
Whitebait.....	141,162	8,827						
Other fish.....	115	7	1,610	40				
Total.....	148,836	9,253	1,969,218	111,228				
<b>SHELLFISH</b>								
Crabs.....					92,448	\$9,638		
Clams:								
Cockle.....							7	\$2
Mixed.....							4,916	1,028
Octopus.....					4,188	335		
Total.....					96,636	9,973	4,923	1,030



## Fisheries of the San Francisco district of California, 1930

## OPERATING UNITS: BY GEAR

Item	Lampara nets, sardine	Haul seines	Gill nets					Lines	
			Drift, salmon	Drift, sea bass	Drift, shad	Drift, striped bass	Other	Set and hand	Troll
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....	68							133	2
On boats and shore.....	69	3	364	23	253	289	70	70	270
Total.....	137	3	364	23	253	289	70	203	272
Vessels:									
Motor.....	7							1	1
Net tonnage.....	76							9	19
Sail.....								4	
Net tonnage.....								1,722	
Total vessels.....	7							5	1
Total net tonnage.....	76							1,731	19
Boats:									
Motor.....	12		187	15	126	151	37	81	255
Other.....		1	10	2	7	9	2	10	
Apparatus:									
Number.....	19	1	197	17	133	160	64	619	936
Length, yards.....	4,080	100							
Square yards.....			634,088	38,070	441,226	434,720	108,177		
Hooks.....								55,843	4,780

  

Item	Fyke nets	Bag nets	Paranzella nets	Beam trawls	Traps	Harpoons, whaling	Tongs	Rakes	Shovels	Total, exclusive of duplication
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels.....		14	86			44				345
On boats and shore.....	97	52		22	207		21	1	28	997
Total.....	97	66	86	22	207	44	21	1	28	1,342
Vessels:										
Steam.....						4				4
Net tonnage.....						153				153
Motor.....		3	20							30
Net tonnage.....		20	312							408
Sail.....										4
Net tonnage.....										1,722
Total vessels.....		3	20			4				38
Total net tonnage.....		20	312			153				2,283
Boats:										
Motor.....	31	8		22	206		7			538
Other.....	40	5					14	1	28	89
Apparatus:										
Number.....	2,102	16	10	22	4,086	4	21	1	28	
Length, yards.....		8,996								
Yards at mouth.....			170	147						

## Fisheries of the San Francisco district of California, 1930—Continued

## CATCH: BY GEAR

Species	Lampara nets		Haul seines		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
Anchovies.....	261,850	\$3,142				
Carp.....			4,835	\$232	43,589	\$705
Flounders, other.....	843	32			1,302	31
Grayfish.....	2,460	25			12,602	126
Herring.....	3,485	51			598,442	5,386
Kingfish.....	22,160	776				
Mackerel.....	12,246	367			116	4
Perch.....	1,711	102			110,550	5,528
Pilchard or sardine.....	48,468,957	195,812				
Salmon.....					1,214,084	109,762
Sea bass, white or squeteague.....	3,739	280			44,403	3,219
Shad.....					1,199,459	45,314
Smelt.....	4,844	291			193,562	10,646
Squawfish.....					1,455	51
Striped bass.....					851,417	88,485
Suckers.....					33	2
Tomcod.....	15,450	618			108	4
Whitebait.....	30,758	2,614			875	74
Other fish.....					1,616	49
<b>Total.....</b>	<b>48,828,503</b>	<b>204,110</b>	<b>4,835</b>	<b>232</b>	<b>4,273,613</b>	<b>269,386</b>

Species	Lines				Fyke nets		Bag nets	
	Set and hand		Troll		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
<b>FISH</b>								
Carp.....					18,588	\$378		
Catfish.....					389,848	51,827		
Cod.....	9,259,119	\$150,928						
Eels.....	10	1						
Flounders:								
" Sole ".....	3,146	142						
Other.....	367	9						
Grayfish.....	6,822	68	1,700	\$12				
Halibut.....	391	38	669	61				
Hardhead.....					38,857	5,257		
"Lingcod".....	267,162	12,022	7,298	194				
Rockfishes.....	492,075	17,223	3,020	61				
Sablefish.....	118,203	3,842						
Salmon.....			1,007,856	99,574				
Sea bass, white or squeteague.....			192	14				
Splittail.....					18,528	555		
Squawfish.....					3,752	249		
Striped bass.....	15,391	1,902						
Suckers.....					1,957	98		
Other fish.....	2,166	54	487	11	220	10		
<b>Total.....</b>	<b>10,164,852</b>	<b>186,229</b>	<b>1,021,222</b>	<b>99,927</b>	<b>471,750</b>	<b>58,374</b>		
<b>SHELLFISH, ETC.</b>								
Shrimp.....							1,296,247	\$19,444
Octopus.....	7,527	677						
<b>Grand total.....</b>	<b>10,172,379</b>	<b>186,906</b>	<b>1,021,222</b>	<b>99,927</b>	<b>471,750</b>	<b>58,374</b>	<b>1,296,247</b>	<b>19,444</b>



## Fisheries of the Monterey district of California, 1930—Continued

## OPERATING UNITS: BY GEAR—Continued

Item	Paranzella nets	Traps, octopus	Rakes	Shovels	Abalone outfits	Total, exclusive of duplication
	Number	Number	Number	Number	Number	Number
Fishermen:						
On vessels.....					50	557
On boats and shore.....	6	15	1	8	10	632
Total.....	6	15	1	8	60	1,189
Vessels, motor.....					10	52
Net tonnage.....					77	904
Boats:						
Motor.....	2	11			2	237
Other.....		1				35
Apparatus:						
Number.....	1	141	1	8	12	
Yards at mouth.....	17					

## CATCH: BY GEAR

Species	Purse seines		Lampara nets		Gill nets		Trammel nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Anchovies.....			43,500	\$749				
Barracuda.....					30	\$3		
Flounders:								
"California halibut".....			237	28			13,946	\$1,693
"Sole".....			140	7			2,338	117
Other.....							184	8
Horse mackerel.....			94,901	1,012	370	18		
Kingfish.....			24,254	857	82,566	2,902		
"Lingcod".....			25	1			448	24
Mackerel.....			113,212	3,279	1,419	44		
Perch.....			6,958	350	7,740	332		
Pilchard or sardine.....	64,290,585	\$307,400	194,789,676	870,040	17,672	177		
Pompano.....			384	166	132	48		
Rockfishes.....			823	26			65	2
Sculpin.....							65	7
Sea bass, white or squeague.....	191	23						
Skates.....			625	65	44,819	2,977		
Smelt.....			1,853	34			4,308	96
Tuna and tunalike fishes, bonito.....			60,844	3,443	278,848	14,643		
Whitebait.....			508	25	658	33		
.....			2,996	261				
Total.....	64,290,776	307,423	195,140,936	880,343	434,254	21,177	21,354	1,947
SHELLFISH								
Crabs.....					1,088	160		
Squid.....			10,937,974	115,614				
Grand total.....	64,290,776	307,423	206,078,910	995,957	435,342	21,337	21,354	1,947

## Fisheries of the Monterey district of California, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Lines				Paranzella nets		Traps	
	Set and hand		Troll		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
FISH								
Flounders:								
"California halibut".....	5,362	\$542	1,529	\$186	3,338	\$350		
"Sole".....	32,446	1,503	15	1	869,180	52,215		
Other.....	7,489	399			97,066	4,070		
Grayfish.....	280	3			8,645	86		
Hake.....					5,105	51		
Kingfish.....	8,257	289			9,530	238		
"Lingcod,".....	154,597	8,416	3,370	186	37,914	1,523		
Mackerel.....	1,245,875	39,088	2,600	78				
Perch.....	129	7			130	5		
Rock bass.....	16	1						
Rockfishes.....	2,769,684	96,129	3,245	114	52,153	1,990		
Sablefish.....	243,116	7,754			24,473	612		
Salmon.....			279,409	31,528				
Sculpin.....	752	14						
Sea bass, white or squeteague.....	26	2	16	2				
Skates.....	4,517	91			18,193	349		
Smelt.....	271	19						
Tuna and tunalike fishes, albacore.....			172,962	12,570				
Other fish.....	7,838	357			4,893	171		
Total.....	4,480,655	154,614	463,146	44,665	1,130,620	61,660		
SHELLFISH								
Crabs.....					16	2		
Shrimp.....							8,736	\$1,954
Octopus.....	8,974	904			117	11	53,912	5,154
Total.....	8,974	904			133	13	62,648	7,108
Grand total.....	4,489,629	155,518	463,146	44,665	1,130,753	61,673	62,648	7,108

Species	Rakes		Shovels		Abalone outfits	
	Pounds	Value	Pounds	Value	Pounds	Value
SHELLFISH						
Abalone.....					631,795	\$126,359
Clams, Pismo.....			2,409	\$1,230		
Mussels.....	30	\$5				
Total.....	30	5	2,409	1,230	631,795	126,359

## Fisheries of the San Pedro division of the southern district of California, 1930

## OPERATING UNITS: BY GEAR

Item	Purse seines			Lampara nets		Haul seines	Gill nets		
	Barra-cuda	Sardine	Tuna	Sardine	Other		Drift, barra-cuda	Set, sea bass	Other
	Num-ber	Num-ber	Num-ber	Num-ber	Num-ber	Num-ber	Num-ber	Num-ber	Num-ber
Fishermen:									
On vessels.....	303	785	817	390	361		32	14	21
On boats and shore.....					50	2	74	69	41
Total.....	303	785	817	390	411	2	106	83	62
Vessels, motor.....	33	78	82	39	41		11	4	7
Net tonnage.....	938	2,991	3,328	893	506		69	42	49
Boats:									
Motor.....					11		26	30	15
Other.....						1	1	3	11
Apparatus:									
Number.....	33	78	82	39	52	1	38	37	37
Length, yards.....	14,228	31,747	46,625	17,106	21,152	100			
Square yards.....							330,904	152,625	30,905

Fisheries of the San Pedro division of the southern district of California, 1930—Con.

OPERATING UNITS: BY GEAR—Continued

Item	Trammel nets	Lines		Paranzella nets	Traps, lobster	Harpoons, swordfish	Shovels	Abalone outfits	Total, exclusive of duplication
		Set and hand	Troll						
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....	37	119	731	10	19	21			2,025
On boats and shore.....	55	403	287	14	142	33	61	2	732
Total.....	92	522	1,018	24	161	54	61	2	2,757
Vessels, motor.....	13	40	110	3	8	5			254
Net tonnage.....	85	425	3,914	42	61	69			7,707
Boats:									
Motor.....	21	288	209	5	79	17		1	405
Other.....	1	18			13				41
Apparatus:									
Number.....	35	1,450	2,215	4	2,805	22	61	1	
Square yards.....	255,500								
Yards at mouth.....				67					
Hooks.....		255,987	2,215						

CATCH OFF CALIFORNIA: BY GEAR

Species	Purse seines		Lampara nets		Haul seines		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Anchovies.....			10,311	\$284				
Barracuda.....	712,739	\$76,627	607,348	29,831			637,740	\$47,273
Carp.....					2,375	\$175		
Eels.....			10	1				
Flounders:								
"California halibut".....	186	22	430	60			407	51
"Sole".....							52	2
Flyingfish.....	170	6	315	12			47,973	1,787
Grayfish.....	3,862	75	7,264	195			102,013	3,067
Halfmoon.....	2,920	247	13,894	756			19,951	1,717
Herring.....							259	13
Horse mackerel.....	38,353	1,434	234,518	8,651			48	2
Kingfish.....			276,951	5,293			741	14
"Lingcod".....							20	1
Mackerel.....	72,776	775	10,497,248	108,489			107,081	2,191
Mullet.....			1,892	181			9,204	874
Perch.....	3,761	229	76,915	1,399			22,109	1,735
Pilchard or sardine.....	121,628,006	647,669	61,083,099	330,096			770	19
Pompano.....			1,275	716			14	8
Rock bass.....	10,085	1,053	26,051	1,660			2,193	90
Rockfishes.....	90	6	613	18			237	15
Sculpin.....							29	3
Sea bass:								
Black.....	9,915	527	5,453	320			4,405	233
White or squeteague.....	73,512	9,024	391,883	36,480			395,165	32,188
Sheepshead.....							1,007	36
Smelt.....	1,879	83	268,021	10,757			158,072	8,875
Tuna and tunalike fishes:								
Bluefin.....	15,036,617	859,132	405,172	22,708				
Bonito.....	2,416,196	78,599	121,256	2,799			56,121	1,089
Whitebait.....							55	4
Whitefish.....	30	2	105	9			253	14
Yellowtail.....	81,568	4,706	120,216	6,567			11,035	603
Other fish.....	87	4	940	61			1,006	22
Total.....	140,092,752	1,680,220	74,151,180	567,343	2,375	175	1,577,960	101,926
<b>SHELLFISH</b>								
Squid.....			30,316	1,665				
Grand total.....	140,092,752	1,680,220	74,181,496	569,008	2,375	175	1,577,960	101,926

## Fisheries of the San Pedro division of the southern district of California, 1930—Con.

## CATCH OFF CALIFORNIA: BY GEAR—Continued

Species	Trammel nets		Lines				Paranzella nets	
			Set and hand		Troll			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Barracuda.....					597, 025	\$32, 418	23	\$2
Flounders:								
"California halibut".....	321, 738	\$45, 476	28, 577	\$3, 692			379, 728	43, 831
"Sole".....	4, 214	261	6, 401	456			368, 699	15, 605
Other.....	3, 413	259	13, 168	416			760	53
Grayfish.....	60, 884	2, 203	98, 395	2, 664	3, 214	62	12, 535	437
Horse mackerel.....			638	25				
Kingfish.....			12, 051	241				
"Lingcod".....			2, 688	142			700	35
Mackerel.....			3, 543, 550	69, 847	252, 697	3, 544		
Perch.....			415	21				
Pompano.....			47	25	15	8		
Rock bass.....	578	39	148, 146	11, 791	4, 810	302	1, 049	83
Rockfishes.....	130	7	2, 040, 496	89, 031	28	2	1, 727	80
Sablefish.....			5, 506	405				
Salmon.....					6	1		
Sculpin.....	20	1	64, 186	6, 848			443	51
Sea bass:								
Black.....	1, 483	103	80, 488	4, 011	529	32	973	66
White or squeteague.....	2, 251	322	21, 883	2, 089	364	33	1, 627	270
Sheepshead.....	818	33	53, 573	1, 884			86	3
Skates.....	6, 841	163	8, 868	184			15, 701	315
Smelt.....			3, 303	152			134	7
Swordfish.....					28, 091	1, 687		
Tuna and tunalike fishes:								
Albacore.....					107, 987	10, 857		
Bluefin.....			764	74	793	62		
Bonito.....	153	2	1, 605	42	29, 311	612		
Skipjack or striped tuna.....					1, 109, 680	44, 387		
Yellowfin.....					12, 564	795		
Whitefish.....	197	14	112, 052	8, 449				
Yellowtail.....	243	13	310	20	28, 466	1, 589		
Other fish.....	376	15	31, 403	2, 228	178	8		
Total.....	403, 339	48, 911	6, 278, 513	204, 737	2, 175, 758	96, 399	784, 185	60, 838
<b>SHELLFISH</b>								
Sea crawfish or spiny lobster.....	7, 045	1, 399					340	74
Squid.....	60	7						
Total.....	7, 105	1, 406					340	74
Grand total.....	410, 444	50, 317	6, 278, 513	204, 737	2, 175, 758	96, 399	784, 525	60, 912

Species	Traps		Harpoons		Shovels		Abalone outfits	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>								
Perch.....	1, 231	\$60						
Rock bass.....	152, 724	9, 441						
Rockfishes.....	990	59						
Sculpin.....	889	106						
Sheepshead.....	148, 109	5, 514						
Swordfish.....			168, 334	\$24, 922				
Whitefish.....	2, 662	142						
Total.....	306, 605	15, 322	168, 334	24, 922				
<b>SHELLFISH</b>								
Crabs.....	12	3						
Sea crawfish or spiny lobster.....	260, 285	51, 687						
Abalone.....							15, 521	\$3, 972
Clams:								
Coekle.....					8, 510	\$2, 063		
Pismo.....					19, 363	8, 380		
Octopus.....	258	46						
Total.....	260, 555	51, 736			27, 873	10, 443	15, 521	3, 972
Grand total.....	567, 160	67, 058	168, 334	24, 922	27, 873	10, 443	15, 521	3, 972

## Fisheries of the San Pedro division of the southern district of California, 1930—Con.

## CATCH OFF LATIN AMERICA: BY GEAR

Species	Purse seines		Lampara nets		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value
Barracuda.....	860,009	\$91,182			187	\$28
Cabrilla.....	315	16				
Flounders, "California halibut".....	218	21				
Mullet.....	80	6	474	\$31		
Perch.....	660	30				
Rock bass.....	3,262	240				
Sea bass:						
Black.....	44,593	2,398			2,953	173
White or squeteague.....	60,241	8,146			26,606	2,540
Spanish mackerel.....	545	38				
Tuna and tunalike fishes:						
Bluefin.....	6,150,000	338,341				
Bonito.....	1,208,576	41,935				
Skipjack or striped tuna.....	38,051	1,599				
Yellowfin.....	1,184,340	79,496				
Whitefish.....	200	13			160	11
Yellowtail.....	2,049,967	85,565			384	20
Other fish.....	354	21				
Total.....	11,601,411	649,047	474	31	30,290	2,772

Species	Trammel nets		Lines			
			Set and hand		Troll	
	Pounds	Value	Pounds	Value	Pounds	Value
Barracuda.....					77,519	\$5,164
Cabrilla.....			387,079	\$22,529		
Flounders:						
"California halibut".....	11,990	\$1,160	354	53		
Other.....	100	7				
Grayfish.....			1,555	62		
Rock bass.....			10,710	582		
Sea bass:						
Black.....			23,516	1,242	90	5
White or squeteague.....			41,346	3,740		
Sheepshead.....			377	15		
Spanish mackerel.....			19,075	1,246		
Tuna and tunalike fishes:						
Bonito.....					5,991	188
Skipjack or striped tuna.....					5,699,289	202,279
Yellowfin.....					11,353,431	675,038
Yellowtail.....					364,323	26,244
Other fish.....			4,520	215		
Total.....	12,090	1,167	488,532	29,684	17,500,643	908,918

## Fisheries of the San Diego division of the southern district of California, 1930

## OPERATING UNITS: BY GEAR

Item	Lampara nets, sardine	Gill nets			Trammel nets
		Drift, barracuda	Set, sea bass	Other	
	Number	Number	Number	Number	Number
Fishermen:					
On vessels.....	80	10	14		15
On boats and shore.....	17	39	46	15	37
Total.....	97	49	60	15	52
Vessels, motor.....	14	3	4		4
Net tonnage.....	138	21	34		36
Boats:					
Motor.....	3	16	18	8	14
Other.....				1	
Apparatus:					
Number.....	17	19	22	11	18
Length, yards.....	4,790				
Square yards.....		94,804	120,450	6,826	247,572



## Fisheries of the San Diego division of the southern district of California, 1930—Con.

## OPERATING UNITS: BY GEAR—Continued

Item	Lines		Traps, lobster	Harpoons, swordfish and turtle	Total, exclusive of duplication
	Set and hand	Troll			
Fishermen:	Number	Number	Number	Number	Number
On vessels.....	214	770	43	75	841
On boats and shore.....	125	114	52	19	210
Total.....	339	884	95	94	1,051
Vessels, motor.....	47	102	10	16	117
Net tonnage.....	643	5,129	108	196	5,246
Boats:					
Motor.....	79	72	37	8	119
Other.....			2		3
Apparatus:					
Number.....	735	1,545	1,572	24	
Hooks.....	115,690	1,545			

## CATCH OFF CALIFORNIA: BY GEAR

Species	Purse seines		Lampara nets		Gill nets		Trammel nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
FISH								
Anchovies.....			3,900	\$39				
Barracuda.....					81,492	\$6,799		
Flounders, "California halibut".....							106,983	\$11,628
Grayfish.....					63,175	308	33,711	151
Herring.....					43,579	565		
Kingfish.....			490	18				
Mackerel.....			239,355	2,887	19,220	392	271	8
Mullet.....			94	9	9,563	849		
Perch.....			2,934	82	443	16		
Pilchard or sardine.....			4,171,982	26,219				
Pompano.....			327	131				
Rock bass.....					334	11	348	9
Rockfishes.....							536	32
Sea bass:								
Black.....					2,250	408	1,557	88
White or squeteague.....			28	5	105,538	7,973	116	21
Skates.....							1,670	33
Smelt.....			6,127	271	7,800	468		
Tuna and tunalike fishes:								
Bluefin.....	130,448	\$7,175	25,067	1,379				
Bonito.....			688	20	10,944	270		
Yellowtail.....							8,954	420
Total.....	130,448	7,175	4,450,992	31,060	344,338	17,759	154,146	12,390
SHELLFISH								
Sea crawfish or spiny lobster.....							2,194	295
Squid.....			679	34			433	52
Total.....			679	34			2,627	347
Grand total.....	130,448	7,175	4,451,671	31,094	344,338	17,759	156,773	12,737

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

Fisheries of the San Diego division of the southern district of California, 1930—Con.

## CATCH OFF CALIFORNIA: BY GEAR—Continued

Species	Lines				Traps		Harpoons	
	Set and hand		Troll		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
<b>FISH</b>								
Barracuda			877, 211	\$56, 308				
Cabrilla	471	\$17						
Flounders:								
"California halibut"	2, 482	201						
" Sole "	6, 498	583						
Other	43	3						
Grayfish	27, 747	123						
Kingfish	1, 981	61						
Mackerel	404, 154	10, 322	18, 280	231				
Pompano	29	11						
Rock bass	117, 321	5, 016	126	6	11, 891	\$602		
Rockfishes	1, 052, 930	50, 407			138	6		
Sculpin	23, 043	1, 982						
Sea bass:								
Black	80, 345	3, 490	75	4				
White or squeteague	152, 464	10, 795	227	24				
Sheepshead	15, 962	572			21, 499	882		
Skates	85	1						
Swordfish			175	9			364, 895	\$48, 723
Tuna and tunalike fishes:								
Albacore			2, 168	224				
Bluefin			31	2				
Bonito	40	1	1, 229, 016	38, 072				
Skipjack or striped tuna			1, 905, 595	76, 224				
Yellowfin			22, 989	1, 379				
Whitefish	99, 267	3, 836						
Yellowtail	59	3	964, 108	38, 646				
Total	1, 984, 921	87, 424	5, 020, 001	211, 129	33, 528	1, 490	364, 895	48, 723
<b>SHELLFISH</b>								
Sea crawfish or spiny lobster					104, 586	20, 779		
Grand total	1, 984, 921	87, 424	5, 020, 001	211, 129	138, 114	22, 269	364, 895	48, 723

## CATCH OFF LATIN AMERICA: BY GEAR

Species	Purse seines		Gill nets		Trammel nets	
	Pounds	Value	Pounds	Value	Pounds	Value
<b>FISH</b>						
Barracuda	44, 761	\$6, 732	18, 539	\$1, 531		
Flounders, "California halibut"					189, 094	\$19, 930
Sea bass:						
Black	1, 109	59	23, 887	1, 214	23, 433	1, 218
White or squeteague	2, 935	229	235, 115	21, 332	287	38
Smelt			1, 082	79		
Tuna and tunalike fishes:						
Bluefin	172, 296	9, 139				
Bonito	28, 511	1, 049				
Yellowfin	361, 494	22, 369				
Yellowtail	53, 560	2, 054	15, 083	730		
Total	664, 666	41, 631	293, 706	24, 886	212, 814	21, 186
<b>SHELLFISH, ETC.</b>						
Sea crawfish or spiny lobster					132	24
Grand total	664, 666	41, 631	293, 706	24, 886	212, 946	21, 210

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

## Fisheries of the San Diego division of the southern district of California, 1930—Con.

## CATCH OFF LATIN AMERICA: BY GEAR—Continued

Species	Lines				Traps		Harpoons	
	Set and hand		Troll		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
Barracuda.....			249, 143	\$25, 224				
Cabrilla.....								
Flounders, "California halibut".....	121, 674	\$4, 528						
.....	42	6						
Mackerel.....	719	13	545	10				
Rock bass.....	17, 804	1, 474	715	17				
Rockfishes.....	8, 405	429						
Sea bass:								
Black.....	86, 448	4, 562	507	25				
White or squeteague.....	20, 461	2, 625	146	19				
Sheepshead.....	2, 258	96						
Spanish mackerel.....	23, 345	757						
Swordfish.....							1, 234	\$154
Tuna and tunalike fishes:								
Bluefin.....	94	5						
Bonito.....			54, 686	1, 830				
Skipjack or striped tuna.....			11, 732, 972	465, 347				
Yellowfin.....			43, 719, 363	2, 617, 140				
Whitefish.....	10, 176	470						
Yellowtail.....	678	61	1, 071, 474	42, 535				
Total.....	292, 104	15, 026	56, 829, 551	3, 152, 147			1, 234	154
SHELLFISH, ETC.								
Sea crawfish or spiny lobster.....					1, 019, 557	\$188, 887		
Turtles.....							580	58
Grand total.....	292, 104	15, 026	56, 829, 551	3, 152, 147	1, 019, 557	188, 887	1, 814	212

## Industries related to the fisheries of California, 1930

## TRANSPORTING

Persons engaged on vessels.....	41
Vessels:	
Steam.....	1
Net tonnage.....	33
Motor.....	7
Net tonnage.....	539
Total vessels.....	8
Total net tonnage.....	572

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Northern district	San Francisco district	Monterey district	Southern district		Total
				San Pedro division	San Diego division	
Establishments.....	8	35	32	55	21	151
Persons engaged:						
Proprietors.....	5	47	41	93	27	213
Salaried employees.....	10	154	155	252	59	630
Wage earners—						
Average for season.....	119	685	2, 201	3, 163	1, 518	7, 686
Average for year.....	38	564	865	1, 561	629	3, 639
Paid to salaried employees.....	\$21, 173	\$412, 130	\$398, 786	\$692, 955	\$172, 846	\$1, 697, 860
Paid to wage earners.....	40, 199	859, 041	880, 068	1, 789, 121	779, 796	4, 348, 225
Total, salaries and wages.....	61, 372	1, 271, 171	1, 278, 854	2, 482, 076	952, 642	6, 046, 115

## Industries related to the fisheries of California—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Barracuda, fresh fillets..... pounds.....	225,000	\$43,500
Cabrilla, fresh fillets..... do.....	115,000	20,250
Cod:		
Salted <sup>1</sup> ..... do.....	2,870,327	150,928
Salted, packaged..... do.....	2,149,827	323,836
Flounders, fresh fillets..... do.....	4,735,000	947,000
Halibut, fresh fillets..... do.....	45,000	15,750
Mackerel, canned..... standard cases.....	127,479	430,962
Pilchard or sardine:		
Salted..... pounds.....	65,490	3,472
Canned..... standard cases.....	2,979,333	8,741,928
Meal..... tons.....	25,938	1,414,858
Oil..... gallons.....	5,803,166	1,826,319
Rockfishes, fresh fillets..... pounds.....	761,500	120,400
Salmon, mild-cured..... do.....	1,039,500	189,000
Sea bass, black, fresh fillets..... do.....	55,500	7,825
Sea bass, white, fresh fillets..... do.....	326,250	79,375
Totuava, fresh fillets..... do.....	260,000	52,000
Tuna and tunalike fishes:		
Salted (bonito)..... do.....	18,124	1,567
Canned <sup>2</sup> ..... standard cases.....	2,010,640	13,055,876
Meal..... tons.....	8,554	428,556
Oil..... gallons.....	56,748	14,153
Spiny lobsters (fresh-cooked, whole)..... pounds.....	1,064,250	287,693
Shrimp:		
Sun-dried..... do.....	146,842	28,507
Meal..... tons.....	136	6,800
Squid, dried..... pounds.....	1,383,660	55,346
Abalone, fresh steaks..... do.....	583,589	248,025
Marine-shell novelties..... (1)		95,000
Unclassified products:		
Packaged <sup>3</sup> ..... (1)		72,500
Salted <sup>4</sup> ..... pounds.....	526,029	41,142
Smoked <sup>5</sup> ..... do.....	450,098	124,131
Canned <sup>6</sup> ..... standard cases.....	24,484	198,783
Meal <sup>7</sup> ..... tons.....	3,712	237,672
Oil <sup>8</sup> ..... gallons.....	579,083	187,720
By-products <sup>9</sup> ..... (1)		269,202
Total.....		29,720,076

<sup>1</sup> The cod were salted in Alaskan waters.

