

21.—A STATISTICAL REPORT ON THE FISHERIES OF THE MIDDLE ATLANTIC STATES.

INTRODUCTORY NOTE.

The following report relating to the fisheries of the Middle Atlantic States is the last of a series of papers on the economic fisheries of the different geographical coast sections, emanating from the Division of Statistics and Methods of the Fisheries of this Commission. The regions previously covered by printed reports were the New England States, the Pacific States, the Gulf States, and the South Atlantic States, in the order named.

As was the case with the previous similar reports, the present article is based entirely on original field inquiries carried on by agents of the Commission. The investigations were conducted during parts of the fiscal years 1891, 1892, and 1893, and the statistics and other information obtained relate to the calendar years 1889, 1890, and 1891, and, in part, to 1892. The canvass of New York was assigned to Messrs. H. M. Smith, E. E. Race, and W. A. Wilcox. The fisheries of New Jersey were covered by Messrs. H. M. Smith, Ansley Hall, and E. E. Race. Pennsylvania was visited by Messrs. C. H. Stevenson and E. E. Race. The waters of Delaware, tributary to Chesapeake Bay, were canvassed by Mr. Race; the remainder of the State by Mr. Stevenson. The agents reporting on Maryland and Virginia were Messrs. W. A. Wilcox, T. M. Cogswell, H. M. Smith, C. E. Ingersoll, C. H. Stevenson, Ansley Hall, and E. E. Race. The special sections of these States investigated by each agent will be found recorded in my annual reports for the fiscal years 1891, 1892, and 1893.

The commercial fisheries of these States are more important than those of any other section in the United States in the items of persons engaged in the industry and the value of products. The capital invested in the fisheries is, however, much less than in the New England States. The returns for the last year covered by the statistics show that 90,923 persons found employment in the different branches of the industry; \$19,318,664 was the value of the vessels, boats, apparatus, and other property used, and \$19,023,474 was the value of the products to the fishermen.

The special fisheries which in the Middle Atlantic region are noticeably important and surpass in value those of all other regions combined are the alewife, bluefish, sea bass, shad, Spanish mackerel, squeteague, striped bass, white perch, yellow perch, clam, crab, terrapin, and oyster. The oyster fishery alone is worth \$12,400,000, or more than one-fourth the value of the entire fishing industry of the United States, and more than that of the combined fisheries of the New England States. Next to the oyster in prominence is the shad, with a value of \$1,216,000.

The report has been prepared by Dr. Hugh M. Smith, assistant in charge of the division. In the elaboration and compilation of the field agents' returns he has been aided by Mr. Charles H. Stevenson, principal office assistant, Mr. S. L. Pritchard, and other members of the divisional force.

MARSHALL McDONALD,
U. S. Commissioner of Fish and Fisheries.

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A STATISTICAL REPORT ON THE FISHERIES OF THE MIDDLE ATLANTIC STATES.

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GENERAL CONSIDERATIONS.

Geographical features of the region.—The group of coast States embraced by the title of this paper consists of New York, New Jersey, Pennsylvania, Delaware, Maryland (including District of Columbia), and Virginia. The Middle Atlantic States are sometimes regarded as including only the four States first named, but from the standpoint of the commercial fisheries the inclusion of Maryland and Virginia with the others mentioned and their exclusion from the group of States lying further to the south, are not only proper but are fully warranted by numerous considerations. While it is true that the fisheries of Maryland and Virginia have certain features that resemble those of North Carolina and other States of the South Atlantic seaboard, by far the strongest affiliations and resemblances are with the Middle Atlantic region.

These States have an area of 159,700 square miles, or about the same as Great Britain and Ireland, Denmark, Holland, and Belgium combined. The land area is 152,065 square miles and the water area 7,635 square miles. New York has the greatest land area, but Maryland, next to the smallest of the States, has relatively and actually the largest water area; this amounts to 2,350 square miles, or about 20 per cent of the total surface. The water areas subject to the jurisdiction of the several States are as follows:

States.	Square miles.
New York	1,550
New Jersey	360
Pennsylvania	230
Delaware	90
Maryland (including District of Columbia)	2,360
Virginia	2,325
Miscellaneous (unassigned waters in Delaware, lower New York, and Raritan bays)	720
Total	7,635

The length of the coast line of this section, following the indentations of the bays and including both sides of the rivers to the limits of commercial fishing, is approximately 5,400 miles. The extreme northern and southern points on the coast of these States, however, are only 340 miles apart in an air line.

This region had a population in 1890 more than one-fourth that of the entire country, namely, 15,798,055, while the counties having a frontage on the salt and fresh waters of the section and maintaining economic fisheries had a population of nearly one-eighth that of the United States, namely, 7,685,220.

This section is indented by three bays, which are among the largest on the coast of the United States and are extremely important in connection with the fisheries; these are New York Bay (with its several tributary bays), Delaware Bay, and Chesapeake Bay, which have a combined area of about 3,720 square miles. Into these bodies of water all the important rivers of the region drain; these are the Hudson, Delaware, Susquehanna, Potomac, Rappahannock, and James.

Scope and aims of the report.—The inquiry on which this report is based disclosed no very marked changes in the methods of conducting the fisheries of this region since the publication of the very full discussion of the subject in the Fisheries and Fishery Industries of the United States, relating primarily to the years 1879 and 1880. The chief purpose of this paper, therefore, is to show the condition and extent of the industry by means of detailed statistics. Noteworthy changes in methods of fishing, abundance of species, etc., will be referred to in the explanatory text for each State.

The paper is based on field investigations carried on during the fiscal years 1891, 1892, and 1893 by the agents of the division of statistics and methods of the fisheries of this Commission. The information has been obtained by the personal inquiries of the agents, and the statistics represent actual records of fishermen, fish dealers, and transportation agencies whenever such records were available. The statistical canvass was principally to the calendar years 1889, 1890, and 1891, and the figures for New York, Maryland, and Virginia in the accompanying tables relate to those years; but owing to the lateness of the field inquiries in New Jersey, Delaware, and Pennsylvania it was possible to secure data for those States for the year 1892.*

The investigations of the river fisheries of this region were carried as far up the streams as commercial fishing existed. Thus the Hudson River was canvassed to Stillwater, N. Y.; the Delaware to Shawnee, N. J.; the Susquehanna to Columbia, Pa.; the Potomac to Washington, D. C.; the Rappahannock to Port Royal, Va.; the James to Richmond, Va.

Whenever available, records have been consulted in ascertaining the quantity and value of the catch, and in the case of a very large proportion of the professional fishing the figures presented may be regarded as being as nearly correct as it is possible to obtain. On the other hand, in the case of the semiprofessional fishing, especially that carried on in the upper courses of the rivers, it is the exception to find fishermen who keep a record of their catch, and in order to determine the approximate output of the various kinds of fishes taken it is often necessary to follow up very slight clues. A certain proportion of the fishermen know how much their fish sold for, and with this item as a basis the agents can, by judicious questioning, prepare a fairly accurate statement of the quantity of the yield, although the separation of the catch into species involves elements of uncertainty which must always render a fishery census of these minor fisheries unsatisfactory.

The statistical matter to be presented consists (1) of general condensed tables showing by States the extent of the fishing industry in the entire region, (2) of detailed tabulations for each State by counties, (3) of a series of statements giving the extent of some of the more important fisheries, and (4) of comparative statistics by States for 1880 and 1891.

* A paper on the statistics of the fisheries of the United States, embracing the region under discussion, was presented by the writer to the World's Fisheries Congress, convened at Chicago in October, 1893, and was published in the Bulletin of the U. S. Fish Commission for the same year. The figures therein contained, which were provisional, will be found to differ in some slight respects from those given in the present report, which is to be regarded as final.

In order to show the aggregate weight of the products of the fisheries, it has been necessary to reduce to the common unit of pounds certain articles which are not ordinarily sold on that basis, among these being oysters, clams, scallops, and crabs. In the case of mollusks, the quantities given in the tables represent the weights of the edible parts of those animals; thus, with oysters, round clams, long clams, and scallops, the weight of the meat and liquor is taken into consideration, while with scallops only the "eye" or "heart" is shown. The weights assigned to a bushel of each of these shellfish are 7 pounds to oysters, 8 pounds to round clams, 10 pounds to long clams and mussels, and 4½ pounds to scallops. The common edible crab is regarded as having an average weight of one-third of a pound; the horseshoe or king crab is rated at 2 pounds.

Nature of the fisheries and fishery resources.—The Middle Atlantic States have the distinction of maintaining more valuable fisheries than are carried on in any other region of the United States. The fishing population is about as numerous as that in all the other coast and lake States combined. The number of vessel fishermen, of shore and boat fishermen, and of factory hands and other shore employés is larger than in any other geographical division.

The aggregate value of the investment in fishing property is less than in the New England States. This is largely due to the relatively expensive class of vessels employed in the latter region. In the items of seines, fyke nets, oyster apparatus, number of vessels, and number of boats, the Middle Atlantic States take first rank.

The value of the fisheries, which affords the best basis for determining the importance of the industry, is much greater in this region than in any other, being one and a half times that of the next prominent section, New England.

Among especially prominent features of these fisheries are the very large fleet of small vessels, chiefly schooner and sloop rigs, engaged in taking oysters; the extensive use of pound nets, fyke nets, gill nets, and seines in the bays and rivers; the numerous small boats employed for oysters and clams; the employment of steam and sail vessels in the capture of menhaden, and the very valuable shore industries dependent on the oyster and menhaden fisheries.

Features of the fishing industry of the Middle Atlantic region which contrast very strongly with that of the geographical section adjoining on the north are the general unimportance of the food-fish industries carried on with vessels and the practical absence of any fishing on the high seas. Only in New York is the use of vessels for the capture of food-fish important, and only in New Jersey are the operations of the shore fishermen noticeably extensive on the ocean grounds beyond jurisdictional limits. It is estimated that fully 90 per cent of the value of the fishery products of this section is from waters within the control of the States.

The waters of this region are perhaps more remarkable for the great abundance of the important fishery objects there found than for an especially large variety of desirable fish and other animals, such as is present on the coasts of the Gulf and Pacific States. While some seventy fishes of recognized food value occur regularly on the ocean shores, in the bays, or in the rivers of the region, and while the number of invertebrate and other aquatic products is not small, the great prominence which the fishing industry of these States has attained may be said to depend on two products, namely, the shad and the oyster, which are here more abundant and valuable than in all the remainder of the country combined.

The following list embraces all the important food and bait fishes of this region, as well as some others that are of considerable value during certain years. The more acceptable common names are given, the local names employed in the different States are shown, and the scientific identifications are added for accuracy.

Common and scientific names of the important fishes of the Middle Atlantic States.

Common names.	Local names.	Scientific names.
Albacore; Little tunny.....	Albacore.....	<i>Gymnosarda alleterata.</i>
	Applecore, N. J.	
Alewife; River herring	Horse-mackerel, Va.	
	Alewife.....	<i>Clupea aestivalis.</i>
	Glut herring, Potomac River.	
	Herring.....	
	Summer herring,	
Alewife; River herring	Alewife.....	<i>Clupea pseudoharengus.</i>
	Branch herring, Potomac River.	
	Herring.....	
Bluefish	Bluefish	<i>Pomatomus saltatrix.</i>
	Greenfish, Md., Va.	
	Horse-mackerel, N. Y.	
	Mackerel, N. J.	
	Salt-water tailor, Md., Va.	
	Skipjack, Md.	
	Skip mackerel, N. Y.	
	Snap mackerel, N. J.	
	Snapping mackerel, N. J.	
	Snapper, N. J.	
	Tailor, Md., Va.	
Bonito	Whitefish, N. Y.	<i>Sarda sarda.</i>
	Bone-eater, N. J.....	
	Bonejack, N. J.	
	Bonito.	
	Skipjack.	
Brier ray; Prickly ray.....	Bob-tailed skate, N. J.....	<i>Raja eglanteria.</i>
Butter-fish.....	Prickly skate, Md.	
	Butter-fish.....	<i>Stromateus paru.</i>
	Dollar-fish, N. J.	
Carp.....	Harvest-fish, N. J., Md., Va.	
Catfish, channel	Starfish, Va.	
	Carp.....	<i>Cyprinus carpio.</i>
	Black cat.....	<i>Ameiurus albodus.</i>
	Channel cat.	
Catfish, common; Bullhead.....	Schuylkill cat, Pa.	
	White cat.	
	Bullhead	
	Mud cat.	
	Yellow cat.	
Cero; Kingfish	Cero.....	<i>Scomberomorus regalis.</i>
	Kingfish.	
	Searer, N. J.	
	Searing, N. J.	
	Sier, N. J.	
Cobia; Crab-eater	Bonito, Chesapeake Bay.....	<i>Elacate canadensis.</i>
Cod.....	Coalfish, Chesapeake Bay.	<i>Gadus morrhua.</i>
Conger eel	Cod.....	<i>Leptocephalus conger.</i>
Croaker.....	Conger eel.....	
	Sea eel.	
Cunner; Chogset.....	Croaker.....	<i>Micropogon undulatus.</i>
	Crocus, Chesapeake Bay.	
	Grumbler, Potomac River.	
	Bengall, N. J.....	<i>Ctenolabrus adspersus.</i>
	Burgall, N. Y.	
Drum, black.....	Gall, N. J.	
	Banded drum (young)	<i>Pogonias cromis.</i>
Drum, red.....	Black drum.	
Eel	Drum.....	<i>Sciæna ocellata.</i>
Flounder, summer; Plaice.....	Red drum.	
	Eel	<i>Anguilla chrysypa.</i>
	Chicken halibut, Chesapeake Bay.	<i>Paralichthys dentatus.</i>
	Flatfish.	
Flounder	Flounder.	
	Fluke, N. J.	
	Plaice.	
Flounder, winter	Splaice, N. J.	
	Flatfish.....	<i>Pseudopleuronectes americanus.</i>
	Flounder.	
Haddock.....	Winter flounder.	
Hake	Haddock.....	<i>Melanogrammus aeglefinus.</i>
	Hake.....	<i>Phycis chuss, P. tenuis.</i>
Halibut.....	Ling, N. J.	
	Halibut.....	<i>Hippoglossus hippoglossus.</i>

Common and scientific names of the important fishes of the Middle Atlantic States—Continued.

Common names.	Local names.	Scientific names.
Hickory shad.....	Autumnal herring, Md..... Fresh-water tailor, Potomac River. Greenback, N. Y. Herring, N. J. Hick, Chesapeake Bay. Hickory jack. Hickory shad, Chesapeake Bay. Shadine, N. J. Tailor shad, Potomac River.	<i>Clupea mediocris.</i>
Kingfish.....	Barb, N. J..... Black mullet, Chesapeake Bay. Hake, N. J., Del. Kingfish. Sea mullet, Va. Boston mackerel, N. J.....	<i>Menticirrus nebulosus.</i>
Mackerel.....	Mackerel.	<i>Scomber scombrus.</i>
Menhaden	Alewife, Del., Md., Va..... Bay alewife, Chesapeake Bay. Bugfish, Va. Bughead, Va. Bug shad, Va. Bunker, N. J., Chesapeake Bay. Chebaug, N. J. Greentail. Marshbanker, N. J. Menhaden. Moss bunker, N. Y. Oldwife, Va. Pilcher, Va. Angel-fish..... Moonfish.	<i>Brevoortia tyrannus.</i>
Moonfish	Porgie. Fatback, Va..... Jumping mullet, Va. Mullet.	<i>Chætodipterus faber.</i>
Mullet, striped	Striped mullet.	<i>Mugil cephalus.</i>
Pigfish	Grunt, Chesapeake Bay..... Hogfish, Chesapeake Bay. Speckled redmouth, Chesapeake Bay.	<i>Pomadasys fulvomaculatus.</i>
Pike; Chain pickerel	Pickerel.....	<i>Lucius reticulatus.</i>
Pike; Banded pickerel	Pike. Pickerel.....	<i>Lucius americanus.</i>
Pollock	Brook pickerel, Hudson River. Ditch pike, Delaware River.	<i>Pollachius virens.</i>
Pompano	Pollock..... Pompano..... Sundfish, Va.	<i>Trachinotus carolinus.</i>
Redhorse	Large-scaled sucker..... Mullet. Mullet sucker, Potomac River. Redhorse.	<i>Moxostoma macrolepidotum.</i>
Salmon	Red mullet, Potomac River.	<i>Salmo salar.</i>
Scup.....	Salmon..... Fair maid, Va..... Porgy, N. Y., N. J. Sea porgy, N. J.	<i>Stenotomus chrysops.</i>
Sea bass	Black bass, Va..... Blackfish. Black will, Chesapeake Bay.	<i>Serranus atrarius.</i>
Sea-robin	Black perch, Md. Black nell, Md. Sea bass. Flying-fish, N. J., Va..... Pigfish, N. J.	<i>Prionotus strigatus, P. palmaripes.</i>
Shad.....	Sea robin. Shad.....	<i>Clupea sapidissima.</i>
Sheepshead.....	Sheepshead.....	<i>Archosargus probatocephalus.</i>
Skate, smooth; Burn-door skate.....	Smooth skate.....	<i>Raja laevis.</i>
Smelt.....	Smelt.....	<i>Osmerus mordax.</i>
Spanish mackerel.....	Bay mackerel, Chesapeake Bay. Spaniard, N. J.	<i>Scomberomorus maculatus.</i>
Spot	Spanish mackerel. Cape May goody, N. J..... Cronker, Md. Crocus, Md. Goody, N. J. Lafayette-fish, N. Y. Porgy, N. J. Rough, Va. Spot.	<i>Leiostomus xanthurus.</i>

Common and scientific names of the important fishes of the Middle Atlantic States—Continued.

Common names.	Local names.	Scientific names.
Squeteague, spotted	Salmon trout, Va..... Spotted sea trout, Chesapeake Bay. Trout. White trout, Va.	Cynoscion nebulosus.
Squeteague; Weakfish	Bluefish, N. Y., N. J., Del., Md., Va. Chickwit, N. Y. Gray trout, Va. Salt-water trout, Chesapeake Bay. Sea trout, Chesapeake Bay. Squettengue. Trout, Chesapeake Bay. Weakfish.	Cynoscion regalis.
Striped bass	Rock Rockfish. Striped bass.	Roccus lineatus.
Sturgeon	Manoose, Delaware River..... Moose (young), N. J. Sturgeon.	Acipenser sturio oxyrhynchus.
Sucker, black	Black sucker, Md., Va..... Mud sucker, Md. Mullet.	Catostomus nigricans.
Sucker, brook	Fine-scaled sucker Mud sucker, Md. Sucker.	Catostomus commersoni.
Tautog	Blackfish Chub, N. J., Va. Moll, Va. Salt-water chub, Chesapeake Bay. Smooth blackfish, N. J. Sea-tog, N. J. Tautog.	Tautoga onitis.
Tomcod.....	Will George, Va. Frostfish	Microgadus tomcodus.
White perch.....	Tomcod. Black perch, N. J	Morone americana.
Yellow perch	Perch. Yellow perch, N. J. Perch.	Perca flavescens.
Yellow-tail	Yellow nod, Md. Yellow perch. King William perch, Va..... Silver perch, N. J. White perch, N. J., Md.	Bairdiella chrysura.

The principal molluscan resources of this region are the oyster (*Ostrea virginica*), the quahog, round clam or hard clam (*Venus mercenaria*), the soft clam or long clam (*Mya arenaria*), the mussel (*Mytilus edulis*), the scallop (*Pecten irradians*), the "jingle" (*Anomia ephippium*), the "quarter deck" (*Crepidula fornicata*), and the squid (*Loligo pealei*). The scallop and two shells employed in oyster planting, the "jingle" and "quarter deck," are taken only in New York, but the other mollusks are found in all the other States having frontage on salt water, although all except the oyster are somewhat more abundant in the more northern States of the section.

The economic crustaceans of this region are the lobster (*Astacus americanus*), the king crab or horseshoe crab (*Limulus polyphemus*), the common blue crab (*Callinectes hastatus*), the shrimp (*Crangon vulgaris*), and crawfishes (*Cambarus*). The lobster is restricted to the coast waters of the States north of Maryland, and the crawfishes are taken only in Maryland and Virginia, but the other crustaceans named are generally distributed throughout the Middle Atlantic region.

The reptilian resources of these States include the diamond-back terrapin (*Malaclemys palustris*), the slider or red-bellied terrapin (*Pseudemys rugosa*), the bullfrog (*Rana catesbeiana*), and several sea turtles.

CONDENSED STATISTICS.

The statistical aspect of the fisheries of the Middle Atlantic States is shown in a general way in the following series of tables. These tabulations make it possible to ascertain at a glance the relative importance of the fishing industry in each State as compared with the entire region and with each of the other States, and are preliminary to the very detailed statistics which are afterwards presented. The general tables which are given pertain to the persons engaged; the apparatus, vessels, boats, etc., employed, and the quantity and value of the catch, viewed from several standpoints.

It appears that of the 90,923 persons employed in the fishing industry of this region in 1891, 15,213 were vessel fishermen, 54,906 were shore and boat fishermen, 2,500 were carriers of fishery products, and 18,304 were shore help, factory hands, etc. Considerably more than two-fifths of the fishery employés, viz., 39,944, were in Maryland and nearly one-fourth, namely, 23,591, were in Virginia. The order of rank of the other States was New York, New Jersey, Pennsylvania, and Delaware.

Persons engaged in the fisheries of the Middle Atlantic States.

States.	Vessel fishermen.	Shore fishermen.	Trans- porters.	Shores- men.	Total.
New York.....	2,250	7,858	86	2,042	12,246
New Jersey.....	2,017	7,889	201	582	10,639
Pennsylvania.....	348	1,031	5	289	2,273
Delaware.....	103	1,053	43	431	2,230
Maryland (including District of Columbia)	6,892	19,867	1,450	11,735	39,944
Virginia.....	3,603	16,008	705	3,275	23,591
Total	15,213	54,906	2,500	18,304	90,923

The money invested in this industry was \$19,318,664, of which Maryland is credited with \$7,466,718, New York with \$5,283,200, Virginia with \$2,948,659, New Jersey with \$2,467,865, Pennsylvania with \$944,140, and Delaware with \$208,082. The factors entering most conspicuously into this large amount are vessels, boats, shore property, and working capital.

No less than 3,169 vessels of over 5 tons register were engaged in the actual taking of fishery products, and 758 others were employed exclusively in transporting the catch. This fleet was valued, with the outfits, at \$4,701,818, and its tonnage was 68,714. Over 1,625 of the vessels were in Maryland and about 945 in Virginia, the other four States having 1,356.

Boats to the number of 32,824, valued at \$1,889,138, exclusive of those constituting a part of the vessels' equipment, were used. Of these 9,825 were in Maryland, 9,247 in Virginia, 6,227 in New York, 5,742 in New Jersey, and 1,783 in Pennsylvania and Delaware.

The various kinds of property used on shore in connection with the business, such as factories, fish-houses, reels, etc., had a value of \$5,863,606. Maryland, owing chiefly to its extensive and numerous oyster-packing establishments, had the largest share in this amount, \$2,446,327 being thus credited; New York followed, with \$1,794,969, and Virginia with \$717,787. The working or cash capital required to properly conduct the fishing industry was \$5,140,955. This is a somewhat uncertain though very important item, which may be viewed in several different ways, and varies with the method of consideration. As here regarded, it is the amount of ready money which must be kept by fishery operators, wholesale purchasing agents, and factory owners in order to meet the current demands for fish, wages, materials, etc.

This element is largest in Maryland and New York, and smallest in Virginia, of the four States having a noticeably large fishery investment.

Foremost in value among the appliances used in the capture of fishery products are the gill nets; 30,158 of these were employed in 1891, with a value of \$419,722, these figures including a few trammel nets, which are structurally gill nets. Maryland leads in the number of gill nets, but New Jersey takes precedence in the value of such nets; and while Virginia leads New York in the number of nets, the latter State surpasses in value.

The dredges, scrapes, rakes, tongs, and forks used mostly in the extensive molluscan fisheries together had a value of \$474,304, a sum representing 51,578 such appliances. In the vessel fisheries, 8,875, valued at \$235,071, were employed; and in the boat fisheries 42,703, valued at \$239,233. The investment of Maryland in these items was \$198,920.

Pound nets, trap nets, and weirs constitute an important class of fishing appliances, which is represented in every State except Pennsylvania and is prominent in New York, New Jersey, Maryland, and Virginia. The number of such nets was 2,414, having a value of \$365,783, of which 1,005, worth \$71,778, were in Maryland, and 941, worth \$166,990, were in Virginia. In New York, 90 traps, valued at \$32,350, were operated from small vessels.

Haul and purse seines, to the number of 1,808, were fished in this region, the former being well distributed among all the States, while the latter are chiefly in New York and Virginia. The value of all seines was \$278,230.

The number and value of other important kinds of apparatus used in these States were as follows: Fyke and bag nets, 21,736, \$125,565; pots, 27,214, \$27,722; lines, \$23,310; miscellaneous appliances, including spears, dip nets, etc., \$8,511.

Vessels, boats, apparatus, shore property, and cash capital employed in fisheries of the Middle Atlantic States.

Designation.	New York.		New Jersey.		Pennsylvania.	
	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	618	\$773,442	524	\$541,520	47	\$84,900
Tonnage	8,496	7,883	1,194	19,410		
Outfit		168,388	122,433		2,875	
Vessels transporting	41	44,100	83	108,150	2	
Tonnage	798	1,437	26			
Outfit		5,710	13,255		110	
Boats	6,227	373,070	5,742	412,373	837	30,652
<i>Apparatus—vessel fisheries:</i>						
Seines	69	39,850	12	6,100		
Trap nets	90	32,350				
Lines, hand and trawl		8,870		370		206
Eel pots	90	248	40	20		
Lobster pots	490	1,137	230	225		
Dredges, rakes, and tongs	1,860	48,322	2,032	44,251	143	5,035
<i>Apparatus—shore fisheries:</i>						
Seines	258	35,700	360	31,922	151	19,405
Gill nets and trammel nets	6,402	88,450	8,983	129,832	209	21,450
Pound nets and weirs	173	38,090	185	55,370		
Fyke nets and bag nets	6,246	55,405	1,692	18,881	2,534	5,264
Lines		2,875		4,808		427
Eel pots	13,568	13,074	3,760	3,901		
Lobster pots	1,750	2,332	725	1,193		
Spears	3,489	3,728	210	404		
Dredges and scrapes	4,872	43,200	1,184	8,334		
Tongs and forks	6,987	33,390	3,474	15,025		
Minor apparatus		250		487		404
Shore and accessory property		1,794,900		409,561		450,162
Cash capital		1,679,000		538,850		303,750
Total		5,283,200		2,407,865		944,140

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Vessels, boats, apparatus, shore property, and cash capital employed in fisheries, etc.—Continued.

Designation.	Delaware.		Maryland.*		Virginia.		Total.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing.....	25	\$21,525	1,225	\$876,705	730	\$498,440	3,169	\$2,796,532
Tonnage.....	304	21,033	3,390	331,709	0,087	169,923	47,997	815,263
Outfit.....								980,220
Vessels transporting.....	16	13,250	402	570,150	214	241,035	758	
Tonnage.....	224	13,150			5,084		20,717	
Outfit.....								109,803
Boats.....	946	29,233	9,825	579,488	9,247	463,722	32,824	1,889,198
Apparatus—vessel fisheries:								
Seines.....			15	8,450	41	25,650	137	80,050
Trap nets.....							90	32,350
Lines, hand and trawl.....								9,476
Eel pots.....								130
Lobster pots.....								720
Dredges, rakes, and tongs.....	110	2,110	2,913	115,661	1,827	24,692	8,875	235,071
Apparatus—shore fisheries:								
Seines.....	203	10,263	521	68,330	178	32,470	1,671	198,180
Gill nets and trammel nets.....	1,586	33,946	11,900	100,014	5,979	40,030	30,158	419,722
Pound nets and weirs.....	20	305	1,005	71,778	941	166,090	2,324	333,433
Fyke nets and bag nets.....	567	1,261	10,358	38,924	330	5,770	21,736	125,565
Lines.....		20		2,272		3,432		13,834
Eel pots.....	1,775	784	4,036	4,013	110	95	23,849	22,467
Lobster pots.....	40	100					2,515	8,425
Spoons.....	170	85				15	10	3,890
Dredges and scrapes.....			2,068	10,509	198	4,040	8,322	66,683
Tongs and forks.....	243	522	12,921	72,750	10,750	50,263	34,381	172,550
Minor apparatus.....		113		2,498		442		4,284
Shore and accessory property.....		44,800		2,446,327		717,787		5,863,606
Cash capital.....		44,400		2,107,455		467,500		5,140,955
Total.....		208,082		7,400,718		2,948,050		19,318,664

* Includes District of Columbia.

The yield of the fisheries of this region was 590,454,369 pounds, having a first value of \$19,023,474. The quantity given includes only the net weights of shellfish. Owing to the large catch of a comparatively cheap fish (menhaden) in New York and Virginia, the quantity of products there taken was considerably larger than in Maryland, the fisheries of which were far more valuable. The table shows that the fisheries of the latter State were worth \$6,460,759, those of New York \$4,817,369, those of Virginia \$3,647,845, those of New Jersey \$3,520,057, those of Pennsylvania \$322,021, and those of Delaware \$255,423.

Products of the fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Pennsylvania.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	2,194,560	\$23,526	2,066,820	\$14,280	2,331,775	\$13,449
Black bass.....		9,250	1,166		22,885	2,368
Bluefish.....	5,500,575	237,010	7,227,926	234,103		
Bonito.....	1,760	150	150,033	9,857		
Butter-fish.....	837,246	12,988	230,802	6,582		
Carp.....			2,000	160	3,800	189
Catfish.....	117,180	5,144	133,824	8,265		
Cod.....	2,277,458	89,921	841,011	20,001	132,468	6,223
Drum.....			124,240	980		
Eels.....	1,616,213	97,990	623,280	38,504	40,050	2,174
Flounders.....	1,561,696	45,231	987,895	33,020		
Frostfish or tomcod.....			278,400	10,468	42	
Haddock.....	147,730	3,890	17,040	675		
Kingfish.....	157,541	10,702	33,697	2,298		
Mackerel.....			25,117	2,316		
Menhaden.....	104,800,114	295,005	20,670,542*	56,974		
Mullet.....	100,000	7,878	88,350	4,902		
Perch, white.....	41,209	2,637	193,724	18,530	0,020	341
Perch, yellow.....	46,016	3,692	500,238	27,219	12,025	674
Pike.....	8,215	740	19,485	1,004	4,975	697
Scup.....	850,888	7,016	25,082	855		
Sea bass.....	679,180	85,915	3,731,538	147,693	947,500	33,805
Shad.....	3,044,056	161,208	10,225,455	443,438	2,692,864	128,274
Sheepshead.....	19,523	3,500	20,290	4,013		
Skates.....	101,897	2,022	7,050	353		
Spanish mackerel.....	74,836	7,255	78,391	12,620		

Products of the fisheries of the Middle Atlantic States—Continued.

Species.	New York.		New Jersey.		Pennsylvania.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Spots and croakers	17,501	\$700	106,680	\$4,521	.....	.....
Squeateague	2,852,653	111,301	6,002,563	201,515	24,015	\$2,406	
Striped bass	205,449	21,389	298,104	43,290	52,700	640	
Sturgeon	30,261	929	452,630	10,610	42,550	2,115	
Suckers	25,378	1,545	56,680	4,008	.....	.....
Tautog	171,172	7,618	99,437	3,894	.....	.....
Other fish	236,991	8,028	167,320	3,684	84,230	4,236	
Refuse fish	1,118,913	2,733	.....	.....	.....	.....
Oysters	18,277,434	2,748,509	16,114,567	1,039,618	1,183,700	124,420	
Soft clams or long clams	1,505,500	105,891	827,000	47,700	.....	.....
Quahogs or hard clams	4,524,520	650,621	3,454,024	371,933	.....	.....
Scallops	313,042	48,340	.....	.....	.....	.....
Mussels	21,000	900	6,000	200	.....	.....
Squid	40,936	1,633	.....	.....	.....	.....
Shells	16,766,100	15,950	.....	.....	.....	.....
Crabs, hard	435,566	7,589	230,111	0,499	.....	.....
Crabs, soft	93,500	3,450	289,500	35,380	.....	.....
Lobsters	165,093	15,655	165,664	12,403	.....	.....
Shrimp	.....	.....	1,200	600	.....	.....
King crabs	.....	.....	2,708,980	7,534	.....	.....
Terrapins	.....	.....	3,280	1,074	.....	.....
Total	170,885,022	4,817,369	79,116,380	3,520,057	7,583,657	322,021	
Species.	Delaware.		Maryland.*		Virginia.		Total.
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.
Alewives	863,760	\$12,412	17,418,850	\$131,245	11,013,485	\$93,905	35,889,250
Black bass	.....	.....	516,364	22,761	1,842,204	67,545	39,135
Bluefish	.....	.....	.....	.....	.....	.....	501,479
Bonito	.....	.....	31,955	785	120,000	2,900	152,383
Butter fish	.....	.....	27,628	780	13,370	576	21,220,003
Carp	73,800	4,074	1,296,752	45,502	935,244	28,487	2,680,268
Catfish	.....	.....	.....	.....	195,250	4,048	105,250
Cobia or crab-eater	.....	.....	.....	.....	.....	.....	3,118,469
Cod	.....	.....	.....	.....	.....	.....	5,371
Drum	30,000	380	.....	.....	179,502	4,011	333,742
Eels	223,500	8,967	792,044	32,919	71,610	2,907	3,307,606
Flounders	5,000	168	33,443	1,008	127,295	4,109	2,715,329
Frostfish or tomcod	.....	.....	.....	.....	.....	.....	84,136
Haddock	960	48	.....	.....	149,565	7,097	279,800
Kingfish	.....	.....	.....	.....	.....	.....	10,510
Mackerel	.....	.....	.....	.....	.....	.....	165,070
Menahaden	67,000	420	30,932,120	65,307	105,980,334	197,523	202,530,110
Mullet	38,900	1,125	101,540	2,974	110,700	2,736	498,550
Perch, white	212,945	14,113	1,109,273	57,038	299,813	12,010	1,862,984
Perch, yellow	42,910	2,026	1,385,352	48,040	160,020	6,709	2,157,061
Pike	24,950	1,548	563,264	35,261	12,415	795	633,304
Pompano	.....	.....	.....	.....	93,700	9,520	40,945
Scup	.....	.....	.....	.....	.....	.....	376,540
Sea bass	.....	.....	113,370	4,544	66,310	2,270	5,537,898
Shad	1,500,196	64,699	6,224,873	211,575	6,498,242	207,394	30,180,586
Sheepshead	.....	.....	3,185	396	23,871	1,344	72,866
Skates	.....	.....	.....	.....	.....	.....	9,253
Spanish mackerel	.....	.....	44,837	5,369	730,910	50,756	108,947
Spots and croakers	42,400	2,280	273,283	12,110	1,725,847	62,122	2,165,771
Squeateague	1,164,730	17,524	750,465	25,902	3,929,809	124,645	14,700,310
Striped bass	94,910	12,758	1,294,093	97,770	483,436	42,127	2,371,267
Sturgeon	1,304,800	30,448	72,445	2,343	723,646	21,304	2,030,482
Suckers	11,050	501	285,238	7,533	116,364	3,153	537,260
Tautog	8,000	320	.....	.....	.....	.....	18,855
Other fish	4,380	164	438,683	14,561	1,514,057	38,075	278,609
Refuse fish	.....	.....	.....	.....	.....	.....	11,832
Oysters	1,097,040	70,134	69,615,406	5,295,866	43,184,002	2,524,348	149,422,749
Soft clams or long clams	21,920	2,094	147,760	8,226	550,278	36,030	2,332,500
Quahogs or hard clams	.....	.....	.....	.....	.....	.....	153,591
Scallops	.....	.....	.....	.....	.....	.....	1,068,904
Mussels	.....	.....	.....	.....	.....	.....	313,042
Squid	.....	.....	.....	.....	.....	.....	48,340
Shells	.....	.....	.....	.....	.....	.....	1,100
Crabs, hard	.....	.....	2,776,898	37,460	2,308,071	32,683	5,750,646
Crabs, soft	86,250	4,713	4,828,872	266,256	585,956	29,370	5,884,078
Lobsters	8,200	410	.....	.....	.....	.....	338,957
Crawfish	.....	.....	7,350	695	833	75	28,528
Shrimp	.....	.....	8,044	3,960	.....	.....	8,183
King crabs	740,000	647	.....	.....	.....	.....	770
Frogs	11,988	2,190	80,780	22,333	52,215	2,754	9,244
Terrapins	18,000	1,260	4,060	231	189,121	18,494	5,588
Turtles	.....	.....	.....	.....	3,934	211,181	8,181
Total	7,697,640	255,423	141,177,827	6,460,750	183,993,834	3,647,845	590,454,369
							19,028,474

* Includes District of Columbia.

The products of the fisheries of this region may be classified as general food-fish, mollusks, crustaceans, reptiles, and menhaden utilized for oil and guano. The extent of the fisheries for each of these classes is given in the following table, which shows that the yield of the molluscan fisheries was \$13,692,443; the general food-fish fisheries, \$4,194,484; the menhaden fishery, \$615,829; the crustacean fisheries, \$468,448; and the reptilian fisheries, \$52,270.

The mollusks are the most important products in all the States except Pennsylvania and Delaware, in which food-fish are most prominent. Maryland holds the first place in the value of mollusks and crustaceans, New Jersey leads in the value of its fisheries for fish proper; New York takes precedence in the value of its menhaden fishery, and Virginia occupies the first rank for reptilian fisheries.

Classification of the products of the fisheries of the Middle Atlantic States.

States.	General food-fish fisheries.		Oyster and other molluscan fisheries.		Crustacean fisheries.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
New York.....	23,882,317	\$923,226	41,448,432	\$3,571,844	694,159	\$20,694
New Jersey.....	34,555,512	1,337,052	20,401,501	2,059,481	3,485,455	65,476
Pennsylvania.....	6,399,957	107,601	1,183,700	124,420	.....	.....
Delaware.....	5,647,251	173,555	1,118,060	72,228	834,450	5,770
Maryland.....	32,747,537	769,425	60,763,166	5,304,092	7,621,164	308,371
Virginia.....	31,162,424	802,625	43,698,880	2,560,378	2,894,860	62,137
Total	134,394,008	4,194,484	177,609,729	13,692,443	15,530,088	468,448
States.	Reptilian fisheries.		Menhaden fishery.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
New York.....	.....	.....	104,860,114	\$205,605	170,885,022	\$4,817,309
New Jersey.....	3,280	\$1,074	20,070,542	56,974	78,116,380	8,520,057
Pennsylvania.....	.....	.....	.....	.....	7,583,657	392,021
Delaware.....	29,988	3,450	67,000	420	7,697,649	253,423
Maryland.....	93,840	22,564	30,052,120	65,307	141,177,827	6,480,759
Virginia.....	262,936	25,182	105,980,334	107,523	183,008,834	8,647,845
Total	389,444	52,270	202,530,110	615,829	590,454,309	19,023,474

Considerable general interest attaches to the relative quantities of fishery products destroyed or sacrificed by the different kinds of apparatus employed. In the following table the quantity and value of the catch with each principal class of appliances are shown, and in a supplementary table the facts disclosed by the first table are reduced to the basis of percentage. In every State, except Delaware, dredges, tongs, and other similar apparatus employed in taking shellfish are the most important means of capture. Of the remaining forms of apparatus, lines are the most prominent in New Jersey; seines in New York, Pennsylvania, and Maryland; gill nets in Delaware, and pound nets in Virginia.

Considering the entire region, the order of rank based on value of catch is (1) dredges, tongs, etc., (2) seines, (3) gill nets, (4) lines, (5) pound nets, trap nets, and weirs, (6) miscellaneous apparatus, (7) fyke nets, and (8) pots. The figures for seines, gill nets, pound nets, fyke nets, pots, and lines refer only to fish proper, while the crustaceans and other products taken with these appliances appear under miscellaneous apparatus.

Quantity and value of products taken with each kind of apparatus employed in the Middle Atlantic States.

Apparatus.	New York.		New Jersey.		Pennsylvania.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines.....	103,188,374	\$445,951	21,124,166	\$223,077	3,817,247	\$100,208
Gill nets.....	4,953,280	222,014	10,586,442	435,908	1,370,550	47,953
Pound nets and weirs.....	9,909,828	123,834	7,992,260	125,100		
Fyke nets.....	2,382,882	48,903	786,210	37,329	146,695	6,659
Pots.....	975,031	60,001	285,700	16,350		
Lines.....	6,656,605	276,979	14,254,026	543,687	1,033,310	40,567
Dredges, tongs, and rakes.....	41,407,596	3,570,211	20,401,591	2,059,481	1,183,700	124,082
Miscellaneous apparatus.....	1,411,426	69,476	3,685,985	79,125	32,155	2,214
Total.....	170,885,022	4,817,369	79,116,380	3,520,057	7,583,057	322,021

Apparatus.	Delaware.		Maryland.		Virginia.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines.....	2,020,244	\$48,156	43,128,398	\$325,976	104,872,062	\$284,422	278,159,491	\$1,427,790
Gill nets.....	3,343,425	111,451	8,571,287	217,088	4,857,214	124,617	33,082,198	1,159,031
Pound nets and weirs.....	27,891	1,037	8,875,190	165,423	23,851,951	472,680	50,637,120	888,083
Fyke nets.....	45,091	2,591	1,546,864	60,549	325,861	12,845	5,233,603	168,376
Pots.....	97,300	4,070	389,740	16,030	4,000		325	1,751,771
Lines.....	41,700	1,532	970,135	35,271	3,227,845	105,060	26,183,621	96,776
Dredges, tongs, and rakes.....	1,118,900	72,228	69,763,166	5,304,092	43,683,880	2,560,978	177,568,893	13,090,810
Miscellaneous apparatus.....	994,038	14,358	7,933,047	336,330	3,161,021	87,500	17,217,072	589,012
Total.....	7,697,049	255,423	141,177,827	6,460,759	183,993,834	3,047,845	590,454,369	19,023,474

From the percentage table it appears that 30.07 per cent of the quantity and 71.97 per cent of the value of the fishery products of this section were obtained with dredges, tongs, rakes, etc., these figures representing essentially the extent of the molluscan fisheries. The largest quantity of fish, amounting to 47.11 per cent of the entire yield, was taken with seines. The relative value of the seine catch was also greater than that with any other apparatus except the dredges, tongs, etc., being 7.50. Pound nets, trap nets, and weirs took 8.58 per cent of the aggregate production, ranking third in this respect, but the value of the stock was only 4.67 per cent, being less than that with gill nets and lines. Gill nets yielded 5.70 per cent of the quantity and 6.09 per cent of the value of the catch, followed by lines with 4.43 per cent of the quantity and 5.27 per cent of the value. The relative importance of the other forms of apparatus is insignificant.

Table showing the relative quantity and value of the products taken with each kind of apparatus in each State and the entire region as compared with the total quantity and value of the catch of each State and the entire region.

Table showing the relative quantity and value of the products taken with each kind of apparatus in each State and the entire region as compared with the total quantity and value of the catch of each State and the entire region—Continued.

Apparatus.	Maryland.		Virginia.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Dredges, tongs, etc.....	49.41	82.10	23.75	70.19	30.07	71.97
Seines	30.55	5.04	57.00	7.79	47.11	7.50
Gill nets	6.07	3.36	2.64	3.42	5.70	6.09
Pound nets, traps, etc	6.29	2.56	12.96	12.96	8.58	4.87
Lines .....	.69	.55	1.75	2.88	4.43	5.27
Fyke nets	1.10	.94	.18	.35	.80	.80
Pots .....	.27	.25	[.002]	.01	.30	.51
Miscellaneous	5.62	5.20	1.72	2.40	2.92	3.10
Total	100.00	100.00	100.00	100.00	100.00	100.00

The relative value of each important fishery product in each State as compared with the entire region is exhibited in the following table, which brings out some interesting points. Cod, eels, flounders, soft clams, and hard clams, among the more prominent products, are taken in largest quantities in New York; bluefish, sea bass, shad, and squeteague in New Jersey; sturgeon in Delaware; alewives, catfish, white perch, yellow perch, striped bass, crabs, and oysters in Maryland; menhaden, spots and croakers, and Spanish mackerel in Virginia. Of the species of which more than half the catch in the entire region is taken in a single State, are cod, flounders, soft clams, and hard clams in New York; sea bass in New Jersey; white perch, yellow perch, striped bass, and crabs in Maryland; spots and croakers and Spanish mackerel in Virginia.

Statement of the percentage of weight of certain products in each State compared with the total yield in the entire region.

Species.	New York.	New Jersey.	Pennsyl-vania.	Delaware.	Maryland.	Virginia.	Total.
Alewives.....	6.11	5.76	6.50	2.41	48.53	30.09	100.00
Bluefish.....	36.48	47.89	.....	.....	3.42	12.81	100.00
Catfish.....	4.36	4.98	4.92	2.74	48.22	34.78	100.00
Cod	73.03	26.97	.....	.....	.....	.....	100.00
Eels.....	47.99	18.51	1.22	6.04	23.52	2.12	100.00
Flounders.....	57.51	30.38	.....	.19	1.28	4.09	100.00
Menhaden.....	39.94	7.87	.....	.08	11.79	40.37	100.00
Perch, white	2.21	10.40	.82	11.43	59.54	16.10	100.00
Perch, yellow	2.17	23.10	.58	1.08	64.22	7.83	100.00
Sea bass.....	12.26	67.38	17.11	.....	2.04	1.19	100.00
Shad	10.09	33.87	8.92	4.97	20.62	21.53	100.00
Spots and croakers	7.08	8.36	.....	.....	4.78	78.88	100.00
Spanish mackerel .....	.81	4.92	.....	1.90	12.02	70.69	100.00
Squeteague.....	19.41	40.83	.....	7.92	5.11	26.73	100.00
Striped bass.....	8.07	12.07	1.04	4.00	53.33	20.39	100.00
Sturgeon	1.15	17.17	1.99	40.40	2.75	27.45	100.00
Crabs, hard	7.57	4.00	.....	.....	48.29	40.14	100.00
Crabs, soft	1.59	4.92	.....	1.46	82.07	9.96	100.00
Oysters	12.23	10.79	.79	.73	46.59	28.87	100.00
Soft clams or long clams	64.54	35.46	.....	.....	.....	.....	100.00
Onahogs or hard clams	51.95	39.07	.....	.25	1.70	6.42	100.00
All other products	68.83	13.36	.52	2.95	5.13	9.21	100.00
All products	28.04	13.40	1.29	1.80	23.91	31.16	100.00

FISHERIES OF NEW YORK.

General features of the fisheries.—In the value of its fisheries New York ranks second among the States of the Middle Atlantic region and third in the entire country, being surpassed only by Maryland and Massachusetts.

Owing chiefly to the large coastal population, the proximity of the best markets, and the ready demand for nearly all forms of water products, there is probably no State whose fishery resources are more fully utilized than New York. Fishing is systematically prosecuted along all the shores of the State bordering on salt water and is also extensive in the Hudson River.

The fisheries which give special prominence to the State are those for fish and other animals inhabiting the rivers and inshore waters. The vessel fisheries in the open ocean, while very important, are practically restricted to the taking of menhaden with seines and bluefish and cod with lines. Chief among the products are oysters, hard clams, soft clams, scallops, shad, squeteague, and eels in addition to those mentioned.

The products in the value of which New York surpasses the other States of this region are scallops (which are taken only in this State), soft clams, hard clams, lobsters, butter-fish, eels, flounders, menhaden, and scup. In salt water the cultivation and taking of oysters is by far the most prominent branch of the fisheries, while in the fresh waters the capture of shad is the principal fishery.

Statistical summary.—Condensed statistics of the commercial fisheries of New York as they existed in the years 1889, 1890, and 1891 are shown in the following series of tables, relating respectively to the persons employed, the capital invested, and the products.

The fishing population of this State in 1891 was 12,246, an increase of somewhat more than 1,000 as compared with 1889. Vessel fishing engaged the attention of 2,250 persons, shore and boat fishing was participated in by 7,858 persons, shore fishery industries gave employment to 2,042 persons, and the transporting trade was conducted by 96 persons.

The investment in the fisheries of this State in 1891 was \$5,283,200, or \$705,977 more than in the second preceding year, thus compensating for the increase in the fishing population. The details of the investment are shown in the table, which indicates the items in which the changes have occurred during the three years.

In 1891 the yield of the fisheries of this State was 170,885,022 pounds, valued at \$4,817,369. While the quantity of the catch was less than in 1889 or 1890, the value was considerably greater, owing to a larger catch of products with a relatively high valuation per pound.

Persons employed in the fisheries of New York.

How engaged.	1889.	1890.	1891.
In vessel fisheries.....	2,071	2,181	2,250
In shore fisheries.....	7,312	7,740	7,858
On transporting vessels.....	122	116	96
On shore, in factories, etc.....	1,715	1,904	2,042
Total.....	11,220	11,941	12,246

Vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of New York.