<sup>2</sup> This figure is included in the total, however, it should be explained that it represents a further manufacture of salted cod already included in this table.

<sup>3</sup> Includes canned albacore; bluefin, striped, and yellowfin tuna; bonito; and yellowtail.

<sup>4</sup> Data not available.

<sup>5</sup> Includes packaged fried fish cakes; and fresh-shucked western and eastern oysters.

<sup>6</sup> Includes salted anchovies, barracuda, cabrilla, herring, mackerel, mullet, salmon, black and white sea bass, Spanish mackerel, whitefish, and yellowtail; and mild-cured shad.

<sup>7</sup> Includes smoked mackerel, sablefish, salmon, and sardines.

<sup>8</sup> Includes canned salmon, shad, shad roe, abalone, squid, and fish cakes.

<sup>9</sup> Includes kelp, mackerel, and miscellaneous fish meal and fish flour.

<sup>10</sup> Includes sperm, whale, shark, shark-liver, mackerel, and miscellaneous fish oils.

<sup>11</sup> Includes agar agar; glue; miscellaneous dry scrap; alginates; and oyster-shell products.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State.

HALIBUT FISHERY OF THE PACIFIC COAST <sup>11</sup>

The halibut fishery of the Pacific coast, which is prosecuted both by United States (including Alaska) and Canadian vessels, ranks as one of the foremost fisheries of that section. During 1931 the total catch by

<sup>11</sup> To preclude the possibility of unwarranted comparison of figures given in this section with others for years previous to 1927, 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 United States 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 United States fleet for the year 1931 at all Pacific ports, except those in Oregon and California, 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 to use "hailing fares" for the weight of the landings at Prince Rupert, British Columbia. The data for Seattle and Alaska are based on the actual weight of the fares. Halibut are landed with the heads on, but eviscerated.

vessels of both nationalities amounted to 42,845,000 pounds, valued at \$2,842,000. This is a decrease of 13 per cent in quantity and 43 per cent in value as compared with the catch in 1930. Of the total catch in 1930, 83 per cent was taken by United States craft and 17 per cent by Canadian craft. Considered according to the ports of landing, 42 per cent was landed at Canadian ports, 36 per cent at ports in the State of Washington, and 22 per cent at ports in Alaska.

*Halibut fishery of the Pacific coast, 1931*

UNITED STATES OPERATING UNITS: BY FLEET CLASSIFICATION

Item	Washing- ton fleet	Alaska fleet	Total
<b>Regular halibut vessels:</b>			
Number.....	94	123	217
Net tonnage.....	2,448	2,663	5,111
Crew.....	651	768	1,419
Dories.....	94	123	217
Skates of lines.....	2,812	3,532	6,344
<b>Vessels in other fisheries but landing one or more fares of halibut:</b>			
Number.....	28	46	74
Net tonnage.....	593	508	1,101
Crew.....	150	167	317
Dories.....	18	33	51
Skates of lines.....	769	995	1,764
<b>Regular halibut boats:</b>			
Number.....		17	17
Crew.....		47	47
Skates of lines.....		306	306
<b>Boats in other fisheries but landing one or more fares of halibut:</b>			
Number.....		95	95
Crew.....		150	150
Skates of lines.....		636	636

CATCH OF ALL SPECIES: BY UNITED STATES VESSELS AND BOATS

Fleet classification	Landed in—						Total	
	Washington		British Columbia		Alaska		Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value		
<b>WASHINGTON FLEET</b>								
<b>Regular vessels:</b>								
Halibut.....	11,402,473	\$827,509	1,823,417	\$116,981	884,414	\$51,724	14,110,304	\$996,214
Sablefish.....	1,255,446	43,245			1,145	35	1,256,591	43,280
"Lingcod".....	301,399	8,452					301,399	8,452
Rockfishes.....	254,823	6,367					254,823	6,367
Total.....	13,214,141	885,573	1,823,417	116,981	885,559	51,759	15,923,117	1,054,313
<b>Other vessels:</b>								
Halibut.....	823,482	70,903	31,441	2,605	12,657	1,131	867,580	74,639
Sablefish.....	17,269	725					17,269	725
"Lingcod".....	89,007	2,475					89,007	2,475
Rockfishes.....	23,869	763					23,869	763
Total.....	953,627	74,866	31,441	2,605	12,657	1,131	997,725	78,602
<b>ALASKA FLEET</b>								
<b>Regular vessels:</b>								
Halibut.....	2,962,330	206,007	8,413,476	567,533	6,773,367	410,620	18,149,173	1,184,160
Sablefish.....	22,318	980			257,416	7,455	279,734	8,435
"Lingcod".....	15,285	1,111					15,285	1,111
Rockfishes.....	9,106	639			1,522	57	10,628	696
Total.....	3,009,039	208,737	8,413,476	567,533	7,032,305	418,132	18,454,820	1,194,402
<b>Other vessels and boats:</b>								
Halibut.....	25,606	2,847	295,174	20,675	1,955,680	145,005	2,276,460	168,527
Sablefish.....	3,680	184			7,915	234	11,595	418
"Lingcod".....	838	42			1,249	33	2,087	75
Rockfishes.....	1,293	65			8,412	198	9,705	263
Total.....	31,417	3,138	295,174	20,675	1,973,256	145,470	2,299,847	169,283

## Halibut fishery of the Pacific coast, 1931—Continued

## CATCH OF ALL SPECIES: BY UNITED STATES VESSELS AND BOATS—Continued

Fleet classification	Landed in—						Total	
	Washington		British Columbia		Alaska			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
<b>COMBINED FLEETS</b>								
Regular vessels:								
Halibut.....	14,364,803	\$1,033,516	10,236,893	\$684,514	7,657,781	\$462,344	32,259,477	\$2,180,374
Sablefish.....	1,277,764	44,225			258,561	7,490	1,536,325	51,715
"Lingcod".....	316,684	9,563					316,684	9,563
Rockfishes.....	263,929	7,006			1,522	57	265,451	7,063
Total.....	16,223,180	1,094,310	10,236,893	684,514	7,917,864	469,891	34,377,937	2,248,715
Other vessels and boats:								
Halibut.....	849,088	73,750	326,615	23,280	1,968,337	146,136	3,144,040	243,166
Sablefish.....	20,949	909			7,915	234	28,864	1,143
"Lingcod".....	89,845	2,517			1,249	33	91,094	2,550
Rockfishes.....	25,162	828			8,412	198	33,574	1,026
Total.....	985,044	78,004	326,615	23,280	1,985,913	146,601	3,297,572	247,885
All vessels and boats:								
Halibut.....	15,213,891	1,107,266	10,563,508	707,794	9,626,118	608,480	35,403,517	2,423,540
Sablefish.....	1,298,713	45,134			266,476	7,724	1,565,189	52,858
"Lingcod".....	406,529	12,080			1,249	33	407,778	12,113
Rockfishes.....	289,091	7,834			9,934	255	299,025	8,089
Grand total.....	17,208,224	1,172,314	10,563,508	707,794	9,903,777	616,492	37,675,509	2,496,600

NOTE.—These statistics are compiled from data collected by the International Fisheries Commission for Washington, by the U. S. Consular Service and the Prince Rupert Halibut Exchange for British Columbia, and by bureau agents for Alaska.

## CATCH OF HALIBUT: BY UNITED STATES AND CANADIAN VESSELS AND BOATS

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

Fleet classification	Landed in—						Total	
	Washington		British Columbia		Alaska			
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>WASHINGTON FLEET</b>								
Regular halibut vessels.....	11,403	\$827	1,823	\$117	884	\$52	14,110	\$996
Other vessels.....	823	71	32	3	13	1	808	75
Total.....	12,226	898	1,855	120	897	53	14,978	1,071
<b>ALASKA FLEET</b>								
Regular halibut vessels.....	2,962	206	8,413	568	6,774	410	18,149	1,184
Other vessels and boats.....	26	3	295	20	1,955	145	2,276	168
Total.....	2,988	209	8,708	588	8,729	555	20,425	1,352
<b>COMBINED FLEETS</b>								
Regular halibut vessels.....	14,365	1,033	10,236	685	7,658	462	32,259	2,180
Other vessels and boats.....	849	74	327	23	1,968	146	3,144	243
Total.....	15,214	1,107	10,563	708	9,626	608	35,403	2,423
British Columbia fleet.....	13	1	7,429	1,418			7,442	419
Grand total.....	15,227	1,108	17,992	1,126	9,626	608	42,845	2,842

<sup>1</sup> Estimated.

NOTE.—These statistics are compiled from data collected by the International Fisheries Commission for Washington, by the U. S. Consular Service and the Prince Rupert Halibut Exchange for British Columbia, and by bureau agents for Alaska.

## VESSEL FISHERIES AT SEATTLE, WASH.

During 1931, a total of 40,746,241 pounds of fishery products, valued at \$2,308,024, were handled by Seattle wholesale dealers, exclusive of quantities received by transporting vessels or rail from Alaska or Canada. This represents an increase of 5 per cent in quantity and a decrease of 33 per cent in value as compared with the previous year.

Of the total quantity handled, 17,208,224 pounds, valued at \$1,172,314, were landed by fishing vessels, an increase of 4 per cent in quantity and a decrease of 31 per cent in value as compared with the previous year. The vessels made 1,064 trips to the fishing grounds during the year, which is 170 trips less than during 1930. Halibut was the most important species taken by the fishing vessels, accounting for 88 per cent of the catch. Sablefish accounted for 8 per cent; and "lingcod" and rockfishes, each 2 per cent.

The catch by fishing vessels was taken off the Pacific coast from Oregon to Unalaska Island. South of Cape Spencer ranked as the most productive area, furnishing 56 per cent of the catch. Grounds west of Cape Spencer provided the balance.

During 1931, 23,538,017 pounds, valued at \$1,135,710, were received by wholesale dealers from sources other than Alaska or Canada, or from vessels in the halibut fishery. Most of these products were taken in Puget Sound. This is an increase of 6 per cent in the quantity received from similar sources in 1930 and a decrease of 35 per cent in value. The increase in quantity was due to the large catch of humpback or pink salmon as compared with the "off year" for this species in 1930. All varieties of salmon accounted for 91 per cent of the fishery products handled by the wholesale dealers from sources other than the halibut fleet or from Alaska or Canada.

*Fishery products landed by United States vessels at Seattle, Wash., 1931<sup>1</sup>*

BY BANKS

Fishing ground	Trips	Halibut				Sablefish	
		No. 1		No. 2		Pounds	Value
		Pounds	Value	Pounds	Value		
	<i>Number</i>						
West of Cape Spencer.....	268	4,037,226	\$351,278	3,403,699	\$171,878	18,304	\$761
South of Cape Spencer.....	796	3,239,218	327,953	4,533,748	256,157	1,280,409	44,373
Total.....	1,064	7,276,444	679,231	7,937,447	428,035	1,298,713	45,134

  

Fishing ground	"Lingcod"		Rockfishes		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
West of Cape Spencer.....	30,473	\$1,515	5,153	\$213	7,494,819	\$525,645
South of Cape Spencer.....	376,092	10,565	283,938	7,621	9,713,405	646,669
Total.....	406,529	12,080	289,091	7,834	17,208,224	1,172,314

<sup>1</sup> Halibut fleet.

*Fishery products landed by United States vessels at Seattle, Wash., 1931* <sup>1</sup>—Cont'd  
BY MONTHS

Month	Trips	Halibut				Sablefish	
		No. 1		No. 2		Pounds	Value
		Pounds	Value	Pounds	Value		
	<i>Number</i>						
January.....	7						
February.....	7	16, 367	\$2, 067	3, 203	\$249	2, 000	\$180
March.....	67	496, 298	61, 549	230, 526	21, 481	15, 403	770
April.....	113	750, 892	81, 339	547, 779	42, 433	12, 886	543
May.....	135	671, 357	64, 207	919, 432	55, 997	8, 779	370
June.....	155	908, 779	88, 249	1, 227, 896	59, 762	65, 500	2, 796
July.....	123	1, 070, 574	89, 631	1, 128, 656	49, 304	143, 477	4, 123
August.....	144	1, 337, 109	96, 822	1, 340, 616	52, 139	207, 156	5, 705
September.....	138	1, 024, 353	81, 311	1, 260, 298	56, 470	310, 558	10, 127
October.....	106	653, 760	67, 842	912, 450	59, 927	316, 736	11, 119
November.....	57	346, 955	46, 214	366, 591	30, 273	180, 718	7, 685
December.....	12					35, 500	1, 716
Total.....	1, 064	7, 276, 444	679, 231	7, 937, 447	428, 035	1, 298, 713	45, 134

Month	"Lingcod"		Rockfishes		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
January.....	26, 600	\$1, 603	10, 500	\$779	37, 100	\$2, 382
February.....	17, 150	1, 355	8, 950	726	47, 670	4, 577
March.....	31, 255	1, 556	4, 347	230	777, 829	85, 586
April.....	104, 250	2, 425	33, 186	804	1, 448, 993	127, 544
May.....	58, 527	1, 137	28, 672	642	1, 686, 767	122, 353
June.....	35, 691	718	43, 264	943	2, 281, 130	152, 468
July.....	10, 499	209	17, 819	365	2, 371, 025	143, 632
August.....	15, 251	302	53, 642	1, 071	2, 953, 774	156, 039
September.....	15, 446	343	39, 555	928	2, 650, 210	149, 179
October.....	28, 479	685	29, 300	733	1, 940, 725	140, 306
November.....	19, 681	742	356	13	914, 301	84, 927
December.....	43, 700	1, 005	19, 500	600	98, 700	3, 321
Total.....	406, 529	12, 080	289, 091	7, 834	17, 208, 224	1, 172, 314

<sup>1</sup> Halibut fleet.

*Fishery products received by Seattle wholesale dealers, 1931* <sup>1</sup>

BY MONTHS

Species	January		February		March		April		May	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders:										
" Sole ".....	39, 765	\$1, 388	43, 221	\$1, 673	42, 983	\$1, 242	49, 022	\$1, 822	29, 592	\$805
Other.....			100	3	2, 988	87	3, 125	94	1, 073	11
Halibut.....					3, 020	453	3, 060	248	7, 547	609
Herring.....	875	18	2, 217	34	1, 050	10	750	4		
" Lingcod ".....	8, 847	398	12, 219	623	9, 466	259	22, 241	636	6, 666	134
Perch.....	3, 040	137	3, 180	160	7, 034	274	5, 541	166	5, 352	160
Rockfishes.....	5, 625	208	7, 561	350	5, 183	244	5, 832	169	7, 639	198
Salmon:										
Blueback, red or sock-eye.....									329	23
Chinook or king.....	96	19	299	57	23, 892	3, 931	281, 610	37, 477	1, 452, 151	122, 379
Chum or keta.....	3, 584	179							442	12
Silver or coho.....	68	5							21, 661	1, 102
Smelt.....	15, 159	858	23, 457	556	27, 766	808	654	54	12, 424	996
Steelhead trout.....	24, 652	3, 105	21, 007	2, 868	759	91			14, 436	1, 414
Sturgeon.....									699	35
Crabs.....	62, 706	3, 926	69, 573	4, 787	76, 666	4, 816	75, 056	4, 978	50, 439	6, 185
Octopus.....	535	28	2, 863	143	7, 348	221	7, 375	221	7, 362	219
Total.....	164, 952	10, 269	185, 697	11, 254	208, 155	12, 436	454, 266	45, 869	1, 617, 812	134, 282

<sup>1</sup> This tabulation does not include fish received from Alaska or Canada, or vessels in the halibut fleet.



## Fishery products received by Seattle wholesale dealers, 1931—Continued

## BY MONTHS—Continued

Species	June		July		August		September	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders:								
" Sole ".....	25,439	\$598	31,932	\$801	15,278	\$413	26,580	\$742
Other.....	4,752	68	754	8	2,497	35	526	5
Halibut.....	6,274	521	6,510	370	14,719	281	1,303	119
Herring.....			80	1				
" Lingcod ".....	6,447	128	9,257	190	11,027	198	3,088	215
Perch.....	2,190	109	2,035	81	2,067	82	2,882	86
Rockfishes.....	15,519	477	8,371	230	4,482	140	3,100	77
Sablefish.....	34	1						
Salmon:								
Blueback, red or sockeye.....	4,127	288	13,656	1,205	26,640	2,443	1,134	105
Chinook or king.....	2,233,946	210,262	2,664,507	127,301	1,693,110	142,251	400,087	28,818
Chum or keta.....	2,450	62	11,945	179	80,630	1,209	167,948	2,516
Humpback or pink.....	4,790	107	521,095	8,106	3,388,001	44,893	768,422	8,504
Silver or coho.....	532,070	29,275	578,830	29,296	467,407	24,276	1,739,851	78,359
Smelt.....	13,117	656	29,177	1,114	12,862	590	49,379	1,802
Steelhead trout.....	16,114	804	14,947	1,195	1,626	130	20,496	888
Sturgeon.....	459	22	305	17	1,842	97	327	16
Crabs.....	66,616	4,509	54,648	4,346	48,818	3,328	28,842	1,967
Octopus.....	4,181	124	2,785	84	1,154	56	4,961	242
Total.....	2,938,535	248,011	3,950,834	174,514	5,772,160	220,422	3,219,016	124,461

Species	October		November		December		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Flounders:								
" Sole ".....	22,000	\$588	27,987	\$669	35,368	\$940	389,167	\$11,681
Other.....	7,810	78	199	2	3,080	31	26,904	422
Halibut.....	1,414	170					43,937	2,771
Herring.....	4,715	94	2,212	44			11,899	205
" Lingcod ".....	3,204	78	16,469	492	42,224	1,611	151,155	4,952
Perch.....	6,134	202	7,699	323	6,953	235	54,107	2,015
Rockfishes.....	4,499	73	4,445	194	13,069	496	85,325	2,856
Sablefish.....	36,186	1,186			540	11	36,700	1,198
Salmon:								
Blueback, red or sockeye.....							45,886	4,064
Chinook or king.....	141,143	9,929	8,721	687	409	29	8,899,971	683,140
Chum or keta.....	2,335,295	35,029	617,555	13,623	14,160	212	3,234,019	53,021
Humpback or pink.....	1,145	14					4,683,433	61,624
Silver or coho.....	937,544	43,926	129,467	9,017	44,751	5,350	4,451,649	220,606
Smelt.....	45,710	1,868	22,559	1,241	16,731	1,198	268,995	11,741
Steelhead trout.....	2,482	198	8,087	647	11,838	1,411	136,444	12,751
Sturgeon.....	235	12			180	18	4,047	217
Crabs.....	174,310	8,680	144,128	7,530	96,142	5,101	947,944	60,153
Octopus.....	9,572	287	7,769	255	10,450	413	66,355	2,293
Total.....	3,733,398	102,412	997,297	34,724	295,895	17,056	23,538,017	1,135,710

<sup>1</sup> 43,769 dozen.

LAKE FISHERIES <sup>12</sup>

The yield of the fisheries of the Great Lakes including the international lakes of northern Minnesota during 1930 amounted to 94,947,642 pounds, valued at \$6,050,267. This is an increase of 11 per cent in quantity, but a decrease of 11 per cent in value as compared with the catch and its value for 1929. These fisheries gave

<sup>12</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure" which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

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

In all cases the statistics collected are for the calendar year, except for Lake of the Woods, Rainy Lake, and Lake Namakan in Minnesota, which are for two seasons. For Lake of the Woods the seasons are from June 1 to Nov. 1 and Dec. 1 to Apr. 1, and for Rainy and Namakan Lakes from May 15 to Nov. 1 and Dec. 1 to Apr. 1. The catch for these two seasons, in the order named, have been combined to constitute a year. The quantity of fish taken in these lakes between Jan. 1 and Apr. 1 amounted to less than 3 per cent of the total catch of these lakes in 1927.

employment to 6,980 fishermen or 3 per cent less than in 1929. Of the total number of fishermen employed, 1,666 regular fishermen were engaged on vessels, and 3,703 regular and 1,617 casual fishermen were employed in the shore and boat fisheries.