Designation.	1889.		1890.		1891.	
	Number.	Value.	Number.	Value.	Number.	Value.
Vessels fishing	605	\$714,437	608	\$760,674	618	\$773,442
Tonnage	8,081	158,451	8,338	164,185	8,496	168,388
Outfit		52,600	49	50,780	41	44,100
Vessels transporting	52	52,600	952		796	
Tonnage	949	7,470		6,580		5,710
Outfit		344,440	6,036	368,050	6,227	373,670
Boats	5,750					
Apparatus—vessel fisheries:						
Purse seines	64	89,250	71	40,975	69	39,850
Trap nets	70	28,625	86	31,750	90	32,350
Lines		7,230		8,225		8,870
Pots, lobster and eel	635	1,540	509	1,140	580	1,385
Dredges, rakes, and tongs		44,144		44,638		43,322
Apparatus—shore fisheries:						
Seines	292	42,790	298	42,135	258	35,790
Gill nets	6,004	98,380	6,056	98,106	6,402	88,450
Fyke nets	6,006	57,023	6,753	59,202	6,246	55,465
Pound nets and trap nets	183	41,350	189	41,950	173	38,990
Lines		2,775		2,780		2,875
Eel pots	14,980	15,191	14,804	15,328	13,508	13,074
Lobster pots	1,704	2,461	1,800	2,419	1,750	2,332
Spears	4,050	4,193	3,945	4,120	3,489	3,728
Dredges	1,165	19,400	1,834	13,090	1,475	15,550
Rakes	3,453	27,229	3,363	26,815	3,397	27,650
Tongs	5,000	20,570	5,313	30,855	5,512	31,820
Forks	1,333	1,378	1,401	1,490	1,475	1,570
Minor apparatus		250		250		250
Scows, floats, etc	651	82,962	698	90,200	752	99,314
Shore property		1,355,081		1,573,580		1,695,655
Cash capital		1,406,000		1,575,500		1,670,000
Total		4,577,223		5,062,717		5,283,200

Products of the fisheries of New York.

Species.	1889.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	2,522,435	\$20,661	2,288,204	\$24,785	2,194,560	\$23,520
Bluefish	5,027,573	219,592	5,739,757	249,504	5,506,575	237,010
Bonito	3,125	250	2,500	200	1,750	150
Butter-fish	365,502	11,570	423,674	13,310	837,246	12,988
Catfish	118,422	0,250	115,915	5,059	117,180	5,144
Cod	1,886,280	75,890	1,938,950	78,595	2,277,458	89,921
Eels	1,745,002	95,964	1,680,083	101,071	1,616,218	97,909
Flounders	1,427,503	41,755	1,575,824	45,005	1,501,696	45,281
Haddock	160,450	4,053	155,720	3,870	147,730	3,800
Kingfish	164,505	11,132	185,997	13,011	157,541	10,792
Mackerel			5,000	400		
Menhaden	115,452,296	298,408	128,736,016	340,958	104,860,114	285,606
Miunows	60,000	090	45,100	750	25,600	480
Mullet	101,610	9,448	182,600	0,033	180,060	7,878
Perch	84,900	5,761	92,061	6,500	88,125	6,320
Pike	7,465	672	8,840	615	8,215	740
Scup	348,316	0,972	388,843	7,326	350,858	7,016
Sea bass	557,841	30,119	750,829	40,972	679,180	35,915
Shad	4,332,532	217,988	3,776,975	190,180	3,044,956	161,209
Sheepshead	20,926	3,347	22,788	8,874	19,523	3,500
Skates	86,432	1,642	98,025	1,873	101,897	2,022
Spanish mackerel	68,490	6,510	70,258	7,040	74,836	7,255
Spots	13,516	0,635	2,654	837	17,501	700
Squettengue	2,802,341	112,356	2,980,711	117,355	2,852,653	111,301
Striped bass	212,430	20,734	207,540	21,046	205,449	21,389
Sturgeon	39,988	1,168	39,336	1,153	30,261	929
Suckers	27,265	1,637	24,069	1,535	25,378	1,546
Tautog	181,746	8,453	170,432	8,255	171,172	7,618
Tomcod	241,980	9,084	308,610	12,215	278,400	10,408
Other fish	265,418	10,230	207,170	10,105	211,391	7,548
Rufuse fish	1,220,430	2,927	1,342,000	8,142	1,118,013	2,733
Crabs, hard	423,138	0,925	430,016	7,470	415,566	7,589
Crabs, soft	108,433	4,750	88,406	3,350	98,500	3,450
Lobsters	124,023	12,780	150,400	14,754	165,093	15,055
Mussels	1,400	67	49,350	1,028	21,000	900
Oysters	14,028,208	2,132,772	16,450,104	2,457,580	18,277,484	2,748,509
Quahogs or hard clams	4,161,164	602,502	4,202,224	607,120	4,524,520	680,021
Soft clams or long clams	1,411,000	100,100	1,580,000	103,370	1,505,500	105,891
Scallops	457,425	62,180	595,890	71,250	318,042	48,340
Squid	38,045	1,557	39,140	1,564	40,830	1,633
Shells	14,944,500	18,800	15,230,700	14,170	16,760,100	15,950
Total	175,930,098	4,181,704	192,470,691	4,002,157	170,885,022	4,817,369

The quantities of oysters, clams, crabs, etc., taken in the fisheries of this State are specified by bushels or number in the following supplementary table:

Products..		1889.	1890.	1891.
Soft clams or long clams	bushels..	141, 100	158, 000	150, 550
Quahogs or hard clams	do....	520, 146	525, 278	565, 565
Oysters.....	do....	2, 089, 744	2, 350, 872	2, 611, 002
Scallops.....	do....	101, 950	132, 420	69, 565
Mussels.....	do....	140	4, 035	2, 100
Shells.....	do....	332, 100	338, 460	372, 580
Crabs, soft.....	number..	325, 299	265, 398	280, 600
Crabs, hard.....	do....	1, 269, 399	1, 290, 048	1, 306, 608

Statistics of the fisheries by counties.—There are in New York six counties bordering on the ocean or on the bays and sounds tributary thereto, in all of which important fishing is carried on; these are Kings, New York, Queens, Richmond, Suffolk, and Westchester. Nine other counties abutting on the Hudson River have fisheries of considerable value; these are Albany, Columbia, Dutchess, Greene, Orange, Putnam, Rensselaer, Rockland, and Ulster. The extent of the fisheries in each of these is shown for the years 1890 and 1891 in the following series of tables.

The use of vessels is restricted to the six counties which border on salt water. Some forms of apparatus are found in every county, and others are operated in only a few localities. Thus gill nets, fyke nets, and eel pots are means of capture in every county except New York; while pound nets and traps are operated only in three counties on Long Island.

The preponderating importance of the fishing industry of Suffolk County is clearly brought out in the tables. Here, in 1891, 5,201 persons were employed in the fisheries, \$1,787,444 was invested, 120,737,349 pounds of products were taken, and the value of the catch was \$1,536,649. On comparing these figures with the total for the State, it appears that this county represents about 43 per cent of the fishing population, 34 per cent of the investment, and 32 per cent of the value of the industry.

Next to Suffolk County in importance are Queens, Kings, Richmond, Westchester, and New York counties, in the order named, in all of which the oyster is of prime importance, followed by the other products which give prominence to the salt-water fisheries of the State, as menhaden, bluefish, clams, etc. The counties maintaining the most extensive fisheries in the Hudson River are Dutchess, Ulster, Rockland, and Orange. The principal kinds of apparatus there used are seines, gill nets, and fyke nets, and the bulk of the catch consists of shad, alewives, and catfish.

Statement by counties of the number of persons employed in the fisheries of New York.

Counties.	In vessel fisheries.		In shore fisheries.		On transporting vessels.		On shore, in factories, etc.		Total.	
	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.
Albany			65	64					65	64
Columbia			133	131					133	131
Dutchess			301	297					301	297
Greene			122	118					122	118
Kings	234	231	451	510	16	12	178	198	879	955
New York	112	115			9	9	705	887	916	1,011
Orange			124	113					124	113
Putnam			35	30					35	30
Queens	296	310	1, 061	2, 024	47	37	141	158	2, 445	2, 520
Rensselaer			64	62					64	62
Richmond	310	314	406	440	44	88			780	792
Rockland			146	143					146	143
Suffolk	1, 155	1, 209	3, 175	3, 188			700	804	5, 120	5, 201
Ulster			199	180					199	186
Westchester	74	71	558	543					632	614
Total	2, 181	2, 250	7, 740	7, 858	116	96	1, 904	2, 042	11, 941	12, 246

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of New York.

Designation.	Albany.				Columbia.				Dutchess.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Boats.....	15	\$565	15	\$485	54	\$2,245	55	\$2,150	163	\$9,240	158	\$8,715
Apparatus:												
Seines.....	10	1,025	7	775	16	1,470	14	1,220	9	1,900	7	1,000
Gill nets.....	245	426	255	448	290	2,594	301	2,375	518	12,440	533	11,656
Fyke nets.....	285	1,345	295	1,565	68	480	71	495	136	710	136	840
Eel pots.....	26	26	23	23	29	34	30	35	22	25	28	28
Scows, floats, etc.....	6	639	6	630	9	108	8	96	55	1,636	54	1,624
Shore property.....		570		453		1,113		1,232		2,060		1,935
Total.....		4,536		4,388		8,044		7,603		28,011		26,398
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Designation.	Orange.				Putnam.				Queens.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing									110	\$81,520	116	\$82,220
Tonnage.....									1,102		1,120	
Outfit.....										14,875		14,500
Vessels transporting									10	20,300	15	16,500
Tonnage.....									417		330	
Outfit.....										1,000		1,500
Boats.....	64	\$3,055	60	\$3,005	16	\$815	13	\$580	2,069	109,260	2,155	110,035
Apparatus—vessel fisheries:												
Dredges, rakes, and tongs.....												
Apparatus—shore fisheries:												
Seines.....									60	9,095	60	7,245
Gill nets.....	278	5,943	287	5,505	142	1,418	136	1,200	48	4,350	41	3,380
Fyke nets.....	167	1,006	156	933	21	100	17	102	275	2,825	213	2,340
Pound nets.....									5	1,000	4	800
Lines.....										225		210
Eel pots	33	41	31	35	13	13	13	13	3,265	3,418	2,910	3,053
Lobster pots.....									100	149	81	121
Spears.....									1,645	1,650	1,595	1,620
Dredges.....									545	5,900	600	6,500
Rakes.....									1,060	9,385	1,187	10,480
Tongs.....									1,575	9,120	1,605	9,440
Forks.....									500	544	543	593
Scows, floats, etc.....									243	33,100	240	35,000
Shore property.....		1,150		975		125		125		40,000		44,400
Cash capital.....										105,000		110,000
Total.....		11,195		10,513		2,480		2,110		462,980		468,458
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Designation.	Rensselaer.				Richmond.				Rockland.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing					119	\$126,075	118	\$125,850				
Tonnage.....					1,528		1,529					
Outfit.....						17,850		17,700				
Vessels transporting					18	19,700	16	17,900				
Tonnage.....					970		334					
Outfit.....						1,800		1,000				
Boats.....	18	\$705	10	\$715	398	30,000	433	42,500	113	\$4,900	113	\$4,925
Apparatus—vessel fisheries:												
Lines.....						580		490				
Pots (lobster).....					390	900	440	1,050				
Dredges, rakes, and tongs.....						10,600		9,434				
Apparatus—shore fisheries:												
Seines.....	7	775	6	710	3	525	3	525				
Gill nets.....	275	480	253	444	252	1,200	240	1,200	847	4,505	745	4,050
Fyke nets.....	174	925	161	885	218	2,180	215	2,150	115	1,400	125	1,525
Lines.....						120		125				
Eel pots	27	27	20	20	350	350	335	335	48	48	43	43
Lobster pots.....					680	680	720	720				
Rakes.....					380	8,800	400	4,000				
Tongs.....					390	3,250	430	3,440				
Forks.....					95	35	30	30				
Scows, floats, etc.....	3	235	3	235	59	7,000	59	7,000				
Shore property.....		633		408		11,700		11,700		300		275
Total.....		3,770		3,477		248,305		247,749		11,303		10,218

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of New York—Continued.

Designation.	Greene.				Kings.				New York.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing					63	\$84,200	61	\$81,850	20	\$64,429	29	\$64,150
Tonnage			896		889		548		548		20,100	
Outfit					14,875		14,625				21,500	
Vessels transporting					8	7,500	6	6,500	4	3,280	4	3,200
Tonnage			100		73		60		60		60	
Outfit					880		660				2,000	
Boats	39	\$2,005	38	\$1,995	691	33,180	746	36,150				
Apparatus—vessel fisheries:												
Purse seines					11	7,600	11	7,900				
Lines						565		970			2,400	
Pots (lobster and eel)					95	200	140	335	24	40		
Dredges, rakes, and tongs							2,855		2,610		1,020	
Apparatus—shore fisheries:												
Seines	18	2,675	15	2,500								
Gill nets	310	1,918	338	1,884	153	10,170	151	10,200				
Fyke nets	52	290	52	290	218	1,962	205	1,860				
Pound nets					6	2,100	6	2,000				
Lines						225		215				
Eel pots	24	24	20	20	525	525	485	485				
Lobster pots					200	520	250	500				
Spears					310	285	225	210				
Dredges					475	4,750	540	5,400				
Rakes					175	1,050	175	1,050				
Tongs					650	4,550	775	5,425				
Forks					115	135	115	135				
Scows, floats, etc	10	120	9	108	85	12,250	112	16,100				
Shore property		751		664		36,500		38,500			1,085,000	
Cash capital						62,000		70,000			987,000	
Total		7,783		7,461		288,877		303,080			2,146,160	
												2,308,125
Designation.	Suffolk.				Ulster.				Westchester.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	249	\$394,200	266	\$401,522					29	\$18,350	28	\$17,850
Tonnage	4,000	4,166							258		240	
Outfit		93,585		97,363						2,900		2,700
Boats	1,933	133,175	1,950	133,120	95	\$4,065	97	\$4,225	368	25,720	360	25,670
Apparatus—vessel fisheries:												
Purse seines	60	33,375	58	31,950								
Trap nets	86	31,750	90	32,350								
Lines		4,080		5,070								
Dredges, rakes, and tongs		18,512		18,602						2,251		2,170
Apparatus—shore fisheries:												
Seines	151	22,425	124	19,165	12	1,105	9	1,000	3	1,050	3	1,050
Gill nets	848	27,195	785	23,815	420	6,070	390	5,608	2,015	17,337	1,945	16,535
Fyke nets	4,840	43,010	4,430	40,515	89	485	72	400	95	1,575	98	1,505
Pound nets	178	38,850	163	30,180								
Lines		2,100		2,220						110		105
Eel pots	10,237	10,409	9,329	9,279	45	48	41	45	250	250	260	260
Lobster pots	645	840	580	771					115	230	110	220
Spears	1,070	2,155	1,654	1,875					20	30	15	23
Dredges	239	2,590	275	3,050					75	750	60	600
Rakes	1,438	9,790	1,360	9,465					310	2,700	295	2,655
Tongs	2,438	12,115	2,477	11,940					260	1,820	225	1,575
Forks	711	736	757	782					40	40	30	30
Minor apparatus		250	250	250								
Scows, floats, etc	171	25,800	195	29,200	6	72	6	72	51	9,240	51	9,240
Shore property		390,850		402,950		1,778		1,728		250		250
Cash capital		441,500		476,000								
Total		1,740,852		1,787,444		13,713		13,078		84,693		82,498

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of New York—Continued.

Designation.	Total for State.				Designation.	Total for State.				
	1890.		1891.			1890.		1891.		
	No.	Value.	No.	Value.		No.	Value.	No.	Value.	
Vessels fishing	608	\$760,674	618	\$773,442	Apparatus—shore fish- eries—Continued.					
Tonnage	8,338	8,490			Fyke nets	6,753	\$59,202	6,246	\$55,405	
Outfit			104,185	108,388	Pound nets	189	41,950	173	38,980	
Vessels transporting	49	50,780	41	44,100	Lines		2,780		2,875	
Tonnage	952	796			Eel pots	14,894	15,328	13,568	13,674	
Outfit			6,580	5,710	Lobster pots	1,800	2,419	1,750	2,322	
Boats	6,036	308,050	6,227	373,670	Spears	3,945	4,120	3,489	3,728	
Apparatus—vessel fish- eries:					Dredges	1,334	13,990	1,475	15,550	
Purse seines	71	40,975	69	39,850	Rakes	3,363	26,815	3,397	27,050	
Trap nets	86	31,750	90	32,350	Tongs	5,313	30,855	5,512	31,820	
Lines			8,225	8,870	Forks	1,401	1,490	1,475	1,570	
Pots (lobster and eel)	509	1,140	580	1,385	Minor apparatus		250		250	
Dredges, rakes, and tongs			44,638	43,322	Scows, floats, etc	698	90,200	752	99,314	
Apparatus—shore fish- eries:					Shore property		1,573,580		1,695,855	
Seines	208	42,135	258	35,790	Cash capital		1,575,500		1,679,000	
Gill nets	6,656	96,106	6,402	88,450	Total		5,002,717		5,283,200	

Statement by counties and species of the yield of the fisheries of New York.

Species.	Albany.				Columbia.				Dutchess.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	120,700	\$1,530	121,366	\$1,537	230,000	\$8,122	188,440	\$2,133	154,038	\$1,950	146,933	\$1,904
Catfish	7,453	385	7,855	400	10,578	560	10,530	554	5,742	286	6,100	305
Eels	780	55	825	58	940	56	950	57	675	47	725	51
Perch	5,542	402	5,015	492	9,736	666	9,180	613	3,488	285	3,890	303
Shad	3,300	165	1,600	80	70,400	3,480	49,500	2,485	650,000	32,980	287,800	20,300
Striped bass	4,118	494	8,500	420	1,419	170	1,330	160	1,863	223	1,815	218
Sturgeon	250	10	150	6	1,050	42	980	39	1,460	58	1,375	55
Suckers	4,067	235	4,120	238	2,228	139	2,558	165	2,021	167	2,780	178
Other fish	4,282	285	4,095	268	5,082	187	5,915	212	1,767	122	2,660	161
Total	150,492	3,030	140,426	3,405	332,033	8,422	249,383	6,418	831,249	30,118	454,078	23,565

Species.	Greene.				King.				New York.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	336,233	\$4,324	328,633	\$4,296	219,570	\$8,820	94,500	\$5,050	431,000	\$22,120	409,000	\$19,160
Bluefish					5,000	200	12,500	500				
Butter-fish					14,474	572	13,120	520				
Catfish	5,178	282	5,167	283	172,200	7,302	167,507	7,510	437,500	15,910	458,670	16,085
Cod					91,328	6,160	78,141	5,105	6,000	500		
Eels	675	41	575	35	26,156	924	28,040	1,038				
Flounders									94,000	1,700	87,000	1,650
Haddock					5,000	400						
Mackerel					21,960,000	65,880	22,380,000	70,870				
Menhaden					5,246	196	4,460	170				
Perch	6,287	482	6,312	484	500	30	500	30	155,000	6,400	142,500	6,280
Sea bass					13,089	789	13,180	713				
Shad	56,500	2,825	42,800	2,140	106,504	8,672	147,360	7,660				
Squettengue					5,320	693	4,020	617				
Striped bass	1,828	222	1,725	194								
Suckers	1,760	116	1,730	114	1,430	73	1,130	60				
Tautog					800	36	1,230	50				
Tomcod					12,665	410	12,093	435				
Other fish	4,669	181	4,271	139	6,020	625	5,730	573				
Lobsters					118,416	2,475	65,400	2,229				
Crabs, hard					33,466	1,000	40,166	1,750				
Crabs, soft					3,380,845	630,435	3,781,120	725,860	859,250	120,350	890,750	126,265
Oysters					127,030	11,460	117,000	10,581				
Soft clams					349,600	43,702	385,800	48,553	25,840	2,960	24,640	29810
Quahogs					42,000	1,700	21,000	900				
Mussels												
Total	413,130	8,473	391,213	7,625	26,764,180	799,229	27,395,497	800,773	2,008,500	169,940	2,012,500	172,250

Statement by counties and species of the yield of the fisheries of New York—Continued.

Species.	Orange.				Putnam.				Queens.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives									206,667	\$1,550	163,333	\$1,225
Bluefish									609,208	29,278	530,145	24,687
Catfish	5,157	\$257	4,820	\$241	1,865	\$82	2,050	\$102	12,998	444	12,955	460
Cod									82,000	3,800	68,750	3,350
Eels	1,150	80	1,080	75	375	26	575	40	429,303	25,931	422,120	25,514
Flounders									166,047	6,970	143,472	6,000
Kingfish									63,903	4,439	58,247	3,734
Mullet									40,600	1,933	37,560	1,778
Perch	3,249	283	3,035	277	1,552	124	1,685	142	9,320	475	9,000	452
Sea bass									69,360	5,890	59,434	3,250
Shad	259,600	12,980	149,200	7,460	55,100	2,755	31,156	1,558	29,925	1,859	27,285	1,704
Spanish mack'l.									20,471	1,433	17,605	1,231
Squeteague									361,516	20,774	309,056	18,083
Striped bass	1,161	140	1,070	130	1,023	123	925	111	57,403	4,279	49,789	4,002
Sturgeon	975	39	1,050	42	835	33	925	37				
Suckers	2,119	135	2,050	132	980	67	850	56				
Tautog									44,600	2,652	39,755	2,182
Tomcod or frost-fish									70,880	3,246	68,090	2,749
Other fish	1,700	119	1,775	121	1,527	129	1,800	107	45,440	1,900	18,721	692
Lobsters									6,320		4,840	485
Oysters									4,511,619	735,804	4,036,135	745,944
Soft clams									500,000	33,770	553,000	37,785
Quahogs									1,829,184	282,599	2,084,280	321,215
Mussels									7,350	228		
Total	275,111	14,033	164,080	8,478	63,262	3,349	39,466	2,153	9,174,202	1,109,937	9,314,172	1,207,237
Species.	Suffolk.				Ulster.				Westchester.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
Alewives	837,451	\$7,157	828,323	\$6,923	172,233	\$2,201	177,233	\$2,260	115,267	\$1,470	150,166	\$1,914
Bluefish	4,199,979	176,570	4,202,930	175,903								
Bonito	2,500	200	1,750	150								
Butter-fish	418,674	13,110	824,746	12,488								
Catfish	16,225	392	17,610	453	7,206	379	7,313	384	6,840	346	7,730	388
Cod	1,178,350	48,743	1,420,531	56,716								
Eels	1,081,427	62,695	1,047,720	61,924	975	58	875	52	36,000	3,600	33,500	3,350
Flounders	1,340,526	35,092	1,351,039	36,327					34,470	1,710	31,365	1,495
Haddock	44,320	1,770	44,230	1,815								
Kingfish	122,004	8,572	99,294	7,058								
Menhaden	106,776,016	275,078	82,480,114	224,735								
Minnows	45,100	750	25,600	480								
Mullet	142,000	7,100	122,500	6,100								
Perch	14,300	1,040	12,500	984	5,109	330	5,076	404	15,275	1,198	14,285	1,110
Scup	368,843	7,326	350,858	7,016								
Sea bass	515,969	28,203	476,746	26,349								
Shad	113,524	6,205	98,095	7,094	369,000	18,450	252,020	12,585	1,046,150	32,308	1,595,600	79,780
Sheepshead	22,788	3,874	19,523	3,500								
Skates	98,025	1,873	101,897	2,022								
Spanish mackerel	55,787	5,607	57,231	6,024								
Spot	20,954	837	17,501	700								
Squeteague	2,409,501	89,748	2,440,497	88,010								
Striped bass	84,108	8,968	93,392	9,442	1,555	186	1,685	202	25,115	3,013	20,580	2,460
Sturgeon	29,801	773	21,001	559	1,250	50	1,050	42	1,550	62	1,600	64
Suckers					1,847	132	2,000	144	3,040	136	3,340	148
Tautog	117,687	4,750	117,247	4,726					12,300	610	10,040	500
Tomcod or frost-fish	198,028	7,025	168,280	5,794					36,802	1,840	37,000	1,775
Other fish	176,166	6,285	148,080	5,123	2,329	102	3,061	170	4,307	241	4,180	219
Refuse fish	1,342,090	3,142	1,118,913	2,733					12,000	1,500	10,000	1,250
Lobsters	27,588	2,046	24,498	2,435								
Crabs, hard	811,000	4,995	850,166	5,300								
Crabs, soft	55,000	1,750	53,334	1,700								
Oysters	2,671,515	370,458	3,310,615	400,740					1,085,000	123,500	980,000	112,000
Soft clams	848,000	50,240	757,500	51,895					40,000	4,000	25,000	2,500
Quahogs	1,372,200	186,388	1,413,200	187,448					388,000	62,250	368,000	59,000
Scallops	595,890	71,250	313,042	48,340								
Squid	39,140	1,504	40,836	1,033								
Shells	15,230,700	14,170	16,766,100	15,950								
Total	143,014,436	1,516,346	120,737,349	1,536,640	561,504	21,948	450,313	16,243	3,462,200	287,784	3,202,366	267,062

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties and species of the yield of the fisheries of New York—Continued.

Species.	Rensselaer.				Richmond.				Rockland.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	108,700	\$1,385	103,733	\$1,314	6,920	\$87	6,400	\$80	.....	.....	.....	.....
Bluefish.....	280,000	12,710	270,000	12,210	.....	.....	.....	.....	.....	.....	.....	.....
Catfish.....	9,720	517	8,820	518	8,475	348	8,510	350	3,986	\$190	3,600	\$180
Cod.....	.....	.....	.....	.....	88,000	2,780	162,000	6,260	.....	.....	.....	.....
Eels.....	850	59	750	53	27,320	1,597	26,163	1,530	2,285	160	2,214	155
Flounders.....	.....	.....	.....	.....	8,625	300	7,780	275	.....	.....	.....	.....
Haddock.....	.....	.....	.....	.....	17,400	400	16,500	425	.....	.....	.....	.....
Perch.....	5,072	427	5,265	448	4,765	220	4,762	221	3,120	261	2,760	229
Sea bass.....	.....	.....	.....	.....	10,000	440	.....	.....	.....	.....	.....	.....
Shad.....	.....	.....	.....	.....	58,792	3,075	77,680	3,095	288,520	14,426	285,550	14,278
Squeteague.....	.....	.....	.....	.....	114,945	6,050	89,920	4,495	.....	.....	.....	.....
Striped bass.....	8,489	418	8,885	460	16,302	1,780	18,458	2,005	2,831	337	2,425	299
Sturgeon.....	250	10	180	7	.....	.....	.....	.....	1,915	76	1,050	78
Suckers.....	3,351	216	3,425	218	.....	.....	.....	.....	2,956	102	2,525	102
Tautog.....	.....	.....	.....	.....	3,415	170	3,000	150	.....	.....	.....	.....
Tomcod.....	.....	.....	.....	.....	2,130	68	3,200	100	.....	.....	.....	.....
Other fish.....	6,204	384	6,105	394	5,750	180	5,415	157	1,432	96	1,265	90
Lobsters.....	.....	.....	.....	.....	97,572	9,408	120,025	10,910	.....	.....	.....	.....
Oysters.....	.....	.....	.....	.....	3,041,875	471,042	4,673,814	577,700	.....	.....	.....	.....
Soft clams.....	.....	.....	.....	.....	65,000	3,900	53,000	3,180	.....	.....	.....	.....
Quahogs.....	.....	.....	.....	.....	237,400	29,230	248,000	31,595	.....	.....	.....	.....
Total.....	137,046	3,416	133,203	3,412	4,975,586	543,785	5,790,027	655,638	307,055	15,747	302,289	15,471

SUMMARY.

Species.	1890.		1891.		Species.	1890.		1891.	
	Lbs.	Value.	Lbs.	Value.		Lbs.	Value.	Lbs.	Value.
Alewives.....	2,288,204	\$24,785	2,194,500	\$23,526	Squeteague.....	2,989,711	\$117,355	2,852,653	\$111,301
Bluefish.....	5,739,757	240,504	5,506,575	237,010	Striped bass.....	207,540	21,046	205,449	21,389
Bonito.....	2,500	200	1,750	150	Sturgeon.....	39,336	1,153	30,261	929
Butter-fish.....	423,074	13,310	837,246	12,988	Suckers.....	24,960	1,535	25,378	1,545
Catfish.....	115,915	5,059	117,180	5,144	Tautog.....	179,432	8,255	171,172	7,618
Codfish.....	1,938,950	78,505	2,277,458	89,021	Tomcod or frostfish.....	308,640	12,215	278,400	10,468
Eels.....	1,680,083	101,071	1,616,213	97,999	Other fish.....	274,010	10,720	219,006	8,288
Flounders.....	1,575,824	45,005	1,561,096	45,231	Refuse fish.....	1,342,000	3,142	1,118,913	2,733
Haddock.....	155,720	3,870	147,730	3,890	Lobsters.....	150,400	14,754	165,093	15,655
Kingfish.....	185,997	13,011	157,541	10,792	Crabs, hard.....	430,016	7,470	435,566	7,589
Mackerel.....	5,000	400	.....	.....	Crabs, soft.....	88,468	9,359	93,500	3,480
Menhaden.....	128,736,010	340,958	104,860,114	295,005	Oysters.....	16,456,104	2,457,589	18,277,434	2,748,509
Minnows.....	45,100	750	25,000	480	Soft clams or long clams.....	1,580,000	103,370	1,505,500	105,891
Mullet.....	182,600	9,033	180,060	7,878	Quahogs or hard clams.....	4,202,224	607,129	4,524,520	650,621
Perch.....	92,061	6,509	88,125	6,329	Scallops.....	585,890	71,250	313,042	48,340
Scup.....	308,843	7,326	350,858	7,016	Squid.....	39,140	1,564	40,830	1,633
Sea bass.....	750,829	40,072	679,180	35,915	Mussels.....	49,350	1,928	21,000	000
Shad.....	3,770,975	190,180	3,044,956	161,209	Shells.....	15,230,700	14,170	16,766,100	15,950
Sheepshead.....	22,788	3,874	19,523	3,500	Total	192,470,691	4,602,157	170,885,022	4,817,389
Skates.....	98,625	1,873	101,897	2,022					
Spanish mackerel.....	76,258	7,040	74,836	7,255					
Spot.....	20,954	837	17,501	700					

Statistics of the products by each form of apparatus.—In preceding tables the importance of each principal form of apparatus employed in the fisheries of this State has been shown. In the following tables the details of the quantity and value of the products taken with the various appliances are given for each county, the vessel fisheries and the shore fisheries being separately indicated.

Much the larger part of the vessel fishing is done with dredges, rakes, and tongs for oysters, clams, scallops, mussels, and shells, and in Queens and Westchester counties vessels are only used for those products. In Kings, New York, Richmond, and Suffolk counties there is additional vessel fishing with seines, lines, trap nets, and pots for menhaden, bluefish, cod, haddock, sea bass, lobsters, etc. The value of the vessel fisheries of the State in 1891 was \$1,965,228, of which sum \$1,352,769 represented shellfish. Seines are employed for menhaden in Kings and Suffolk counties, taking 99,057,690 pounds of fish in 1891, having a value of \$288,123. Lines

are extensively used in all but two counties, chiefly for bluefish, cod, haddock, and sea bass. The catch in 1891 was 5,660,870 pounds, worth \$228,263. Eels are taken with pots in Kings County, and lobsters with the same means in Richmond County. A vessel fishery of great interest and value is that carried on from Suffolk County with trap nets, which are operated in a manner entirely similar to that in which gill nets or other nets are used from vessels. The nets, to the number of 90 in 1891, are set at the eastern end of Long Island, and take large quantities of all the fish common to those waters, the principal part of the catch consisting of squeteague, bluefish, butter-fish, flounders, scup, sea bass, and menhaden. The yield in 1891 was 7,200,080 pounds, valued at \$84,413.

The yield of the shore fisheries in 1891 was 32,030,141 pounds, having a value of \$2,852,141. The catch of the various mollusks and crustaceans was 15,191,386 pounds, worth \$2,234,241. Considering the output of fish, it appears that gill nets take the largest quantities and give the greatest money returns of all the forms of apparatus employed. The fishes thus obtained which are caught in largest quantities are the shad, bluefish, squeteague, and alewives. The aggregate gill-net catch was 4,953,280 pounds, valued at \$222,014. The quantity and value of the seine yield come next; 4,130,684 pounds, worth \$157,828, were secured in this kind of apparatus. The species which enter most conspicuously into the seine fishery are alewives, bluefish, kingfish, mullet, sea bass, shad, squeteague, and tomcod, the most important being bluefish and squeteague. Pound nets took 2,742,412 pounds in 1891 and 3,228,198 pounds in 1890, valued, respectively, at \$40,849 and \$43,829; squeteague is the most prominent fish thus taken, although the menhaden is caught in larger quantities. Fyke nets yield larger money returns than pound nets, but the catch is smaller. Flounders constitute the largest and most valuable part of the output. The fyke-net yield was 2,382,882 pounds, worth \$48,903. The catch of eels with pots is very large, 957,331 pounds, valued at \$58,441, being secured in 1891. Spears took eels to the value of \$32,123, and flounders worth \$9,026. The line catch was 995,735 pounds of bluefish, cod, squeteague, etc., valued at \$48,716.

Statement by counties, apparatus, and species of the yield of the vessel fisheries of New York.

Apparatus and species.	Kings.				New York.			
	1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:								
Menhaden	21,960,000	\$65,880	22,380,000	\$70,870				
Lines:								
Bluefish	196,950	7,695	88,000	4,625	431,000	\$22,120	409,000	\$19,100
Cod	164,500	6,900	158,340	6,000	437,500	15,910	458,670	16,085
Haddock					84,000	1,700	87,000	1,050
Mackerel	5,000	400						
Sea bass	500	30	500	30	155,000	6,400	142,500	6,280
Tautog	300	15	300	15				
Total	367,250	15,040	245,140	11,630	1,117,500	46,130	1,097,170	43,175
Pots:								
Eels	25,700	2,825	17,700	1,500	6,000	500		
Tongs, rakes, and dredges:								
Oysters	828,345	119,685	720,120	111,540	859,250	120,350	890,750	126,265
Quahogs or hard clams	81,200	9,890	60,200	8,735	25,840	2,060	24,640	2,810
Mussels	42,000	1,700	21,000	900				
Total	951,545	131,275	810,320	121,175	885,080	123,310	915,300	120,075
Grand total	23,304,495	214,520	23,462,100	205,235	2,008,590	169,940	2,012,560	172,250

Statement by counties, apparatus, and species of the yield of the vessel fisheries of New York—Continued.

Apparatus and species.	Queens.				Richmond.			
	1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:								
Bluefish.....					280,000	\$12,710	270,000	\$12,210
Cod.....					68,900	2,780	162,000	6,260
Haddock.....					17,400	400	16,500	425
Sea bass.....					10,000	440		
Total.....					376,300	16,330	448,500	18,895
Pots:								
Lobsters.....					88,312	8,520	111,875	10,100
Tongs, rakes, and dredges:								
Oysters.....	1,591,210	\$225,024	1,612,065	\$221,004	3,101,175	368,322	3,720,814	452,450
Quahogs or hard clams.....	292,544	46,324	290,820	46,435	163,800	17,730	180,600	20,970
Total.....	1,891,113	272,176	1,911,385	268,039	3,264,975	386,052	3,907,414	473,420
Grand total.....	1,891,113	272,176	1,911,385	268,039	3,720,587	410,902	4,467,789	502,415
 Suffolk.								
Apparatus and species.	1890.				1891.			
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:								
Menhaden.....	100,172,100	\$287,125	70,677,690	\$217,253				
Lines:								
Bluefish.....	2,295,400	91,816	2,501,350	100,054				
Cod.....	1,019,175	41,831	1,281,300	50,652				
Haddock.....	30,800	1,432	32,910	1,532				
Sea bass.....	59,237	2,360	54,500	2,325				
Total.....	3,404,612	137,448	3,870,000	154,563				
Trap nets:								
Alewives.....	23,021	414	20,305	380				
Bluefish.....	117,006	4,564	104,800	4,194				
Butter-fish.....	203,368	8,091	550,249	8,388				
Eels.....	58,076	2,690	54,006	2,520				
Flounders and flatfish.....	105,082	2,805	151,312	2,268				
Kingfish.....	10,440	1,588	8,763	1,815				
Menhaden.....	4,238,264	5,084	3,849,440	4,804				
Scup.....	233,800	4,676	223,440	4,408				
Sea bass.....	106,960	5,348	101,144	5,107				
Shad.....	6,160	616	4,732	504				
Sheepshead.....	16,180	2,744	14,056	2,520				
Skate.....	69,848	1,927	73,300	1,456				
Spanish mackerel.....	7,369	1,700	7,317	1,954				
Spot.....	14,840	593	12,000	504				
Squeteague.....	1,105,440	83,163	1,110,110	83,303				
Striped bass.....	34,115	4,435	32,048	4,244				
Sturgeon.....	21,108	548	15,120	403				
Tautog.....	47,460	1,898	52,500	2,100				
Other fish.....	41,732	856	37,070	779				
Refuse fish.....	883,899	2,044	734,884	1,774				
Lobsters.....	4,071	313	3,264	252				
Squid.....	27,720	1,108	29,400	1,176				
Total.....	7,496,445	87,203	7,200,080	84,413				
Tongs, rakes, and dredges:								
Oysters.....	1,382,465	190,508	1,507,015	218,090	455,000	\$58,500	420,000	\$54,000
Quahogs or hard clams.....	89,600	11,688	109,000	14,080	52,000	9,750	48,000	9,000
Scallops.....	595,890	71,250	813,042	48,340				
Shells.....	15,230,700	14,170	16,706,100	15,950				
Total.....	17,298,655	287,010	18,785,157	208,000	507,000	88,250	468,000	63,000
Grand total.....	128,971,812	779,452	106,532,987	764,289	507,000	68,250	468,000	63,000

Statement by counties, apparatus, and species of the yield of the vessel fisheries of New York—Continued.

Apparatus and species.	Total for State.				Apparatus and species.	Total for State.				
	1890.		1891.			1890.		1891.		
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.	Pounds.	Value.	
Trap nets:										
Alewives	23,021	\$414	20,305	\$380	Lines:	3,203,350	\$134,341	3,266,350	\$136,040	
Bluefish.....	117,006	4,564	104,860	4,194	Cod.....	1,690,075	67,421	2,060,310	79,957	
Butter-fish.....	263,368	8,891	550,249	8,388	Haddock.....	142,200	3,552	136,410	3,807	
Eels.....	58,676	2,699	54,066	2,520	Mackerel.....	5,000	400	.....	.....
Flounders.....	165,032	2,805	151,312	2,268	Sea bass.....	224,737	9,239	197,500	8,635	
Kingfish.....	10,449	1,568	8,763	1,315	Tautog.....	300	15	300	15	
Menhaden.....	4,238,264	5,084	3,849,440	4,804	Total	5,265,662	214,948	5,000,870	228,263	
Scup.....	233,800	4,076	223,440	4,468	.....	.....	.....	.....	.....
Sea bass.....	106,960	5,348	101,144	5,107	.....	.....	.....	.....	.....
Shad.....	6,160	616	4,732	504	.....	.....	.....	.....	.....
Sheepshead.....	16,139	2,744	14,056	2,520	Pots:	.....	.....	.....	.....
Skate.....	69,848	1,327	73,360	1,456	Eels.....	31,700	2,825	17,700	1,560	
Spanish mackerel.....	7,369	1,769	7,817	1,954	Lobsters.....	88,312	8,520	111,875	10,100	
Spot.....	14,840	593	12,600	504	Total	120,012	11,345	129,575	11,660	
Squeteague.....	1,105,440	33,103	1,110,110	33,303	.....	.....	.....	.....	.....
Striped bass.....	34,115	4,435	32,648	4,244	Tongs, rakes, and dredges:	.....	.....	.....	.....
Sturgeon.....	21,106	548	15,120	403	Oysters.....	8,217,454	1,082,989	8,975,764	1,185,549	
Tautog.....	47,460	1,898	52,500	2,100	Quahogs.....	704,984	98,342	730,760	102,080	
Other fish.....	41,732	856	37,070	779	Scallops.....	595,890	71,250	313,042	48,340	
Refuse fish.....	883,860	2,044	734,884	1,774	Shells.....	15,230,700	14,170	10,766,100	15,950	
Lobsters.....	4,071	313	3,264	252	Mussels.....	40,350	1,928	21,000	900	
Squid.....	27,720	1,108	20,400	1,176	Total	24,708,378	1,208,679	26,800,668	1,352,769	
Total	7,406,445	87,263	7,200,080	84,413	Grand total.	150,812,597	1,915,210	138,854,881	1,065,228	
Seines:										
Menhaden	122,132,100	333,005	90,057,600	288,123						

Statement by counties, apparatus, and species of the yield of the shore fisheries of New York.

Apparatus and species.	Albany.				Columbia.				Dutchess.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	120,700	\$1,539	121,366	\$1,537	207,833	\$2,820	149,433	\$1,880	154,033	\$1,950	146,933	\$1,904
Catfish.....	1,250	75	1,325	79	4,550	273	4,250	255	2,250	112	2,500	125
Perch.....	1,500	120	1,600	128	5,150	283	4,980	209	980	59	1,500	90
Shad.....	3,300	165	1,600	80	38,300	1,875	26,800	1,350	93,200	4,600	33,600	1,680
Striped bass.....	1,800	216	1,200	144	4,000	79	4,145	101	770	29	1,500	60
Other fish.....	2,250	110	2,275	112	.....	.....	.....	.....	.....	.....	.....	.....
Total	130,800	2,225	129,366	2,080	250,833	5,339	180,008	3,864	251,233	6,810	186,033	3,859
Gill nets:												
Alewives .....	.....	.....	.....	.....	22,167	203	19,007	244	.....	.....	.....	.....
Perch.....	2,570	225	2,765	240	1,850	161	1,350	112	1,175	120	1,015	103
Shad.....	.....	.....	.....	.....	32,100	1,605	22,700	1,135	566,400	28,320	254,200	18,710
Striped bass.....	2,200	264	2,175	201	1,175	141	1,075	129	1,800	216	1,750	210
Surgeon.....	250	10	150	6	1,050	42	980	39	1,460	58	1,375	55
Suckers.....	875	70	760	60	975	54	940	70	875	70	980	78
Other fish.....	1,880	173	1,600	153	1,375	93	1,450	95	915	80	1,075	96
Total	7,775	742	7,510	720	60,392	2,380	47,502	1,830	572,625	28,873	200,395	19,252
Fyke nets:												
Catfish.....	6,203	310	6,530	327	6,028	287	6,280	299	3,402	174	3,600	180
Perch.....	1,472	117	1,550	124	2,736	222	2,850	232	1,333	106	1,375	110
Striped bass.....	118	14	125	15	244	29	255	31	63	7	65	8
Suckers.....	3,192	165	3,360	168	1,553	85	1,618	89	1,740	97	1,800	100
Other fish.....	152	2	160	3	307	15	320	16	82	4	85	5
Total	11,137	608	11,725	637	10,804	638	11,323	667	6,716	388	6,925	403
Pots:												
Eels	780	55	825	58	940	56	950	57	675	47	725	51
Grand total.	150,492	3,630	149,426	3,495	332,033	8,422	249,389	6,418	831,240	30,118	454,078	28,565

Statement by counties, apparatus, and species of the yield of the shore fisheries of New York—Continued.

Apparatus and species.	Greene.				Kings.				Orange.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	286,233	\$3,687	275,133	\$3,562								
Catfish	2,318	139	2,417	145								
Perch	2,987	170	3,112	187								
Shad	41,600	2,080	33,600	1,680								
Other fish	2,095	82	2,671	78								
Total	335,833	6,167	316,933	5,652								
Gill nets:												
Alewives	50,000	637	53,500	674								
Perch	2,130	210	2,075	207								
Shad	14,900	745	9,200	460	130,000	\$6,500	118,000	\$5,900	259,600	12,980	140,200	7,460
Striped bass	1,750	210	1,650	185					1,060	127	975	117
Sturgeon										975	39	1,050
Suckers	980	78	950	76					675	54	700	56
Other fish	1,870	93	1,500	55					1,540	111	1,025	113
Total	71,630	1,973	68,875	1,657	130,000	6,500	118,000	5,900	265,200	13,446	154,810	7,914
Pound nets:												
Bluefish					18,000		900	3,000	150			
Butter-fish					5,000		200	12,500	500			
Flounders					5,000		300	7,500	450			
Shad					9,000		450	6,000	300			
Squeteague					4,725		350	3,750	300			
Total					41,725		2,200	32,750	1,700			
Fyke nets:												
Catfish	2,860	143	2,750	138	10,974	424	9,300	360	5,157	257	4,820	241
Eels					12,811	672	10,857	570				
Flounders					12,083	330	10,240	280				
Perch	1,170	93	1,125	90	8,481	129	2,950	110	1,890	148	1,775	151
Shad					27,564	1,722	23,360	1,460				
Squeteague					5,804	233	4,970	240				
Striped bass	73	12	75	9	4,720	613	4,000	520	101	13	95	13
Suckers	780	38	780	38					1,444	81	1,350	76
Other fish	104	6	100	6	8,805	188	5,818	160	100	8	150	8
Total	4,092	202	4,830	281	84,362	4,361	71,495	3,700	8,761	507	8,190	489
Lines:												
Bluefish					4,620		231	5,500	275			
Catfish					3,500		148	3,820	160			
Cod					7,700		402	9,167	550			
Flounders					8,140		238	10,300	805			
Perch					1,765		67	1,510	60			
Squeteague					3,100		150	4,400	173			
Striped bass					600		80	920	97			
Tautog					1,130		58	830	45			
Tomcod					800		30	1,230	50			
Other fish					5,800		231	6,875	275			
Total					37,155		1,701	44,612	1,990			
Spears:												
Eels					22,817	1,360	17,084	1,025				
Flounders					933	56						
Total					23,750	1,425	17,084	1,025				
Pots:												
Eels	675	41	575	35	30,000	1,800	32,500	1,950	1,150	80	1,080	75
Miscellaneous:												
Oysters					2,558,500	510,750	3,052,000	614,320				
Soft clams or long clams					127,000	11,400	117,000	10,581				
Quahogs or hard clams					268,400	33,812	310,600	38,818				
Lobsters					0,920	625	5,730	575				
Crabs, hard					118,416	2,475	85,400	2,220				
Crabs, soft					33,400	1,600	40,166	1,750				
Total					3,112,702	568,722	3,016,896	660,278				
Grand total.	413,130	8,473	391,213	7,625	3,450,094	584,709	3,933,837	686,636	275,111	14,033	104,080	8,478

Statement by counties, apparatus, and species of the yield of the shore fisheries of New York—Continued.

Apparatus and species.	Putnam.				Queens.				Rensselaer.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives												
Bluefish					319,875	\$14,528	265,115	\$11,612	108,700	\$1,385	103,733	\$1,314
Catfish									4,150	249	3,820	229
Eels					2,260	132	1,648	90				
Flounders					1,200	60	900	40				
Kingfish					59,783	4,199	51,817	3,409				
Mullet					40,600	1,933	37,580	1,778				
Perch					9,320	475	9,000	452	1,000	84	975	78
Sea bass					61,360	5,499	52,434	2,906				
Shad					6,342	444	6,685	468				
Spanish mack'l.					20,471	1,433	17,605	1,231				
Squeteague					115,078	6,774	80,563	4,863				
Striped bass					44,685	3,128	36,029	3,482	1,050	126	1,500	180
Tomcod					65,200	3,016	61,650	2,466				
Other fish					33,600	1,052	7,880	389	4,005	195	3,030	196
Total					779,774	43,273	628,016	33,186	119,025	2,039	113,958	1,997
Gill nets:												
Alewives												
Bluefish					206,667	1,550	163,333	1,225				
Perch	1,075	\$86	1,160	\$100	260,333	13,950	247,500	12,375				
Shad	55,100	2,755	31,150	1,558					2,385	213	2,540	280
Squeteague					103,428	6,000	101,143	6,100				
Striped bass	960	115	850	102					2,360	283	2,250	270
Sturgeon	835	33	825	37					250	10	180	7
Suckers	525	42	350	28					1,050	84	950	76
Other fish	1,450	125	1,215	102					2,070	186	2,190	104
Total	59,945	3,156	35,656	1,927	579,428	21,500	511,076	19,700	8,115	776	8,110	777
Pound nets:												
Flounders												
Shad					900	46	880	44				
Striped bass					23,583	1,415	20,600	1,236				
Tautog					3,355	237	4,120	206				
Other fish					1,100	72	1,020	67				
Total					3,150	78	2,470	53				
Fyke nets:												
Catfish	1,865	92	2,050	102	9,166	304	7,835	260	5,580	268	6,000	280
Eels					10,697	561	9,143	480				
Flounders					66,970	1,674	57,240	1,431				
Perch	477	38	525	42					1,627	130	1,750	140
Striped bass	68	8	75	9	608	74	520	64	70	9	85	10
Suckers	455	25	500	28					2,301	132	2,475	142
Other fish	77	4	85	5	5,950	175	5,080	150	60	3	75	4
Total	2,942	167	3,235	186	93,391	2,788	70,824	2,385	9,650	542	10,385	585
Lines:												
Bluenfish												
Catfish					20,000	800	17,500	700				
Cod					3,830	140	5,120	200				
Flounders					82,000	3,800	68,750	3,350				
Kingfish					38,800	1,720	29,372	1,278				
Sea bass					4,210	240	6,480	325				
Squeteague					8,000	400	7,000	350				
Striped bass					143,010	8,000	127,350	7,120				
Tautog					8,725	840	9,120	910				
Tomcod					43,500	2,580	38,735	2,115				
Other fish					5,680	230	7,040	283				
Total					2,710	85	3,285	100				
Spears:												
Eels												
Flounders					219,383	13,163	235,916	14,110				
Total					58,117	3,479	55,100	3,306				
Pots:												
Eels	875	26	575	40	106,963	12,075	170,013	10,825	850	50	750	53
Miscellaneous:												
Oysters					2,920,400	510,180	3,024,070	524,340				
Soft clams					500,000	33,770	553,000	37,735				
Quahogs					1,536,640	236,275	1,784,060	274,780				
Lobsters					6,320	575	4,840	485				
Total												
Grand total	63,262	3,340	39,466	2,153	7,283,089	807,761	7,402,787	837,340	137,640	3,410	133,203	3,412

Statement by counties, apparatus, and species of the yield of the shore fisheries of New York—Continued.