*Lake fisheries of the United States and Canada, 1930*

CATCH: BY LAKES

Species	Lake Ontario			Lake Erie		
	United States	Canada	Total	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Blue pike.....	30,753	25,000	55,753	11,792,338	5,899,100	17,691,438
Bowfin.....	817	(1)	817	2,576	(1)	2,576
Burbot.....	95,612	(1)	95,612	405,442	(1)	405,442
Carp.....	26,204	57,600	83,804	1,861,184	277,800	2,138,984
Catfish and bullheads.....	80,246	145,000	225,246	322,631	102,700	425,331
Chubs.....	.....	.....	.....	12,800	(1)	12,800
Cisco.....	.....	.....	.....	347,356	506,600	853,956
Eels.....	5,100	99,100	104,200	.....	100	100
Goldfish.....	.....	.....	.....	63,929	(1)	63,929
Lake herring.....	189,100	2,319,900	2,509,000	.....	.....	.....
Lake trout.....	24,082	363,700	387,782	5,083	11,100	16,183
Minnows.....	109	(1)	109	.....	.....	.....
Mooneye.....	.....	.....	.....	36,488	(1)	36,488
Pike (jacks).....	8,625	133,100	141,725	8,183	41,600	49,783
Rock bass.....	705	(1)	705	2,208	(1)	2,208
Sauger pike.....	.....	.....	.....	1,530,770	(1)	1,530,770
Sheepshead.....	.....	.....	.....	2,883,581	(1)	2,883,581
Sturgeon.....	24,483	3,400	27,883	16,162	27,000	43,162
Sucker "mullet".....	50,617	(1)	50,617	2,015,786	(1)	2,015,786
Sunfish.....	12,440	(1)	12,440	.....	.....	.....
White bass.....	78	(1)	78	483,696	(1)	483,696
Whitefish:	.....	.....	.....	.....	.....	.....
Common.....	87,400	551,900	639,300	1,522,012	1,087,700	2,609,712
Menominee.....	.....	.....	.....	91	(1)	91
Yellow perch.....	29,943	135,100	165,043	4,340,117	3,419,700	7,759,817
Yellow pike.....	15,583	23,700	39,283	1,887,708	274,600	2,162,308
Miscellaneous.....	.....	243,400	243,400	.....	1,032,100	1,032,100
Total.....	681,897	4,100,900	4,782,797	29,540,141	12,680,100	42,220,241

Species	Lake Huron			Lake Michigan	Lake Superior		
	United States	Canada	Total	United States	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Blue pike.....	.....	.....	.....	.....	.....	700	700
Bowfin.....	16,007	(1)	16,007	.....	.....	.....	.....
Buffalofish.....	.....	.....	.....	400	.....	.....	.....
Burbot.....	6,879	(1)	6,879	115,236	3,399	(1)	3,399
Carp.....	897,014	4,900	901,914	491,237	999	100	1,099
Catfish and bullheads.....	134,978	300	135,278	77,968	1,109	(1)	1,109
Chubs.....	506,420	573,300	1,079,720	5,017,391	526,557	1,100	527,657
Lake herring.....	4,748,345	328,400	5,076,745	6,272,752	11,271,303	2,743,500	14,014,803
Lake trout.....	1,786,529	1,266,300	3,052,829	5,258,024	2,422,998	1,630,200	3,953,198
Pike (jacks).....	67,250	2,100	69,350	86,446	12,800	9,900	22,700
Rock bass.....	13,200	(1)	13,200	788	.....	.....	.....
Sauger pike.....	198,254	(1)	198,254	23,038	4,064	(1)	4,064
Sheepshead.....	5,859	(1)	5,859	18,855	709	(1)	709
Smelt.....	.....	.....	.....	430	.....	.....	.....
Sturgeon.....	.....	8,100	8,100	.....	.....	2,700	2,700
Sucker "mullet".....	2,676,949	(1)	2,676,949	1,770,917	86,291	(1)	86,291
Whitefish:	.....	.....	.....	.....	.....	.....	.....
Common.....	3,379,776	246,600	3,626,376	4,788,574	294,679	371,700	666,379
Menominee.....	109,236	(1)	109,236	221,477	41,331	(1)	41,331
Yellow perch.....	714,949	30,600	745,549	1,429,700	5,219	100	5,319
Yellow pike.....	1,114,999	153,200	1,268,199	63,376	22,885	66,600	89,485
Crawfish.....	.....	.....	.....	51,273	.....	.....	.....
Mussel shells.....	.....	.....	.....	5,284,475	.....	.....	.....
Miscellaneous.....	.....	396,200	396,200	.....	.....	34,100	34,100
Total.....	16,376,644	3,010,000	19,386,644	30,973,257	14,694,343	4,760,700	19,455,043

## Lake fisheries of the United States and Canada, 1930—Continued

## CATCH: BY LAKES—Continued

Species	Namakan Lake			Rainy Lake		
	United States	Canada	Total	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Chubs.....	57, 103	( <sup>1</sup> )	57, 103	41, 118	( <sup>1</sup> )	41, 118
Crappie.....	2, 968	( <sup>1</sup> )	2, 968			
Pike (jacks).....	42, 786	1, 659	44, 445	70, 686	157, 687	228, 373
Sturgeon.....	254	1, 445	1, 699	885	626	1, 511
Sucker "mullet".....	19, 229	( <sup>1</sup> )	19, 229	1, 182	( <sup>1</sup> )	1, 182
Tullibees.....	2, 000	1, 695	3, 695		113, 163	113, 163
Whitefish, common.....	31, 352	10, 596	41, 948	57, 402	32, 645	90, 047
Yellow perch.....	401	( <sup>1</sup> )	401	3, 059	9, 630	12, 689
Yellow pike.....	53, 029	16, 658	69, 687	76, 030	144, 804	220, 834
Miscellaneous.....					3, 929	3, 929
Total.....	209, 122	32, 053	241, 175	250, 362	462, 484	712, 846

Species	Lake of the Woods			Total all lakes		
	United States	Canada	Total	United States	Canada	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Blue pike.....				11, 823, 091	5, 924, 800	17, 747, 891
Bowfin.....				19, 400	( <sup>1</sup> )	19, 400
Buffalofish.....	707	( <sup>1</sup> )	707	1, 107	( <sup>1</sup> )	1, 107
Burbot.....	15, 573	( <sup>1</sup> )	15, 573	642, 141	( <sup>1</sup> )	642, 141
Carp.....	16, 469	3, 134	19, 603	3, 293, 107	343, 534	3, 636, 641
Catfish and bullheads.....	23, 956	61, 183	85, 139	640, 888	309, 183	950, 071
Chubs.....				6, 161, 389	574, 400	6, 735, 789
Cisco.....				347, 356	506, 600	853, 956
Crappie.....	593	( <sup>1</sup> )	593	3, 561	( <sup>1</sup> )	3, 561
Eels.....				5, 100	99, 200	104, 300
Goldeye.....	55	( <sup>1</sup> )	55	55	( <sup>1</sup> )	55
Goldfish.....				63, 929	( <sup>1</sup> )	63, 929
Lake herring.....				22, 481, 500	5, 391, 800	27, 873, 300
Lake trout.....	310	23, 473	23, 783	9, 497, 026	3, 194, 773	12, 691, 799
Minnows.....				109	( <sup>1</sup> )	109
Mooneye.....				36, 488	( <sup>1</sup> )	36, 488
Pike (jacks).....	227, 628	406, 870	634, 498	524, 404	752, 916	1, 277, 320
Rock bass.....				16, 901	( <sup>1</sup> )	16, 901
Sauger pike.....	73, 602	( <sup>1</sup> )	73, 602	1, 830, 628	( <sup>1</sup> )	1, 830, 628
Sheepshead.....				2, 909, 004	( <sup>1</sup> )	2, 909, 004
Smelt.....				430	( <sup>1</sup> )	430
Sturgeon.....	884	456	1, 340	42, 668	43, 727	86, 395
Sucker "mullet".....	125, 102	( <sup>1</sup> )	125, 102	6, 746, 073	( <sup>1</sup> )	6, 746, 073
Sunfish.....				12, 440	( <sup>1</sup> )	12, 440
Tullibees.....	903, 023	102, 110	1, 005, 133	905, 023	216, 968	1, 121, 991
White bass.....				483, 774	( <sup>1</sup> )	483, 774
Whitefish:						
Common.....	11, 028	259, 187	270, 215	10, 172, 223	2, 560, 328	12, 732, 551
Menominee.....				372, 135	( <sup>1</sup> )	372, 135
Yellow perch.....	54, 721	2, 190	56, 911	6, 578, 109	3, 597, 320	10, 175, 429
Yellow pike.....	768, 225	541, 900	1, 310, 125	4, 001, 835	1, 221, 462	5, 223, 297
Crawfish.....				51, 273		51, 273
Mussel shells.....				5, 284, 475		5, 284, 475
Miscellaneous.....		138, 013	138, 013		1, 847, 742	1, 847, 742
Total.....	2, 221, 876	1, 538, 516	3, 760, 392	94, 947, 642	26, 584, 753	121, 532, 395

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

## Lake fisheries of the United States, 1930

## OPERATING UNITS: BY LAKES

Item	Lake Ontario	Lake Erie	Lake Huron	Lake Michigan	Lake Superior	Lake of the Woods, Rainy Lake, and Namakan Lake	Total
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	3	326	226	931	174		1,660
On boats and shore—							
Regular.....	81	915	766	993	959	79	3,703
Casual.....	93	266	126	987	145		1,617
<b>Total.....</b>	<b>177</b>	<b>1,507</b>	<b>1,118</b>	<b>2,821</b>	<b>1,278</b>	<b>79</b>	<b>6,980</b>
<b>Vessels:</b>							
Steam.....		29	17	53	8		107
Net tonnage.....		747	365	1,092	170		2,374
Motor.....	1	30	43	254	32		360
Net tonnage.....	11	292	457	2,681	285		3,726
<b>Total vessels.....</b>	<b>1</b>	<b>59</b>	<b>60</b>	<b>307</b>	<b>40</b>		<b>467</b>
<b>Total net tonnage.....</b>	<b>11</b>	<b>1,039</b>	<b>822</b>	<b>3,773</b>	<b>455</b>		<b>6,100</b>
<b>Boats:</b>							
Motor.....	67	279	362	793	560	154	2,215
Other.....	84	416	118	650	396		1,664
<b>Apparatus:</b>							
Haul seines.....		157	63	16	7		243
Length, yards.....		83,839	29,689	5,173	1,740		120,441
Gill nets—							
" Bull," 3 to 3½ inches.....		1,158					1,158
Square yards.....		339,778					339,778
" Shoal," 2¼ to 3¾ inches.....	774	10,836	2,305	14,706	7,201		35,823
Square yards.....	114,349	1,724,562	843,001	3,347,593	2,467,171		8,496,676
" Shoal," 4 to 6 inches.....	965	5,438	6,867	35,291	7,773	227	56,561
Square yards.....	193,500	1,135,496	2,545,679	10,489,683	3,885,655	78,963	18,328,976
Trammel nets.....		94					94
Square yards.....		9,882					9,882
Lines—							
Hand.....		50	5	4	20		79
Hooks.....		100	6	4	20		130
Troll.....		3	3	13	16		32
Hooks.....			14	21	32		67
Trot.....	50	181	144	242	614		1,231
Hooks.....	48,500	34,633	136,700	345,000	263,541		828,374
Pound nets.....		86	716	668	103	77	1,652
Trap nets.....	187	3,940	1,979	147	42		6,295
Fyke nets.....	154	1,183	378	507	25	298	2,515
Dip nets.....		23		4			27
Crawfish pots.....				5,418			5,418
Crowfoot bars (pairs).....				285			285
Tongs.....				12			12
Forks.....				136			136
Picks.....				656			656

## OPERATING UNITS: BY STATES AND LAKES

Item	New York			Pennsylvania, Lake Erie	Ohio, Lake Erie
	Lake Ontario	Lake Erie	Total		
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	3	85	88	118	123
On boats and shore—					
Regular.....	81	18	99	34	709
Casual.....	93	76	169		180
<b>Total.....</b>	<b>177</b>	<b>179</b>	<b>336</b>	<b>152</b>	<b>1,012</b>
<b>Vessels:</b>					
Steam.....		5	5	13	11
Net tonnage.....		101	101	329	317
Motor.....	1	11	12	8	11
Net tonnage.....	11	84	95	90	118
<b>Total vessels.....</b>	<b>1</b>	<b>16</b>	<b>17</b>	<b>21</b>	<b>22</b>
<b>Total net tonnage.....</b>	<b>11</b>	<b>185</b>	<b>196</b>	<b>419</b>	<b>435</b>

## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS: BY STATES AND LAKES—Continued

Item	New York			Pennsylvania, Lake Erie	Ohio, Lake Erie
	Lake Ontario	Lake Erie	Total		
Boats:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Motor.....	67	18	85	12	210
Other.....	84	48	132	14	300
Apparatus:					
Haul seines.....		16	16		106
Length, yards.....		1,550	1,550		68,452
Gill nets—					
"Shoal," 3 to 3½ inches.....		598	598	560	
Square yards.....		137,088	137,088	202,690	
"Shoal," 2¼ to 3¼ inches.....		774	1,938	2,712	4,344
Square yards.....	114,349	280,215	394,564	736,320	708,027
"Shoal," 4 to 6 inches.....		965	1,961	2,926	3,198
Square yards.....	193,500	325,407	518,907	756,448	53,641
Trammel nets.....					94
Square yards.....					9,882
Lines—					
Hand.....					50
Hooks.....					100
Trot.....	50	58	108		123
Hooks.....	48,500	9,960	58,460		24,673
Pound nets.....					25
Trap nets.....		187	209	40	3,842
Fyke nets.....		154	154		548
Dip nets.....					23

  

Item	Michigan					Indiana, Lake Michigan
	Lake Erie	Lake Huron	Lake Michigan	Lake Superior	Total	
Fishermen:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....		226	442	95	763	17
On boats and shore—						
Regular.....	154	766	481	259	1,660	16
Casual.....	10	126	793	60	989	62
Total.....	164	1,118	1,716	414	3,412	95
Vessels:						
Steam.....		17	28	8	53	1
Net tonnage.....		365	492	170	1,027	26
Motor.....		43	115	18	176	5
Net tonnage.....		457	1,100	121	1,678	76
Total vessels.....		60	143	26	229	6
Total net tonnage.....		822	1,592	291	2,705	102
Boats:						
Motor.....	39	362	571	174	1,146	40
Other.....	54	118	509	73	754	31
Apparatus:						
Haul seines.....	35	63	1	7	106	
Length, yards.....	13,837	29,689	333	1,740	45,599	
Gill nets—						
"Shoal," 2¼ to 3¼ inches.....		2,306	5,519	2,325	10,160	387
Square yards.....		843,001	1,238,387	730,911	2,812,299	99,817
"Shoal," 4 to 6 inches.....		6,867	22,842	4,213	33,922	536
Square yards.....	2,515,679	6,299,030	2,029,280	10,873,989	150,294	
Lines—						
Hand.....		5	4	20	29	
Hooks.....		6	4	20	30	
Troll.....		3	13	16	32	
Hooks.....		14	21	32	67	
Trot.....		144	75	333	552	
Hooks.....		136,700	117,600	159,041	413,341	
Pound nets.....	4	716	482	59	1,261	7
Trap nets.....	36	1,979	147	42	2,204	
Fyke nets.....	635	378	51	8	1,072	
Dip nets.....					4	
Crowfoot bars (pairs).....			237		237	30
Tongs.....					12	
Forks.....					123	
Picks.....			596		596	60

## Lake fisheries of the United States, 1930—Continued

OPERATING UNITS: BY STATES AND LAKES—Continued

Item	Illinois, Lake Michi- gan	Wisconsin			Minnesota		
		Lake Michigan	Lake Superior	Total	Lake Superior	Lake of the Woods, Rainy Lake, and Nama- kan Lake	Total
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	38	434	77	511	2	-----	2
On boats and shore—							
Regular.....	26	380	172	552	528	79	607
Casual.....	-----	132	35	167	50	-----	50
<b>Total.....</b>	<b>64</b>	<b>946</b>	<b>284</b>	<b>1,230</b>	<b>580</b>	<b>79</b>	<b>659</b>
<b>Vessels:</b>							
<b>Steam.....</b>	<b>2</b>	<b>22</b>	-----	<b>22</b>	-----	-----	-----
Net tonnage.....	29	545	-----	545	-----	-----	-----
<b>Motor.....</b>	<b>8</b>	<b>126</b>	<b>13</b>	<b>139</b>	<b>1</b>	-----	<b>1</b>
Net tonnage.....	133	1,372	154	1,526	10	-----	10
<b>Total vessels.....</b>	<b>10</b>	<b>148</b>	<b>13</b>	<b>161</b>	<b>1</b>	-----	<b>1</b>
<b>Total net tonnage.....</b>	<b>162</b>	<b>1,917</b>	<b>154</b>	<b>2,071</b>	<b>10</b>	-----	<b>10</b>
<b>Boats:</b>							
Motor.....	18	164	92	256	294	154	448
Other.....	-----	110	40	150	283	-----	283
<b>Apparatus:</b>							
Haul seines.....	-----	15	-----	15	-----	-----	-----
Length, yards.....	-----	4,840	-----	4,840	-----	-----	-----
Gill nets—							
"Shoal," 2¼ to 3¾ inches.....	1,193	7,607	1,238	8,845	3,628	-----	3,628
Square yards.....	260,405	1,748,984	581,495	2,330,479	1,154,765	-----	1,154,765
"Shoal," 4 to 6 inches.....	1,190	10,723	2,080	12,803	1,480	227	1,707
Square yards.....	376,775	3,663,584	1,269,540	4,933,124	586,835	78,963	665,798
Lines—							
Trot.....	-----	167	47	214	234	-----	234
Hooks.....	-----	227,400	43,745	271,145	60,755	-----	60,755
Pound nets.....	1	178	46	224	-----	77	77
Fyke nets.....	-----	456	17	473	-----	268	268
Crawfish pots.....	-----	5,418	-----	5,418	-----	-----	-----
Crowfoot bars (pairs).....	-----	18	-----	18	-----	-----	-----
Forks.....	-----	13	-----	13	-----	-----	-----

OPERATING UNITS OF LAKE ONTARIO: <sup>1</sup> BY GEAR

Item	Gill nets		Lines, trot	Trap nets	Fyke nets	Total, exclusive of dupli- cation
	"Shoal," 2¼ to 3¾ inches	"Shoal," 4 to 6 inches				
<b>Fishermen:</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	3	-----	-----	-----	-----	1
On boats and shore—						
Regular.....	22	16	-----	47	20	81
Casual.....	49	18	30	-----	-----	93
<b>Total.....</b>	<b>74</b>	<b>34</b>	<b>30</b>	<b>47</b>	<b>20</b>	<b>177</b>
<b>Vessels, motor:</b>						
11 to 20 tons.....	1	-----	-----	-----	-----	1
Net tonnage.....	11	-----	-----	-----	-----	11
<b>Boats:</b>						
Motor.....	31	13	-----	26	16	67
Other.....	17	10	29	26	16	84
<b>Apparatus:</b>						
Number.....	774	965	50	187	154	-----
Square yards.....	114,349	153,500	-----	-----	-----	-----
Hooks.....	-----	-----	48,500	-----	-----	-----

<sup>1</sup> Includes Niagara River below the Falls and the St. Lawrence River.

## Lake fisheries of the United States, 1930—Continued

OPERATING UNITS OF LAKE ERIE: <sup>2</sup> BY GEAR

Item	Haul seines	Gill nets			Trammel nets
		"Bull," 3 to 3½ inches	"Shoal," 2¼ to 3¼ inches	"Shoal," 4 to 6 inches	
Fishermen:	Number	Number	Number	Number	Number
On vessels.....		130	315	226	
On boats and shore—					
Regular.....	312		28	6	
Casual.....	62		21	8	14
Total.....	374	130	364	240	14
Vessels:					
Steam—					
11 to 20 tons.....		2	8	5	
21 to 30 tons.....		8	13	11	
31 to 40 tons.....			4	3	
41 to 50 tons.....			2		
61 to 70 tons.....			1	1	
Total.....		10	28	20	
Net tonnage.....		222	715	499	
Motor—					
5 to 10 tons.....		12	19	17	
11 to 20 tons.....		1	9	3	
21 to 30 tons.....		1	1	1	
Total.....		14	29	21	
Net tonnage.....		131	283	195	
Total vessels.....		24	57	41	
Total net tonnage.....		353	998	694	
Boats:					
Motor.....	60		20	4	7
Other.....	149		12	4	
Apparatus:					
Number.....	157	1, 158	10, 836	5, 438	94
Length, yards.....	83, 839				
Square yards.....		339, 778	1, 724, 562	1, 135, 496	9, 882

Item	Lines		Pound nets	Trap nets	Fyke nets	Dip nets	Total, exclusive of duplication
	Hand	Trot					
Fishermen:	Number	Number	Number	Number	Number	Number	Number
On vessels.....							326
On boats and shore—							
Regular.....	8		36	487	141		915
Casual.....	50	125		1	2	23	266
Total.....	58	125	36	488	143	23	1, 607
Vessels:							
Steam—							
11 to 20 tons.....							8
21 to 30 tons.....							13
31 to 40 tons.....							5
41 to 50 tons.....							2
61 to 70 tons.....							1
Total.....							29
Net tonnage.....							747
Motor—							
5 to 10 tons.....							20
11 to 20 tons.....							9
21 to 30 tons.....							1
Total.....							30
Net tonnage.....							292
Total vessels.....							59
Total net tonnage.....							1, 039
Boats:							
Motor.....	2		13	166	40		279
Other.....	2	125	17	139	59		416
Apparatus:							
Number.....	50	181	86	3, 940	1, 183	23	
Hooks.....	100	34, 633					

<sup>2</sup> Includes Niagara River above the Falls.

## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS OF LAKE HURON: BY GEAR

Item	Haul seines	Gill nets		Lines			Pound nets	Trap nets	Fyke nets	Total, exclusive of duplication
		"Shoal," 2¼ to 3¾ inches	"Shoal," 4 to 6 inches	Hand	Troll	Trot				
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>										
On vessels.....		98	156			62	24	42		226
On boats and shore—										
Regular.....	73	84	172			15	264	339	49	766
Casual.....	67	40	38	5	3	2		5	2	126
<b>Total.....</b>	<b>140</b>	<b>222</b>	<b>366</b>	<b>5</b>	<b>3</b>	<b>79</b>	<b>288</b>	<b>386</b>	<b>51</b>	<b>1,118</b>
<b>Vessels:</b>										
<b>Steam—</b>										
5 to 10 tons.....		1	4			1	2			5
11 to 20 tons.....		1	5			2				5
21 to 30 tons.....		3	3			2				3
31 to 40 tons.....		2	2			1				2
51 to 60 tons.....		2	2			1				2
<b>Total.....</b>		<b>9</b>	<b>16</b>			<b>7</b>	<b>2</b>			<b>17</b>
<b>Net tonnage.....</b>		<b>279</b>	<b>354</b>			<b>174</b>	<b>11</b>			<b>365</b>
<b>Motor—</b>										
5 to 10 tons.....		7	13			1	4	12		28
11 to 20 tons.....		2	5			1	1	3		11
21 to 30 tons.....		2	3			1	1			3
31 to 40 tons.....		1	1			1				1
<b>Total.....</b>		<b>12</b>	<b>22</b>			<b>4</b>	<b>6</b>	<b>15</b>		<b>43</b>
<b>Net tonnage.....</b>		<b>173</b>	<b>265</b>			<b>95</b>	<b>60</b>	<b>126</b>		<b>457</b>
<b>Total vessels.....</b>		<b>21</b>	<b>38</b>			<b>11</b>	<b>8</b>	<b>15</b>		<b>60</b>
<b>Total net tonnage.....</b>		<b>452</b>	<b>619</b>			<b>269</b>	<b>71</b>	<b>126</b>		<b>822</b>
<b>Boats:</b>										
Motor.....	45	50	96		1	8	104	143	25	362
Other.....	33	28	18	2	2	1	7	42	5	118
<b>Apparatus:</b>										
Number.....	63	2,306	6,867	5	3	144	716	1,979	378	
Length, yards.....	29,689									
Square yards.....		843,001	2,545,679							
Hooks.....				6	14	136,700				

 OPERATING UNITS OF LAKE MICHIGAN: <sup>1</sup> BY GEAR

Item	Haul seines	Gill nets		Lines			Pound nets	Trap nets
		"Shoal," 2¼ to 3¾ inches	"Shoal," 4 to 6 inches	Hand	Troll	Trot		
	Number	Number	Number	Number	Number	Number	Number	Number
<b>Fishermen:</b>								
On vessels.....	10	509	819			206	109	14
On boats and shore—								
Regular.....	26	372	590	4	6	32	241	30
Casual.....	8	74	48		7	2	2	
<b>Total.....</b>	<b>44</b>	<b>955</b>	<b>1,457</b>	<b>4</b>	<b>13</b>	<b>240</b>	<b>352</b>	<b>44</b>
<b>Vessels:</b>								
<b>Steam—</b>								
5 to 10 tons.....		1	5			3		
11 to 20 tons.....		18	27			5	1	
21 to 30 tons.....		5	6			5		
31 to 40 tons.....		5	6			6		
41 to 50 tons.....		1	1			1		
51 to 60 tons.....						1		
<b>Total.....</b>		<b>30</b>	<b>45</b>			<b>21</b>	<b>1</b>	
<b>Net tonnage.....</b>		<b>622</b>	<b>839</b>			<b>527</b>	<b>15</b>	

<sup>1</sup> Includes operating units used in the mussel fisheries of streams tributary to Lakes Erie, Huron, and Michigan. Those used in Lakes Erie and Huron were inconsiderable and are included herein to avoid disclosure of private enterprise.



## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS OF LAKE MICHIGAN: BY GEAR—Continued

Item	Haul seines	Gill nets		Lines			Pound nets	Trap nets
		"Shoal," 2¼ to 3¼ inches	"Shoal," 4 to 6 inches	Hand	Troll	Trot		
<b>Vessels—Continued</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Motor—								
5 to 10 tons.....	3	78	149			22	33	5
11 to 20 tons.....	1	40	61			15	6	1
21 to 30 tons.....		9	9			3		
31 to 40 tons.....		4	3				1	
Total.....	4	131	222			40	40	6
Net tonnage.....	29	1,456	2,247			453	317	47
Total vessels.....	4	161	267			61	41	6
Total net tonnage.....	29	2,078	3,086			980	332	47
<b>Boats:</b>								
Motor.....	3	185	251	1	12	18	152	23
Other.....	3	83	122	1	1		10	3
<b>Apparatus:</b>								
Number.....	16	14,706	35,291	4	13	242	668	147
Length, yards.....	5,173							
Square yards.....		3,317,593	10,489,683					
Hooks.....				4	21	345,000		

Item	Fyke nets	Dip nets	Craw-fish pots	Crow-foot bars	Tongs	Forks	Picks	Total, exclusive of duplication
<b>Fishermen.</b>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
On vessels.....	44		2					931
On boats and shore—								
Regular.....	76		30	9		9		903
Casual.....	30	4	10	285	12	141	676	987
Total.....	150	4	42	294	12	150	676	2,821
<b>Vessels:</b>								
Steam—								
5 to 10 tons.....								7
11 to 20 tons.....								26
21 to 30 tons.....								9
31 to 40 tons.....								8
41 to 50 tons.....								2
51 to 60 tons.....								1
Total.....								53
Net tonnage.....								1,092
<b>Motor—</b>								
5 to 10 tons.....	15		1					160
11 to 20 tons.....	5							76
21 to 30 tons.....								13
31 to 40 tons.....								5
Total.....	20		1					254
Net tonnage.....	171		7					2,681
Total vessels.....	20		1					307
Total net tonnage.....	171		7					3,773
<b>Boats:</b>								
Motor.....	37		16	284		47	257	793
Other.....	25	2	23	10	12	103	419	650
<b>Apparatus:</b>								
Number.....	507	4	5,418	285	12	136	656	

## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS OF LAKE SUPERIOR: BY GEAR

Item	Haul seines	Gill nets		Lines			Pound nets	Trap nets	Fyke nets	Total, exclusive of duplication
		"Shoal" 2¼ to ¾ inches	"Shoal" 4 to 6 inches	Hand	Troll	Trot				
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:										
On vessels.....		117	107			73				174
On boats and shore—										
Regular.....	6	785	454		16	250	39	4	11	959
Casual.....	1	107	51	20		7	8			145
Total.....	7	1,009	612	20	16	330	53	4	11	1,278
Vessels:										
Steam—										
5 to 10 tons.....		1	1			1				1
11 to 20 tons.....		2	1			2				3
21 to 30 tons.....		2	3			1				3
41 to 50 tons.....		1	1			1				1
Total.....		6	6			5				8
Net tonnage.....		132	136			105				170
Motor—										
5 to 10 tons.....		17	23			12	3			27
11 to 20 tons.....		1	2			2				3
21 to 30 tons.....		1								1
31 to 40 tons.....		1								1
Total.....		20	25			14	3			32
Net tonnage.....		193	187			101	16			285
Total vessels.....		26	31			19	3			40
Total net tonnage.....		325	323			206	16			455
Boats:										
Motor.....	3	462	331		8	208	23	2	10	560
Other.....	5	352	79	20		8	9			396
Apparatus:										
Number.....	7	7,201	7,773	20	16	614	105	42	25	
Length, yards.....	1,740									
Square yards.....		2,467,171	3,885,655							
Hooks.....				20	32	263,541				

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

Item	Gill nets, "shoal" 4 to 6 inches	Pound nets	Fyke nets	Total, exclusive of duplication
	Number	Number	Number	Number
Fishermen on boats and shore—regular.....	63	21	27	79
Boats, motor.....	126	42	54	154
Apparatus:				
Number.....	227	77	268	
Square yards.....	78,963			

## Lake fisheries of the United States, 1930—Continued

OPERATING UNITS: \* BY STATES AND COUNTIES

Item	New York								
	Cayuga	Chautauqua	Erie	Jefferson	Monroe	Niagara	Orleans	Oswego	St. Lawrence
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....		85		3					
On boats and shore—									
Regular.....		4	14	54	1	4		16	
Casual.....	1	41	23	9	25	20	4	14	18
Total.....	1	130	37	66	26	24	4	30	18
Vessels:									
Steam.....		5							
Net tonnage.....		101							
Motor.....		11		1					
Net tonnage.....		84		11					
Total vessels.....		16		1					
Total net tonnage.....		185		11					
Boats:									
Motor.....	1	4	14	34	7	5	3	7	
Other.....	1	21	15	32	10	15	1	15	18
Apparatus:									
Haul seines.....		16							
Length, yards.....		1,550							
Gill nets—									
" Bull," 3 to 3½ inches.....		598							
Square yards.....		137,088							
" Shoal," 2¼ to 3¾ inches.....	20	1,829	109	168	66	15		214	
Square yards.....	2,160	258,665	21,550	18,588	21,120	3,762		26,924	
" Shoal," 4 to 6 inches.....		1,870	91	129	4	40	14	476	
Square yards.....		305,124	20,283	16,400	1,280	14,300	3,920	93,440	
Lines—									
Trot.....		10	24	3		25	1	1	37
Hooks.....		2,000	5,560	750		3,000	250	250	41,600
Trap nets.....			22	187					
Fyke nets.....				147	7				

Item	New York—Continued		Pennsylvania	Ohio					
	Wayne	Total	Erie	Ashtabula	Cuyahoga	Erie	Lake	Lorain	Lucas
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....		88	118	14	35	66		8	
On boats and shore—									
Regular.....	6	99	34	96	14	198	49	32	74
Casual.....	14	169		11	20	49	4	2	25
Total.....	20	356	152	121	69	313	53	42	99
Vessels:									
Steam.....		5	13	2	5	3			1
Net tonnage.....		101	329	32	192	61		32	
Motor.....		12	8		1	10			
Net tonnage.....		95	90		9	109			
Total vessels.....		17	21	2	6	13			1
Total net tonnage.....		196	419	32	201	170		32	
Boats:									
Motor.....	10	85	12	30	6	75	18	11	17
Other.....	4	132	14	38	7	78	18	11	50
Apparatus:									
Haul seines.....		16				12	1		16
Length, yards.....		1,550				7,898	45		4,434

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

## Lake fisheries of the United States, 1930—Continued

OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	New York—Continued		Pennsylvania	Ohio					
	Wayne	Total	Erie	Ashtabula	Cuyahoga	Erie	Lake	Lorain	Lucas
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Apparatus—Continued.									
Gill nets—									
" Bull," 3 to 3½ inches		598	560						
Square yards		137,088	202,690						
" Shoal," 2¼ to 3¾ inches	291	2,712	4,344	515	400	3,110	1	368	
Square yards	41,795	394,564	736,320	85,035	75,504	481,788	150	54,000	
" Shoal," 4 to 6 inches	302	2,926	3,198		72	65	48	70	
Square yards	64,160	518,907	756,448		19,432	11,895	8,784	11,530	
Trammel nets						94			
Square yards						9,882			
Lines—									
Trot	7	108		14	2	43	5	3	43
Hooks	5,050	58,460		3,450	400	8,860	325	120	8,350
Pound nets			57		3				22
Trap nets		209	40	731	90	1,562	369	183	197
Fyke nets		154				44		5	296
Dip nets					18	3			

Item	Ohio—Continued			Michigan					
	Ot-tawa	San-dusky	Total	Al-cona	Alger	Alle-gan	Alpena	An-trim	Are-nac
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels			123		27	4	55		
On boats and shore—									
Regular	246		709	24	32	6	62	3	34
Casual	63	6	180	1	9		5	3	20
Total	309	6	1,012	25	68	10	122	6	54
Vessels:									
Steam			11		3		8		
Net tonnage			317		44		222		
Motor			11		4	2	3		
Net tonnage			118		27	11	19		
Total vessels			22		7	2	11		
Total net tonnage			435		71	11	241		
Boats:									
Motor	53		210	10	16	3	34	1	23
Other	95	3	300	1	10		4	4	6
Apparatus:									
Haul seines	74	3	106			1			17
Length, yards	55,151	924	68,452			333			7,469
Gill nets—									
" Shoal," 2¼ to 3¾ inches	160		4,554	3	80	50	629	6	16
Square yards	11,550		708,027	788	15,040	8,500	205,925	900	4,256
" Shoal," 4 to 6 inches	24		279		801	260	1,369	12	
Square yards	2,000		53,641		247,300	43,160	442,675	1,800	
Trammel nets			94						
Square yards			9,882						
Lines—									
Hand	50		50		5				
Hooks	100		100		5				
Troll					16				
Hooks					32				
Trot	13		123		101		26		
Hooks	3,168		24,673		49,000		52,000		
Pound nets			25	17	7	12	46	4	3
Trap nets	710		3,842	34			165		50
Fyke nets	203		548						24
Dip nets	2		23						

## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Michigan—Continued									
	Bara- ga	Bay	Benzie	Ber- rien	Charle- voix	Che- boy- gan	Chip- pewa	Delta	Em- met	
	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber
Fishermen:										
On vessels.....			25	24	69	36	10	56	7	
On boats and shore—										
Regular.....	16	140	2	9	27	49	67	196	17	
Casual.....	12	41		16	4	8	13	2	5	
Total.....	28	181	27	49	100	93	90	254	29	
Vessels:										
Steam.....			4	1	3	1	2			
Net tonnage.....			56	39	39	11	11			
Motor.....			4	4	19	13	2	19	2	
Net tonnage.....			65	46	178	117	13	186	12	
Total vessels.....			8	5	22	14	4	19	2	
Total net tonnage.....			121	85	217	128	24	186	12	
Boats:										
Motor.....	14	69	1	11	13	28	34	81	7	
Other.....	14	57		2	2	5	17	50	7	
Apparatus:										
Haul seines.....		34								
Length, yards.....		17,380								
Gill nets—										
"Shoal," 2¼ to 3¾ inches.....	85	12	315	45	504	157	214	332	21	
Square yards.....	25,320	3,192	103,950	12,585	151,200	34,375	37,870	66,475	3,717	
"Shoal," 4 to 6 inches.....	40	177	1,074	762	5,640	885	729	4,516	290	
Square yards.....	10,415	50,587	550,740	252,312	1,507,930	193,950	396,714	1,449,585	51,330	
Lines—										
Hand.....					1		5			
Hooks.....					1		5			
Trot.....		1	4	3	5	3	61	27,600	21	
Hooks.....		500	4,500	8,400	9,000	1,200	19,600	27,600	150	
Pound nets.....	11	66		2	23	66	74	150	24	
Trap nets.....		584				473	71	83	21	
Fyke nets.....	4	35					4	51		
Dip nets.....				4						

Item	Michigan—Continued									
	Goge- bic	Grand Trav- erse	Hough- ton	Huron	Iosco	Ke- wee- naw	Lee- lanau	Mack- inac	Manis- tee	
	Num- ber	Number	Number	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber	Num- ber
Fishermen:										
On vessels.....		9	38	18	21	5	51	79	22	
On boats and shore—										
Regular.....	12	33	96	204	96	43	24	127		
Casual.....	6		18	27	1	2	7	11	4	
Total.....	18	42	152	249	118	50	82	217	26	
Vessels:										
Steam.....		1	2	2	1		6	1		
Net tonnage.....		9	34	57	15		94	8		
Motor.....		2	10	1	5	1	14	27	6	
Net tonnage.....		17	61	10	68	10	99	228	46	
Total vessels.....		3	12	3	6	1	20	28	6	
Total net tonnage.....		26	95	67	83	10	193	236	46	
Boats:										
Motor.....	9	22	78	87	32	28	16	62	1	
Other.....	4	5	21	14	3	2	5	13	3	
Apparatus:										
Haul seines.....	1		6	8	2					
Length, yards.....	90		1,650	3,108	852					

## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS: BY STATES AND COUNTIES—Continued

Item	Michigan—Continued								
	Gogebic	Grand Traverse	Houghton	Huron	Iosco	Keeweenaw	Leelanau	Mackinac	Manistee
Apparatus—Continued.	Number	Number	Number	Number	Number	Number	Number	Number	Number
Gill nets—									
"Shoal," 2¼ to 3¾ inches . . . . .	33	436	1,298	129	4	276	1,231	957	131
Square yards . . . . .	10,571	69,232	526,455	58,950	1,064	69,000	262,249	261,688	19,953
"Shoal," 4 to 6 inches . . . . .	15	240	2,400	500	1,539	351	2,180	2,491	826
Square yards . . . . .	6,660	72,000	1,335,023	207,575	613,724	194,580	516,633	877,610	146,412
Lines—									
Hand . . . . .		1	10	2					3
Hooks . . . . .		1	10	2					3
Troll . . . . .		5		1				8	
Hooks . . . . .		5		2				16	
Trot . . . . .	13	1	84	28	14	36	7		8
Hooks . . . . .	6,500	400	38,341	35,200	19,000	22,600	4,400		10,000
Pound nets . . . . .	1	25	6	221	150	2	12	251	
Trap nets . . . . .		12		483	1		9	70	
Fyke nets . . . . .				190					

Item	Michigan—Continued								
	Marquette	Mason	Menominee	Monroe	Muskegon	Oceana	On-tonagon	Ot-tawa	Pres-que Isle
Fishermen:	Number	Number	Number	Number	Number	Number	Number	Number	Number
On vessels . . . . .	14	18	14		17	7	11	32	27
On boats and shore—									
Regular . . . . .	9	3	47	101	18	3	6	22	3
Casual . . . . .				6	6		2	6	6
Total . . . . .	23	21	61	107	41	10	19	54	36
Vessels:									
Steam . . . . .	1				1		2	6	
Net tonnage . . . . .	41				12		51	96	
Motor . . . . .	2	8	4		5	2	1	1	6
Net tonnage . . . . .	17	82	67		45	27	6	7	112
Total vessels . . . . .	3	8	4		6	2	3	7	6
Total net tonnage . . . . .	58	82	67		57	27	57	103	112
Boats:									
Motor . . . . .	6	2	22	26	11	1	4	12	6
Other . . . . .	1		4	31	3	1	4		2
Apparatus:									
Haul seines . . . . .				23					
Length, yards . . . . .				9,385					
Gill nets—									
"Shoal," 2¼ to 3¾ inches . . . . .	127		405		78	4	240	1,014	699
Square yards . . . . .	14,630		60,605		10,850	800	40,495	214,708	310,356
"Shoal," 4 to 6 inches . . . . .	190	702	966		1,391	172	210	1,022	201
Square yards . . . . .	56,790	197,100	235,705		226,300	40,160	86,262	218,508	89,244
Lines—									
Trot . . . . .	26				6		12	8	72
Hooks . . . . .	16,100				12,000		6,900	17,600	28,800
Pound nets . . . . .		6	22		7		3	15	
Trap nets . . . . .			4	36					10
Fyke nets . . . . .				216					



## Lake fisheries of the United States, 1930—Continued

## OPERATING UNITS—BY STATES AND COUNTIES—Continued

Item	Wisconsin—Continued								
	Brown	Door	Douglas	Kenosha	Ke-wau-nee	Mani-towoc	Mari-nette	Mil-wau-kee	Oconto
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....	52	130	2	21	21	33	37	72	37
On boats and shore—									
Regular.....	97	139	4	3	34	16	11	9	41
Casual.....	66		6				35	11	
Total.....	215	269	12	24	55	49	83	92	78
Vessels:									
Steam.....					1	1		14	
Net tonnage.....					19	18		309	
Motor.....	22	50	1	7	6	8	15	2	15
Net tonnage.....	179	523	6	94	70	178	113	47	128
Total vessels.....	22	50	1	7	7	9	15	16	15
Total net tonnage.....	179	523	6	94	89	196	113	356	128
Boats:									
Motor.....	31	48	4	1	18	4	4	8	16
Other.....	53	10	6	1	1	2	21	4	5
Apparatus:									
Haul seines.....	15								
Length, yards.....	4,840								
Gill nets—									
"Shoal," 2¼ to 3¾ inches.....	560	2,897	40	402	291	626	775	646	965
Square yards.....	78,750	854,450	11,280	126,525	101,640	162,840	132,076	96,513	110,850
"Shoal," 4 to 6 inches.....	470	5,078	40	190	441	110	983	1,291	1,705
Square yards.....	77,030	2,210,950	17,188	86,990	249,580	39,270	227,866	445,938	215,420
Lines—									
Trot.....		82	2	9	21	4		23	
Hooks.....		67,900	900	17,000	28,700	4,800		43,200	
Pound nets.....	33	68				30	13	4	1
Fyke nets.....	369	9	2				12		66
Crawfish pots.....	5,418								

Item	Wisconsin—Contd.			Minnesota					Total
	Ozaukee	Sheboygan	Total	Cook	Lake	Koochi-ching	St. Louis	Roseau and Lake of the Woods	
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Fishermen:									
On vessels.....	23	8	511				2		2
On boats and shore—									
Regular.....	8	13	543	372	89	12	74	60	607
Casual.....	2		149	10	18		22		50
Total.....	33	21	1,203	382	107	12	98	60	659
Vessels:									
Steam.....	4	2	22						
Net tonnage.....	109	90	545						
Motor.....	1		139				1		1
Net tonnage.....	40		1,526				10		10
Total vessels.....	5	2	161				1		1
Total net tonnage.....	149	90	2,071				10		10
Boats:									
Motor.....	6	11	239	205	44	24	59	116	448
Other.....		3	140	176	63		44		283
Apparatus:									
Haul seines.....			15						
Length, yards.....			4,840						
Gill nets—									
"Shoal," 2¼ to 3¾ inches.....	435	10	8,845	2,446	437		745		3,628
Square yards.....	83,340	2,000	2,330,479	775,865	155,780		223,120		1,154,765
"Shoal," 4 to 6 inches.....	365	90	12,803	628	85	36	791	167	1,707
Square yards.....	68,740	41,800	4,933,124	258,515	39,970	8,400	293,950	64,963	665,798
Lines—									
Trot.....	19	9	214	219	11		4		234
Hooks.....	52,000	13,800	271,145	54,005	4,950		1,800		60,755
Pound nets.....	6	23	224			12	5	60	77
Fyke nets.....			473					268	268
Crawfish pots.....			5,418						



## Lake fisheries of the United States, 1930—Continued

CATCH: BY GEAR

Species	New York							
	Haul seines		Gill nets		Trot lines		Trap nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....			591,786	\$28,606			3,299	\$469
Bowfin.....							667	22
Burbot.....			51,864	2,490			35,374	2,870
Carp.....	20,000	\$1,200	20,721	852			4,611	253
Catfish and bullheads.....	2,000	200	2,130	232			43,570	4,708
Cisco.....			58,604	5,446				
Eels.....					4,800	\$240		
Lake herring.....			176,170	14,214			12,930	746
Lake trout.....			19,955	3,164			7,971	1,015
Minnows.....	109	21						
Pike (jacks).....			707	93			6,137	604
Rock bass.....			240	20			952	87
Sturgeon.....			7,925	2,194	29,560	7,270	770	211
Sucker "mullet".....	110,000	7,000	16,679	843			47,378	1,637
Sunfish.....							8,072	369
White bass.....			398	33			404	30
Whitefish, common.....			193,284	39,863			63,255	8,265
Yellow perch.....			39,525	3,127			17,619	859
Yellow pike.....			2,217	342			24,048	4,085
Total.....	132,109	8,421	1,182,205	101,519	34,360	7,510	277,057	26,230

Species	New York—Continued				Pennsylvania			
	Fyke nets		Total		Gill nets		Pound nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....			595,085	\$29,075	1,766,323	\$70,654	417,420	\$16,697
Bowfin.....	150	88	817	30				
Burbot.....	16,739	1,069	103,977	6,429	1,101	22	155	3
Carp.....	1,928	96	47,260	2,401	124	5	1,579	63
Catfish and bullheads.....	35,772	3,578	83,472	8,718			3,471	174
Cisco.....			58,604	5,446	230,045	27,605	149	18
Eels.....	300	30	5,100	270				
Lake herring.....			189,100	14,960				
Lake trout.....			27,926	4,179	1,229	159		
Minnows.....			109	21				
Mooneye.....							115	2
Pike (jacks).....	1,781	158	8,625	855				
Rock bass.....			1,192	107				
Sheepshead.....					468	19	15,043	602
Sturgeon.....			38,255	9,675	49	13	1,770	442
Sucker "mullet".....	7,152	441	181,209	9,921	5,835	117	6,906	138
Sunfish.....	4,368	253	12,440	622				
White bass.....			802	63	423	21	36,844	1,844
Whitefish, common.....			256,539	48,128	647,043	129,408	107,900	21,580
Yellow perch.....	6,947	317	64,091	4,303	59,838	3,590	18,516	1,111
Yellow pike.....			26,265	4,427	249	24	13,423	1,300
Total.....	75,137	5,950	1,700,868	149,630	2,712,727	231,637	623,291	43,974

Species	Pennsylvania—Continued				Ohio			
	Trap nets		Total		Haul seines		Gill nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	27,665	\$1,207	2,211,408	\$88,558	5,327	\$266	1,059,912	\$52,996
Bowfin.....					1,042	10		
Burbot.....	5,750	115	7,006	140	418	8	25,341	506
Carp.....	840	34	2,543	102	953,950	38,158	10,921	437
Catfish and bullheads.....	5,500	275	8,971	449	62,710	3,136	287	14
Cisco.....			230,194	27,623		39	54,272	6,513
Goldfish.....					51,076	511	245	2
Lake trout.....			1,229	159				
Mooneye.....			115	2				
Sauger pike.....					21,328	213		
Sheepshead.....	7,450	298	22,961	919	12,541	627	501,090	25,055
Sturgeon.....	354	89	2,173	544	477,661	14,330	16,051	482
Sucker "mullet".....	16,333	326	29,074	581	114,870	2,297	51,949	1,039
White bass.....	2,000	100	39,267	1,965	29,894	1,495	5,563	278
Whitefish, common.....			754,943	150,988			37,205	7,241
Yellow perch.....	7,100	426	85,454	5,127	5,063	202	1,536,858	61,474
Yellow pike.....	9,855	975	23,527	2,299	17,891	2,147	66,927	8,031
Total.....	82,847	3,845	3,418,865	279,456	1,754,096	63,439	3,366,621	164,068

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Ohio—Continued							
	Trammel nets		Lines				Pound nets	
			Hand		Trot			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	-----	-----	-----	-----	-----	-----	31,123	\$1,556
Burbot.....	-----	-----	-----	-----	73	\$2	120	2
Carp.....	87,648	\$3,506	-----	-----	3,180	160	10,615	425
Catfish and bullheads.....	670	33	-----	-----	16,302	1,600	3,146	157
Mooneye.....	-----	-----	-----	-----	-----	-----	9,001	90
Sauger pike.....	-----	-----	2,356	\$259	-----	-----	-----	-----
Sheepshead.....	-----	-----	-----	-----	3,612	216	2,694	81
Sucker, "mullet".....	17,034	511	-----	-----	-----	-----	33,137	663
White bass.....	40	1	-----	-----	-----	-----	4,147	207
Whitefish, common.....	-----	-----	-----	-----	35	2	1,821	364
Yellow perch.....	-----	-----	8,643	951	307	30	639	25
Yellow pike.....	18	2	11,117	2,052	34	5	5,454	654
Total.....	105,410	4,053	22,116	3,262	23,543	2,015	101,897	4,224

Species	Ohio—Continued							
	Trap nets		Fyke nets		Dip nets		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	7,919,950	\$395,997	153	\$8	133	\$13	9,016,598	\$450,836
Bowfin.....	-----	-----	635	7	-----	-----	1,677	17
Burbot.....	361,768	7,235	2,201	44	-----	-----	389,921	7,797
Carp.....	111,114	4,445	63,777	2,551	2,041	102	1,243,246	49,784
Catfish and bullheads.....	136,507	6,825	34,559	1,728	112	11	254,293	13,504
Cisco.....	2,614	314	7	1	-----	-----	57,218	6,867
Goldfish.....	8,724	87	3,884	39	-----	-----	63,929	639
Mooneye.....	2,555	26	3,314	33	-----	-----	36,198	362
Sauger pike.....	971,386	48,569	20,380	1,019	18	2	1,507,771	75,531
Sheepshead.....	2,026,423	60,693	256,506	7,695	53	4	2,800,034	84,012
Sturgeon.....	217	65	-----	-----	-----	-----	217	65
Sucker, "mullet".....	1,258,145	25,163	243,718	4,874	214	10	1,702,073	34,047
White bass.....	328,822	16,441	75,244	3,762	-----	-----	443,705	22,185
Whitefish, common.....	557,640	112,527	-----	-----	-----	-----	596,666	120,132
Yellow perch.....	2,588,456	103,538	46,908	1,976	63	6	4,186,937	168,202
Yellow pike.....	1,424,868	170,984	288,406	34,609	-----	-----	1,814,715	218,484
Total.....	17,699,189	952,909	1,039,692	58,346	2,634	148	24,115,198	1,252,464

Species	Michigan							
	Haul seines		Gill nets		Lines			
					Hand		Troll	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin.....	8,921	\$177	-----	-----	-----	-----	129	\$2
Burbot.....	23	1	10,673	\$326	72	\$3	-----	-----
Carp.....	1,067,508	27,751	9,366	244	-----	-----	65	1
Catfish and bullheads.....	72,754	5,840	1,312	79	-----	-----	66	6
Chubs.....	1,010	101	1,356,828	137,891	-----	-----	22	2
Lake herring.....	67,777	1,761	2,500,782	62,520	106	3	-----	-----
Lake trout.....	84	12	4,298,523	601,793	9,285	1,301	40,136	5,619
Pike (jacks).....	9,648	965	12,216	1,221	145	15	-----	-----
Rock bass.....	1,881	56	141	4	-----	-----	84	3
Sauger pike.....	753	45	148,203	8,892	-----	-----	291	17
Sheepshead.....	20,320	610	346	10	-----	-----	-----	-----
Sucker "mullet".....	592,763	15,260	313,128	7,832	220	4	22	1
Whitefish:	-----	-----	-----	-----	-----	-----	-----	-----
Common.....	48	7	3,067,552	469,335	2,016	308	259	40
Menominee.....	904	54	250,861	15,052	58	3	-----	-----
Yellow perch.....	34,680	3,225	201,643	18,752	-----	-----	-----	-----
Yellow pike.....	156,772	26,024	146,306	24,287	913	152	778	129
Total.....	2,035,846	81,889	12,317,880	1,348,238	12,815	1,789	41,852	5,820

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Michigan—Continued							
	Lines—Trot		Pound nets		Trap nets		Fyke nets	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin.....	1, 065	\$21	352	\$7	3, 145	\$63	3, 201	\$63
Burbot.....	1, 058	43	4, 937	179	3, 111	120	1, 380	54
Carp.....	1, 642	45	31, 791	834	178, 127	4, 632	213, 347	5, 549
Catfish and bullheads.....	3, 006	230	6, 218	484	56, 873	4, 077	53, 162	2, 957
Chubs.....	7, 300	730	1, 077	107	12, 173	920	2, 980	298
Cisco.....			1, 270	33			70	2
Lake herring.....	4, 330	108	4, 896, 457	122, 411	144, 653	3, 616	17, 049	426
Lake trout.....	1, 075, 343	150, 548	267, 122	37, 397	106, 374	14, 892	16, 449	2, 303
Mooneye.....							175	2
Pike (jacks).....	1, 207	121	10, 857	1, 086	47, 630	4, 764	25, 327	2, 532
Rock bass.....			216	6	6, 841	205	6, 546	197
Sauger pike.....			12, 238	735	62, 668	3, 760	25, 102	1, 506
Sheepshead.....			17, 472	523	6, 928	208	38, 413	1, 152
Sucker "mullet".....	1, 227	28	562, 961	16, 149	1, 781, 491	47, 192	413, 530	10, 778
Whitefish:								
Common.....	18, 417	2, 818	3, 812, 491	583, 311	890, 929	136, 312	12, 780	1, 956
Menominee.....			52, 673	3, 161	1, 540	92	973	59
Yellow perch.....	4, 061	377	75, 872	7, 057	444, 223	41, 313	105, 011	9, 776
Yellow pike.....	1, 797	299	327, 149	54, 307	493, 343	81, 896	77, 053	12, 790
Total.....	1, 120, 453	155, 368	10, 081, 153	827, 787	4, 240, 049	344, 062	1, 012, 538	52, 400

Species	Michigan—Continued							
	Dip nets		Spears		Crowfoot bars		Tongs	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Bowfin.....			93	\$2				
Burbot.....	36	\$1						
Carp.....	518	15						
Lake herring.....	150	4						
Pike (jacks).....			310	31				
Smelt.....	430	4						
Sucker "mullet".....	9, 039	181	229	11				
Yellow perch.....			182	17				
Mussel shells <sup>1</sup> .....					2, 783, 400	\$79, 846	16, 000	\$328
Pearls and slugs <sup>2</sup> .....						6, 444		35
Total.....	10, 173	205	814	61	2, 783, 400	86, 290	16, 000	363

Species	Michigan—Continued						Indiana—Gill nets	
	Forks		Picks		Total		Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value		
Bowfin.....					16, 906	\$335		
Burbot.....					21, 290	727	15, 798	\$934
Carp.....					1, 502, 364	39, 071		
Catfish and bullheads.....					193, 391	13, 673		
Chubs.....					1, 381, 390	140, 049	204, 211	16, 056
Cisco.....					1, 340	35		
Lake herring.....					7, 631, 304	190, 849	210, 139	10, 381
Lake trout.....					5, 813, 316	813, 865	185, 941	24, 908
Mooneye.....					175	2		
Pike (jacks).....					107, 340	10, 735		
Rock bass.....					15, 709	471		
Sauger pike.....					249, 255	14, 955		
Sheepshead.....					83, 479	2, 503		
Smelt.....					430	4		
Sucker "mullet".....					3, 674, 600	97, 436	273	13
Whitefish:								
Common.....					7, 804, 492	1, 194, 087	8, 565	1, 291
Menominee.....					307, 009	18, 421		
Yellow perch.....					865, 672	80, 517	10, 935	944
Yellow pike.....					1, 204, 111	199, 884		
Mussel shells <sup>3</sup> .....	306, 200	\$6, 759	1, 600, 500	\$47, 619	4, 706, 100	134, 552		
Pearls and slugs <sup>3</sup> .....		698		3, 668		10, 845		
Total.....	306, 200	7, 457	1, 600, 500	51, 287	35, 579, 673	2, 963, 016	635, 862	54, 527

<sup>1</sup> From streams tributary to Lakes Michigan, Huron, and Erie. The mussel shells taken in streams tributary to Lakes Huron and Erie, which were inconsiderable, have been included with those taken in Lake Michigan, State of Michigan, to avoid disclosure of private enterprises.