Apparatus and species.	Richmond.				Rockland.				Suffolk.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives									18,500	\$340	12,000	\$235
Bluefish									1,125,175	45,013	965,350	38,616
Eels									10,800	760	9,100	635
Flounders									22,000	865	14,750	710
Kingfish									93,666	5,500	72,501	4,350
Minnows									45,100	750	25,000	480
Mullet									142,000	7,100	122,500	6,100
Perch									10,500	850	9,250	810
Sea bass									207,745	10,387	196,180	9,800
Shad	28,000	\$1,400	36,000	\$1,800								
Spanish mack'l									42,132	2,850	39,920	2,800
Squeteague	30,000	1,800	22,000	1,100					319,500	15,085	298,467	13,840
Striped bass									31,471	2,200	44,274	3,100
Tautog									2,000	130	1,800	110
Tomcod									150,000	6,000	117,500	4,700
Other fish									35,600	1,800	27,100	1,450
Total	58,000	3,200	58,000	2,000					2,256,189	100,230	1,956,071	87,745
Gill nets:												
Alewives									756,067	5,674	751,600	5,637
Bluefish									482,850	26,901	462,150	25,092
Perch					1,150	\$104	985	\$87				
Sea bass									85,037	7,208	75,041	6,617
Shad	24,000	1,200	34,000	1,700	286,800	14,840	284,000	14,200	100,540	5,030	88,219	4,174
Squeteague	26,000	1,300	13,600	680					861,754	16,302	323,774	16,378
Striped bass					1,000	120	775	103				
Sturgeon					750	30	900	36				
Suckers					875	70	650	52				
Other fish					600	47	515	45	44,580	2,239	37,727	1,830
Total	50,000	2,500	47,600	2,380	291,175	14,711	287,825	14,523	1,832,328	63,360	1,738,511	61,732
Pound nets:												
Alewives									14,481	420	17,898	347
Bluefish									64,206	2,080	58,190	2,501
Bonito									2,500	200	1,750	150
Butter-fish									114,007	3,800	222,207	13,452
Eels									24,174	1,121	21,008	980
Flounders									72,159	1,375	62,026	2,172
Kingfish									8,471	916	7,565	761
Menhaden									1,746,164	2,095	1,904,984	1,868
Scup									90,325	1,876	86,918	1,738
Sea bass									45,567	2,938	30,345	1,986
Shad									6,824	553	5,054	416
Sheepshead									6,640	1,130	5,467	980
Skates									28,777	546	28,537	566
Spanish mack'l									6,286	988	9,415	1,270
Spot									6,114	244	4,901	196
Squeteague									481,109	15,076	405,146	14,504
Squid									11,420	456	11,436	457
Striped bass									14,055	1,827	12,700	1,050
Sturgeon									8,403	225	5,881	156
Tautog									18,553	781	20,422	816
Tomcod									800	42	800	42
Other fish									22,048	617	13,459	276
Refuse fish									365,298	876	286,820	716
Total									3,165,775	40,237	2,602,028	38,000
Fyke nets:												
Alewives	6,020	87	6,400	80					24,770	309	25,020	324
Bluefish									25,102	1,084	28,350	1,134
Catfish	6,475	258	5,980	235	3,900	190	3,000	180	41,290	619	43,200	648
Eels	4,820	247	5,330	280					11,615	232	12,150	243
Flounders									5,822	804	6,090	320
Kingfish									942,287	23,208	986,700	24,277
Menhaden									253	38	265	40
Perch	2,230	80	1,980	80	1,970	157	1,775	142	619,488	774	648,000	810
Scup									38,718	774	40,500	810
Sea bass									7,743	387	8,100	405
Shad	6,792	475	7,080	405	1,720	86	1,550	78	103,248	3,097	108,000	3,240
Squeteague												
Striped bass	1,742	205	1,525	183	1,881	217	1,650	196	1,577	101	1,650	200
Sturgeon					1,165	46	1,050	42				
Suckers					2,081	122	1,875	110				
Tautog									9,070	387	10,125	405
Tomcod									38,818	738	40,000	772
Other fish	4,000	120	3,285	97	332	49	750	45	26,156	576	27,360	603
Refuse fish									92,023	222	97,200	243
Total	32,970	1,482	31,530	1,450	13,595	876	12,250	793	1,989,502	32,040	2,084,210	34,474

Statement by counties, apparatus, and species of the yield of the shore fisheries of New York—Continued.

Apparatus and species.	Richmond.				Rockland.				Suffolk.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:												
Bluefish									90,240	\$4,512	82,080	\$4,312
Catfish	2,000	\$90	2,530	\$115					4,610	160	5,460	210
Cod									159,175	6,012	139,231	6,064
Flounders	8,625	300	7,780	275					45,685	1,367	38,920	1,180
Haddock									13,520	338	11,320	283
Kingfish									9,165	550	10,200	592
Perch	2,535	130	2,782	141					3,800	190	3,250	174
Sea bass									2,780	111	2,430	100
Squeteague	58,945	2,950	54,320	2,715					128,420	6,425	135,000	6,750
Striped bass	14,560	1,575	16,933	1,822					2,890	315	2,120	248
Tautog	3,415	170	3,000	150					38,095	1,554	32,400	1,205
Tomcod	2,130	68	3,200	100					8,415	245	9,380	280
Other fish	1,750	60	2,180	60					6,050	197	5,364	176
Total	93,960	5,343	92,725	5,378					513,745	22,876	477,761	21,664
Spears:												
Eels									272,106	15,428	268,100	16,629
Flounders									98,303	5,472	97,331	5,720
Total									365,469	20,900	365,431	22,349
Pots:												
Eels	22,500	1,350	20,833	1,250	2,285	\$100	2,214	\$155	709,849	42,383	689,416	40,840
Miscellaneous:												
Oysters	840,700	102,720	952,000	125,250					1,289,050	170,950	1,713,000	241,050
Soft clams	65,000	3,900	53,000	3,180					848,000	50,240	575,500	51,895
Quahogs	73,600	11,500	68,000	10,625					1,282,900	174,700	1,304,200	173,388
Lobsters	9,260	888	8,150	810					23,517	2,333	21,284	2,183
Crabs, hard									311,600	4,995	350,166	5,360
Crabs, soft									55,000	1,750	55,384	1,700
Total	988,560	110,008	1,081,150	139,865					3,809,767	413,968	4,200,034	475,556
Grand total	1,245,999	132,883	1,331,883	153,223	307,055	15,747	302,280	15,471	14,642,624	736,894	14,204,862	782,360
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Apparatus and species.	Ulster.				Westchester.				Total.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
Seines:												
Alewives	172,233	\$2,201	177,233	\$2,260	115,267	\$1,470	150,166	\$1,914	1,183,400	\$15,401	1,136,597	\$14,615
Bluefish									1,445,050	59,541	1,230,405	60,228
Catfish	2,836	170	2,713	163					17,354	1,018	17,025	990
Eels									13,060	892	10,748	725
Flounders									23,200	925	15,650	750
Kingfish									153,449	9,099	124,318	7,750
Minnows									45,100	750	25,000	480
Mullet									182,000	9,033	160,060	7,878
Perch	1,742	105	1,191	71	11,200	896	10,200	816	44,439	3,051	41,808	2,901
Sea bass									269,105	15,886	248,614	12,715
Shad	151,600	7,580	90,600	4,530	118,400	5,920	103,200	5,160	480,742	24,124	332,085	16,748
Spanish mackrel									62,603	4,283	57,604	4,031
Squeteague									404,578	24,250	401,030	19,803
Striped bass					15,400	1,848	12,500	1,500	94,400	7,518	95,503	8,408
Tautog									2,000	130	1,800	110
Tomcod									215,200	9,016	170,150	7,166
Other fish	1,422	25	1,596	41	1,800	108	1,500	90	86,202	4,080	52,507	2,517
Total	329,833	10,081	273,333	7,065	262,067	10,242	277,566	9,480	4,782,587	189,606	4,130,684	157,828
Gill nets:												
Alewives									1,035,501	8,154	987,440	7,780
Bluefish									752,183	40,851	709,650	37,407
Perch	1,610	145	2,035	185	2,180	150	1,965	137	17,475	1,549	17,150	1,527
Sea bass									85,937	7,208	75,041	6,617
Shad	217,400	10,870	161,420	8,055	1,520,800	70,340	1,491,600	74,580	3,213,640	160,091	2,643,695	130,032
Squeteague	1,475	177	1,000	192	1,250	150	1,100	132	491,182	23,602	438,517	23,153
Striped bass	1,250	50	1,050	42	850	34	650	38	15,030	1,803	14,200	1,701
Sturgeon									7,670	306	7,500	302
Suckers	850	68	950	76	1,440	72	1,440	72	8,820	662	8,670	650
Other fish	765	69	1,315	120	1,157	80	1,085	73	58,202	3,305	51,357	2,885
Total	223,850	11,370	108,370	8,670	1,533,077	76,826	1,408,140	75,032	5,085,040	248,131	4,953,280	222,014

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of New York—Continued.

Apparatus and species.	Ulster.				Westchester.				Total.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.
Pound nets:												
Alewives									14,484	\$420	17,898	\$347
Bluefish									82,206	3,580	61,190	2,051
Bonito									2,500	200	1,750	150
Butter-fish									119,007	4,000	234,797	3,952
Eels									24,174	1,121	21,008	980
Flounders									78,050	1,721	70,386	2,000
Kingfish									8,471	916	7,565	761
Menhaden									1,746,164	2,095	1,304,984	1,868
Scup									96,325	1,876	86,918	1,738
Sea bass									45,567	2,393	39,345	1,986
Shad									39,407	2,418	31,054	1,952
Sheepshead									6,640	1,130	5,467	980
Skates									28,777	546	28,537	566
Spanish mack'l									6,286	988	9,415	1,270
Spot									6,114	244	4,901	196
Squeteague									485,924	15,426	468,896	14,804
Striped bass									17,440	2,064	16,820	1,856
Sturgeon									8,695	225	5,881	156
Tautog									20,653	853	21,442	883
Tomcod									800	42	800	42
Other fish									25,198	695	15,920	329
Refuse fish									365,298	876	286,820	716
Squid									11,420	456	11,430	457
Total									3,239,618	44,285	2,753,848	41,306
Fyke nets:												
Alewives									81,699	390	82,820	404
Bluefish									25,102	1,084	28,350	1,134
Butter-fish									41,209	619	43,200	648
Catfish	4,370	\$200	4,600	\$221	2,000	\$100	2,450	\$123	79,781	3,257	77,945	3,198
Eels									34,150	1,784	31,420	1,650
Flounders					15,000	750	10,000	500	1,036,340	25,962	1,064,180	26,488
Kingfish									233	38	205	40
Menhaden									619,488	774	648,000	810
Perch	1,757	140	1,850	148	1,275	102	1,050	84	21,427	1,472	20,555	1,453
Scup									38,718	774	40,500	810
Sea bass					950	48	800	40	7,743	387	8,100	405
Shad									37,026	2,331	32,790	2,073
Squeteague									100,112	3,380	112,970	3,480
Striped bass	80	9	85	10	7,250	870	6,100	732	18,559	2,271	16,305	2,000
Sturgeon					700	28	650	26	1,865	74	1,700	68
Suckers	997	64	1,050	68	1,600	64	1,900	76	16,149	873	16,708	895
Tautog					10,000	500	8,000	400	10,679	887	18,125	805
Tomcod					10,000	500	8,000	400	46,813	1,238	48,600	1,172
Other fish	142	8	150	9	300	18	275	16	45,196	1,170	43,649	1,127
Refuse fish									92,923	222	97,200	243
Total	7,346	430	7,735	456	49,075	2,980	30,225	2,397	2,325,322	48,990	2,382,882	48,903
Lines:												
Bluefish									114,860	5,543	105,680	5,287
Catfish					4,840	240	6,280	265	18,780	784	22,210	950
Cod									248,875	11,174	217,148	9,964
Flounders					10,470	900	21,365	995	120,780	4,585	107,737	4,033
Haddock									13,520	338	11,320	283
Kingfish									13,375	790	16,030	917
Perch					620	50	1,070	73	8,720	437	8,612	448
Sea bass									10,780	511	9,436	450
Squeteague					1,215	145	880	145	338,475	17,525	321,130	16,758
Striped bass									27,990	2,955	29,973	3,182
Tautog					2,300	110	2,040	100	89,340	4,472	77,005	8,705
Tomcod					26,802	1,840	29,000	1,375	43,827	1,019	40,850	2,088
Other fish					1,140	35	1,300	40	17,480	608	19,004	651
Total					56,387	2,886	60,935	2,953	1,061,802	51,641	995,735	48,716
Spears:												
Eels					5,000	500	3,500	350	519,306	30,460	524,000	32,123
Flounders									152,413	9,007	152,431	9,026
Total					5,000	500	3,500	350	671,719	39,467	670,433	41,149
Pots:												
Eels	975	58	875	52	81,000	3,100	30,000	3,000	990,017	61,290	957,331	58,441
Miscellaneous:												
Oysters					630,000	65,000	560,000	58,000	8,238,650	1,374,600	9,301,670	1,562,960
Soft clams					40,000	4,000	25,000	2,500	1,580,000	103,370	1,505,500	105,891
Quahogs					836,000	52,500	320,000	50,000	3,497,240	508,737	3,793,760	548,591
Lobsters					12,000	1,500	10,000	1,250	58,017	5,921	49,954	5,303
Crabs, hard									430,016	7,470	435,500	7,589
Crabs, soft									88,466	3,350	93,500	3,450
Total					1,018,000	123,000	915,000	111,750	19,802,380	2,003,498	15,170,950	2,233,784
Grand total	501,504	21,948	450,313	16,243	2,955,206	219,534	2,824,366	204,902	32,658,094	2,088,017	32,030,141	2,852,141

FISHERIES OF NEW JERSEY.

Importance and prominent features of industry.—The rank of New Jersey among the States of this section, as determined by the value of the products, is fourth, although the difference between it and Virginia is so slight that a comparatively unimportant advance in the catch of one of a dozen species would place this State ahead. Its position is only one point lower when the entire country is considered.

The natural features of this State are extremely favorable to the prosecution of extensive fisheries. The long ocean frontage permits the carrying on of various fisheries for the typical salt-water fishes, which are unusually abundant on this coast; the large bays of the northern and southern extremities of the State and the smaller bays on the ocean side afford uncommonly fine opportunities for oyster fishing and cultivation, in addition to being the haunts of numerous shore and anadromous fishes of recognized food value, while the two foremost shad rivers in the country skirt the borders of the State, the Delaware forming practically its entire western boundary and the Hudson its eastern border for a distance of 22 miles above its mouth.

Every part of the State is within easy rail communication with New York, Brooklyn, Philadelphia, Jersey City, Newark, Trenton, and other large cities of New York, Pennsylvania, and New Jersey, thus insuring a ready and constant market, while the enormous summer population of the seaside communities is in itself sufficient to maintain profitable fisheries of large proportions.

The specially prominent fisheries of this State are the taking of oysters and clams in lower New York, Delaware, and the smaller bays of the outer coast; the pound-net fishing on the northern part of the ocean shore; the line fishing for bluefish and sea bass carried on in the ocean from small boats; the gill-net and seine fishing for shad, alewives, and sturgeon in the Hudson and Delaware Rivers; the pound-net fishery for shad and other fishes along the shore west of Sandy Hook, and the menhaden industry. The fisheries in which New Jersey surpasses the other States of this region are the shore bluefish, the sea bass, the shad, the squeteague, and the king crab, and in the output of these same products the State takes precedence of the entire country.

Statistical summary.—In the following series of tables, condensed statistics of the fisheries of this State in 1889, 1890, 1891, and 1892 are presented.

The number of persons employed in the industry varied but little in the years named. In 1892, 10,447 persons were engaged, of whom 2,157 were vessel fishermen, 7,560 shore and boat fishermen, 194 transporters, and 536 shore employés, such as factory hands.

In the last year covered by the returns, \$2,571,413 was represented by the vessels, boats, apparatus, shore property, and cash capital devoted to the business. The principal factors in this large amount were 540 fishing vessels, valued, with their outfits, at \$718,060; 79 transporting vessels, worth \$117,565; 5,591 boats, with a value of \$414,321; 3,941 gill nets, worth \$129,791; 234 pound nets, valued at \$83,913; shore property and cash capital, \$969,243. The investment in 1892 was larger than in any of the three preceding years, and was about \$350,000 more than in 1889.

The yield of the fisheries in 1892 was 73,267,434 pounds, valued at \$3,646,382. The quantity of the catch was less and the value was greater than in any of the other years. The decrease in the output was due chiefly to a diminished catch of bluefish and menhaden, while the augmented value of the yield depended chiefly on larger sales of market and seed oysters.

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Persons employed in the fisheries of New Jersey.

Designation.	1889.	1890.	1891.	1892.
In vessel fisheries	1,871	1,893	2,017	2,157
In shore fisheries	7,783	7,822	7,889	7,560
On transporting vessels	169	181	201	194
On shore, in factories, etc.	524	532	532	536
Total	10,347	10,428	10,639	10,447

Vessels, boats, shore property, and cash capital employed in the fisheries of New Jersey.

Designation.	1889.		1890.		1891.		1892.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Vessels fishing	499	\$490,880	500	\$502,400	524	\$541,520	540	\$580,965
Tonnage.....	7,387	.....	7,510	.....	7,883	.....	8,255	.....
Outfit.....	104,728	.....	111,089	.....	122,433	.....	128,095	.....
Vessels transporting	60	85,600	71	96,050	83	108,150	79	104,150
Tonnage.....	1,094	.....	1,256	.....	1,437	.....	1,329	.....
Outfit.....	9,300	.....	11,167	.....	13,255	.....	13,415	.....
Boats	5,600	396,665	5,616	401,718	5,742	412,373	5,591	414,321
Apparatus—vessel fisheries:								
Seines	10	5,050	11	6,100	12	6,100	10	5,450
Lines and trawls		322		315		370		450
Pots, lobster and eel	200	199	341	365	270	245	235	210
Oyster dredges and tongs	1,427	34,712	1,453	35,917	1,533	38,980	1,603	40,398
Clam rakes and tongs.....	459	6,787	368	3,709	397	4,703	388	4,660
Crab dredges	24	96	60	240	102	468	92	402
Apparatus—shore fisheries:								
Seines	340	30,832	353	31,931	360	31,922	357	32,268
Gill nets.....	4,120	127,196	4,045	129,911	3,983	129,832	3,951	129,791
Pound nets and weirs	102	43,015	141	40,571	185	55,370	234	83,013
Fyke nets and bag nets	1,730	17,331	1,704	18,256	1,692	18,881	1,625	18,431
Pots, eel and lobster	4,100	4,811	4,036	4,824	4,485	5,004	4,335	4,518
Lines and trawls		4,339		4,189		4,808		4,358
Oyster tongs, rakes, and dredges	2,495	12,501	2,492	12,302	2,498	12,307	2,642	13,470
Clam tongs, rakes, and hoes	2,077	11,368	2,155	11,625	2,160	11,652	2,217	12,996
Minor apparatus		894		903		891		909
Shore and accessory property		375,389		395,875		409,561		420,743
Cash capital		468,450		530,650		538,850		548,500
Total		2,231,155		2,350,377		2,407,865		2,571,413

Products of the fisheries of New Jersey.

Species.	1889.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Albacore	3,708	\$94	3,796	\$90	4,176	\$100	6,410	\$186
Alewives	3,328,235	33,829	1,860,740	14,453	2,066,820	14,260	1,985,555	14,361
Black bass	5,535	663	6,035	873	9,250	1,166	12,035	1,542
Bluefish	8,564,600	313,805	9,291,125	340,939	7,227,926	264,163	4,765,873	178,601
Bonito	177,850	6,411	144,750	5,144	150,633	9,857	105,643	4,000
Butter-fish	236,900	7,027	238,685	7,001	230,802	6,582	308,862	10,845
Carp	2,725	218	2,626	202	2,000	166	2,025	162
Catfish	214,423	12,802	157,625	9,735	133,824	8,265	144,938	8,877
Cero	956	42	630	26	847	38	3,610	172
Cod	681,535	26,284	729,747	19,164	841,011	26,001	676,859	20,601
Dogfish	36,000	90	60,000	150	77,000	190	56,000	140
Drum	22,683	671	26,900	726	124,240	930	89,650	892
Eels	570,180	37,357	578,438	37,309	623,280	38,594	565,210	86,283
Flounders	885,912	31,374	929,365	32,091	987,895	33,620	1,221,172	36,645
Frostfish or tomood	3,000	90	4,500	135	1,400	42	2,000	60
Haddock	21,020	760	18,710	638	17,940	675	16,070	487
Hake	13,800	240	12,040	188	12,080	204	8,526	89
Kingfish	33,050	2,073	49,590	2,730	33,697	2,298	26,783	1,908
Mackerel	12,987	1,172	9,919	987	25,117	2,316	22,907	2,747
Menhaden	22,240,570	64,084	30,301,227	63,535	20,670,542	56,074	16,565,541	48,535
Mullet	48,670	1,860	92,400	5,131	88,350	4,902	43,500	2,458
Perch, white	198,104	13,491	215,278	15,261	193,724	13,539	182,887	12,636
Perch, yellow	403,370	24,790	488,524	26,291	500,238	27,219	394,332	21,767

Products of the fisheries of New Jersey—Continued.

Species.	1889.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pike	19,584	\$1,812	18,940	\$1,859	19,485	\$1,904	18,880	\$1,811
Seup	12,000	422	16,220	630	25,682	835	48,150	1,579
Sea bass	2,968,328	118,658	3,560,419	130,992	3,731,598	147,093	3,892,311	153,431
Shad	10,423,572	372,543	10,622,718	409,059	10,225,455	443,438	8,746,518	582,221
Sheepshead	59,754	8,508	23,566	3,772	26,290	4,013	37,337	5,401
Skates	7,400	370	9,300	465	7,050	353	5,700	286
Spanish mackerel	57,232	9,555	59,050	9,700	78,391	12,620	117,254	15,907
Spots and croakers	43,260	1,938	78,010	3,336	106,680	4,521	184,182	7,424
Squeteague or weakfish	4,716,350	138,106	4,073,008	180,465	6,002,503	201,515	7,540,196	208,051
Striped bass	305,884	42,610	228,196	47,645	298,164	43,296	219,675	33,395
Sturgeon	3,592,188	67,498	455,775	11,868	452,030	10,619	448,887	8,829
Suckers	50,843	3,756	56,546	3,914	56,080	4,008	53,430	3,667
Tautog	84,395	3,686	89,945	3,654	99,437	3,894	93,630	3,723
Other fish	85,411	2,804	63,622	3,053	73,217	3,152	105,122	3,258
Crabs, soft	299,700	31,805	275,500	31,975	289,500	35,380	409,520	37,642
Crabs, hard	53,866	2,004	142,333	5,317	230,111	9,499	164,433	7,267
Crabs, king	1,974,188	6,162	3,335,700	8,573	2,708,980	7,534	2,025,460	5,369
Lobsters	188,347	14,301	185,321	13,683	165,664	12,403	143,905	10,861
Shrimp			1,050	525	1,200	600	750	500
Mussels					6,000	200		
Oysters, market	7,457,408	1,060,182	7,956,515	1,218,792	7,686,322	1,227,909	8,047,151	1,270,568
Oysters, seed	7,706,965	356,510	7,856,080	375,388	8,428,245	411,739	10,157,140	496,060
Quahogs or hard clams	3,414,192	311,601	3,396,364	342,637	3,454,024	371,933	2,990,572	349,221
Clams, soft or long	772,110	44,660	815,270	47,090	827,000	47,700	595,450	34,620
Terrapins	2,250	683	2,560	770	3,280	1,074	2,598	997
Turtles							2,795	60
Total	82,361,635	3,170,376	88,730,048	3,447,351	70,116,380	3,520,057	73,267,434	3,646,382

The molluscan and crustacean products shown in the preceding table, which are usually designated by a different unit than pounds, are separately shown by number or bushels in the following table:

Species.	1889.	1890.	1891.	1892.
Crabs, soft	number..	899,100	826,500	868,500
Crabs, hard	do..	161,598	426,909	690,333
Crabs, king	do..	987,094	1,667,850	1,398,490
Oysters, market	bushels..	1,063,344	1,136,645	1,098,046
Oysters, seed	do..	1,100,995	1,122,200	1,204,035
Quahogs or hard clams	do..	426,774	424,546	431,753
Clams, soft or long	do..	77,211	81,527	82,700
Mussels	do..			600

Statistics of the fisheries by counties.—Commercial fishing is carried on in 17 counties in this State bordering on the ocean, the bays tributary thereto, and the Delaware and Hudson rivers. Seven of these, viz, Atlantic, Burlington, Cape May, Cumberland, Middlesex, Monmouth, and Ocean abut on salt water, and several others have vessels which follow fishing for salt-water species. The counties named are those maintaining the most important fisheries.*

The preeminent county of New Jersey, viewed from the fishing standpoint, is Cumberland. More persons are there employed, a greater amount of money is invested, and the value of the products is more than in any other county. The importance of the fisheries of this county is due entirely to the oyster industry, as the business of taking other products is insignificant. In 1892, 2,005 persons were employed in the fisheries of this county; of these 1,481 were vessel fishermen, 245 shore fishermen, and 279 shore employés. The capital invested was \$872,570. The principal items entering into this investment were 336 vessels, valued at \$454,363, a much larger number than was found in the remainder of the State; 133 boats, valued at \$15,335; 1,412 oyster dredges and tongs, with a value of \$33,890; and \$362,371 representing shore property

* In 1892 a large amount of fishing is shown in Ocean County which was credited to Burlington County in previous years. In the year named the county line of Burlington County was moved south, throwing a considerable part of that county into Ocean County.

and working capital. The value of the products was \$1,006,232. Of this sum the oyster yield constituted \$963,755. The only other objects worthy of mention were shad, worth \$33,457, and sturgeon, worth \$7,310.

Next in importance to Cumberland is Monmouth County, which has varied fishing interests, and in respect to its food-fish fisheries is one of the most prominent sections on the Atlantic seaboard. It has a frontage on the ocean and also on Sandy Hook Bay, and includes all that part of the New Jersey coast north of Manasquan and east of Keyport. In the years 1890 and 1891 the number of fishermen and value of the catch were greater than in any other county. In 1892, 1,981 persons were employed, of whom 1,534 were shore fishermen. The decrease of over 400 persons, as compared with the previous year, was almost entirely due to the very disastrous fire which visited Seabright, the principal fishing center, in the latter part of 1891, causing many line fishermen to leave that community and seek employment elsewhere or engage in other occupations. The aggregate investment was \$572,003. Vessels to the number of 132 were operated; these were valued at \$147,465. The 1,119 small boats used had a value of \$67,640. The most valuable apparatus employed were pound nets, 48 of which were worth \$67,540. All other apparatus had a value of only \$34,538.

The catch in Monmouth County consisted of a large variety of water products. Oysters had a value of \$226,864, hard clams \$183,671, bluefish \$130,653, squeteague \$103,049, sea bass \$61,034, crabs \$37,308, soft clams \$32,780, menhaden \$30,762, and other products \$105,732, the whole being worth \$911,853 to the fishermen. In 1890 and 1891 the fishermen received \$1,059,229 and \$1,092,440, respectively, for their catch. The decline indicated from 1891 to 1892 was due principally to the smaller number of fishermen engaged in line fishing, and was made up largely of bluefish and sea bass; there was also, however, a diminished yield of menhaden, oysters, and soft clams, while the catch of squeteague was much larger.

Each of the counties of Atlantic, Ocean, and Salem has over 1,000 persons engaged in the fishing industry, over \$180,000 invested, and products worth over \$250,000. Burlington, Camden, and Cape May counties also have important fisheries.

The following tables, relating to the years 1890, 1891, and 1892, present detailed statistics for each county:

Statement by counties of the number of persons employed in the fisheries of New Jersey.

Counties.	In vessel fisheries.			In shore fisheries.			On transporting vessels.			On shore, in factories, etc.			Total.		
	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.
Atlantic	79	77	90	1,013	1,035	967	43	46	42	61	62	61	1,106	1,220	1,100
Bergen				121	112	114							121	112	114
Burlington.....	30	43		917	911	630	17	19	2	31	43	12	905	1,016	644
Camden	149	160	164	170	174	173	15	12	15				334	346	352
Cape May.....	63	69	83	587	672	734	16	18	19	8	8	10	674	767	846
Cumberland.....	1,269	1,357	1,481	187	201	245				230	260	270	1,695	1,818	2,005
Essex										25	26	26	25	26	26
Gloucester.....	5		5	174	170	167							179	170	172
Hudson	10	8	8	182	185	181	2	4	4	5	5	6	100	202	109
Hunterdon and Warren.....				81	81	78							81	81	78
Mercer				53	49	50							53	49	50
Middlesex.....	5	2		282	266	279	16	16	16				303	284	295
Monmouth.....	270	287	278	1,958	1,942	1,534	54	72	61	151	116	108	2,433	2,417	1,981
Ocean	13	14	48	682	694	908	18	14	35	6	6	30	719	728	1,111
Salem.....				1,305	1,307	1,309							1,305	1,307	1,309
Union.....				110	90	101				6	6	4	116	96	105
Total....	1,893	2,017	2,157	7,822	7,889	7,500	181	201	194	532	532	536	10,428	10,639	10,447

Statement by counties of the apparatus and capital employed in the fisheries of New Jersey.

Designation.	Atlantic.						Bergen.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing.....	24	\$27,400	24	\$24,600	25	\$37,050	.....	.....	.....	.....	.....	.....
Tonnage.....	297	.....	289	.....	325	.....	.....	.....	.....	.....	.....	.....
Outfit.....	.....	5,931	.....	6,360	.....	6,739	.....	.....	.....	.....	.....	.....
Vessels transporting.....	17	27,800	13	30,000	17	24,350	.....	.....	.....	.....	.....	.....
Tonnage.....	442	.....	454	.....	393	.....	.....	.....	.....	.....	.....	.....
Outfit.....	.....	2,250	.....	3,045	.....	2,978	.....	.....	.....	.....	.....	.....
Boats.....	935	57,259	984	62,083	967	61,421	102	\$4,560	90	\$4,000	92	\$4,080
Apparatus—vessel fisheries:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seines.....	2	1,500	2	1,500	2	1,500	.....	.....	.....	.....	.....	.....
Lines.....	.....	205	.....	275	.....	360	.....	.....	.....	.....	.....	.....
Oyster dredges and tongs.....	46	804	30	558	44	702	.....	.....	.....	.....	.....	.....
Clam rakes and tongs.....	22	118	23	124	19	103	.....	.....	.....	.....	.....	.....
Apparatus—shore fisheries:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seines.....	66	3,135	71	3,268	62	3,355	.....	.....	.....	.....	.....	.....
Gill nets.....	60	202	60	202	46	142	1,283	8,855	1,181	8,278	1,179	8,218
Fyke nets and bag nets.....	26	456	29	546	29	546	.....	.....	.....	.....	.....	.....
Pots, lobster and eel.....	.....	.....	.....	.....	.....	.....	100	200	120	240	120	240
Lines.....	.....	1,315	.....	1,363	.....	1,163	.....	.....	.....	.....	.....	.....
Oyster tongs, rakes, and dredges.....	360	1,517	383	1,620	431	1,865	.....	.....	.....	.....	.....	.....
Clam tongs, rakes, and hoes.....	482	1,874	492	1,909	503	1,944	.....	.....	.....	.....	.....	.....
Minor apparatus.....	.....	4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
Shore property.....	.....	30,460	.....	31,455	.....	30,980	.....	.....	5,255	.....	4,780	.....
Cash capital.....	.....	62,400	.....	65,400	.....	68,400	.....	.....	.....	.....	.....	4,700
Total.....	.....	225,230	.....	234,312	.....	243,578	.....	18,870	.....	17,298	.....	17,298
Designation.	Burlington.						Camden.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing.....	3	\$16,500	4	\$23,500	.....	.....	30	\$42,700	31	\$47,300	30	\$49,150
Tonnage.....	87	.....	151	.....	.....	.....	636	.....	688	.....	689	.....
Outfit.....	.....	3,715	.....	4,475	.....	.....	.....	9,360	.....	9,845	.....	10,325
Vessels transporting.....	7	7,300	8	8,800	1	.....	5	5,550	4	3,850	5	5,300
Tonnage.....	110	.....	134	.....	13	.....	78	.....	56	.....	70	.....
Outfit.....	.....	1,070	.....	995	.....	20	.....	515	.....	400	.....	500
Boats.....	739	34,550	743	35,930	401	17,915	47	6,990	49	7,385	48	7,350
Apparatus—vessel fisheries:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seines.....	2	1,200	3	1,700	.....	.....	.....	5	.....	.....	.....	.....
Lines.....	.....	12	3	12	.....	.....	114	2,800	123	3,050	117	2,925
Oyster dredges and tongs.....	3	12	3	12	.....	.....	.....	.....	.....	.....	.....	.....
Apparatus—shore fisheries:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seines.....	35	6,100	36	5,930	31	5,150	4	3,300	4	3,250	4	3,300
Gill nets.....	141	9,414	142	8,925	149	8,937	35	4,150	37	4,550	37	4,475
Fyke nets and bag nets.....	1,282	8,185	1,168	7,935	1,000	7,595	.....	.....	.....	.....	.....	.....
Pots, lobster and eel.....	315	158	315	158	158	18	9	.....	.....	.....	.....	.....
Lines.....	.....	441	.....	419	.....	407	.....	.....	.....	.....	.....	.....
Oyster tongs, rakes, and dredges.....	318	1,141	328	1,177	76	228	.....	.....	.....	.....	.....	.....
Clam tongs, rakes, and hoes.....	373	1,516	375	1,524	76	304	.....	.....	.....	.....	.....	.....
Minor apparatus.....	.....	35	.....	35	.....	.....	.....	.....	.....	.....	.....	.....
Shore property.....	.....	25,735	.....	31,435	.....	8,025	.....	1,265	.....	1,270	.....	1,265
Cash capital.....	.....	26,000	.....	28,500	.....	4,000	.....	.....	.....	.....	.....	.....
Total.....	.....	143,072	.....	161,450	.....	52,940	.....	76,035	.....	80,900	.....	84,590
Designation.	Essex.						Gloucester.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing.....	.....	.....	.....	.....	.....	.....	1	\$1,000	.....	.....	1	\$1,000
Tonnage.....	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	25	.....
Outfit.....	.....	.....	.....	.....	.....	.....	.....	200	.....	.....	.....	135
Boats.....	.....	.....	.....	.....	.....	.....	85	10,775	83	\$10,435	82	10,540
Apparatus—vessel fisheries:	.....	.....	.....	.....	.....	.....	4	100	.....	.....	4	100
Oyster dredges and tongs.....	.....	.....	.....	.....	.....	.....	83	9,825	81	9,300	80	9,125
Apparatus—shore fisheries:	.....	.....	.....	.....	.....	.....	.....	917	.....	917	.....	917
Seines.....	.....	.....	.....	.....	.....	.....	1	300	1	275	1	250
Gill nets.....	.....	.....	.....	.....	.....	.....	83	9,825	81	9,300	80	9,125
Shore property.....	\$17,400	.....	\$17,500	.....	\$17,500	.....	83	917	.....	917	.....	917
Cash capital.....	16,000	.....	15,000	.....	13,500	.....	.....	.....	.....	.....	.....	.....
Total.....	33,400	32,500	31,000	22,677	20,927	22,067

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the apparatus and capital employed in the fisheries of New Jersey—Continued.

Designation.	Cape May.						Cumberland.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	22	\$18,350	24	\$18,950	28	\$23,550	303	\$315,415	323	\$334,145	336	\$368,240
Tonnage.....	248	284	344	344	5,045	5,045	5,333	5,333	5,597	5,597	80,123	
Outfit.....	3,125	3,070	3,900	3,900	74,747	74,747	78,607	78,607				
Vessels transporting	16	6,200	7	8,700	7	8,900						
Tonnage.....	38	154	153	153								
Outfit.....	415	555	575	575								
Boats	521	11,123	548	12,800	585	14,636	98	12,108	106	12,715	133	15,335
Apparatus—vessel fisheries:												
Lines.....		38	35	25		15						15
Pots, lobster and eel	35	35	70	35	35	35						
Oyster dredges and tongs.....	60	1,575	68	1,725	84	2,125	1,175	29,146	1,257	31,281	1,304	32,291
Apparatus—shore fisheries:												
Seines	105	3,465	105	3,445	112	3,610	1	200	1	100	1	175
Gill nets	17	770	33	1,465	47	2,270	59	6,075	62	6,975	61	6,395
Pound nets	102	3,081	140	3,610	174	6,003	4	40	4	40	7	70
Fyke nets and bag nets.....	3	150	3	150	3	150						
Pots, lobster and eel				40	30							
Lines		243	830	666								
Oyster tongs, rakes, and dredges	136	247	143	202	149	271	54	790	64	855	108	1,555
Clam tongs, rakes, and hoes	222	923	184	719	257	2,130						
Minor apparatus.....		134	133	150								
Shore property.....		19,265	19,285	22,410		127,717			132,832		139,871	
Cash capital.....		27,800	25,000	28,000		191,500			211,500		222,500	
Total		97,639	100,834	110,526		757,813			808,540		872,570	
Designation.	Hudson.						Hunterdon and Warren.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	5	\$7,000	4	\$5,800	4	\$5,800						
Tonnage.....	68	50	50	480	50	480						
Outfit.....	635	500	500	480	500	480						
Vessels transporting	1	700	2	1,900	2	1,900						
Tonnage.....	6	18	18	18	18	18						
Outfit.....	50	200	200	200	50	200						
Boats	98	4,695	99	4,770	98	4,400	40	\$1,380	41	\$1,385	34	\$1,375
Apparatus—vessel fisheries:												
Pots, lobster and eel	200	175	200	175	200	175						
Oyster dredges and tongs.....	8	140	6	100	6	100						
Apparatus—shore fisheries:												
Seines			1	50	1	50	21	4,020	20	4,190	20	4,140
Gill nets.....	700	6,000	700	6,000	630	5,400						
Fyke nets and bag nets.....	210	8,750	210	8,750	210	8,750						
Pots, lobster and eel	80	.80	75	.75	75	.75						
Oyster tong,rakes, and dredges	65	825	68	840	70	350						
Shore property.....		8,765	8,765	8,765	8,765	8,765	890		875		850	
Total		27,315	27,425	26,535	26,535	26,535	6,200		6,450		6,365	
Designation.	Mercer.						Middlesex.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing							2	\$1,100	1	\$300		
Tonnage.....							16	350	7	130		
Outfit.....							6	8,700	6	8,000	6	\$8,000
Vessels transporting							83	880	86	86	86	930
Tonnage.....												
Outfit.....												
Boats	35	\$1,230	33	\$1,220	31	\$1,195	203	17,890	259	17,480	261	17,565
Apparatus—vessel fisheries:							100	150	4	60		
Pots, lobster and eel							4	50	4	60		
Clam rakes and tongs												
Apparatus—shore fisheries:												
Seines	8	1,475	8	1,550	8	1,525	4	2,500	4	2,500	5	2,900
Gill nets.....	19	1,090	21	1,290	19	1,120	50	1,000	50	1,000	50	1,000
Pound nets												
Fyke nets and bag nets							20	610	22	590	17	800
Pots, lobster and eel							10	25	10	25	10	25
Oyster tong,rakes, and dredges							513	9,078	496	2,976	502	8,012
Clam tongs, rakes, and hoes							8	80	10	100	7	70
Shore property		475	485	445			20,550		20,400		14,250	
Cash capital.....							25,800		25,300		20,800	
Total		4,270	4,545	4,285			82,813		80,631		69,852	

Statement by counties of the apparatus and capital employed in the fisheries of New Jersey—Continued.

Designation.	Monmouth.						Ocean.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing	104	\$70,275	108	\$85,475	107	\$87,225	6	\$2,750	5	\$1,450	9	\$17,950	
Tonnage	1,040		1,055		1,075		48		32		144		
Outfit		12,630		18,776		15,488		336		670		4,815	
Vessels transporting	20	31,450	31	40,200	25	38,500	9	7,650	7	6,700	16	16,850	
Tonnage	307		454		379		95		83		212		
Outfit		4,787		6,690		6,252		550		440		1,960	
Boats	1,326	77,503	1,335	80,147	1,119	67,640	689	71,130	705	70,448	1,075	98,329	
Apparatus—vessel fisheries:													
Seines	7	3,400	7	2,900	6	2,850					2	1,100	
Lines		43		60		50		9					
Pots, lobster and eel	6	5											
Oyster dredges and tongs	43	1,340	46	2,264	39	2,137					5	18	
Clam rakes and tongs	326	3,619	356	4,608	349	4,541	16		12	14	20	16	
Crab dredges	60	240	102	468	92	402							
Apparatus—shore fisheries:													
Seines	22	867	25	760	23	673	81	4,704	79	4,614	84	5,240	
Gill nets	778	6,510	750	7,120	721	6,887	220	6,920	264	5,857	341	6,867	
Pound nets	35	37,450	40	51,190	48	67,540					4	9,800	
Fyke nets and bag nets	193	3,455	213	4,430	202	3,955	60	1,650	47	1,080	74	1,635	
Pots, lobster and eel	1,991	3,398	2,020	3,505	1,712	2,906	1,540	963	1,945	1,091	2,360	1,233	
Lines		1,174		1,150		1,023		1,016		1,040		1,099	
Oyster tongs, rakes, and dredges	595	3,072	581	2,982	565	2,882	321	1,312	325	1,325	621	2,467	
Clam tongs, rakes, and hoes	683	5,731	688	5,774	692	5,792	363	1,297	387	1,422	657	2,540	
Minor apparatus		450		433		440		280		286		319	
Shore property	98	723	100,472		104,520		18,568		18,765		47,355		
Cash capital		167,150		153,650		150,300		11,000		12,000		39,500	
Total		533,272		573,054		572,003		130,147		127,205		259,093	
Designation.	Salem.						Union.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Boats	575	\$87,215	612	\$88,875	605	\$89,450	65	\$3,250	55	\$2,750	60	\$3,000	
Apparatus—shore fisheries:													
Seines	5	1,865	5	1,900	5	1,900							
Gill nets	600	69,600	602	69,470	591	68,955							
Oyster tongs, rakes, and dredges							130	910	110	770	120	840	
Clam tongs, rakes, and hoes		22,490		22,925		22,850		24	204	24	204	25	216
Shore property								2,400		2,400		1,000	
Cash capital								3,000		2,500		1,500	
Total		181,170		183,170		183,155		9,764		8,624		6,556	
Total for State.													
Designation.	1890.						1891.						
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing			500	\$502,490	524	\$541,520	540						
Tonnage			7,510		7,863		8,255						
Outfit					111,089		122,433						
Vessels transporting			71	96,050	83	108,150	79						
Tonnage			1,256		1,437		1,320						
Outfit					11,167		13,255						
Boats			5,616	401,718	5,742	412,373	5,591						
Apparatus—vessel fisheries:													
Seines			11	6,100	12	6,100	10						
Lines				315		370							
Pots, lobster and eel			341	365	270	245	235						
Oyster dredges and tongs			1,453	35,917	1,533	38,990	1,603						
Clam rakes and tongs			368	3,799	397	4,703	388						
Crab dredges			60	240	102	468	92						
Apparatus—shore fisheries:													
Seines			353	31,931	360	31,922	357						
Gill nets			4,045	129,911	3,983	129,832	3,951						
Pound nets			141	40,571	185	55,370	234						
Fyke nets and bag nets			1,794	18,256	1,692	18,881	1,625						
Pots, lobster and eel			4,036	4,824	4,485	5,094	4,335						
Lines				4,189		4,808							
Oyster tongs, rakes, and dredges			2,492	12,392	2,498	12,307	2,042						
Clam tongs, rakes, and hoes			2,155	11,625	2,160	11,652	2,217						
Minor apparatus				903		891							
Shore property				395,875		409,561							
Cash capital				530,650		538,850							
Total				2,350,377		2,467,865							

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the product of the fisheries of New Jersey.

Species.	Atlantic.						Bergen.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	30,180	\$617	34,080	\$600	25,880	\$497	-----	-----	-----	-----	-----	-----
Bluefish	92,400	5,705	92,700	5,640	96,000	5,485	-----	-----	-----	-----	-----	-----
Cod	66,600	1,460	83,500	2,890	79,000	3,600	-----	-----	-----	-----	-----	-----
Drum	7,500	112	11,000	145	3,500	52	-----	-----	-----	-----	-----	-----
Eels	10,000	500	9,000	450	4,200	210	10,000	\$800	12,000	\$960	12,800	\$1,025
Flounders	77,900	2,857	79,800	3,540	62,900	2,097	-----	-----	-----	-----	-----	-----
Kingfish	11,000	580	10,000	510	5,200	352	-----	-----	-----	-----	-----	-----
Menhaden	4,371,500	9,109	2,424,000	5,051	1,818,000	4,543	20,800	62	25,000	75	25,000	75
Perch, white	54,500	3,695	46,700	2,916	40,500	2,230	-----	-----	-----	-----	-----	-----
Pike	635	50	600	48	500	40	-----	-----	-----	-----	-----	-----
Sea bass	63,200	3,165	53,000	2,660	56,100	2,411	-----	-----	-----	-----	-----	-----
Shad	800	57	769	56	1,360	81	459,200	18,040	391,200	16,764	425,600	20,560
Sheepshead	5,700	870	3,200	420	2,500	250	-----	-----	-----	-----	-----	-----
Spots and croakers	14,000	582	34,000	1,385	92,500	3,830	-----	-----	-----	-----	-----	-----
Squeteague	1,618,800	74,890	1,640,100	76,839	1,201,125	54,115	-----	-----	-----	-----	-----	-----
Striped bass	21,300	3,839	20,600	2,760	19,700	2,504	31,500	3,780	27,000	3,240	25,300	3,035
Tautog	2,500	125	2,000	100	1,000	50	-----	-----	-----	-----	-----	-----
Other fish	6,000	300	7,700	385	6,000	300	-----	-----	-----	-----	-----	-----
Oysters, market	731,514	127,250	720,412	123,565	813,750	134,978	-----	-----	-----	-----	-----	-----
Oysters, seed	518,560	10,186	600,050	20,095	750,395	24,938	-----	-----	-----	-----	-----	-----
Quahogs or hard clams	601,904	58,242	552,104	56,128	454,520	50,330	-----	-----	-----	-----	-----	-----
Terrapins	1,510	395	1,340	366	1,200	308	-----	-----	-----	-----	-----	-----
Total	8,308,063	313,586	6,428,446	306,629	5,541,830	293,201	521,500	22,682	455,200	21,039	488,700	24,695
Species.	Cape May.						Cumberland.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	84,200	\$038	66,400	\$735	71,680	\$828	17,350	\$173	16,500	\$165	15,400	\$154
Bluefish	228,400	12,302	130,500	9,927	267,700	13,415	-----	-----	-----	-----	-----	-----
Butter-fish	35,200	1,276	14,100	613	23,000	810	-----	-----	-----	-----	-----	-----
Bonito	1,000	50	2,000	100	2,000	100	-----	-----	-----	-----	-----	-----
Catfish	1,000	80	1,000	80	500	40	2,000	120	2,183	131	1,600	96
Cod	-----	-----	10,000	200	46,000	2,760	-----	-----	-----	-----	-----	-----
Drum	16,900	514	24,200	647	33,250	742	-----	-----	-----	-----	-----	-----
Eels	74,950	4,614	80,450	4,757	79,150	4,773	-----	-----	-----	-----	-----	-----
Flounders	72,400	3,509	73,100	3,419	81,600	3,954	-----	-----	-----	-----	-----	-----
Kingfish	34,200	1,680	18,800	1,174	17,800	1,073	-----	-----	-----	-----	-----	-----
Menhaden	191,900	794	224,500	1,620	161,750	1,179	-----	-----	-----	-----	-----	-----
Mullet	91,900	5,111	87,700	4,876	42,900	2,435	-----	-----	-----	-----	-----	-----
Perch, white	26,700	2,229	20,400	1,686	14,115	1,182	2,110	127	1,800	108	2,350	141
Perch, yellow	500	25	500	25	100	5	3,332	200	4,186	251	3,500	210
Pike	4,000	480	3,500	420	2,000	240	175	17	200	20	150	15
Scup	5,500	280	9,500	395	10,000	400	-----	-----	-----	-----	-----	-----
Sea bass	614,800	24,417	1,015,400	40,671	1,896,000	75,950	9,000	360	-----	-----	10,000	300
Shad	4,300	343	3,650	282	1,700	137	560,912	10,752	600,400	24,161	491,300	33,457
Sheepshead	2,300	545	100	15	-----	-----	-----	-----	-----	-----	-----	-----
Spanish mackerel	-----	200	20	700	70	-----	-----	-----	-----	-----	-----	-----
Spots and croakers	53,600	2,414	63,200	2,768	83,000	3,356	-----	-----	-----	-----	-----	-----
Squeteague	729,500	26,730	655,500	24,520	449,350	18,957	-----	-----	-----	-----	-----	-----
Striped bass	84,030	8,323	60,750	5,063	33,910	3,692	2,016	235	1,683	195	2,333	275
Sturgeon	-----	-----	-----	12,750	255	438,350	11,233	428,700	9,502	390,125	7,810	9
Suckers	-----	-----	-----	-----	400	22	250	15	150	150	-----	-----
Tautog	4,600	400	5,500	440	4,000	320	-----	-----	-----	-----	-----	-----
Other fish	1,500	90	1,200	48	1,000	40	-----	-----	-----	-----	-----	-----
Crabs, hard	33,200	2,325	38,000	2,625	40,000	2,700	-----	-----	-----	-----	-----	-----
King crabs	3,094,100	7,781	2,552,000	6,710	1,810,460	4,728	241,600	792	226,380	690	194,000	510
Oysters, market	383,250	60,023	351,225	58,031	413,385	67,136	3,971,088	575,583	3,706,871	570,526	4,210,255	653,015
Oysters, seed	173,600	8,805	186,550	9,583	285,000	14,625	4,635,018	209,583	5,156,970	240,881	8,886,380	310,740
Quahogs or hard clams	212,800	16,510	293,000	20,810	395,200	25,256	-----	-----	-----	-----	-----	-----
Total	6,200,330	192,558	5,904,125	200,035	6,280,600	251,157	9,893,956	813,203	10,146,123	855,705	11,707,543	1,006,292

Statement by counties of the product of the fisheries of New Jersey—Continued.