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Indiana—Continued							
	Pound nets		Crowfoot bars		Picks		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish.....	400	\$28					400	\$28
Burbot.....	175	10					15,973	944
Carp.....	1,512	72					1,512	72
Chubs.....							204,211	16,056
Lake herring.....	44,552	1,012					254,691	11,393
Lake trout.....	510	75					186,451	24,983
Sucker "mullet".....	650	23					923	36
Whitefish, common.....	2,130	354					10,695	1,645
Yellow perch.....	1,899	184					12,834	1,128
Mussel shells <sup>5</sup> .....			284,000	\$13,900	188,000	\$9,300	472,000	23,200
Pearls and slugs <sup>5</sup> .....				687		463		1,150
Total.....	51,828	1,758	284,000	14,587	188,000	9,763	1,159,690	80,635

Species	Illinois						Wisconsin— Haul seines	
	Gill nets		Pound nets		Total		Pounds	Value
	Pounds	Value	Pounds	Value	Pounds	Value		
Carp.....							239,730	\$7,191
Catfish and bullheads.....							9,569	575
Chubs.....	538,192	\$46,637	2,000	\$180	540,192	\$46,817		
Lake herring.....	65,000	1,400			65,000	1,400		
Lake trout.....	382,442	42,104	500	60	382,942	42,164		
Yellow perch.....	75,500	6,710	1,000	100	76,500	6,810		
Total.....	1,061,134	96,851	3,500	340	1,064,634	97,191	249,299	7,766

Species	Wisconsin—Continued					
	Gill nets		Lines, trot		Pound nets	
	Pounds	Value	Pounds	Value	Pounds	Value
Burbot.....	45,366	\$459			21,518	\$213
Carp.....	119,865	3,596				
Catfish and bullheads.....	9,569	574				
Chubs.....	2,624,737	176,226			832,952	54,213
Lake herring.....	2,226,129	40,286			3,630,173	68,242
Lake trout.....	1,535,606	141,391	510,724	\$43,500	744,826	63,483
Pike (jacks).....	9,028	903			38,828	3,883
Sheepshead.....	364	11			709	21
Sucker "mullet".....	502,053	20,330			251,027	10,165
Whitefish:						
Common.....	429,657	49,399			143,220	16,467
Menominee.....	45,906	5,041			11,666	1,392
Yellow perch.....	409,202	20,460			204,600	10,230
Yellow pike.....	13,454	622			7,217	362
Total.....	7,970,936	459,298	510,724	43,500	5,886,736	228,671

<sup>5</sup> From streams tributary to Lakes Michigan, Huron, and Erie. The mussel shells taken in streams tributary to Lakes Huron and Erie, which were inconsiderable, have been included with those taken in Lake Michigan, State of Michigan, to avoid disclosure of private enterprise.

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Wisconsin—Continued							
	Fyke nets		Crawfish pots		Crowfoot bars		Forks	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Burbot.....	21, 517	\$212						
Carp.....	120, 118	3, 604						
Catfish and bullheads.....	57, 667	3, 460						
Chubs.....	479, 418	33, 900						
Lake herring.....	117, 440	1, 761						
Pike (jacks).....	19, 413	1, 941						
Sheepshead.....	1, 457	44						
Sucker "mullet".....	251, 026	10, 165						
Whitefish, common.....	71, 609	8, 233						
Yellow perch.....	614, 638	30, 732						
Yellow pike.....	15, 262	763						
Crawfish.....			51, 273	\$2, 514				
Mussel shells <sup>5</sup> .....					70, 918	\$1, 666 277	35, 457	\$832 137
Pearls and slugs <sup>5</sup> .....								
Total.....	1, 769, 565	94, 815	51, 273	2, 514	70, 918	1, 943	35, 457	969

Species	Wisconsin—Total		Minnesota			
	Pounds	Value	Gill nets		Lines, trot	
			Pounds	Value	Pounds	Value
Burbot.....	88, 401	\$884	15, 573	\$195		
Carp.....	479, 713	14, 391				
Catfish and bullheads.....	76, 805	4, 609				
Chubs.....	3, 937, 107	264, 339	41, 386	1, 072		
Lake herring.....	5, 973, 742	110, 289	8, 367, 663	190, 210		
Lake trout.....	2, 791, 156	248, 374	196, 108	27, 450	97, 898	\$13, 702
Pike (jacks).....	67, 269	6, 727	227, 470	12, 896		
Sauger pike.....			49, 068	2, 709		
Sheepshead.....	2, 530	76				
Sturgeon.....			652	195		
Sucker "mullet".....	1, 004, 106	40, 660	112, 388	2, 344		
Tullibee.....			604, 016	15, 080		
Whitefish.....						
Common.....	644, 486	74, 099	98, 888	9, 323		
Menominee.....	57, 572	6, 433	7, 554	579		
Yellow perch.....	1, 228, 440	61, 422	2, 441	122		
Yellow pike.....	35, 933	1, 747	470, 152	46, 155		
Crawfish.....	51, 273	2, 514				
Mussel shells <sup>5</sup> .....	106, 375	2, 498				
Pearls and slugs <sup>5</sup> .....		414				
Total.....	16, 544, 908	839, 476	10, 193, 359	308, 330	97, 898	13, 702

<sup>5</sup> From streams tributary to Lakes Michigan, Huron, and Erie. The mussel shells taken in streams tributary to Lakes Huron and Erie, which were inconsiderable, have been included with those taken in Lake Michigan, State of Michigan, to avoid disclosure of private enterprise.

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY GEAR—Continued

Species	Minnesota—Continued					
	Pound nets		Fyke nets		Total	
	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish.....	235	\$4	472	\$10	707	\$14
Burbot.....					15,573	195
Carp.....	5,489	109	10,980	220	16,469	329
Catfish and bullheads.....	7,985	678	15,971	1,358	23,956	2,036
Chubs.....	57,103	1,111			98,489	2,183
Crappie.....	3,165	559	396	72	3,561	631
Goldeye.....			55	2	55	2
Lake herring.....					8,367,663	190,210
Lake trout.....					294,006	41,152
Pike (jacks).....	63,116	3,156	50,584	3,288	341,170	19,340
Sauger pike.....	8,178	451	16,356	903	73,602	4,063
Sturgeon.....	977	293	394	118	2,023	606
Sucker "mullet".....	13,900	278	27,800	556	154,088	3,178
Tullibee.....	301,007	7,525			905,023	22,605
Whitefish:						
Common.....	5,514	606			104,402	9,929
Menominee.....					7,554	579
Yellow perch.....	19,292	963	36,448	1,824	58,181	2,909
Yellow pike.....	171,056	16,675	256,076	25,608	897,284	88,438
Total.....	657,017	32,408	415,532	33,959	11,363,806	388,399

## CATCH: BY LAKES

Species	Lake Ontario— New York		Lake Erie					
			New York		Pennsylvania		Ohio	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....	30,753	\$3,222	564,332	\$25,853	2,211,408	\$88,558	9,016,598	\$450,836
Bowfin.....	817	30					1,677	17
Burbot.....	95,612	6,144	8,365	285	7,006	140	389,921	7,797
Carp.....	26,204	1,145	21,056	1,256	2,543	102	1,243,246	49,784
Catfish and bullheads.....	80,246	8,429	3,226	289	8,971	449	254,293	13,504
Cisco.....			58,604	5,446	230,194	27,623	57,218	6,867
Eels.....	5,100	270						
Goldfish.....							63,929	639
Lake herring.....	189,100	14,960						
Lake trout.....	24,082	3,626	3,844	553	1,229	159		
Minnows.....	109	21						
Mooneye.....					115	2	36,198	362
Pike (jacks).....	8,625	855						
Rock bass.....	705	65	487	42				
Sauger pike.....							1,507,771	75,531
Sheepshead.....					22,961	919	2,800,034	84,012
Sturgeon.....	24,483	6,351	13,772	3,324	2,173	544	217	65
Sucker "mullet".....	50,617	2,061	130,592	7,860	29,074	581	1,702,073	34,047
Sunfish.....	12,440	622						
White bass.....	78	15	724	48	39,267	1,965	443,705	22,185
Whitefish, common.....	87,400	12,684	169,139	35,544	754,942	150,988	596,666	120,132
Yellow perch.....	29,943	1,943	34,148	2,360	85,454	5,127	4,186,937	168,202
Yellow pike.....	15,583	2,846	10,682	1,581	23,527	2,299	1,814,715	218,484
Total.....	681,897	65,189	1,018,971	84,441	3,418,865	279,456	24,115,198	1,252,446

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY LAKES—Continued

Species	Lake Erie—Continued				Lake Huron—Michigan		Lake Michigan—Michigan	
	Michigan		Total		Pounds	Value	Pounds	Value
	Pounds	Value	Pounds	Value				
Blue pike.....			11,792,338	565,247				
Bowfin.....	899	\$18	2,576	\$35	16,007	\$317		
Burbot.....	150	6	405,442	8,228	6,879	276	13,193	\$40
Carp.....	594,339	15,453	1,861,184	66,595	897,014	23,322	10,264	28
Catfish and bullheads.....	56,141	3,195	322,631	17,437	134,978	10,303	1,418	9
Chubs.....	12,800	1,280	12,800	1,280	506,420	50,344	743,526	76,50
Cisco.....	1,340	35	347,356	39,971				
Goldfish.....			63,929	639				
Lake herring.....					4,748,345	118,709	683,963	17,06
Lake trout.....	10	1	5,083	713	1,786,529	250,115	2,372,546	332,11
Mooneye.....	175	2	36,488	366				
Pike (jacks).....	8,183	818	8,183	818	67,250	6,726	28,205	2,85
Rock bass.....	1,721	52	2,208	94	13,300	396	788	2
Sauger pike.....	22,999	1,380	1,530,770	76,911	198,254	11,894	23,938	1,43
Sheepshead.....	60,586	1,818	2,883,581	86,749	5,859	174	17,034	51
Smelt.....							430	
Sturgeon.....			16,162	3,933				
Sucker "mullet".....	154,047	5,275	2,015,786	47,763	2,676,949	72,077	765,888	18,06
White bass.....			483,696	24,198				
Whitefish:								
Common.....	1,264	193	1,522,012	306,857	3,379,776	517,105	4,218,851	645,48
Menominee.....	91	5	91	5	109,236	6,554	186,477	11,18
Yellow perch.....	33,578	3,123	4,340,117	178,812	714,949	66,409	112,762	10,48
Yellow pike.....	38,784	6,439	1,887,708	228,803	1,114,999	185,091	41,666	6,91
Mussel shells <sup>1</sup> .....							4,706,100	134,55
Pearls and slugs <sup>2</sup> .....								10,84
Total.....	987,107	39,093	29,540,141	1,655,454	16,376,644	1,319,902	13,927,049	1,268,96

Species	Lake Michigan—Continued							
	Indiana		Illinois		Wisconsin		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Buffalofish.....	400	\$28					400	\$28
Burbot.....	15,973	944			86,070	\$849	115,236	2,11
Carp.....	1,512	72			479,461	14,383	491,237	14,7
Catfish and bullheads.....					76,550	4,594	77,968	4,6
Chubs.....	204,211	16,056	540,192	\$46,817	3,529,462	223,575	5,017,391	363,
Lake herring.....	254,691	11,393	65,000	1,400	5,269,098	99,719	6,272,752	129,6
Lake trout.....	186,451	24,983	382,942	42,164	2,316,085	186,615	5,258,024	585,9
Pike (jacks).....					58,241	5,824	86,446	8,6
Rock bass.....							788	
Sauger pike.....							23,938	1,4
Sheepshead.....					1,821	55	18,855	5
Smelt.....							430	
Sucker "mullet".....	923	36			1,004,106	40,660	1,770,917	58,7
Whitefish:								
Common.....	10,695	1,645			559,028	63,844	4,788,574	710,9
Menominee.....					35,000	4,176	221,477	15,3
Yellow perch.....	12,834	1,128	76,500	6,810	1,227,604	61,380	1,429,700	79,8
Yellow pike.....					21,710	1,086	63,376	8,0
Crawfish.....					51,273	2,514	51,273	2,5
Mussel shells <sup>1</sup> .....	472,000	23,200			106,375	2,498	5,284,475	160,2
Pearls and slugs <sup>2</sup> .....		1,150				414		12,4
Total.....	1,159,690	80,635	1,064,634	97,191	14,821,884	712,186	30,973,257	2,158,9

<sup>1</sup> From streams tributary to Lakes Michigan, Huron, and Erie. The mussel shells taken in streams tributary to Lakes Huron and Erie, which were inconsiderable, have been included with those taken in Lake Michigan, State of Michigan, to avoid disclosure of private enterprise.

## Lake fisheries of the United States, 1930—Continued

## CATCH: BY LAKES—Continued

Species	Lake Superior					
	Michigan		Wisconsin		Minnesota	
	Pounds	Value	Pounds	Value	Pounds	Value
Burbot.....	1, 068	\$43	2, 331	\$35		
Carp.....	747	15	252	8		
Catfish and bullheads.....	854	76	255	15		
Chubs.....	118, 644	11, 864	407, 645	40, 764	268	\$16
Lake herring.....	2, 198, 996	55, 042	704, 644	10, 570	8, 367, 663	190, 210
Lake trout.....	1, 654, 231	231, 594	475, 071	61, 759	293, 696	41, 106
Pike (jacks).....	3, 702	370	9, 028	903	70	6
Sauger pike.....	4, 064	244				
Sheepshead.....			709	21		
Sucker "mullet".....	77, 716	1, 985			8, 575	267
Whitefish:						
Common.....	204, 601	31, 304	85, 458	10, 255	4, 620	728
Menominee.....	11, 205	673	22, 572	2, 257	7, 554	579
Yellow perch.....	4, 383	408	836	42		
Yellow pike.....	8, 662	1, 437	14, 223	661		
Total.....	4, 288, 873	335, 055	1, 723, 024	127, 290	8, 682, 446	232, 912

Species	Lake Superior—Total		Lake of the Woods, Rainy Lake, and Namakan Lake— Minnesota		Total, all lakes	
	Pounds	Value	Pounds	Value	Pounds	Value
Blue pike.....					11, 823, 091	\$568, 469
Bowfin.....					19, 400	382
Buffalofish.....			707	\$14	1, 107	42
Burbot.....	3, 399	\$78	15, 573	195	642, 141	17, 116
Carp.....	999	23	16, 469	329	3, 293, 107	106, 150
Catfish and bullheads.....	1, 109	91	23, 956	2, 036	640, 888	42, 989
Chubs.....	526, 557	52, 644	98, 221	2, 167	6, 161, 389	469, 444
Cisco.....					347, 356	39, 971
Crappie.....			3, 561	631	3, 561	631
Eels.....					5, 100	270
Goldeye.....			55	2	55	2
Goldfish.....					63, 929	639
Lake herring.....	11, 271, 303	255, 822			22, 481, 500	519, 101
Lake trout.....	2, 422, 998	344, 459	310	46	9, 497, 026	1, 174, 876
Minnows.....					109	21
Mooneye.....					36, 488	366
Pike (jacks).....	12, 800	1, 279	341, 100	19, 334	524, 404	37, 657
Rock bass.....					16, 901	578
Sauger pike.....	4, 064	244	73, 602	4, 063	1, 830, 628	94, 549
Sheepshead.....	709	21			2, 909, 004	87, 510
Smelt.....					430	4
Sturgeon.....			2, 023	606	42, 668	10, 890
Sucker "mullet".....	86, 291	2, 252	145, 513	2, 911	6, 746, 073	185, 859
Sunfish.....					12, 440	622
Tullibee.....			905, 023	22, 605	905, 023	22, 605
White bass.....					483, 774	24, 213
Whitefish:						
Common.....	294, 679	42, 287	99, 782	9, 201	10, 172, 223	1, 599, 008
Menominee.....	41, 331	3, 509			372, 135	25, 433
Yellow perch.....	5, 219	450	58, 181	2, 909	6, 578, 109	330, 418
Yellow pike.....	22, 885	2, 098	897, 284	88, 438	4, 001, 835	515, 279
Crawfish.....					51, 273	2, 514
Mussel shells <sup>1</sup> .....					5, 284, 475	160, 250
Pearls and slugs <sup>2</sup> .....						12, 409
Total.....	14, 694, 343	695, 257	2, 681, 360	155, 487	94, 947, 642	6, 050, 267

<sup>1</sup> From streams tributary to Lakes Michigan, Huron, and Erie. The mussel shells taken in streams tributary to Lakes Huron and Erie, which were inconsiderable, have been included with those taken in Lake Michigan, State of Michigan, to avoid disclosure of private enterprise.



## Industries related to the fisheries of the Lake States, 1930

Item	New York	Pennsylvania	Ohio	Michigan
Transporting:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Persons engaged.....		3	18	16
Vessels—				
Steam.....		1	2	
Net tonnage.....		17	41	
Motor.....			6	7
Net tonnage.....			66	95
Total vessels.....		1	8	7
Total net tonnage.....		17	107	95
Wholesale and manufacturing:				
Establishments.....	16	7	34	59
Persons engaged—				
Proprietors.....	21	14	56	75
Salaried employees.....	28	6	58	55
Wage earners:				
Average for season.....	67	57	199	246
Average for year.....	65	57	191	209
Salaries and wages paid.....	\$144,572	\$93,733	\$486,247	\$442,746
Manufactured products <sup>1</sup> .....	\$98,054	\$74,031	\$268,025	\$270,712
Fishermen's prepared products:				
Persons engaged.....	8	3	5	162
Products.....	\$356	\$98	\$5,400	\$81,876

Item	Indiana	Illinois	Wisconsin	Minnesota	Total
Transporting:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Persons engaged.....			13	26	76
Vessels—					
Steam.....			1	2	6
Net tonnage.....			28	107	193
Motor.....			1	2	16
Net tonnage.....			19	69	249
Total vessels.....			2	4	22
Total net tonnage.....			47	176	442
Wholesale and manufacturing:					
Establishments.....	4	47	40	21	228
Persons engaged—					
Proprietors.....	4	66	49	21	306
Salaried employees.....	1	166	34	27	375
Wage earners:					
Average for season.....	5	366	250	140	1,330
Average for year.....	5	327	145	103	1,102
Salaries and wages paid.....	\$11,500	\$1,353,091	\$280,256	\$173,843	\$2,985,988
Manufactured products <sup>1</sup> .....	\$20,555	\$631,051	\$298,487	\$102,290	\$1,763,205
Fishermen's prepared products:					
Persons engaged.....	3	20	153	212	566
Products.....	\$2,750	\$43,632	\$44,178	\$78,743	\$257,033

<sup>1</sup> These production figures are not comparable with those shown in previous bulletins, since packaged fresh and frozen fishery products are now included.

NOTE.—Of the total number of persons employed on transporting craft, 21 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 545 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

*Industries related to the lake fisheries of New York, 1930*

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Chautauqua, Jefferson, and Oswego Counties	Erie County	Total
Establishments.....	5	11	16
Persons engaged:			
Proprietors.....	5	16	21
Salaried employees.....	7	21	28
Wage earners—			
Average for season.....	14	53	67
Average for year.....	14	51	65
Paid to salaried employees.....	\$9,950	\$59,301	\$69,251
Paid to wage earners.....	13,250	62,071	75,321
Total salaries and wages.....	23,200	121,372	144,572

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Blue pike, fresh fillets.....pounds..	50,200	\$12,332
Unclassified products:		
Smoked <sup>1</sup> .....do.....	313,100	84,690
Miscellaneous <sup>2</sup> .....	( <sup>3</sup> )	1,032
Total.....		98,054

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 8]

Sturgeon roe, salted.....pounds..	330	\$356
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<sup>1</sup> Includes smoked eels, salmon, sturgeon, tullibee, and whitefish.<sup>2</sup> Includes pickled herring, cisco caviar, salted cisco, and whitefish.<sup>3</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 8 have also been included as fishermen. This fact should be considered in computing the total number of persons in the fishery industries exclusive of duplication.

*Industries related to the lake fisheries of Pennsylvania, 1930*

## TRANSPORTING IN ERIE COUNTY

Persons engaged on vessels.....	3
Vessels, steam.....	1
Net tonnage.....	17

## WHOLESALE AND MANUFACTURING IN ERIE COUNTY

## OPERATING UNITS, SALARIES, AND WAGES

Establishments.....	7
Persons engaged:	
Proprietors.....	14
Salaried employees.....	6
Wage earners—	
Average for season.....	57
Average for year.....	57
Paid to salaried employees.....	\$31,845
Paid to wage earners.....	61,888
Total salaries and wages.....	93,733

## Industries related to the lake fisheries of Pennsylvania, 1930—Continued

## WHOLESALE AND MANUFACTURING IN ERIE COUNTY—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Blue pike, frozen fillets.....pounds..	111, 250	\$22, 250
Miscellaneous, fresh fillets <sup>1</sup> .....do.....	251, 086	51, 781
Total.....	362, 336	74, 031

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 3]

Sturgeon roe, salted.....pounds..	78	\$98
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<sup>1</sup> Includes fresh blue pike and yellow perch fillets.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 3 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 3 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## Industries related to the lake fisheries of Ohio, 1930

## TRANSPORTING

Item	Erie County	Lake County	Lucas County	Ottawa County	Total
Persons engaged on vessels.....	Number 10	Number 3	Number 2	Number 3	Number 18
Vessels:					
Steam—					
5 to 10 tons.....				1	1
30 to 40 tons.....		1			1
Total.....		1		1	2
Net tonnage.....		31		10	41
Motor—					
5 to 10 tons.....	3		1		4
11 to 20 tons.....	2				2
Total.....	5		1		6
Net tonnage.....	60		6		66
Total vessels.....	5	1	1	1	8
Total net tonnage.....	60	31	6	10	107

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Ashtabula and Lake Counties	Cuyahoga and Lorain Counties	Erie County	Lucas and Ottawa Counties	Total
Establishments.....	7	11	11	5	34
Persons engaged:					
Proprietors.....	8	17	23	8	56
Salaried employees.....	7	19	22	10	58
Wage earners—					
Average for season.....	25	87	70	17	199
Average for year.....	25	79	70	17	191
Paid to salaried employees.....	\$20, 987	\$64, 787	\$89, 732	\$42, 688	\$218, 194
Paid to wage earners.....	32, 728	97, 152	113, 952	24, 221	268, 053
Total salaries and wages.....	53, 715	161, 939	203, 684	66, 909	486, 247

*Industries related to the lake fisheries of Ohio, 1930—Continued*

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Blue pike, fresh fillets.....pounds..	302, 046	\$60, 659
Salmon, smoked.....do.....	176, 250	67, 950
Sturgeon, smoked.....do.....	11, 646	7, 535
Tullibee, smoked.....do.....	281, 898	58, 580
Whitefish, smoked.....do.....	58, 741	17, 982
Yellow perch, fresh fillets.....do.....	132, 993	27, 369
Miscellaneous <sup>1</sup> .....do.....	111, 069	27, 950
Total.....	1, 074, 643	268, 025

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 5]

Blue pike, fresh fillets.....pounds..	19, 500	\$3, 900
Yellow perch, fresh fillets.....do.....	5, 700	1, 500
Total.....	25, 200	5, 400

<sup>1</sup> Includes frozen fillets of blue pike, smoked cisco and sablefish.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 16 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products, 4 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

*Industries related to the lake fisheries of Michigan, 1930*

## TRANSPORTING

Item	Cheboygan County	Mackinac County	Total
	Number 14	Number 2	Number 16
Persons engaged on vessels.....			
Vessels, motor:			
5 to 10 tons.....	3		3
11 to 20 tons.....	1	1	2
21 to 30 tons.....	2		2
Total.....	6	1	7
Net tonnage.....	81	14	95