Species.	Burlington.						Camden.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives . . .	715,710	\$3,943	697,590	\$3,869	657,675	\$3,629	126,200	\$1,262	118,400	\$1,184	110,320	\$1,103
Black bass . . .	6,935	873	9,250	1,166	12,035	1,542	800	40	800	40	800	40
Bluefish . . .	4,200	175	3,500	145	-----	-----	-----	-----	-----	-----	-----	-----
Butter-fish . . .	2,900	65	2,950	67	-----	-----	-----	-----	-----	-----	-----	-----
Carp . . .	2,525	202	2,000	160	2,025	162	-----	-----	-----	-----	-----	-----
Catfish . . .	51,500	3,717	49,215	3,566	45,775	3,334	-----	-----	-----	-----	-----	-----
Drum . . .	-----	87,240	116	-----	-----	-----	-----	-----	-----	-----	-----	-----
Eels . . .	57,165	3,446	53,830	3,186	29,680	1,998	-----	-----	-----	-----	-----	-----
Flounders . . .	24,520	1,046	22,500	965	4,900	245	-----	-----	-----	-----	-----	-----
Kingfish . . .	900	42	800	38	500	25	-----	-----	-----	-----	-----	-----
Menhaden . . .	7,090,600	10,055	4,739,160	7,783	-----	-----	-----	-----	-----	-----	-----	-----
Perch, white . . .	67,630	5,306	69,450	5,446	69,795	5,531	-----	-----	-----	-----	-----	-----
Perch, yel- low . . .	15,800	1,249	12,480	998	13,025	1,042	-----	-----	-----	-----	-----	-----
Pike . . .	4,850	422	5,300	458	5,900	518	-----	-----	-----	-----	-----	-----
Sea bass . . .	7,200	300	6,900	290	-----	-----	3,700	148	-----	-----	-----	-----
Shad . . .	569,049	31,273	537,586	29,668	475,437	26,292	685,650	32,892	645,400	32,910	638,050	43,888
Sheepshead . . .	1,200	120	600	60	-----	-----	-----	-----	-----	-----	-----	-----
Spots and croakers . . .	1,000	50	1,000	50	506	25	-----	-----	-----	-----	-----	-----
Squeteague . . .	274,000	10,445	201,500	8,900	13,000	620	4,500	135	-----	-----	-----	-----
Striped bass . . .	56,575	10,010	46,885	8,221	39,110	7,235	2,000	240	2,124	255	1,000	120
Suckers . . .	47,025	3,503	49,100	3,660	45,460	3,358	-----	-----	-----	-----	-----	-----
Other fish . . .	22,250	1,414	22,950	1,442	20,005	1,255	-----	-----	-----	-----	-----	-----
Oysters, market . . .	274,295	28,502	279,524	29,288	71,050	6,598	363,398	52,990	395,738	61,070	469,350	73,625
Oysters, seed . . .	384,042	11,626	359,800	10,974	126,000	3,600	488,000	22,130	570,500	28,050	658,700	32,970
Quahogs or hard clams . . .	798,104	79,810	764,400	76,442	98,800	9,880	-----	-----	-----	-----	-----	-----
Total . . .	10,459,075	208,104	8,025,510	106,958	1,730,672	76,889	1,674,848	109,837	1,732,162	124,075	1,877,420	151,658
Species.	Hunterdon and Warren.						Mercer.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives . . .	29,000	\$290	31,500	\$315	29,200	\$292	8,000	\$83	7,050	\$80	7,500	\$75
Catfish . . .	20,861	1,170	19,006	1,072	17,963	990	2,505	120	2,420	112	1,850	95
Perch, white . . .	2,932	185	2,805	178	2,242	146	800	50	710	45	985	60
Perch, yel- low . . .	4,862	273	4,732	286	4,387	252	1,130	45	1,340	54	1,070	43
Pike . . .	2,300	210	2,770	245	2,450	220	520	40	415	35	680	58
Shad . . .	57,828	5,373	58,100	5,354	52,090	4,719	60,164	4,973	45,831	3,775	38,218	2,082
Striped bass . . .	1,820	182	2,095	211	1,840	185	610	60	763	75	460	45
Suckers . . .	3,150	78	2,730	80	4,120	100	-----	-----	-----	-----	-----	-----
Other fish . . .	7,032	428	6,750	449	7,461	476	4,220	197	2,890	139	8,825	169
Total . . .	129,845	8,180	131,088	8,190	121,753	7,380	78,009	5,508	62,019	4,815	54,588	3,227
Species.	Gloucester.						Hudson.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives . . .	55,780	\$186	80,858	\$287	58,288	\$197	1,000	\$15	800	\$12	900	\$13
Catfish . . .	10,071	604	7,200	432	9,428	566	-----	-----	2,450	49	2,300	46
Eels . . .	-----	-----	-----	-----	-----	-----	7,050	353	6,000	330	6,000	300
Menhaden . . .	-----	-----	-----	-----	-----	-----	-----	-----	25,000	500	16,000	320
Perch, white . . .	4,356	281	3,786	227	8,428	206	2,400	48	-----	-----	-----	-----
Perch, yel- low . . .	12,014	774	11,500	690	10,714	643	-----	-----	-----	-----	-----	-----
Pike . . .	171	17	171	18	114	11	-----	-----	-----	-----	-----	-----
Shad . . .	667,258	26,388	640,330	28,762	697,993	51,089	528,000	22,425	444,000	20,960	382,000	21,000
Striped bass . . .	3,450	405	3,100	359	2,080	240	2,800	140	2,700	135	2,500	125
Suckers . . .	514	81	328	19	214	13	-----	-----	-----	-----	-----	-----
Other fish . . .	100	5	71	3	86	4	-----	-----	-----	-----	-----	-----
Lobsters . . .	-----	-----	-----	-----	-----	-----	51,500	3,075	55,400	3,478	49,800	3,180
Oysters, market . . .	8,400	900	-----	-----	-----	-----	117,600	18,300	87,500	13,900	84,000	13,200
Oysters, seed . . .	17,500	875	-----	-----	17,500	875	247,800	17,700	245,000	17,500	210,000	15,000
Total . . .	780,526	30,446	747,344	30,777	790,845	53,844	956,150	62,056	800,459	58,864	753,500	53,700

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the product of the fisheries of New Jersey—Continued.

Species.	Middlesex.						Monmouth.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Albacore							1,296	\$40	2,176	\$60	1,810	\$54	
Alewives							58,500	933	57,800	931	53,000	830	
Bluefish	19,500	\$780	7,000	\$350	3,000	\$171	7,519,525	270,050	6,076,926	213,499	3,714,023	130,653	
Butter-fish							196,385	5,623	209,152	5,754	267,762	7,620	
Bonito							108,150	4,020	122,733	4,721	71,443	2,802	
Cero							630	26	847	38	1,910	98	
Cod							638,087	16,704	737,511	22,351	540,859	14,131	
Dogfish							60,000	150	77,000	190	56,000	140	
Drum											900	18	
Eels	800	80	500	50	200	20	234,823	16,001	279,200	17,886	235,130	15,588	
Flounders	4,900	230	6,000	285	23,000	1,075	633,445	20,188	649,095	19,683	815,472	19,805	
Haddock								11,210	338	12,040	475	13,570	387
Hake							12,040	188	12,080	204	8,526	89	
Kingfish							1,430	206	2,747	368	2,183	301	
Mackerel							9,819	975	25,017	2,304	18,607	2,105	
Menhaden	1,458,333	2,625	1,641,666	3,435	2,179,166	3,983	17,128,894	39,560	11,457,716	37,708	8,273,425	30,762	
Perch, white	5,500	330					6,800	426	8,600	514	5,800	350	
Scup							10,120	326	15,582	436	23,250	618	
Sea bass							2,244,019	86,707	2,364,518	91,944	1,618,286	61,034	
Shad	30,500	1,355	28,400	1,155	21,500	995	159,810	9,265	159,118	9,952	159,063	10,298	
Sheepshead							9,366	1,405	17,340	2,049	23,223	3,310	
Skates							9,300	465	7,050	753	5,700	286	
S p a n i s h mackerel								47,275	6,998	63,691	9,115	98,454	12,517
Spots and croakers								7,010	230	7,580	280	6,982	164
Squatengue	8,550	513	9,000	540	8,500	210	1,048,958	52,779	3,202,463	78,288	4,906,521	103,049	
Striped bass	12,700	1,116	8,900	712	2,200	176	18,950	2,287	20,150	2,159	14,750	1,404	
Sturgeon							17,425	635	23,030	1,057	40,812	1,004	
Tautog							77,745	2,948	87,097	3,181	82,030	3,127	
Other fish	3,500	175	500	25	300	18	14,320	350	27,177	548	61,481	852	
Crabs, hard							109,133	2,992	192,111	6,874	124,433	4,567	
Crabs, soft							225,500	26,125	241,100	29,000	365,400	32,610	
King crabs									20,000	125	21,000	131	
Lobsters	11,250	600					114,571	9,308	105,264	8,585	91,105	7,435	
Mussels									6,000	200			
Oysters, market	281,400	47,838	230,400	40,698	250,900	43,073	1,508,010	268,194	1,016,377	284,905	1,277,759	225,764	
Oysters, seed	283,500	20,250	301,000	21,500	285,600	20,400	100,800	7,200	21,700	1,550	15,400	1,100	
Clams, soft							700,270	45,090	803,000	45,780	572,450	32,780	
Quahogs or hard clams	6,400	643	18,440	1,704	2,400	225	1,499,952	160,338	1,538,224	187,549	1,249,248	183,671	
Terrapins									848	318	820	304	
Turtles											1,545	35	
Total	2,120,833	76,514	2,255,806	70,544	2,777,766	70,940	34,634,168	1,050,220	30,271,820	1,092,440	24,900,532	911,859	
Species.	Salem.						Union.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Alewives	334,714	\$1,114	485,142	\$1,598	849,712	\$1,163							
Catfish	60,429	3,626	43,200	2,592	56,572	3,394							
Perch, white	26,144	1,560	22,714	1,363	20,572	1,234							
Perch, yellow	77,480	4,050	69,000	4,140	64,286	3,857							
Pike	1,029	103	1,029	110	686	69							
Shad	6,832,248	237,523	6,670,080	269,633	5,351,707	305,743							
Striped bass	13,039	1,505	12,314	1,401	13,742	1,505							
Suckers	3,057	184	1,972	110	1,286	77							
Other fish	600	30	420	22	514	20							
Oysters, seed							593,000	\$42,500	525,000	\$45,000	420,000	\$36,000	
Quahogs or hard clams							14,000	1,750	14,400	1,800	16,000	2,300	
Total	7,348,746	250,304	7,300,480	280,978	5,859,077	377,158	608,000	44,250	539,400	46,800	430,000	38,000	

Statement by counties of the product of the fisheries of New Jersey—Continued.

Species.	Ocean.						Total for State.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Albacore...	2,500	\$50	2,000	\$40	4,600	\$132	3,706	\$90	4,176	\$100	6,410	\$186
Alevines...	400,100	4,899	469,200	4,414	606,000	5,580	1,860,740	14,453	2,066,820	14,260	1,985,555	14,361
Black bass...	4,200	127	4,600	148	78,100	2,415	6,035	873	9,250	1,166	12,035	1,542
Bluefish...	1,426,300	51,878	917,300	37,602	685,150	28,967	9,291,125	340,939	7,227,926	284,163	4,765,735	178,691
Butter-fish...	4,200	127	4,600	148	78,100	2,415	238,085	7,091	230,802	6,582	368,862	10,845
Bonito...	35,600	1,074	25,900	5,036	32,200	1,098	144,750	5,144	150,633	9,857	103,643	4,000
Carp...	8,880	292	9,000	280	11,250	362	2,525	202	2,000	160	2,025	162
Catfish...	8,880	292	9,000	280	11,250	362	157,325	9,735	133,824	8,265	144,038	8,877
Cero...	25,000	1,000	10,000	400	5,000	200	729,747	19,164	841,011	20,001	676,859	20,691
Dogfish...	2,500	100	1,800	72	2,000	80	60,000	150	77,000	190	56,000	140
Drum...	184,650	11,425	181,700	10,975	198,050	12,370	579,438	37,300	623,280	38,594	565,210	36,283
Flounders...	110,300	4,252	157,400	5,768	233,300	9,460	923,365	32,001	987,895	33,620	1,221,172	36,645
Frostfish or tomcod...	4,500	135	1,400	42	2,000	60	4,500	135	1,400	42	2,000	60
Haddock...	7,500	300	5,000	200	2,500	100	18,710	638	17,940	675	16,070	487
Hake...	2,000	222	1,350	178	1,100	157	12,040	188	12,080	204	8,526	80
Kingfish...	2,000	12	100	12	4,300	642	49,530	2,730	33,697	2,298	26,783	1,908
Mackerel...	100	12	100	12	4,300	642	9,919	987	25,117	2,316	22,997	2,747
Menhaden...	129,200	730	133,500	892	4,092,200	7,673	30,391,227	63,535	20,670,542	56,974	10,565,541	48,535
Mullet...	500	20	650	20	600	23	92,400	5,131	88,350	4,902	43,500	2,458
Perch, white...	15,400	1,035	14,300	1,007	20,800	1,510	215,278	15,261	193,724	13,539	182,887	12,636
Perch, yellow...	372,500	19,075	396,500	20,775	297,250	15,715	488,524	26,291	500,238	27,219	304,332	21,767
Pike...	5,200	520	5,500	550	6,400	640	18,940	1,850	19,485	1,904	18,880	1,811
Scup...	600	24	600	24	14,900	561	16,220	630	25,082	855	48,150	1,579
Sea bass...	618,500	24,895	201,700	12,128	311,925	13,730	3,560,419	139,992	3,731,538	147,693	3,892,311	153,431
Shad...	5,000	832	5,050	809	11,614	1,901	23,566	3,772	29,290	4,013	37,337	5,461
Sheepshead...	5,000	832	5,050	809	11,614	1,901	9,300	165	7,050	353	5,700	286
Skate...	11,775	2,702	14,500	3,485	18,100	3,320	59,050	9,700	78,391	12,620	117,254	15,007
Spanish mackerel...	1,860	60	900	32	1,200	49	78,010	3,336	106,680	4,521	184,182	7,424
Spots and eckakers...	388,700	14,973	294,000	12,428	806,700	31,100	4,073,008	180,405	6,002,569	201,515	7,540,190	208,051
Squeteague...	77,400	15,523	89,100	17,610	63,750	12,704	328,196	47,645	298,164	43,296	219,075	33,395
Striped bass...	2,400	96	2,300	115	2,200	110	5,200	260	455,775	11,868	452,630	10,610
Sturgeon...	5,100	181	4,900	173	6,600	226	56,546	3,914	56,680	4,008	53,430	3,667
Tautog...	4,100	94	3,550	91	4,450	118	63,022	3,053	73,217	3,152	105,122	3,258
Crabs, hard...	50,000	5,550	48,400	5,480	44,120	5,032	142,833	5,317	230,111	9,409	164,433	7,267
Crabs, soft...	2,400	96	2,300	115	2,200	110	5,200	260	275,500	31,675	280,500	35,380
King crabs...	8,000	640	5,000	400	3,000	240	3,335,700	8,573	2,798,980	7,534	2,025,460	5,369
Lobsters...	1,050	525	1,200	600	750	500	185,321	13,683	165,664	12,463	143,905	10,861
Shrimp...	1,050	525	1,200	600	750	500	1,050	525	1,200	600	750	500
Mussels...	316,960	39,212	289,275	35,726	450,702	52,579	7,956,515	1,218,792	7,686,322	1,227,909	8,047,151	1,270,568
Oysters, market...	430,710	15,533	460,775	16,606	992,565	35,812	7,856,030	375,388	8,428,245	411,739	10,157,140	406,060
Oysters, seed...	25,000	2,000	24,000	1,920	23,000	1,840	815,270	47,080	827,000	47,700	595,450	34,620
Quahogs or hard clams...	263,204	25,344	277,856	27,404	774,404	77,859	3,306,364	342,637	3,454,024	371,933	2,900,572	349,221
Terrapins...	1,050	875	1,092	890	1,078	883	2,560	770	3,280	1,074	2,598	997
Turtles...	-----	-----	-----	-----	1,250	25	-----	-----	-----	-----	2,795	60
Total...	4,948,090	245,705	4,151,308	223,808	9,031,608	326,354	88,730,048	3,447,351	79,116,380	3,520,057	73,267,434	3,646,382

The catch by different forms of apparatus.—In the ten counties of New Jersey having vessel fisheries, oysters taken with dredges, tongs, etc., constitute a more or less important part of the yield, except in the one county of Middlesex. The yield of the vessel fisheries in 1892 was valued at \$1,294,358, of which \$1,171,641 represented oysters, \$71,566 quahogs, \$4,375 crabs, \$2,436 lobsters, and \$44,340 fish. Purse seines, lines, and pots are used in the capture of fish. In Atlantic, Burlington, Monmouth, and Ocean counties, seines are operated for menhaden, the yield of which fish in 1892 was 10,515,960 pounds, valued at \$30,425. Lines are employed for bluefish, cod, scup, sea bass, and squeteague in Atlantic, Cape May, Cumberland, and Monmouth counties; the output in 1892 was 369,400 pounds, having a value of \$13,540. Pots are used to a limited extent on vessels fishing from Cape May and Hudson counties; 8,700 pounds of eels, worth \$375, and 34,800 pounds of lobsters worth \$2,436, were thus taken in 1892.

The yield of the shore fisheries of New Jersey in 1892 was 49,383,552 pounds, with a value of \$2,352,024. Seines took 6,442,659 pounds, valued at \$153,630; gill nets, 8,945,666 pounds, valued at \$568,484; fyke nets and bag nets, 820,025 pounds, valued at \$39,639; pound nets, trap nets, and weirs, 10,602,607 pounds, valued at \$194,919; lines, 10,568,243 pounds, valued at \$404,692; pots, 247,900 pounds, valued at \$15,005; dredges, tongs, rakes, etc., 11,549,952 pounds, valued at \$963,147, including crabs, lobsters, shrimps, terrapins, and turtles; other minor apparatus, 206,500 pounds, valued at \$12,508.

Considering fish proper, it is seen that pound nets, trap nets, and weirs take larger quantities than any other class of apparatus, squeteague constituting more than half the quantity and value of the yield. Next to the pound nets in quantity of catch and greatly surpassing them in value of products are hand and trawl lines, the bulk of whose yield consists of bluefish and sea bass. Gill nets come next in quantity of fish taken, and surpass all other apparatus in value of products, shad being the only important species thus taken. Seines are fourth in respect to both quantity and value of the yield, and have as the most prominent fish shad, striped bass, alewives, yellow perch, and squeteague. Shad, flounders, alewives, perch, and eels form the larger part of the fyke-net catch, and have more value than all the other fish.

Seines are most important in Ocean and Cape May counties, gill nets in Salem and Cumberland counties, pound nets in Monmouth and Ocean counties, fykes in Burlington and Hudson counties, and lines in Monmouth and Cape May counties.

Statement by counties, apparatus, and species of the yield of the vessel fisheries of New Jersey.

Apparatus and species.	Atlantic.						Burlington.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Drum.....												
Menhaden	4,350,000	\$9,062	2,400,000	\$5,000	1,800,000	\$4,500	7,007,100	\$10,600	4,702,410	\$87,000	\$113	.....
Total.....	4,350,000	9,062	2,400,000	5,000	1,800,000	4,500	7,007,100	10,600	4,780,410	7,813	.....	.....
Lines:												
Bluefish	5,200	260	1,700	85	2,000	100	.....	.....	.....	.....	.....	.....
Cod.....	66,600	1,460	83,500	2,890	79,000	3,000	.....	.....	.....	.....	.....	.....
Sea bass.....	58,000	2,900	48,000	2,400	53,000	2,300	.....	.....	.....	.....	.....	.....
Squeteague	2,000	100	2,000	100	3,200	100	.....	.....	.....	.....	.....	.....
Total	131,800	4,720	135,200	5,475	137,200	6,160	.....	.....	.....	.....	.....	.....
Miscellaneous:												
Oysters, market..	55,664	9,417	38,962	6,657	77,700	10,075	.....	.....	.....	.....	.....	.....
Oysters, seed...	134,960	5,836	131,950	4,905	139,825	5,116	17,500	750	17,500	17,500	750	.....
Quahogs	46,800	4,797	51,896	5,640	39,616	4,457	.....	.....	.....	.....	.....	.....
Total	237,424	20,050	222,808	17,202	257,141	19,648	17,500	750	17,500	17,500	750	.....
Grand total.	4,710,284	33,832	2,758,008	27,677	2,194,341	30,308	7,084,600	11,350	4,806,910	8,563	.....	.....
 Cumberland.												
Apparatus and species.	Cumberland.						Gloucester.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:												
Sea bass.....	9,000	\$360	.....	.....	10,000	\$300	.....	.....	.....	.....	.....	.....
Dredges, rakes, and tongs:												
Oysters, market..	3,957,513	573,718	3,692,696	\$577,661	4,185,580	649,650	8,400	\$900	.....	.....	17,500	\$875
Oysters, seed ...	4,349,275	198,958	4,817,827	228,606	5,887,105	201,965	17,500	875	.....	.....	17,500	875
Total	8,306,788	772,670	8,510,523	806,267	10,072,685	941,615	25,900	1,775	.....	.....	17,500	875
Grand total.	8,315,788	773,036	8,510,523	806,267	10,082,685	941,915	25,900	1,775	.....	.....	17,500	875

Statement by counties, apparatus, and species of the yield of the vessel fisheries of New Jersey—Continued.