## WHOLESALE AND MANUFACTURING

## OPERATING UNITS, SALARIES, AND WAGES

Item	Bay and Arenac Counties	Berrien and Ottawa Counties	Cheboygan and Alpena Counties	Charlevoix and Grand Traverse Counties	Huron County
Establishments.....	7	6	6	6	5
Persons engaged:					
Proprietors.....	12	8	5	3	7
Salaried employees.....	7		6	5	3
Wage earners—					
Average for season.....	26	26	12	8	21
Average for year.....	18	23	11	8	21
Paid to salaried employees.....	\$20, 600	\$10, 150	\$9, 650	\$9, 380	\$9, 500
Paid to wage earners.....	21, 050	28, 900	9, 467	8, 050	23, 200
Total salaries and wages.....	41, 650	39, 050	19, 117	17, 430	32, 700

## Industries related to the lake fisheries of Michigan, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## OPERATING UNITS, SALARIES, AND WAGES—Continued

Item	Mackinac, Chippewa, Delta, and Schoolcraft Counties	Menominee, Houghton, and Marquette Counties	Newaygo, Mason, and Muskegon Counties	Wayne and St. Clair Counties	Total
Establishments.....	9	3	3	14	59
Persons engaged:					
Proprietors.....	9	3	4	24	75
Salaried employees.....	6	3		25	55
Wage earners—					
Average for season.....	25	34	22	72	246
Average for year.....	21	24	22	61	209
Paid to salaried employees.....	\$15,990	\$11,900	\$2,000	\$118,800	\$207,970
Paid to wage earners.....	23,870	24,440	22,700	73,099	234,776
Total salaries and wages.....	39,860	36,340	24,700	191,899	442,746

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Chubs, smoked..... pounds..	407,700	\$106,660
Lake herring:		
Salted..... do.....	2,423,040	81,730
Smoked..... do.....	9,600	1,780
Lake trout, smoked..... do.....	34,900	7,860
Whitefish, smoked..... do.....	49,800	11,590
Fresh-water mussel button blanks..... gross..	156,740	28,122
Miscellaneous <sup>1</sup> .....	( <sup>2</sup> )	32,970
Total.....		270,712

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 162]

Item	Quantity	Value
Chubs, smoked..... pounds..	22,000	\$6,500
Lake herring:		
Salted..... do.....	1,034,466	29,857
Smoked..... do.....	76,560	7,956
Lake trout:		
Salted..... do.....	168,750	25,312
Smoked..... do.....	8,200	2,275
Whitefish:		
Salted..... do.....	100,000	7,000
Smoked..... do.....	9,900	2,500
Caviar, fresh..... do.....	950	476
Total.....	1,420,826	81,876

<sup>1</sup> Includes smoked carp, Menominee, salmon, Russian sturgeon, and tullibee; and fresh fillets of lake trout and whitefish.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons employed on transporting craft, 2 have also been included as fishermen, and among the total persons engaged in the preparation of fishermen's manufactured products 162 have been included as fishermen. These facts should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

*Industries related to the lake fisheries of Indiana, 1930*

## WHOLESALE AND MANUFACTURING IN LA PORTE COUNTY

## OPERATING UNITS, SALARIES, AND WAGES

Establishments.....	4
Persons engaged:	
Proprietors.....	4
Salaried employees.....	1
Wage earners—	
Average for season.....	5
Average for year.....	5
<hr/>	
Paid to salaried employees.....	\$5, 500
Paid to wage earners.....	6, 000
<hr/>	
Total salaries and wages.....	11, 500

## PRODUCTS MANUFACTURED

Item	Quan- tity	Value
Chubs, smoked.....pounds..	74, 600	\$18, 650
Miscellaneous <sup>1</sup> .....	(2)	1, 905
<hr/>		
Total.....		20, 555

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 3]

Chubs, smoked.....pounds..	7, 500	\$1, 875
Lake trout, smoked.....do...	2, 500	625
Whitefish, smoked.....do...	1, 000	250
<hr/>		
Total.....	11, 000	2, 750

<sup>1</sup> Includes smoked lake trout and fish oil.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 3 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

*Industries related to the lake fisheries of Illinois, 1930*

## WHOLESALE AND MANUFACTURING IN COOK COUNTY

## OPERATING UNITS, SALARIES, AND WAGES

Establishments.....	47
Persons engaged:	
Proprietors.....	66
Salaried employees.....	166
Wage earners—	
Average for season.....	366
Average for year.....	327
<hr/>	
Paid to salaried employees.....	\$750, 880
Paid to wage earners.....	602, 211
<hr/>	
Total salaries and wages.....	1, 353, 091

*Industries related to the lake fisheries of Illinois, 1930—Continued*  
**WHOLESALE AND MANUFACTURING IN COOK COUNTY—Continued**  
**PRODUCTS MANUFACTURED**

Item	Quantity	Value
Chubs, smoked.....pounds..	772, 600	\$189, 056
Eels, smoked.....do.....	20, 334	6, 810
Lake trout, smoked.....do.....	23, 390	5, 654
Salmon, smoked.....do.....	610, 330	221, 100
Tullibee, smoked.....do.....	437, 800	86, 856
Miscellaneous <sup>1</sup> .....do.....	602, 366	121, 575
Total.....	2, 466, 820	631, 051

**FISHERMEN'S MANUFACTURED PRODUCTS**

[Number of persons engaged, 20]

Item	Quantity	Value
Chubs, smoked.....pounds..	131, 300	\$34, 997
Eels, smoked.....do.....	400	180
Lake herring, smoked.....do.....	20, 000	2, 000
Lake trout, smoked.....do.....	15, 000	4, 500
Sturgeon, smoked.....do.....	2, 650	1, 430
Whitefish, smoked.....do.....	1, 500	525
Total.....	170, 850	43, 632

<sup>1</sup> Includes smoked buffalofish, butterfish, carp, ciscoes, lake herring, flounders, sea herring, sturgeon, and shad; and pickled sea herring.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State.

*Industries related to the lake fisheries of Wisconsin, 1930*

**TRANSPORTING**

Item	Bayfield County	Menominee County	Total
Persons engaged on vessels.....	<i>Number</i> 10	<i>Number</i> 3	<i>Number</i> 13
Vessels:			
Motor.....		1	1
Net tonnage.....		19	19
Steam.....	1		1
Net tonnage.....	28		28
Total.....	1	1	2
Net tonnage.....	28	19	47

**WHOLESALE AND MANUFACTURING**

**OPERATING UNITS, SALARIES, AND WAGES**

Item	Bay- field and Ash- land Count- ies	Brown County	Doug- las County	Mani- towoc and Wau- paca Count- ies	Mari- nette County	Mil- waukee County	Ozau- kee and Kenos- ha Count- ies	Total
Establishments.....	4	7	4	3	3	15	4	46
Persons engaged:								
Proprietors.....	3	9	4	3	3	18	9	49
Salaried employees.....	4	12		2		14	2	33
Wage earners—								
Average for season.....	55	67	8	25	17	48	30	255
Average for year.....	14	36	7	9	10	43	26	148
Paid to salaried employees.....	\$8, 650	\$26, 621	\$3, 900	\$1, 050		\$34, 200	\$42, 708	\$117, 129
Paid to wage earners.....	15, 840	45, 328	5, 000	8, 855	\$10, 754	54, 250	23, 100	163, 127
Total salaries and wages.....	24, 490	71, 949	8, 900	9, 905	10, 754	88, 450	65, 808	280, 256

## Industries related to the lake fisheries of Wisconsin, 1930—Continued

## WHOLESALE AND MANUFACTURING—Continued

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Chubs, smoked..... pounds.....	528, 472	\$102, 991
Lake herring:		
Salted..... do.....	922, 000	28, 413
Spiced..... do.....	95, 000	13, 350
Smoked..... do.....	302, 280	26, 934
Lake trout, smoked..... do.....	198, 281	42, 978
Salmon, smoked..... do.....	85, 760	14, 937
Tullibee, smoked..... do.....	78, 235	15, 272
Whitefish, smoked..... do.....	81, 449	16, 640
Miscellaneous <sup>1</sup> ..... do.....	(2)	36, 972
Total.....		298, 487

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 153]

Chubs, smoked..... pounds.....	20, 000	\$4, 400
Lake herring, salted..... do.....	1, 444, 497	39, 228
Lake trout, smoked..... do.....	2, 500	550
Total.....	1, 466, 997	44, 178

<sup>1</sup> Includes pickled lake herring and lake trout; salted lake trout and whitefish; fresh fillets of blue pike, jack pike, sauger, and yellow perch; canned whitefish caviar; poultry feed and lime from mussel shells; and novelties and button blanks from fresh-water mussel shells.

<sup>2</sup> Data not available.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 153 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

## Industries related to the lake fisheries of Minnesota, 1930

## TRANSPORTING

Item	Roseau County	St. Louis County	Total
	Number 6	Number 20	Number 26
Persons engaged on vessels.....			
Vessels:			
Steam—			
31 to 40 tons.....		1	1
71 to 80 tons.....		1	1
Total.....		2	2
Net tonnage.....		107	107
Motor—			
5 to 10 tons.....	1		1
61 to 70 tons.....	1		1
Total.....	2		2
Net tonnage.....	69		69
Total vessels.....	2	2	4
Total net tonnage.....	69	107	176



## Industries related to the lake fisheries of Minnesota, 1930—Continued

WHOLESALE AND MANUFACTURING  
OPERATING UNITS, SALARIES, AND WAGES

Item	Cook, Lake, Lake of the Woods, Koochiching and Roseau Counties	St. Louis County	Total
Establishments.....	7	14	21
Persons engaged:			
Proprietors.....	6	15	21
Salaried employees.....	6	21	27
Wage earners—			
Average for season.....	33	107	140
Average for year.....	15	88	103
Paid to salaried employees.....	\$9,760	\$48,760	\$58,520
Paid to wage earners.....	17,672	97,651	115,323
Total salaries and wages.....	27,432	146,411	173,843

## PRODUCTS MANUFACTURED

Item	Quantity	Value
Tullibee, smoked..... pounds..	59,000	\$6,000
Unclassified products:		
Salted <sup>1</sup> ..... do.....	448,200	44,038
Smoked <sup>2</sup> ..... do.....	171,400	52,252
Total.....	678,600	102,290

## FISHERMEN'S MANUFACTURED PRODUCTS

[Number of persons engaged, 212]

Lake herring:		
Salted..... pounds..	2,195,500	\$65,873
Smoked..... do.....	102,000	10,200
Lake trout, smoked..... do.....	8,500	2,550
Whitefish, smoked..... do.....	1,200	120
Total.....	2,307,200	78,743

<sup>1</sup> Includes salted Alaska herring, alewives, lake herring, mackerel, salmon, lake trout, and sablefish.<sup>2</sup> Includes smoked ciscoes, lake herring, salmon filets, and lake herring filets.

NOTE.—Some of the above products may have been manufactured from fishery products imported from another State or country; therefore, they can not be correlated directly with the catch within the State. Of the total number of persons engaged in the preparation of fishermen's manufactured products, 212 have also been included as fishermen. This fact should be considered when computing the total number of persons in the fishery industries exclusive of duplication.

Mussel-shell industry of the lake fisheries, 1930 <sup>1</sup>

## OPERATING UNITS

Item	Lake Michigan							
	St. Joseph River			Grand River	Kalama-zoo River	Muskegon River	Elkhart River	
	Michigan	Indiana	Total	Michigan	Michigan	Michigan	Indiana	
Fishermen—On boats and shore, casual.....	Number 250	Number 30	Number 280	Number 306	Number 50	Number 140	Number 12	
Boats:								
Motor.....	80	10	90	164	20	70	12	
Other.....	170	20	190	149	30	70	-----	
Apparatus:								
Crowfoot bars.....	80	10	90	137	20	-----	12	
Tongs.....	-----	-----	-----	12	-----	-----	-----	
Forks.....	-----	-----	-----	98	25	-----	-----	
Picks.....	230	30	260	176	50	140	12	

<sup>1</sup> The mussel-shell industry of streams tributary to Lakes Huron and Erie, which was inconsiderable, has been included with the St. Joseph River tributary to Lake Michigan, State of Michigan to avoid disclosure of private enterprise.

## Mussel-shell industry of the lake fisheries, 1930—Continued

## OPERATING UNITS—Continued

Item	Lake Michigan—Continued							Grand total
	Pigeon River	Fox River	Grand River	Total, all rivers				
	Indiana	Wisconsin	Wisconsin	Michigan	Indiana	Wisconsin		
Fishermen—On boats and shore:	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	
Regular.....		4	5			9	9	
Casual.....	18	12	6	746	60	18	824	
Total.....	18	16	11	746	60	27	833	
Boats:								
Motor.....	8	12	5	334	30	17	381	
Other.....	10	4	6	419	30	10	459	
Apparatus:								
Crowfoot bars.....	8	12	6	237	30	18	285	
Tongs.....				12			12	
Forks.....		8	5	123		13	136	
Picks.....	18			596	60		656	

## CATCH

Gear and product	Lake Michigan							
	St. Joseph River						Grand River, Mich.	
	Michigan		Indiana		Total			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
By crowfoot bars:								
Mussel shells.....	612,000	\$31,518	180,000	\$9,750	792,000	\$41,268	1,947,400	\$40,208
Pearls and slugs.....		1,500		450		1,950		4,480
By tongs:							16,000	328
Mussel shells.....								35
Pearls and slugs.....								
By forks:							278,200	5,744
Mussel shells.....								640
Pearls and slugs.....								
By picks:								
Mussel shells.....	401,000	21,502	120,000	6,500	521,000	28,002	679,500	14,032
Pearls and slugs.....		1,000		300		1,300		1,280
Total.....	1,013,000	55,520	300,000	17,000	1,313,000	72,520	2,921,100	66,747

Gear and product	Lake Michigan—Continued							
	Kalamazoo River, Mich.		Muskegon River, Mich.		Elkhart River, Ind.		Pigeon River, Ind.	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
By crowfoot bars:								
Mussel shells.....	224,000	\$8,120			54,000	\$2,025	50,000	\$2,125
Pearls and slugs.....		464				112		125
By forks:								
Mussel shells.....	28,000	1,015						
Pearls and slugs.....		58						
By picks:								
Mussel shells.....	28,000	1,015	492,000	\$11,070	18,000	675	50,000	2,125
Pearls and slugs.....		58		1,330		38		125
Total.....	280,000	10,730	492,000	12,400	72,000	2,850	100,000	4,500

## Mussel-shell industry of the lake fisheries, 1930—Continued

## CATCH—Continued

Gear and product	Lake Michigan—Continued					
	Fox River, Wis.		Grand River, Wis.		Total, all rivers— Michigan	
	Pounds	Value	Pounds	Value	Pounds	Value
By crowfoot bars:						
Mussel shells.....	36,784	\$1,143	34,134	\$523	2,783,400	\$79,864
Pearls and slugs.....		190		87		6,444
By tongs:						
Mussel shells.....					16,000	328
Pearls and slugs.....						35
By forks:						
Mussel shells.....	18,391	571	17,066	261	306,200	6,759
Pearls and slugs.....		95		42		698
By picks:						
Mussel shells.....					1,600,500	47,619
Pearls and slugs.....						3,668
Total.....	55,175	1,999	51,200	913	4,706,100	145,397

Gear and product	Lake Michigan—Continued					
	Total, all rivers—Continued				Grand total	
	Indiana		Wisconsin			
	Pounds	Value	Pounds	Value	Pounds	Value
By crowfoot bars:						
Mussel shells.....	284,000	\$13,900	70,918	\$1,666	3,138,318	\$95,412
Pearls and slugs.....		687		277		7,408
By tongs:						
Mussel shells.....					16,000	328
Pearls and slugs.....						35
By forks:						
Mussel shells.....			35,457	832	341,657	7,591
Pearls and slugs.....				137		835
By picks:						
Mussel shells.....	188,000	9,300			1,788,500	56,919
Pearls and slugs.....		463				4,131
Total.....	472,000	24,350	106,375	2,912	5,284,475	172,659

## BUTTON BLANK MANUFACTURING

Item	Number	Value
Establishments.....	4	
Persons engaged:		
Proprietors.....	4	
Salaried employees.....	1	
Wage earners—		
Average for season.....	50	
Average for year.....	35	
Paid to salaried employees.....		\$2,150
Paid to wage earners.....		32,455
Total salaries and wages.....		34,605
Products—Button blanks, gross.....	176,740	36,812
By-products—Miscellaneous.....		424

## FISHERIES OF THE MISSISSIPPI RIVER AND TRIBUTARIES

*Catch of the fisheries of the Mississippi River and tributaries, 1922*

Species	Pounds	Value
Black bass.....	73, 554	\$10, 874
Bowfin.....	190, 073	6, 078
Buffalofish.....	17, 267, 177	1, 013, 692
Carp.....	18, 338, 371	872, 128
Catfish and bullheads.....	8, 092, 690	713, 461
Crappie.....	512, 423	49, 338
Drum, fresh-water, or sheepshead.....	5, 260, 892	290, 480
Eels.....	16, 060	1, 057
Mooneye.....	3, 450	166
Paddlefish or spoonbill cat.....	1, 398, 991	132, 545
Paddlefish caviar.....	12, 398	29, 546
Pike and pickerel.....	20, 100	1, 850
Pike perch (sauger).....	4, 745	768
Pike perch (wall-eyed).....	24, 650	3, 750
Quillback or "American carp".....	765, 389	59, 221
Rock bass.....	2, 738	312
Sturgeon, lake.....	10, 953	1, 369
Sturgeon, shovelnose.....	227, 365	19, 323
Sturgeon, shovelnose, caviar.....	1, 880	2, 615
Sturgeon, shovelnose, eggs.....	449	764
Sucker "mullet".....	699, 539	63, 028
Sunfish.....	374, 533	24, 955
White bass.....	64, 624	5, 500
Yellow bass.....	7, 500	600
Yellow perch.....	22, 250	1, 904
Other fish.....	73, 275	4, 917
Shrimp.....	147, 482	14, 570
Crawfish.....	7, 890	759
Frogs.....	231, 761	20, 410
Turtles.....	96, 743	2, 772
Alligator hides.....	15, 616	2, 673
Mussel shells.....	51, 768, 173	1, 050, 592
Pearls.....		46, 124
Slugs.....		55, 380
Total.....	105, 733, 734	4, 503, 521

FISHERIES OF ALASKA <sup>13</sup>

During 1931 the fisheries of Alaska employed 22,577 persons, of whom 8,914 were fishermen, 11,995 were engaged in the wholesale and manufacturing industries, and 1,668 in transporting fishery products. The catch in round weight amounted to 598,124,566 pounds, valued at \$10,043,366, consisting of 467,664,391 pounds of salmon, valued at \$7,757,966; 128,290,715 pounds of other fish, valued at \$2,164,986; and 2,169,460 pounds of shellfish, valued at \$120,414.

<sup>13</sup> With reference to the figures published in this section the reader should refer to that section in the latter part of the book entitled "Statistical survey procedure," which gives in detail methods for collecting statistics, compilation practices, and conversion factors. This is most necessary for a complete understanding of the statistics presented herewith.

## Fisheries of Alaska, 1931

## SUMMARY: BY DISTRICTS

Item	Southeast Alaska	Central Alaska	Western Alaska	Total
<b>PERSONS ENGAGED</b>				
In fishing.....number.....	4, 183	1, 973	2, 758	8, 914
In transporting.....do.....	591	584	493	1, 668
In wholesale and manufacturing industries.....number.....	4, 599	3, 396	4, 000	11, 995
Total.....	9, 373	5, 953	7, 251	22, 577
<b>CRAFT EMPLOYED</b>				
Vessels fishing.....number.....	525	48	9	582
Boats fishing.....do.....	2, 138	1, 433	1, 389	4, 960
Vessels transporting.....do.....	172	140	87	399
Scows, houseboats, pile drivers, etc.....do.....	334	312	190	836
Total.....	3, 169	1, 933	1, 675	6, 777
<b>CATCH</b>				
Fish:				
Salmon.....pounds.....	204, 452, 280	137, 905, 111	125, 307, 000	467, 664, 391
value.....	\$2, 879, 412	\$2, 219, 945	\$2, 658, 609	\$7, 757, 966
Other.....pounds.....	104, 835, 823	17, 390, 925	6, 063, 967	128, 290, 715
value.....	\$1, 924, 822	\$187, 840	\$52, 324	\$2, 164, 986
Shellfish.....pounds.....	1, 010, 353	1, 159, 127	-----	2, 169, 480
value.....	\$49, 629	\$70, 785	-----	\$120, 414
Total.....pounds.....	310, 298, 436	156, 455, 163	131, 370, 967	598, 124, 566
value.....	\$4, 853, 863	\$2, 478, 570	\$2, 710, 933	\$10, 043, 366
<b>WHOLESALE AND MANUFACTURING</b>				
Establishments.....number.....	87	88	51	226
<b>PRODUCTS AS PREPARED FOR MARKET</b>				
Salmon.....pounds.....	133, 369, 092	81, 883, 462	58, 834, 928	274, 087, 482
value.....	\$11, 291, 812	\$8, 705, 670	\$10, 425, 919	\$30, 423, 401
Herring.....pounds.....	36, 673, 926	7, 624, 417	3, 853, 225	48, 151, 568
value.....	\$747, 673	\$254, 863	\$225, 360	\$1, 227, 896
Halibut.....pounds.....	19, 018, 986	1, 277, 247	129, 400	20, 425, 633
value.....	\$1, 277, 860	\$96, 154	\$8, 673	\$1, 352, 687
Cod.....pounds.....	-----	324, 898	90, 000	414, 898
value.....	-----	\$19, 150	\$4, 500	\$23, 650
Trout.....pounds.....	60, 194	27, 336	-----	87, 530
value.....	\$4, 361	\$2, 841	-----	\$7, 202
Sablefish.....pounds.....	279, 345	-----	-----	279, 345
value.....	\$13, 286	-----	-----	\$13, 286
Smelt.....pounds.....	-----	1, 340	-----	1, 340
value.....	-----	\$80	-----	\$80
Flounder.....pounds.....	275, 172	-----	-----	275, 172
value.....	\$6, 887	-----	-----	\$6, 887
Rockfish.....pounds.....	22, 919	-----	-----	22, 919
value.....	\$677	-----	-----	\$677
"Lingcod".....pounds.....	526	-----	-----	526
value.....	\$16	-----	-----	\$16
Clam.....pounds.....	30, 789	523, 527	-----	554, 316
value.....	\$8, 939	\$303, 518	-----	\$312, 457
Shrimp.....pounds.....	458, 650	1, 400	-----	460, 050
value.....	\$184, 197	\$250	-----	\$184, 447
Crab.....pounds.....	60, 311	60, 612	-----	120, 923
value.....	\$22, 004	\$20, 062	-----	\$42, 066
Total.....pounds.....	190, 249, 910	91, 724, 239	62, 907, 553	344, 881, 702
value.....	\$13, 557, 712	\$9, 372, 588	\$10, 664, 452	\$33, 594, 752

## OPERATING UNITS: BY DISTRICTS

Fishermen.....number.....	4, 183	1, 973	2, 758	8, 914
Vessels, fishing, motor.....do.....	525	48	9	582
Net tonnage.....do.....	7, 361	788	267	8, 416
Boats, fishing:				
Motor.....do.....	946	319	53	1, 318
Other.....do.....	1, 192	1, 114	1, 336	3, 642

## Fisheries of Alaska, 1931—Continued

## OPERATING UNITS: BY DISTRICTS—Continued

Item	Southeast Alaska	Central Alaska	Western Alaska	Total
<b>Apparatus:</b>				
Traps.....number.....	274	202	2	478
Purse seines.....do.....	325	138	5	468
Yards.....do.....	114,710	29,996	2,146	146,852
Haul seines.....do.....	3	137	3	143
Yards.....do.....	600	31,268	410	32,278
Gill nets.....do.....	315	1,828	2,453	4,596
Yards.....do.....	36,520	165,196	326,534	528,250
Beam trawls.....do.....	9	1	-----	10
Wheels.....do.....	-----	-----	259	259
<b>Lines:</b>				
Hand lines (cod fishery).....do.....	-----	61	5	66
Trawl lines (cod fishery).....do.....	-----	36	-----	36
Troll lines (salmon fishery).....do.....	3,628	-----	-----	3,628
Skates of lines (halibut fishery).....do.....	3,838	-----	-----	3,838
Crab pots.....do.....	320	130	-----	450
Herring pounds.....do.....	2	12	1	15
Herring-pound seines.....do.....	14	5	2	21

## CATCH: BY DISTRICTS

[Estimated round weight and value to fishermen]

FISH					
<b>Salmon:</b>					
Blueback, red, or sockeye.....pounds.....	12,761,595	40,116,195	109,173,687	162,051,477	
value.....	\$375,991	\$1,055,584	\$2,563,855	\$3,995,430	
Chinook or king.....pounds.....	9,203,900	2,153,320	2,248,200	13,605,420	
value.....	\$250,715	\$71,060	\$23,609	\$345,384	
Chum or keta.....pounds.....	25,656,714	19,798,830	13,875,336	59,330,880	
value.....	\$230,924	\$155,087	\$70,988	\$456,999	
Humpback or pink.....pounds.....	146,461,180	68,869,990	25	215,331,195	
value.....	\$1,809,304	\$809,899	-----	\$2,619,203	
Silver or coho.....pounds.....	10,368,891	6,966,776	9,752	17,345,419	
value.....	\$212,478	\$128,315	\$157	\$340,950	
Herring.....pounds.....	82,897,978	15,048,720	5,620,190	103,566,888	
value.....	\$621,735	\$112,865	\$42,151	\$776,751	
Halibut.....pounds.....	21,132,207	1,419,163	143,777	22,695,147	
value.....	\$1,277,860	\$66,154	\$8,673	\$1,352,687	
Cod.....pounds.....	-----	886,862	300,000	1,186,862	
value.....	-----	\$5,900	\$1,500	\$7,400	
<b>Trout:</b>					
Dolly Varden.....pounds.....	36,819	34,170	-----	70,989	
value.....	\$2,639	\$2,841	-----	\$5,480	
Steelhead.....pounds.....	39,536	-----	-----	39,536	
value.....	\$1,722	-----	-----	\$1,722	
Sablefish.....pounds.....	410,801	-----	-----	410,801	
value.....	\$13,286	-----	-----	\$13,286	
Smelt.....pounds.....	-----	2,010	-----	2,010	
value.....	-----	\$80	-----	\$80	
Flounders.....pounds.....	282,413	-----	-----	282,413	
value.....	\$6,887	-----	-----	\$6,887	
Rockfishes.....pounds.....	35,260	-----	-----	35,260	
value.....	\$677	-----	-----	\$677	
"Lingcod".....pounds.....	809	-----	-----	809	
value.....	\$16	-----	-----	\$16	
Total.....pounds.....	309,288,103	155,296,036	131,370,967	595,955,106	
value.....	\$4,804,234	\$2,407,785	\$2,710,933	\$9,922,952	
<b>SHELLFISH</b>					
Crabs.....pounds.....	116,582	110,586	-----	227,168	
value.....	\$11,002	\$10,031	-----	\$21,033	
Shrimp.....pounds.....	832,563	1,727	-----	834,290	
value.....	\$36,839	\$50	-----	\$36,889	
<b>Clams:</b>					
Butter.....pounds.....	61,188	-----	-----	61,188	
value.....	\$1,788	-----	-----	\$1,788	
Razor.....pounds.....	-----	1,046,814	-----	1,046,814	
value.....	-----	\$60,704	-----	\$60,704	
Total.....pounds.....	1,010,333	1,159,127	-----	2,169,460	
value.....	\$49,629	\$70,785	-----	\$120,414	
Grand total.....pounds.....	310,298,436	156,455,163	131,370,967	598,124,566	
value.....	\$4,853,863	\$2,478,570	\$2,710,933	\$10,043,366	

## Industries related to the fisheries of Alaska, 1931

## TRANSPORTING

Item	Southeast Alaska	Central Alaska	Western Alaska	Total
Persons engaged.....number.....	591	584	493	1,668
Vessels transporting:				
Steam.....do.....			17	17
Net tonnage.....do.....			30,560	30,560
Motor.....do.....	172	140	70	382
Net tonnage.....do.....	5,141	3,955	3,520	12,616
Scows, houseboats, pile drivers, etc.....do.....	334	312	190	836

## WHOLESALE AND MANUFACTURING

Item	4,599	3,396	4,000	11,995
Persons engaged.....number.....				
Establishments:				
Handling fresh and frozen fish.....do.....	39	7	1	47
Curing fish.....do.....	31	29	26	86
Canning fish.....do.....	42	55	25	122
Manufacturing by-products.....do.....	7	8		15
Total, exclusive of duplication.....do.....	87	88	51	226

## PRODUCTS AS PREPARED FOR MARKET

FRESH				
Salmon (all species).....pounds.....	768,619			768,619
value.....	\$55,918			\$55,918
Salmon eggs (for caviar).....pounds.....			4,100	4,100
value.....			\$500	\$500
Herring (for bait).....pounds.....	1,910,100	946,762	29,250	2,886,112
value.....	\$26,763	\$12,469	\$351	\$39,583
Halibut.....pounds.....	13,681,622	117,070	12,588	13,811,280
value.....	\$942,135	\$8,948	\$496	\$951,579
Trout.....pounds.....	34,552	21,400		55,952
value.....	\$3,011	\$2,422		\$5,433
Sablefish.....pounds.....	1,110			1,110
value.....	\$30			\$30
Smelt.....pounds.....		1,340		1,340
value.....		\$80		\$80
Flounders.....pounds.....	210,000			210,000
value.....	\$5,250			\$5,250
Rockfishes.....pounds.....	4,451			4,451
value.....	\$134			\$134
Crabs:				
Meat.....pounds.....	56,271	43,686		99,957
value.....	\$21,600	\$17,478		\$39,078
Whole in shell.....pounds.....	4,040	10,590		14,630
value.....	\$404	\$480		\$884
Clams, whole in shell.....pounds.....		240		240
value.....		\$50		\$50
Shrimp:				
Meat.....pounds.....	457,005	400		457,405
value.....	\$183,950	\$100		\$184,050
Whole in shell.....pounds.....	1,645	1,000		2,645
value.....	\$247	\$150		\$397
Total.....pounds.....	17,129,415	1,142,488	45,938	18,317,841
value.....	\$1,239,442	\$42,177	\$1,347	\$1,282,966
FROZEN				
Salmon (all species).....pounds.....	5,969,299	22,800		5,992,099
value.....	\$392,018	\$644		\$392,662
Salmon fillets.....pounds.....	190,818			190,818
value.....	\$19,153			\$19,153
Herring (for bait).....pounds.....	4,675,060	46,625		4,721,685
value.....	\$36,566	\$746		\$37,312
Herring (for food).....pounds.....			236,500	236,500
value.....			\$9,460	\$9,460
Halibut.....pounds.....	5,284,947	1,157,737	116,812	6,559,496
value.....	\$331,007	\$57,019	\$8,177	\$396,203
Halibut fillets.....pounds.....	52,417			52,417
value.....	\$4,718			\$4,718
Halibut cheeks.....pounds.....		2,032		2,032
value.....		\$102		\$102

## Industries related to the fisheries of Alaska, 1931—Continued

## PRODUCTS AS PREPARED FOR MARKET—Continued

Item		Southeast Alaska	Central Alaska	Western Alaska	Total
FROZEN—continued					
Trout.....	pounds.....	21, 786	5, 936		27, 722
	value.....	\$738	\$419		\$1, 157
Sablefish.....	pounds.....	278, 235			278, 235
	value.....	\$13, 256			\$13, 256
Flounders.....	pounds.....	65, 172			65, 172
	value.....	\$1, 637			\$1, 637
Rockfishes.....	pounds.....	18, 468			18, 468
	value.....	\$543			\$543
“Lingcod”.....	pounds.....	526			526
	value.....	\$16			\$16
Total.....	pounds.....	16, 556, 728	1, 235, 130	353, 312	18, 145, 170
	value.....	\$799, 652	\$58, 930	\$17, 637	\$876, 219
CURED					
Salmon:					
Mild-cured.....	pounds.....	3, 243, 200	16, 800	60, 800	3, 320, 800
	value.....	\$626, 291	\$1, 425	\$6, 037	\$633, 753
Pickled.....	pounds.....	77, 800	354, 450	708, 950	1, 141, 200
	value.....	\$6, 121	\$31, 161	\$66, 226	\$103, 508
Dried, smoked, and dry-salted.....	pounds.....	7, 600	9, 450	1, 265, 126	1, 282, 176
	value.....	\$380	\$945	\$76, 935	\$78, 260
Herring:					
Pickled (for food)—					
Scotch cure.....	pounds.....	1, 759, 475	2, 960, 350	3, 291, 225	8, 011, 050
	value.....	\$107, 097	\$167, 217	\$199, 493	\$473, 807
Norwegian cure.....	pounds.....	200	29, 500	130, 800	160, 500
	value.....	\$15	\$2, 006	\$8, 790	\$10, 811
Roused.....	pounds.....			92, 400	92, 400
	value.....			\$4, 266	\$4, 266
Spiced.....	pounds.....	2, 000			2, 000
	value.....	\$250			\$250
Dry-salted.....	pounds.....			73, 050	73, 050
	value.....			\$3, 000	\$3, 000
Cod:					
Dry-salted.....	pounds.....		58, 800	90, 000	148, 800
	value.....		\$2, 702	\$4, 500	\$7, 202
Stockfish.....	pounds.....		119, 300		119, 300
	value.....		\$11, 930		\$11, 930
Pickled.....	pounds.....		146, 398		146, 398
	value.....		\$4, 471		\$4, 471
Tongues.....	pounds.....		400		400
	value.....		\$47		\$47
Trout, pickled.....	pounds.....	400			400
	value.....	\$36			\$36
Total.....	pounds.....	5, 090, 675	3, 695, 448	5, 712, 351	14, 498, 474
	value.....	\$740, 190	\$221, 904	\$369, 247	\$1, 331, 341
CANNED					
Salmon:					
Blueback, red or sockeye.....	pounds.....	7, 098, 960	21, 079, 344	53, 147, 040	81, 325, 344
	value.....	\$1, 471, 578	\$4, 116, 919	\$9, 997, 591	\$15, 586, 088
Chinook or king.....	pounds.....	715, 008	1, 324, 752	449, 856	2, 489, 616
	value.....	\$134, 825	\$276, 690	\$75, 872	\$487, 387
Chum or keta.....	pounds.....	13, 163, 904	9, 266, 544	3, 194, 640	25, 625, 088
	value.....	\$891, 375	\$607, 108	\$202, 202	\$1, 700, 685
Humpback or pink.....	pounds.....	96, 645, 216	45, 140, 064		141, 785, 280
	value.....	\$7, 052, 803	\$3, 162, 695		\$10, 215, 498
Silver or coho.....	pounds.....	4, 245, 840	3, 903, 888	4, 416	8, 154, 144
	value.....	\$616, 541	\$489, 537	\$556	\$1, 106, 634
Trout.....	pounds.....	3, 456			3, 456
	value.....	\$576			\$576
Miscellaneous fish.....	pounds.....	5, 328	5, 640		10, 968
	value.....	\$999	\$1, 035		\$2, 034
Clams.....	pounds.....	30, 789	523, 287		554, 076
	value.....	\$8, 939	\$303, 468		\$312, 407
Crabs.....	pounds.....		6, 336		6, 336
	value.....		\$2, 104		\$2, 104
Total.....	pounds.....	121, 908, 501	81, 249, 855	56, 795, 952	259, 954, 308
	value.....	\$10, 177, 636	\$8, 959, 556	\$10, 276, 221	\$29, 413, 413



## Industries related to the fisheries of Alaska, 1931—Continued

## PRODUCTS AS PREPARED FOR MARKET—Continued

Item		Southeast Alaska	Central Alaska	Western Alaska	Total
BY-PRODUCTS					
Fertilizer, salmon	pounds	1,020,000	565,288		1,585,288
	value	\$20,040	\$9,054		\$29,094
Meal, herring	pounds	14,000,276	1,822,700		15,822,976
	value	\$242,736	\$30,089		\$272,825
Oil:					
Salmon	pounds	217,500	194,850		412,350
	value	\$3,770	\$8,542		\$12,312
Herring	pounds	14,326,815	1,818,480		16,145,295
	value	\$334,246	\$42,336		\$376,582
Total	pounds	29,564,591	4,401,318		33,965,909
	value	\$600,792	\$90,021		\$690,813
Grand total	pounds	190,249,910	91,724,239	62,907,553	344,881,702
	value	\$13,557,712	\$9,372,588	\$10,664,452	\$33,594,752

SUPPLEMENTARY TABLE SHOWING THE PACK OF CANNED PRODUCTS IN "STANDARD CASES"<sup>1</sup>

Salmon:					
Blueback, red or sockeye	cases	147,895	439,153	1,107,230	1,694,278
	value	\$1,471,578	\$4,116,919	\$9,997,591	\$15,586,088
Chinook or king	cases	14,896	27,599	9,372	51,867
	value	\$134,825	\$276,690	\$75,872	\$487,387
Chum or keta	cases	274,248	193,053	66,555	533,856
	value	\$891,375	\$607,108	\$202,202	\$1,700,685
Humpback or pink	cases	2,013,442	940,418		2,953,860
	value	\$7,052,803	\$3,162,695		\$10,215,498
Silver or coho	cases	88,455	81,331	92	169,878
	value	\$616,541	\$489,537	\$556	\$1,106,634
Trout	cases	72			72
	value	\$576			\$576
Miscellaneous fish	cases	111	118		229
	value	\$999	\$1,035		\$2,034
Clams	cases	2,039	34,886		36,925
	value	\$8,939	\$303,468		\$312,407
Crabs	cases		132		132
	value		\$2,104		\$2,104
Total	cases	2,541,158	1,716,690	1,183,249	5,441,097
	value	\$10,177,636	\$8,959,556	\$10,276,221	\$29,413,413

## SUPPLEMENTARY TABLE SHOWING THE OUTPUT OF BY-PRODUCTS IN TONS AND GALLONS

Item		Southeast Alaska	Central Alaska	Total
Fertilizer, salmon	tons	510	283	793
	value	\$20,040	\$9,054	\$29,094
Meal, herring	tons	7,000	911	7,911
	value	\$242,736	\$30,089	\$272,825
Oil:				
Salmon	gallons	29,000	25,980	54,980
	value	\$3,770	\$8,542	\$12,312
Herring	gallons	1,910,242	242,464	2,152,706
	value	\$334,246	\$42,336	\$376,582
Total	value	\$600,792	\$90,021	\$690,813

<sup>1</sup> The pack of salmon, trout, miscellaneous fish, and crabs has been converted to "standard cases" of 48 one-pound cans, and clams to "standard cases" of 48 No. 1 five-ounce cans.

NOTE.—Halibut products include all taken by the Alaska fleet, some of which were landed at other than Alaskan ports. The total landings in Alaska in 1931 amounted to 9,626,118 pounds, valued at \$608,480, as compared with 11,408,984 pounds, valued at \$863,089, in 1930.

## FISHERIES OF PUERTO RICO

A general survey of the fisheries of Puerto Rico was made in 1899, immediately after the American occupation of that island, but no detailed data on catch, fishermen, and gear employed were secured. The survey made in 1931 was the first statistical and marketing survey made of the fisheries of Puerto Rico.

During 1930, the fisheries of Puerto Rico employed 1,403 fishermen. Their catch amounted to 3,080,100 pounds of fishery products valued at \$207,085 to the fishermen. In making the catch the fishermen used 9 motor boats, 240 sailboats, and 462 rowboats. The gear employed consisted of 91 haul seines, 285 gill nets, 14 trammel nets, 366 cast nets, 31 dip nets, 9 hoop nets, 15 weirs (corrals), 912 hand lines, 133 trawl lines, 334 troll lines, and 4,239 fish pots.

As the fishermen keep no records of their operations, it was impossible to separate the catch by species. In general it may be stated that about 50 per cent of the catch is taken by fish pots, 30 per cent by nets, and 20 per cent by lines or other apparatus.

*Fisheries of Puerto Rico, 1930*

Persons engaged, fishermen.....	1, 403
Boats:	
Motor.....	9
Sail.....	240
Row.....	462
Apparatus:	
Haul seines.....	91
Length, yards.....	19, 820
Gill nets.....	285
Square yards.....	55, 835
Trammel nets.....	14
Square yards.....	6, 940
Cast nets.....	366
Dip nets.....	31
Hoop nets.....	9
Fish pots.....	4, 239
Weirs or corrals.....	15
Lines—	
Hand.....	912
Hooks.....	2, 501
Trawl.....	133
Hooks.....	18, 087
Troll.....	334
Hooks.....	334
Forks (used in taking langosta or spiny lobster).....	46
Catch—	
Pounds.....	3, 080, 100
Value.....	\$207, 085

## COMMON AND SCIENTIFIC NAMES OF FISHERY PRODUCTS

In order to prevent misunderstanding from the use of common names employed in the tables and discussions, the following list of common and scientific names is given:

Common and scientific names of the commercial fishery products caught in the United States and Alaska

Common name as shown in bureau reports	Other common names	Scientific names
Albacore	Longfin tuna	<i>Germo alalunga</i> .
Alewives	Branch herring, wall-eyed or big-eyed herring.	<i>Pomolobus pseudoharengus</i> .
Amberjack	Blueback, glut herring	<i>Pomolobus xstivalis</i> .
Anchovies		<i>Seriola</i> species.
Angelfish		<i>Engraulis mordax</i> .
Barracuda		<i>Anchoiella delicatissima</i> .
Black bass	Smallmouth bass	<i>Anchoiella compressa</i> .
Bluefish	Largemouth bass	<i>Pomacanthus arcuatus</i> .
Blue pike	Tailor	<i>Angelichthys isabelita</i> .
Blue runner or hardtail	Pike perch, blue pickerel (Canada)	<i>Sphyræna argentea</i> (Pacific coast).
Bonito	Runner	<i>Sphyræna barracuda</i> (Atlantic coast).
Bowfin		<i>Micropterus dolomieu</i> .
Buffalofish		<i>Micropterus salmoides</i> .
Bullhead		<i>Pomalomox saltatrix</i> .
Butterfish	Dollarfish	<i>Stizostedion glaucum</i> .
Burbot	Lawyer, ling	<i>Caranz crysos</i> .
Cabio	Coalfish, crab eater, cobia	<i>Sarda sarda</i> .
Cabrilla	Rock bass	<i>Sarda chiliensis</i> .
Carp (German)		<i>Amia calca</i> .
Catfish		<i>Ictiobus</i> species.
Cero		<i>Ameiurus</i> species.
Chubs	Tullibee in Canada, longjaws, bluefin, blackfin in United States.	<i>Poronotus triacanthus</i> .
Cigarfish	Scad	<i>Lota maculosa</i> .
Cisco	Herring in Canada	<i>Rachycentron canadum</i> .
Cod	Codfish	<i>Parala brax clathratus</i> .
Cowfish	Trunkfish, chapin	<i>Cyprinus carpio</i> .
Crappie	White crappie	<i>Siluridæ</i> species.
Crevalle	Black crappie, strawberry bass, calico bass.	<i>Scomberomorus regalis</i> .
Croaker		All <i>Leucichthys</i> except <i>artedi</i> (in Great Lakes).
Cunner	Crocus, hardhead	Decapterus species.
Cusk	Chogset, blue perch, bergall	<i>Leucichthys artedi</i> (Lake Erie only).
Dolly Varden trout		<i>Gadus macrocephalus</i> (Pacific coast).
Dolphin		<i>Gadus callarias</i> (Atlantic coast).
Drum, fresh-water, or sheepshead	White perch, gaspergou	<i>Ostracion</i> species.
Drum, black		<i>Pomoxis annularis</i> .
Drum, red	Channel bass, redfish, spotted bass	<i>Pomoxis sparoides</i> .
Eels		<i>Caranz hippos</i> .
Eulachon		<i>Micropogon undulatus</i> .
Flounders	Candlefish	<i>Tautoglabrus adspersus</i> .
Flyingfish	Dabs, blackbacks, lemon sole, winter flounder, summer flounder.	<i>Brosmius brosmie</i> .
Frigate mackerel		<i>Salteilinus parkei</i> .
Garfish		<i>Coryphaena hippurus</i> .
Gizzard shad	Nanny shad, mud shad	<i>Aplodinotus grunniens</i> .
Goldeye		<i>Pogonias cromis</i> .
Goldfish		<i>Sciænopis ocellatus</i> .
Goosefish	Sand perch	<i>Anguilla rostrata</i> .
Grayfish	Dogfish	<i>Leptocephalus conger</i> .
Greenfish	Spiny dog	<i>Gymnothorax mordax</i> .
Groupers	Smooth dog	<i>Gymnothorax moringua</i> .
Grunts	Rudderfish	<i>Thaleichthys pacificus</i> .
Haddock		<i>Pleuronectidæ</i> species.
Hagfish		<i>Cysilurus californicus</i> .
Hake	Slimefish	<i>Auris thazard</i> .
Halfmoon	Squirrel hake, Boston hake, ling, black hake, mud hake.	<i>Tylosurus</i> species.
Halibut		<i>Ablennes</i> species.
Halibut, "California"	Merluccio	<i>Dorosoma cepedianum</i> .
		<i>Hiodon</i> species.
		<i>Carassius auratus</i> .
		<i>Lophius piscatorius</i> .
		<i>Squalus sucklii</i> (Pacific coast).
		<i>Squalus acanthias</i> .
		<i>Galeohinus texis</i> .
		<i>Girella nigricans</i> .
		<i>Epinephelus</i> species.
		<i>Mycteroperca</i> species.
		<i>Hæmulon</i> species.
		<i>Melanogrammus aegilfinus</i> .
		<i>Myxine glutinosa</i> .
		<i>Urophycis</i> species (Atlantic coast).
		<i>Merluccius productus</i> (Pacific coast).
		<i>Medialuna californiensis</i> .
		<i>Hippoglossus hippoglossus</i> .
		<i>Paralichthys californicus</i> .

Common and scientific names of the commercial fishery products caught in the United States and Alaska—Continued

Common name as shown in bureau reports	Other common names	Scientific names
Hardhead		<i>Orthodon microlepidotus</i> .
Harvestfish	Starfish, pappyfish	<i>Peprilus alepidotus</i> .
Herring		( <i>Clupea harengus</i> (Atlantic coast). <i>Clupea pallasii</i> (Pacific coast).
Hickory shad	Tailor shad	<i>Pomolobus mediocris</i> .
Hog-choker		<i>Achirus fasciatus</i> .
Hogfish	Capitaine, perro perro	<i>Lachnolaimus maximus</i> (Florida).
Horse mackerel		<i>Trachurus symmetricus</i> .
Jewfish		<i>Promicrops itaiara</i> .
Kingfish		<i>Scomberomorus cavalla</i> .
Kingfish (California)	Little roncador, croaker	<i>Geynonemus lineatus</i> .
King whiting	Northern whiting, kingfish, seamink	<i>Menticirrhus</i> species.
Ladyfish	Bonefish, bananafish	<i>Albula vulpes</i> .
Lake herring	Herring	<i>Leucichthys artedi</i> (Great Lakes, except Erie).
Lake trout		<i>Cristiomer namaycush</i> .
Launce	Sand eel, lant, sand launce	<i>Ammodytes americanus</i> .
"Lingcod"	Cultus cod, blue cod, buffalo cod, ling	<i>Ophiodon elongatus</i> .
Mackerel		( <i>Scomber scombrus</i> (Atlantic coast). <i>Scomber diego</i> (Pacific coast).
Menhaden	Mossbunker, pogy	<i>Brevoortia tyrannus</i> .
Minnows		<i>Cyprinidae</i> species.
Mojarro		<i>Eucinostomus</i> species.
Mooneye	Toothed herring	<i>Hiodon</i> species.
Moonfish		( <i>Vomer setipinnis</i> . <i>Selene romer</i> .
Mullet	Jumping mullet	<i>Mugil</i> species.
Mummichog	Mayfish, killifish	<i>Fundulus</i> species.
Muttonfish		<i>Lutianus analis</i> .
Paddlefish	Spoonbill cat	<i>Polyodon spathula</i> .
Parrotfish		<i>Scaridae</i> species.
Perch, white	{ White perch	<i>Morone americana</i> .
	{ Blue perch, surf-fishes	<i>Embiotocidae</i> species (Pacific coast).
Perch, yellow	Winged perch	<i>Perca flarescens</i> .
Permit	Great pompano	<i>Trachinotus goodei</i> .
Pickereel		( <i>Esox reticulatus</i> . <i>Esox americanus</i> .
Pigfish		<i>Orthopristis chrysopterus</i> .
Pike (jacks)	Great Lakes pike, pickereel	<i>Esox lucius</i> .
Pilchard	Sardine	<i>Sardinia caerulea</i> .
Pilotfish		( <i>Naucrates ductor</i> . <i>Seriola zonata</i> .
Pinfish	Bream, salt-water bream	<i>Lagodon rhomboides</i> .
Pollock		<i>Pollachius virens</i> .
Pompano		( <i>Trachinotus</i> species (Atlantic coast). <i>Palometa stimpellimus</i> (Pacific coast).
Porgies	Porgee	<i>Calamus</i> species.
Porkfish	Sisi	<i>Anisotremus virginicus</i> .
Quillback	Spearfish or skimfish	<i>Carpodius</i> species.
Roach	Shiner	<i>Notemigonus crysoleucas</i> .
Rock bass	Redeye, goggleeye	<i>Ambloplites rupestris</i> (Mississippi River and tributaries).
Rock fishes	Rock cod	<i>Sebastes</i> species (Pacific coast).
Rosefish		<i>Sebastes marinus</i> .
Sablefish	Black cod	<i>Anaplopoma fimbria</i> .
Salmon:		
Atlantic		<i>Salmo salar</i> (Atlantic coast).
Pacific		
Blueback, red or sockeye		<i>Oncorhynchus nerka</i> .
Chinook or king	Tyee, Columbia, Sacramento, spring-	<i>Oncorhynchus tshawytscha</i> .
Chum or keta	Dog salmon	<i>Oncorhynchus keta</i> .
Humpback or pink		<i>Oncorhynchus gorbuscha</i> .
Silver or coho		<i>Oncorhynchus kisutch</i> .
Steelhead		(See steelhead trout.)
Sauger pike	Sand pike	<i>Stizostedion canadense</i> .
Sawfish		<i>Pristis pectinatus</i> .
Scamp		<i>Mycteroperca phenax</i> .
Sculpin		<i>Cottidae</i> species.
Scup	Paugy or porgy, fair maid	<i>Stenotomus chrysops</i> .
Sea bass	(Black jewfish or black sea bass	<i>Stereolepis gigas</i> (Pacific coast.)
	(Black sea bass	<i>Centropristes striatus</i> (Atlantic coast).
Sea bass, white (California)		<i>Cynoscion nobilis</i> (Pacific coast).
Sea gar	Needlefish, billfish, houndfish	<i>Tylosurus</i> species.
Sea robin		<i>Prionotus</i> species.
Shad	American shad	<i>Alosa sapidissima</i> .
Sharks		<i>Carcharodon</i> species; <i>Mustelus</i> species; <i>Carcharhinus</i> species; <i>Sphyrna</i> species.

## Common and scientific names of the commercial fishery products caught in the United States and Alaska—Continued

Common name as shown in bureau reports	Other common names	Scientific names
Sheepshead (salt-water)		<i>Archosargus probatocephalus</i> .
Sheepshead (fresh-water)	Drum, fresh-water	<i>Aplodinotus grunniens</i> .
Sheepshead (Pacific coast)	Redfish, flat head	<i>Pimelometopon pulcher</i> .
Silversides	Spearing	<i>Menidia</i> species.
Silver perch	Sand perch	<i>Bairdiella chrysura</i> .
Skates		<i>Raja</i> species.
Skipjack	Striped tuna	<i>Euthynnus pelamys</i> .
Skipper	"Billfish"	<i>Scomberesox saurus</i> .
Smelt		( <i>Osmerus mordax</i> (Atlantic coast).
Snapper, Mangrove	Gray snapper	<i>Argentinidae</i> species (Pacific coast).
Snapper, red		<i>Lutianus griseus</i> .
Snook	Robalo, sergeantfish	<i>Lutianus blackfordii</i> .
Sole		<i>Centropomus undecimalis</i> .
		<i>Psettichthys melanostictus</i> (Pacific coast).
Spadefish		<i>Chaetodipterus faber</i> .
Spanish mackerel		<i>Scomberomorus maculatus</i> .
Spearfish		<i>Tetrapturus imperator</i> .
Splittail		<i>Pogonichthys macrolepidotus</i> .
Spot	Lafayette, goody	<i>Leiostomus xanthurus</i> .
Squawfish	Sacramento pike	<i>Ptychocheilus oregonensis</i> .
Squeteague (gray)	Gray trout, weakfish, trout	<i>Cynoscion regalis</i> .
Squeteague (spotted)	Spotted weakfish, spotted trout	<i>Cynoscion nebulosus</i> .
Squirelfish		<i>Dipterygion formosum</i> .
Steelhead trout	Salmon trout	<i>Salmo gairdneri</i> .
Stingray		<i>Dasyatis</i> species.
Striped bass	Rockfish, rock	<i>Roccus lineatus</i> .
Sturgeon		<i>Acipenser</i> species.
Sturgeon, shovelnose		<i>Scaphirhynchus platyrhynchus</i> .
Sucker	Fresh-water mullet	<i>Catostomidae</i> species.
Sunfish		<i>Lepomis</i> species.
Surf fishes		( <i>Centrarchidae</i> species.
Swellfish	Puffer, swell toad, balloonfish, globe-fish.	<i>Embiotocidae</i> species.
		<i>Spheroides maculatus</i> .
Swordfish		<i>Xiphias gladius</i> .
Tang		<i>Hepatus</i> species.
Tarpon	Silver king	<i>Tarpon atlanticus</i> .
Tautog	Blackfish, oysterfish	<i>Tautoga onitis</i> .
Tenpounder	Elops	<i>Elops saurus</i> .
Thimble-eyed mackerel	Bullseye	<i>Scomber colias</i> .
Tilefish		<i>Lopholatilus chamaleonticeps</i> .
Tomcod		( <i>Microgadus tomcod</i> (Atlantic coast).
Tripletail		( <i>Microgadus proximus</i> (Pacific coast).
Tuna	Bluefin tuna, tunny, horse mackerel, leaping tuna.	<i>Lobotes surinamensis</i> .
		<i>Thunnus thynnus</i> .
Turbot	Greenland halibut, American turbot	( <i>Reinhardtius hippoglossoides</i> .
White bass	White lake bass	<i>Balistes carolinensis</i> .
Whitebait		<i>Roccus chrysops</i> .
Whitefish		Small fry of any fish.
Whitefish (Menominee)		( <i>Coregonus clupeiformis</i> (Great Lakes).
Whiting	Silver hake	( <i>Caulolatilus princeps</i> (Pacific coast).
Wolfish		<i>Coregonus clupeiformis</i> .
Yellow bass		<i>Merluccius bilinearis</i> .
Yellow perch		<i>Anarrhichas lupus</i> .
Yellow pike	Wall-eyed pike, pike perch, dore	<i>Morone interrupta</i> .
Yellowfin tuna		<i>Perca flavescens</i> .
		<i>Stizostedion vitreum</i> .
Yellowtail		<i>Neothynnus macropterus</i> .
Wahoo		( <i>Ocyurus chrysurus</i> (Atlantic coast).
Abalone		<i>Seriola dorsalis</i> (Pacific coast).
Clams:		<i>Acanthocybium solandri</i> .
Hard	(Round clam, cherrystone, quahog, little neck.	<i>Halotis</i> species.
Cockle		( <i>Tiela stultorum</i> (Pacific coast).
Soft	Sand clam, soft-shelled clam, nanny-nose, maninose.	<i>Venus mercenaria</i> (Atlantic coast).
Surf	Skimmer	<i>Venus mortoni</i> (Florida coast).
Razor (Atlantic)		<i>Cardium corbis</i> .
Razor (Pacific)		<i>Mya arenaria</i> .
Pismo		<i>Mactra solidissima</i> .
Conchs		<i>Siliqua</i> species; Tagelus species.
		<i>Siliqua patula</i> .
		<i>Tiela stultorum</i> (Pacific coast).
		( <i>Strombus</i> species.
		<i>Busycon</i> species.

Common and scientific names of the commercial fishery products caught in the United States and Alaska—Continued

Common name as shown in bureau reports	Other common names	Scientific names
Crabs:		
Stone.....		<i>Menippe mercenaria</i> .
Soft.....	Soft-shelled crab, blue crab.....	<i>Callinectes sapidus</i> .
Hard.....	Hardshell crab, blue crab.....	Do.
	Dungeness crab.....	<i>Cancer magister</i> (Pacific coast).
King.....	Rock crab, hard crab.....	<i>Cancer irroratus</i> (Atlantic coast).
Spider.....	Horseshoe crab.....	<i>Limulus</i> .
	Toad crab.....	<i>Hyas coarctatus</i> .
Crawfish.....	Crayfish.....	<i>Cambarus</i> species (Atlantic coast).
		<i>Astacus</i> species (Pacific coast).
Lobsters:		
Common.....		<i>Homarus americanus</i> (Atlantic coast).
Spiny.....	Rock lobster, crayfish.....	<i>Panulirus interruptus</i> (Pacific coast).
		<i>Panulirus argus</i> (Atlantic coast).
Mussels:		
Sea.....		<i>Mytilus californianus</i> (Pacific coast).
		<i>Mytilus edulis</i> .
		<i>Quadrula</i> species.
		<i>Lampsilis</i> species.
Freshwater.....		<i>Symphynota</i> species.
		<i>Unio</i> species.
		<i>Octopus punctatus</i> (Pacific coast).
Octopus.....		
Oysters:		
Eastern.....		<i>Ostrea elongata</i> .
Western.....	Olympia.....	<i>Ostrea lurida</i> (Pacific coast).
Japanese (introduced).....		<i>Ostrea gigas</i> .
Periwinkles.....		<i>Littorina</i> species.
Scallops:		
Sea.....		<i>Pecten magellanicus</i> .
		<i>Pecten irradians</i> (Atlantic coast).
Bay.....		<i>Pecten squisulcatus</i> (Pacific coast).
		<i>Peneus setiferus</i> .
		<i>Peneus brasiliensis</i> (Atlantic and Gulf coasts).
Shrimp.....		<i>Pandalus</i> species (Pacific coast).
		<i>Pandalopsis</i> species (Pacific coast).
		<i>Crangon</i> species (Pacific coast).
Snails.....		<i>Gastropoda</i> species.
Squid.....		<i>Loligo opalescens</i> (Pacific coast).
		<i>Loligo pealei</i> (Atlantic coast).
Turtles:		
Green.....		<i>Chelonia mydas</i> .
Loggerhead.....		<i>Thalassochelys caretta</i> .
Hawksbill.....		<i>Chelonia inbricata</i> .
Snapping.....	Mud turtle, mossback.....	<i>Chelydra serpentina</i> .
Terrapin.....	Diamond-back terrapin.....	<i>Malacoclemmys palustris</i> .
Frogs.....		<i>Rana</i> species.
Irish moss.....		<i>Chondrus crispus</i> .
Kelp.....		<i>Macrocystis</i> species; <i>Nereocystis</i> species; <i>Pelagophycus</i> species; <i>Alaria</i> species.
Sponges:		
Glove.....		<i>Spongia graminea</i> (Hyatt) <i>Euspongia officianalis</i> (L.).
Grass.....		<i>Hippospongia equina cerebriformis</i> .
Sheepswool.....		<i>Hippospongia canaliculata gossypina</i> .
Yellow.....		<i>Hippospongia equina elastica</i> .
Trepang.....	Sea cucumber.....	<i>Cucumaris frondosa</i> ; <i>Thyone briareus</i> .

## STATISTICAL SURVEY PROCEDURE

### METHODS OF COLLECTION

In order that persons using the statistics in this report may judge as to their completeness and authenticity, there follows an outline of the methods employed by the bureau in collecting fishery statistics. It will be noted that several methods are used. Each method has been carefully studied to obtain the best results with the available personnel.

*General fishery statistics.*—In the collection of general fishery statistics, data are obtained on the catch of fishery products and its value

as landed by the fishermen, the quantity or number of each kind of gear used, the number of fishing boats, the number and net tonnage of fishing and transporting vessels, the number of wholesale establishments, the amount of wages and salaries paid in these establishments, the quantity and value of products prepared, and the number of persons engaged in each phase of the industry.

The scope of the coastal surveys includes the commercial fisheries of the oceans, bays, and coastal rivers as far inland as commercial fishing is important. This usually coincides with the range of commercial fishing for anadromous species. Statistics of the fisheries of the Mississippi River include the fisheries of the Mississippi River proper, as well as all tributaries wherein commercial fishing for either fish, crustaceans, or mollusks is prosecuted. Statistics of the lake fisheries include those prosecuted in the Great Lakes, adjacent bays, and the international lakes of northern Minnesota, as well as certain rivers having outlets into these waters.

Beginning in 1929 general fishery statistics have been collected on an annual basis for all of the marine and lake sections of the United States and Alaska.

In conducting these surveys it is the custom of the bureau to dispatch agents to the districts to be surveyed early in the calendar year. (It should be noted that statistics on the catch of oysters for 1930 cover the calendar year. In previous years statistics for this mollusk were for the oyster season.) They obtain statistics on operations during the previous calendar year. The agents conducting these surveys are trained men or recruits working under the close supervision of trained men. Recruits are permitted to work individually only after proving a satisfactory aptitude for the work during their training period. While it is impossible for the few agents available to interview each fisherman in a given locality, the more important ones are visited and a sufficient number of those of lesser importance are interviewed to obtain reliable information on their production. In practice, virtually all wholesale firms are visited, as well as captains of fishing vessels (those of 5 net tons or over) and also all the more important shore fishermen and representative small producers.

As an aid in locating fishermen, lists of vessels and motor-boat owners are obtained from local customhouses. It is also often possible to obtain the names of licensed commercial fishermen and occasionally some statistics of the catch from the various State fishery agencies. In the Great Lakes and Pacific Coast States such exceptional cooperation has been obtained from the State agencies in recent years that only fragmentary surveys are made by the bureau to supplement missing data. Virginia and Maryland have recently adopted very complete statistical plans.

For the Great Lakes and international lakes of northern Minnesota the bureau obtains catch statistics and usually the value of the catch direct from the State records. To obtain data on the fishermen, boats, vessels, and gear the bureau conducts such personal surveys among the fishermen as may be necessary to supplement the State records. Annual catch statistics are available since 1913.

Agents are stationed at Seattle, Wash., who survey each of the Pacific Coast States annually to supplement data that are missing from the State records. In most cases the value of the catch is derived from dealers' records and from estimates of prices. In

Washington and Oregon the offshore fisheries are surveyed separately for units of operation, catch, and value of the catch. In almost all other respects the statistics are as collected by the States. Statistics of the wholesale industry for this section are obtained largely by personal interview.

The fisheries of Alaska are conducted primarily by large operators. Sworn statements are required from these operators concerning their operations. These are collected and compiled by the Alaska division of this bureau.

Statistics on the catch of fish collected in the above general canvasses are shown in this report on the basis of round weight, that is, the weight of the fish as caught, except in the Pacific Coast States where "as landed" weights are shown.

In general in the Pacific Coast States halibut is landed heads on but eviscerated; tuna and tunalike fishes are landed headless and eviscerated; swordfish may be landed headless and eviscerated; some salmon, especially that caught by troll lines, may be eviscerated; "lingcod," rockfishes, and sablefish may be landed eviscerated. The weight of cod caught off Alaska and shown in the Pacific coast tables has been converted to the basis of round weight.

Bulletins containing statistics for each section are released following the survey.

*Landings at certain important United States ports.*—Statistics of the landings at the principal New England ports, Boston and Gloucester, Mass., and Portland, Me., are similarly obtained. An agent is permanently stationed at each of these ports. His duties include the obtaining of statistics on the quantity of fish landed each day by each fishing vessel, the value of such fish landed, information concerning the date of departure and arrival of the vessel, and also a list of the grounds from which the fish were taken and the gear used in their capture. These statistics are forwarded to the bureau, where compilations are made. Monthly statistical bulletins are issued for these landings as well as annual bulletins summarizing the year's activities.

Statistics of the landings of fish at Seattle, Wash., are collected by the bureau's agent in that city. Landings are classified as those made by American fishing vessels and those received by Seattle wholesale dealers. The landings credited to United States fishing vessels are made by vessels operating distinctly as primary fishing units, usually in the offshore fisheries, while those credited as received by wholesale dealers are usually products of the shore fisheries collected mainly from points in Puget Sound and do not include fish received from Alaska or Canada, or landings made by the halibut fleet. Monthly statistical bulletins are issued for these landings as well as annual bulletins summarizing the year's activities.

Statistics on the landings of fish at New York City are obtained by J. H. Matthews, executive secretary of the Middle Atlantic Fisheries Association, while those for Groton, Conn., are obtained by the bureau's agents. Statements of these landings are forwarded to the bureau, where they are compiled. These statistics have not included the value of the catch. Monthly bulletins including these data are not issued; however, a summary is published in this document.



Statistics of the fishery products handled at the municipal wharf, Washington, D. C., are reported to the bureau by agents of the city health department. They are not published in bulletin form, but a summary of the year's activities is published in the annual report of this division.

*Atlantic mackerel fishery.*—Statistics on the catch by the Atlantic mackerel fleet are obtained by combining the figures of mackerel landed at Boston and Gloucester, Mass., and Portland, Me., with those obtained by agents who in recent years have been stationed at other Atlantic ports where mackerel are landed. These agents obtain data on the fares of mackerel landed, similar to the data obtained on the landings by fishing vessels at the three New England ports. The figures include only the catches made by purse seine and drift gill net craft and are not complete for these gears for craft under 5 net tons, capacity. Statistics of this fishery appear only in the annual reports of this division, although the landings at the principal New England ports appear in the monthly and annual bulletins published for those ports.

*Shad and alewife fisheries.*—Due to the importance of the Hudson and Potomac Rivers in the production of shad, surveys for the statistics of the catch, value of the catch, and operating units are made annually. On the Potomac River similar statistics also are obtained for the alewife fishery. The surveys are conducted by agents in a manner similar to that employed in the collection of general fishery statistics, except that probably more fishermen are interviewed, as great care is exercised to make these canvasses as accurate as possible.

The State of New York obtains statistics for the fisheries of the Hudson River that closely parallel those desired by the bureau for this fishery, which alleviates the work on this river.

Statistics of the shad and alewife fisheries are not published separately in bulletin form, but a summary of the year's activities is published in the annual report of this division.

*Sponge market, Tarpon Springs.*—A large proportion of the total output of sponges in Florida is handled through the sponge exchange at Tarpon Springs. In view of this, the bureau has arranged with a representative of the exchange to furnish statistics of the quantity and value of the sponges, by variety classification, handled through it annually. Statistics of the quantity of sponges handled through the exchange are not published in bulletin form, but a summary of the year's activities is published in the annual reports of this division.

*Pacific halibut fishery.*—Statistics of the Pacific halibut fishery are obtained by the bureau's agent in Seattle, aided by bureau representatives in Alaska, American consuls in British Columbia, the International Fisheries Commission, and the Prince Rupert Halibut Exchange. The fleet classification has been arbitrarily applied by including in the "Washington fleet" all United States and Alaska vessels that land more than half of their catch in that State. All other United States and Alaska vessels of the halibut fleet are included in the "Alaska fleet." Monthly and annual statistical bulletins are available on this fishery, being published along with the statistics of the landings of fishery products at Seattle, Wash.

*Canned fishery products and by-products.*—Beginning in 1921, the bureau has made annual surveys for statistics of the canned fishery products and by-products industries. These are begun the first

week in January of each year for statistics of the production in the preceding year. The surveys usually occupy six to nine weeks' time. During this period agents visit each plant in the United States where there is a production of canned fishery products or by-products. They obtain statistics of the production and value of the production for each commodity. In rare instances, where plants are not easily reached by regular transportation facilities, returns are obtained by mail.

The value shown for canned products constitutes the gross amount received by the packer at the production point, no deductions being made for commissions or expenses.

Statistics of the canned fishery products and by-products produced in Alaska are received on the same sworn statements that include statistics of the general fisheries. An annual statistical bulletin is issued on this trade.

*Manufactured fishery products.*—Statistics were obtained for 1930 for the first time on the total production of the many fishery products manufactured in the marine and lakes sections of the United States. These data appear only in the annual report of this division.

*Packaged-fish trade.*—Complete statistics of the annual production and value of fish packaged in the United States are obtained as a part of the survey for statistics of the canned fishery products and by-products industries. These statistics are published in bulletin form annually.

*Cold-storage holdings of fish.*—An arrangement has been made with the Bureau of Agricultural Economics, Department of Agriculture, whereby statistics of the cold-storage holdings of the various species of fish, by sections of the United States, are furnished to this bureau monthly. Included with statistics of the holdings is a statement of the quantity of the various species of fish frozen and also the holdings of certain cured fish. Bulletins showing these statistics are issued monthly as well as annually.

*Foreign fishery trade.*—Statistics on the foreign fishery trade are obtained from compilations made by the Bureau of Foreign and Domestic Commerce. Statistics of all known fishery products imported or exported are assembled in one table and published annually in the report of this division.

#### COMPILATION PRACTICES

Certain practices of importance used in the compilation of fishery statistics are explained below.

*Days absent.*—In computing "days absent" for vessels landing fares at the various ports, the day of departure and the day of arrival are included; thus, a vessel leaving port on the 8th of the month and returning on the 15th of the month will be shown as being absent eight days.

*Operating units.*—Operating units as referred to in this document include persons engaged and fishing craft and gear employed.

*Vessels.*—The term "vessels" refers to craft having a capacity of 5 net tons or greater.

*Incidental catch.*—The term "incidental catch" refers to the catch of certain species by a type of gear which ordinarily does not take appreciable amounts, if any, of such species.

*Percentages.*—Percentages are usually shown as whole numbers. Fractions of per cents are dropped if less than five-tenths, and the percentage is raised to the next higher integer if the fraction is greater than five-tenths. If the fraction is exactly five-tenths, the integer is raised or lowered to make it an even number.

*Converting.*—Many of the figures shown in the statistical tables published herewith have been reduced to thousands of pounds or dollars. In making these conversions the largest number from which a group of items is computed is raised or lowered to the nearest thousands place. If the number ends in an even 500, the thousands integer is raised or lowered to make it an even number. The individual items are changed to conform to the total thus obtained.

#### CONVERSION FACTORS

It is the policy of the bureau to show the detailed catch figures of all products in pounds for the sake of uniformity and for purposes of comparison. Following such a policy presents very definite problems. In the case of fish there is little difficulty since in very rare instances are such products reported in units of measure other than pounds. For shellfish, however, the units of measure may be bushels, sacks, barrels, or thousands of shellfish, gallons of meats, etc. These many units make standardization difficult, but when coupled with the wide variation in the requirements or definition of some of these units in the various States the problem becomes even more complex.

All bivalve mollusks are reported in pounds of meats in the detailed catch tables presented in this report. In addition there is presented a supplementary table for each section on the production in bushels. These supplementary tables also give the production of certain other shellfish, such as crabs, in number.

*Oysters.*—Probably the greatest problem in presentation of fishery statistics in uniform units of measure is in the case of oysters. Usually the production of oysters on the Atlantic and Gulf coasts is reported to bureau agents in bushels and prior to the data shown in this report conversion from bushels to pounds of meats was effected on the basis of a uniform yield of 7 pounds of meat to the bushel. There follows a table which gives the results of a recent study of the measures used for oysters in the various States and of the average yields per bushel. This table presents the new factors that have been used in the oyster statistics given in this report. These figures apply to the year 1930 and are based on the records of oyster canneries and shucking houses. It is probable that in subsequent years there will be variations from these figures.

## Measures and yields of oysters

State	Capacity of State bushel	Variation from United States standard bushel		Market oysters		Seed oysters	
		Cubic inches	Per cent	Yield per State bushel	Yield per standard bushel	Yield per State bushel	Yield per standard bushel
	Cubic inches		Pounds of meat	Pounds of meat	Pounds of meat	Pounds of meat	
Massachusetts.....	2,150.4			8.8	8.8	7.0	7.0
Rhode Island.....	2,150.4			8.0	8.0	7.0	7.0
Connecticut.....	2,150.4			7.5	7.5	7.0	7.0
New York.....	2,150.4			7.0	7.0	7.0	7.0
New Jersey.....	2,257.3	+126.9	+5.0	8.41	7.96	4.5	4.26
Delaware.....	2,257.3	+126.9	+5.0	7.5	7.1	4.5	4.26
Maryland.....	2,801.5	+650.1	+30.2	7.413	5.69	5.0	3.84
Virginia.....	3,003.4	+853.0	+39.7	6.86	4.91	5.0	3.58
North Carolina.....	2,801.9	+651.5	+30.3	5.36	4.11		
South Carolina.....	4,071.5	+1,921.1	+89.3	4.61	2.44		
Georgia.....	2,753.4	+603.0	+28.0	4.41	3.44		
Florida.....	3,214.1	+1,063.7	+49.4	3.34	2.23		
Alabama.....	2,826.2	+675.8	+31.4	3.23	2.46		
Mississippi.....	2,826.2	+675.8	+31.4	1.91	1.45		
Louisiana.....	2,148.4	-2.0	-0.1	3.99	3.99		
Texas.....	2,700.0	+549.6	+25.6	4.65	3.70		

*Other mollusks.*—Whereas in previous reports certain other mollusks have been converted from bushels to pounds of meats on the basis of an average yield for the whole country, a more detailed study established the factors for the various States for 1930 which are shown in the following table.

## Average yields of certain mollusks in pounds of meats per bushel

State	Clams, hard		Clams, soft		Clams, surf	Cockles	Mussels, sea	Periwinkles	Scallops, sea and bay
	Public	Private	Public	Private					
Maine.....			17	17		10			
Massachusetts.....	11	11	17		12	18	10	18	6
Rhode Island.....	11	11	17					18	6
Connecticut.....	8		15						6
New York.....	9	10	15	15	12		10		6
New Jersey.....	8	10	12	12	12		10		6
Delaware.....	8	8					10		
Maryland.....	8								
Virginia.....	8								6
North Carolina.....	10								
South Carolina.....	10								
Georgia.....	10								
Florida.....	8	8							6

*Other conversion factors.*—The principal other conversion factors that have been used in this report are as follows:

Alewives.....	To convert number of fish to weight in pounds, multiply by 0.4.
Cod, large, salted.....	To convert to fresh-gutted weight, multiply by 1.90.
Cod, market, salted.....	To convert to fresh-gutted weight, multiply by 1.94.
Cod, scrod, salted.....	To convert to fresh-gutted weight, multiply by 1.98.
Cod, all sizes, fresh-gutted.....	To convert to round weight, multiply by 1.25.

## Crustaceans:

Crabs, soft (all States)-----	To convert number of crabs to weight in pounds, divide by 3.
Crabs, hard (Florida)-----	To convert number of crabs to weight in pounds, divide by 1.86.
Crabs, hard (Alabama)-----	To convert number of crabs to weight in pounds, divide by 1.715.
Crabs, hard (Mississippi)---	To convert number of crabs to weight in pounds, divide by 1.715.
Crabs, hard (Louisiana)-----	To convert number of crabs to weight in pounds, divide by 1.86.
Crabs, hard (Texas)-----	To convert number of crabs to weight in pounds, divide by 1.715.
Crabs, hard (other States)---	To convert number of crabs to weight in pounds, divide by 3.
Crabs, king-----	To convert number of crabs to weight in pounds, multiply by 4.
Crabs, rock-----	To convert number of crabs to weight in pounds, divide by 3.
Cusk, salted-----	To convert to fresh-gutted weight, multiply by 1.90.
Haddock, large, salted-----	To convert to fresh-gutted weight, multiply by 2.06.
Haddock, scrod, salted-----	To convert to fresh-gutted weight, multiply by 2.10.
Haddock, fresh-gutted, all sizes--	To convert to round weight, multiply by 1.25.
Hake, large, salted-----	To convert to fresh-gutted weight, multiply by 1.90.
Hake, small, salted-----	To convert to fresh-gutted weight, multiply by 1.98.
Halibut, salted-----	To convert to fresh-gutted weight, multiply by 2.
Herring, salted-----	To convert to round weight, multiply by 1.50.
Mackerel, salted-----	To convert to round weight, multiply by 1.35.
Menhaden-----	To convert number of fish to weight in pounds, multiply by 0.6.
Oil (east coast)-----	To convert gallons to pounds, multiply by 7.74.
Oil (west coast)-----	To convert gallons to pounds, multiply by 7.5.
Pollock, salted-----	To convert to fresh-gutted weight, multiply by 1.90.
Sponges, dried (Florida):	
Large wool-----	To convert number of bunches of sponges to weight in pounds, multiply by 2.5.
Small wool-----	To convert number of bunches of sponges to weight in pounds, multiply by 1.
Glove-----	To convert number of bunches of sponges to weight in pounds, multiply by 1.5.
Grass-----	To convert number of bunches of sponges to weight in pounds, multiply by 2.5.
Wire-----	To convert number of bunches of sponges to weight in pounds, multiply by 1.5.
Yellow-----	To convert number of bunches of sponges to weight in pounds, multiply by 1.5.