Apparatus and species.	Camden.						Cape May.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:												
Bluefish	800	\$40	.....	.....	.....	.....	8,700	\$385	5,100	\$235	3,700	\$185
Scup .....	.....	.....	.....	.....	.....	.....	3,000	180	1,500	75	.....	.....
Sea bass	8,700	148	.....	.....	.....	.....	91,500	3,410	60,500	2,205	38,000	1,420
Squeteague	4,500	135	.....	.....	.....	.....	32,000	1,250	4,000	130	2,000	80
Total	9,000	323	.....	.....	.....	.....	135,200	5,225	71,100	2,645	43,700	1,685
Pots:												
Eels .....	.....	.....	.....	.....	.....	.....	8,000	480	9,500	430	3,700	125
Dredges, rakes, and tongs:												
Oysters, market.	363,398	52,090	305,738	\$61,670	460,350	\$73,625	167,300	25,604	81,550	14,650	127,900	20,680
Oysters, seed ..	488,600	22,130	570,500	28,050	658,700	32,970	126,700	6,325	144,550	7,358	234,500	12,005
Total	851,998	75,120	966,238	89,720	1,128,050	106,595	294,000	32,019	220,100	22,008	362,400	32,685
Grand total.	860,998	75,443	966,238	80,720	1,128,050	106,595	437,200	37,724	306,700	25,063	409,800	34,495
Hudson.												
Apparatus and species.	1890.				1891.				1892.			
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.

Pots:												
Eels	6,000	\$300	5,600	\$280	5,000	\$250	.....	.....	.....	.....	.....	.....
Lobsters	30,000	2,000	35,400	2,478	34,800	2,436	11,250	\$600	.....	.....	.....	.....
Total	36,000	2,300	41,000	2,758	39,800	2,686	11,250	600	.....	.....	.....	.....
Dredges, rakes, and tongs:												
Oysters, market.	65,100	9,300	38,500	5,500	42,000	6,000	.....	.....	.....	.....	.....	.....
Quahogs (hard clams) .....	.....	.....	.....	.....	.....	.....	1,600	163	8,000	\$1,250	.....	.....
Total	65,000	9,300	38,500	5,500	42,000	6,000	1,600	163	8,000	1,250	.....	.....
Grand total.	101,100	11,600	79,500	8,258	81,800	8,686	12,850	763	8,000	1,250	.....	.....
Middlesex.												
Apparatus and species.	1890.				1891.				1892.			
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.

Monmouth.							Ocean.					
Apparatus and species.	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.

Seines:												
Menhaden	12,265,800	\$24,350	7,535,610	\$25,794	4,834,560	\$19,484	.....	.....	.....	.....	3,881,400	\$6,441
Lines:												
Bluefish	271,000	11,130	225,000	6,300	146,500	4,395	20,000	\$1,600	.....	.....	.....	.....
Sea bass	35,000	1,050	40,000	1,000	30,000	900	.....	.....	.....	.....	.....	.....
Squeteague	2,500	125	2,000	100	2,000	100	.....	.....	.....	.....	.....	.....
Total	308,500	12,305	267,000	7,400	178,500	5,395	20,000	1,600	.....	.....	.....	.....
Pots:												
Eels	1,923	115	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dredges, rakes, and tongs:												
Oysters, market.	512,750	70,006	564,340	82,195	471,905	67,600	.....	.....	.....	.....	700	80
Oysters, seed	84,000	6,000	4,200	300	.....	.....	.....	.....	.....	.....	23,800	1,000
Quahogs (hard clams)	505,272	53,007	591,144	72,373	436,048	64,000	10,500	1,109	20,256	\$2,154	24,500	3,100
Mussels .....	.....	.....	6,000	200	118,233	4,375	.....	.....	.....	.....	.....	.....
Crabs	102,333	2,788	184,111	6,634	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,204,355	132,701	1,349,795	161,702	1,026,180	135,984	10,500	1,100	20,256	2,154	49,000	4,180
Grand total.	13,780,578	169,471	9,152,405	104,896	6,039,246	160,863	30,500	2,700	20,256	2,154	3,030,400	10,021

Statement by counties, apparatus, and species of the yield of the vessel fisheries of New Jersey—Continued.

Apparatus and species.	Total for State.					
	1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:						
Drum.....			87,000	\$113		
Menhaden	23,082,900	\$44,012	14,638,020	88,494	10,515,960	\$30,425
Total	23,082,900	44,012	14,725,020	88,607	10,515,960	30,425
Lines:						
Bluefish.....	305,700	13,415	231,800	6,620	152,200	4,680
Cod.....	66,680	1,460	83,500	2,890	79,000	8,600
Scup.....	3,000	180	1,500	75		
Sea bass	197,200	7,808	148,500	5,605	131,000	4,920
Squeteague	41,000	1,610	8,000	330	7,200	340
Total	613,560	24,533	478,300	15,520	369,400	13,540
Pots:						
Eels.....	15,923	895	15,100	710	8,700	875
Lobsters	41,250	2,600	35,400	2,478	34,800	2,436
Total	57,173	3,495	50,500	3,188	43,500	2,811
Dredges, rakes, and tongs:						
Oysters, market.....	5,130,125	742,925	4,811,786	748,333	5,875,195	827,710
Oysters, seed.....	5,218,535	240,874	5,686,527	269,969	6,981,430	843,981
Quahogs (hard clams).....	564,172	59,076	671,298	81,417	500,164	71,566
Mussels.....			6,000	200		
Crabs.....			184,111	6,634	118,233	4,375
Total	11,015,165	1,045,663	11,359,720	1,106,558	12,955,022	1,247,582
Grand total.....	35,368,798	1,117,703	26,608,540	1,163,868	23,883,882	1,204,358

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey.

Apparatus and species.	Gloucester.				Hudson.			
	1890.		1891.		1892.		1890.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:								
Alewives	55,786	\$186	80,858	\$267	58,288	\$197		
Catfish	10,071	604	7,200	432	9,428	560		
Menhaden							25,000	\$500
Perch, white	4,356	261	3,786	227	3,428	206		
Perch, yellow	12,914	774	11,500	690	10,714	643		
Pike	171	17	171	18	114	11		
Shad.....	22,558	600	25,380	650	19,343	675		
Striped bass	500	50	643	61	457	45		
Suckers	514	31	828	19	214	13		
Other fish	100	5	71	3	86	4		
Total	100,970	2,528	129,937	2,370	102,072	2,300		
Gill nets:							25,000	500
Shad.....	644,700	25,788	614,950	28,112	678,650	50,414	360,000	\$16,200
Striped bass	2,956	855	2,457	205	1,023	195		
Total	647,656	26,143	617,407	28,407	680,273	50,609	360,000	16,200
Fyke nets:								
Alewives							1,000	15
Eels							1,050	53
Perch, white							2,400	48
Shad.....							100,000	6,225
Striped bass							2,800	140
Total							173,250	6,481
Miscellaneous:								
Lobsters							21,500	1,075
Oysters, market.....							52,500	9,000
Oysters, seed							247,800	17,700
Total							321,800	27,775
Grand total.....	754,626	28,071	747,344	30,777	782,845	52,900	855,050	50,450
							789,959	48,606
							871,700	45,104

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Atlantic.						Bergen.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....	30,180	\$617	34,980	\$690	25,880	\$497						
Bluefish.....	3,000	150	3,500	175	1,500	75						
Eels.....	6,500	325	6,000	300	4,200	210						
Flounders.....	24,000	1,095	23,800	1,090	15,100	755						
Kingfish.....	3,100	180	4,000	240	4,200	252						
Menhaden.....	21,500	47	24,000	51	18,000	43						
Perch, white.....	28,000	1,500	29,200	1,416	31,500	1,530						
Shad.....	800	57	760	56	1,380	81						
Sheepshead.....	1,200	120	1,200	120	1,500	150						
Squteague.....	228,800	12,510	250,000	15,130	245,525	13,770						
Striped bass.....	12,000	2,024	14,100	1,450	11,800	1,324						
Other fish.....	0,000	300	7,700	385	6,000	300						
Total.....	364,980	18,925	405,240	21,103	366,505	18,987						
Gill nets:												
Menhaden.....							20,800	\$62	25,000	\$75	25,000	\$75
Perch, white.....	16,500	1,395	12,500	1,100	4,000	800						
Pike.....	635	50	600	48	500	40						
Shad.....							459,200	18,040	391,200	16,764	425,600	20,560
Squteague.....	500	20	600	24								
Striped bass.....	1,300	115	1,000	85								
Total.....	18,935	1,580	14,700	1,257	4,500	340	511,500	21,882	443,200	20,070	475,000	23,670
Fyke nets and bag nets:												
Perch, white.....	10,000	800	5,000	400	5,000	400						
Striped bass.....	6,000	1,500	4,500	1,125	4,600	1,150						
Total.....	16,000	2,800	9,500	1,525	9,600	1,550						
Lines:												
Bluefish.....	84,200	5,295	87,500	5,380	92,500	5,310						
Drum.....	7,500	112	11,000	145	8,500	52						
Flounders.....	53,900	1,762	56,000	2,410	47,800	1,342						
Kingfish.....	8,000	400	6,000	300	1,000	100						
Sea bass.....	5,200	265	5,000	260	3,100	111						
Sheepshead.....	4,500	750	2,000	300	1,000	100						
Spots and croakers.....	14,000	582	34,000	1,385	92,500	8,830						
Squteague.....	1,387,500	62,260	1,381,500	61,585	952,400	40,185						
Striped bass.....	2,000	200	1,000	100	300	30						
Tautog.....	2,500	125	2,000	100	1,000	50						
Total.....	1,569,300	71,751	1,656,000	71,965	1,193,100	51,110						
Pots:												
Eels.....							10,000	800	12,000	960	12,800	1,025
Minor apparatus:												
Eels.....	3,500	175	3,000	150								
Miscellaneous:												
Terrapins.....	1,510	305	1,340	366	1,200	308						
Quahogs.....	555,104	53,445	500,208	50,488	414,904	45,873						
Oysters, market.....	675,850	117,830	681,450	116,908	736,050	124,903						
Oysters, seed.....	383,600	13,350	469,000	15,190	619,570	19,822						
Total.....	1,616,064	185,023	1,651,998	182,952	1,771,724	190,906						
Grand total.	3,588,779	279,754	3,670,488	278,952	3,347,489	262,893	521,500	22,682	455,200	21,039	488,700	24,695
Apparatus and species.	Hunterdon and Warren.						Mercer.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....	29,000	\$290	31,500	\$315	29,200	\$292	8,000	\$83	7,650	\$80	7,500	\$75
Catfish.....	20,861	1,170	19,606	1,072	17,963	990	2,565	120	2,420	112	1,850	95
Perch, white.....	2,932	185	2,805	178	2,242	146	800	50	710	45	985	60
Perch, yellow.....	4,862	273	4,732	286	4,387	252	1,180	45	1,340	54	1,070	48
Pike.....	2,360	210	2,770	245	2,450	220	520	40	415	35	680	58
Shad.....	57,828	5,373	58,100	5,354	52,090	4,710	21,814	2,083	20,981	1,895	18,988	1,666
Striped bass.....	1,820	182	2,095	211	1,840	185	610	60	763	75	460	45
Suckers.....	3,150	78	2,730	80	4,120	100						
Other fish.....	7,032	428	6,750	449	7,461	476	1,320	52	890	39	1,125	84
Total.....	129,845	8,189	131,088	8,190	121,753	7,380	36,259	2,513	35,169	2,335	32,638	2,076
Gill nets:												
Shad.....							38,850	2,910	24,850	1,880	19,250	1,016
Other fish.....							2,900	145	2,000	100	2,700	135
Total.....							41,750	3,055	26,850	1,980	21,950	1,151
Grand total.	129,845	8,189	131,088	8,190	121,753	7,380	78,009	5,568	62,019	4,315	54,588	3,227

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Burlington.						Camden.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	532,860	\$3,027	498,040	\$2,870	474,080	\$2,711	126,200	\$1,262	118,400	\$1,184	110,320	\$1,103
Bluefish	4,200	175	3,500	145	2,950	67	.....	.....	.....	.....	.....	.....
Butter-fish	2,000	65	2,950	67	.....	.....	.....	.....	.....	.....	.....	.....
Catfish	3,800	120	4,000	125	3,500	110	.....	.....	.....	.....	.....	.....
Drum . . . . .	.....	240	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
Flounders	6,000	300	7,800	355	2,500	125	.....	.....	.....	.....	.....	.....
Kingfish	900	42	800	38	500	25	.....	.....	.....	.....	.....	.....
Menhaden	23,500	55	36,750	83	.....	.....	.....	.....	.....	.....	.....	.....
Perch, white	13,200	970	13,100	950	10,000	760	.....	.....	.....	.....	.....	.....
Perch, yellow	600	48	800	64	.....	.....	.....	.....	.....	.....	.....	.....
Pike	4,100	350	4,000	340	3,800	320	.....	.....	.....	.....	.....	.....
Sea bass	3,000	120	3,200	130	.....	.....	.....	.....	.....	.....	.....	.....
Shad	204,184	10,840	197,774	10,505	182,537	10,657	318,850	18,220	298,550	17,060	266,000	15,200
Sheepshead	1,200	120	600	60	.....	.....	.....	.....	.....	.....	.....	.....
Spots and croakers	1,000	50	1,000	50	500	25	.....	.....	.....	.....	.....	.....
Squeteague	109,000	4,505	112,000	4,800	3,000	120	.....	.....	.....	.....	.....	.....
Striped bass	14,300	2,045	14,100	2,570	7,200	1,450	.....	.....	.....	.....	.....	.....
Suckers	3,100	69	3,150	69	2,900	63	.....	.....	.....	.....	.....	.....
Other fish	100	5	100	5	.....	.....	.....	.....	.....	.....	.....	.....
Total	928,544	23,590	903,904	23,229	690,517	16,360	445,050	10,482	416,050	18,244	376,320	10,303
Gill nets:												
Perch, white	450	33	800	52	1,200	84	.....	.....	.....	.....	.....	.....
Pike	750	72	1,300	118	2,100	198	.....	.....	.....	.....	.....	.....
Shad	357,525	20,071	383,288	18,835	285,950	15,286	306,800	14,672	346,850	15,856	372,050	28,038
Squeteague . . . . .	.....	4,000	200	10,000	500	.....	.....	.....	.....	.....	.....	.....
Striped bass . . . . .	.....	100	8	300	24	2,000	240	2,124	255	1,000	120	.....
Suckers	400	12	500	15	1,000	30	.....	.....	.....	.....	.....	.....
Other fish	8,800	440	9,300	405	8,300	415	.....	.....	.....	.....	.....	.....
Total	307,925	20,028	349,288	19,693	308,850	16,537	308,800	14,912	348,974	16,111	373,050	28,758
Fyke nets and bag nets:												
Alewives	182,850	916	199,550	999	183,595	918	.....	.....	.....	.....	.....	.....
Black bass	2,000	288	2,800	302	4,885	684	.....	.....	.....	.....	.....	.....
Carp	2,525	202	2,000	160	2,025	162	.....	.....	.....	.....	.....	.....
Catfish	37,700	2,896	33,565	2,025	31,025	2,490	.....	.....	.....	.....	.....	.....
Eels	22,340	1,518	17,280	1,207	19,200	1,344	.....	.....	.....	.....	.....	.....
Flounders	2,920	146	2,200	110	2,400	120	.....	.....	.....	.....	.....	.....
Perch, white	53,080	4,303	55,550	4,444	58,595	4,087	.....	.....	.....	.....	.....	.....
Perch, yellow	15,200	1,201	11,680	934	13,025	1,012	.....	.....	.....	.....	.....	.....
Shad	7,340	362	6,524	328	6,950	349	.....	.....	.....	.....	.....	.....
Striped bass	29,075	5,781	21,110	4,254	21,935	4,600	.....	.....	.....	.....	.....	.....
Suckers	43,525	3,422	45,450	3,576	41,560	3,265	.....	.....	.....	.....	.....	.....
Other fish	11,125	835	10,925	814	9,455	704	.....	.....	.....	.....	.....	.....
Total	410,040	21,870	408,634	19,843	395,550	20,374	.....	.....	.....	.....	.....	.....
Lines:												
Black bass	4,875	585	6,450	774	7,150	858	.....	.....	.....	.....	.....	.....
Catfish	10,000	701	11,650	816	10,350	725	.....	.....	.....	.....	.....	.....
Eels	9,325	653	7,550	529	6,480	454	.....	.....	.....	.....	.....	.....
Flounders	15,000	600	12,500	500	.....	.....	.....	.....	.....	.....	.....	.....
Sea bass	4,200	180	3,700	100	.....	.....	.....	.....	.....	.....	.....	.....
Squeteague	105,000	5,850	85,500	3,900	.....	.....	.....	.....	.....	.....	.....	.....
Striped bass	13,200	1,584	11,575	1,389	0,675	1,101	.....	.....	.....	.....	.....	.....
Other fish	2,225	134	2,025	158	2,250	136	.....	.....	.....	.....	.....	.....
Total	233,825	10,287	141,550	8,226	35,905	3,334	.....	.....	.....	.....	.....	.....
Pots:												
Eels	20,000	1,000	24,000	1,200	4,000	200	.....	.....	.....	.....	.....	.....
Minor apparatus:												
Eels	5,500	275	5,000	250	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous:												
Quahogs	708,104	79,810	764,400	76,442	98,800	9,880	.....	.....	.....	.....	.....	.....
Oysters, market	274,295	28,502	270,524	29,288	71,050	6,598	.....	.....	.....	.....	.....	.....
Oysters, seed	340,542	10,876	342,300	10,224	126,000	3,000	.....	.....	.....	.....	.....	.....
Total	1,418,941	110,188	1,380,224	115,054	205,850	20,078	.....	.....	.....	.....	.....	.....
Grand total	3,375,375	190,844	3,218,600	188,395	1,730,672	76,889	813,850	34,394	765,924	34,355	749,370	45,061

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Cape May.						Cumberland.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.	48,800	\$530	36,400	\$384	32,800	\$347	17,350	\$173	16,500	\$165	15,400	\$154
Bluefish.	27,300	2,087	9,000	642	17,500	675						
Butter-fish.	15,200	676	14,100	613	23,000	810						
Catfish.	1,000	80	1,000	80	500	40						
Drum.	3,000	36	8,000	87	13,000	137						
Eels.	55,000	3,363	54,500	3,298	57,300	3,575						
Flounders.	50,400	2,644	49,200	2,506	61,800	3,212						
Kingfish.	13,800	930	12,100	799	8,800	563						
Menhaden.	156,900	544	84,500	420	91,750	429						
Mullet.	91,000	5,111	87,700	4,876	42,900	2,435						
Perch, white.	24,200	2,070	18,000	1,532	12,000	1,048	2,116	127	1,800	108	2,350	141
Perch, yellow.							3,332	200	4,186	251	3,500	210
Pike.	4,000	480	3,000	420	2,000	240	175	17	200	20	150	15
Sea bass.	2,000	140	4,000	280	3,000	210						
Shad.	2,000	175	1,450	118	800	70	13,500	675	14,500	725	12,500	625
Sheepshead.	300	45	100	15								
Spanish mackrel.					500	50						
Spots and croakers.	14,500	710	9,500	445	14,600	500						
Squeteague.	292,000	12,295	264,500	11,165	192,500	8,800						
Striped bass.	71,700	7,430	46,850	4,945	27,600	3,228	350	35	350	35	250	25
Suckers.							400	22	250	15	150	0
Tautog.	1,600	160	1,500	120	1,000	80						
Other fish.	1,500	00	1,200	48	1,000	40						
Total.	877,100	39,566	707,700	32,793	604,350	26,489	39,322	1,375	39,960	1,450	35,900	1,275
Gill nets:												
Alewives.	5,400	58	6,000	71	5,880	68						
Bluefish.	45,000	2,250	12,000	710	18,000	1,040						
Butter-fish.	20,000	600			5,000	59						
Drum.					1,500	40						
Flounders.												
Kingfish.	15,000	450										
Menhaden.	35,000	250	140,000	1,200	70,000	750						
Perch, white.	1,000	100	1,000	100	80	80						
Shad.					200	200						
Spanish mackrel.												
Spots and croakers.	10,000	500	1,500	75	1,000	50						
Squeteague.	35,000	1,400	23,500	900	21,000	880						
Striped bass.					12,750	255						
Sturgeon.							438,350	11,233	428,700	9,502	390,125	7,310
Total.	166,400	5,608	184,200	3,166	136,130	3,233	906,428	30,510	1,015,933	33,158	871,008	40,392
Fyke nets:												
Eels.	650	65	3,750	250	550	55						
Perch, white.	700	35	600	30	715	30						
Squeteague.	6,500	195	6,000	180	5,000	150						
Striped bass.	930	65	1,000	70	1,110	83						
Total.	8,780	300	11,350	530	7,375	321						
Pound nets:												
Eels.	1,300	91	1,200	84	600	42						
Flounders.	7,800	212	7,100	184	3,300	92						
Perch, white.	800	24	800	24	600	18						
Perch, yellow.	500	25	500	25	100	5						
Shad.	2,300	168	2,200	164	900	67						
Squeteague.	205,000	5,530	172,000	5,180	80,450	2,736						
Striped bass.	10,400	728	11,400	798	4,200	284						
Total.	228,100	6,778	195,200	6,459	90,150	3,244						
Lines:												
Bluefish.	147,400	7,580	103,800	5,340	228,500	11,515						
Bonito.	1,000	50	2,000	100	2,000	100						
Cod.			10,000	360	46,000	2,760						
Drum.	13,000	478	16,200	560	15,250	553						
Flounders.	14,200	653	16,800	729	15,000	610						
Kingfish.	5,400	300	6,700	375	9,000	510						
Scup.	2,500	100	8,000	320	10,000	400						
Sea bass.	521,300	20,867	950,900	38,186	1,855,000	74,320						
Sheepshead.	2,000	500										
Spots and croakers.	29,100	1,204	52,200	2,248	67,400	2,806						
Squeteague.	159,000	6,060	185,500	6,875	148,400	6,311						
Striped bass.	1,000	100	1,500	150	1,000	103						
Tautog.	3,000	240	4,000	320	3,000	240						
Total.	899,800	38,132	1,357,000	55,563	2,400,550	100,227						
Pots:												
Eels.					5,000	250						
Minor apparatus:												
Alewivs.	30,000	350	24,000	280	33,000	412						
Eels.	10,000	615	11,500	695	12,000	725						
Total.	40,000	965	35,500	975	45,000	1,138						

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Cape May.						Cumberland.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Miscellaneous:													
Crabs, hard...	33,200	\$2,325	38,000	\$2,625	40,000	\$2,700							
Crabs, king...	8,094,100	7,781	2,552,600	6,719	1,810,400	4,728	241,600	\$792	226,380	\$690	194,000	\$510	
Quahogs...	212,800	16,510	293,600	20,816	395,200	25,256							
Oysters, market...	215,950	34,329	269,675	43,981	285,425	46,456	14,175	1,865	14,175	1,865	24,675	3,365	
Oysters, seed...	46,900	2,480	42,000	2,225	51,100	2,020	286,643	10,625	339,143	12,275	499,275	18,775	
Total.....	9,602,950	63,425	3,195,875	76,366	2,582,185	81,760	542,418	15,282	579,698	14,830	717,950	22,650	
Grand total.....	5,823,130	154,834	5,687,425	175,852	5,870,740	216,062	1,578,108	45,167	1,035,000	49,438	1,024,858	64,317	
 Apparatus and species.													
Middlesex.						Monmouth.							
Apparatus and species.	1890.		1891.		1892.		1890.		1891.		1892.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Seines:													
Alewives...													
Bluefish.....	10,500	\$780	7,000	\$350	2,300	\$115	11,000	\$220	12,500	\$250	12,000	\$240	
Eels.....							1,500	60	1,000	40	1,000	30	
Flounders.....	4,000	200	4,500	225	7,500	375	900	36	600	30	500	25	
Menhaden.....	1,458,333	2,625	1,541,660	2,775	2,106,068	3,000	4,200	9	3,500	20			
Perch, white.....							2,800	140	3,500	175	3,000	150	
Shad.....	5,600	210	6,400	256	6,000	300	10,000	500	12,000	600	9,600	480	
Squeteague.....	8,000	480	8,500	510	3,500	210	49,000	1,960	46,000	1,840	40,100	1,203	
Striped bass.....	7,500	600	6,500	520	2,000	160	12,000	1,670	10,700	1,270	7,800	856	
Total.....	1,502,033	4,895	1,574,506	4,636	2,187,066	5,000	92,000	4,625	90,800	4,265	75,000	3,024	
Gill nets:													
Bluefish.....							107,635	4,678	109,600	4,765	104,600	3,587	
Butter-fish.....							100	3	100	3	120	4	
Cod.....									45,800	1,603	300	15	
Dogfish.....							60,000	150	77,000	190	56,000	140	
Flounders.....							1,000	30	1,000	40	1,200	48	
Menhaden.....							1,275	12	4,203	42	2,200	20	
Shad.....	10,400	390	9,500	356	8,000	300	61,700	3,515	52,000	3,250	55,200	3,500	
Spanish mack'l.....							24,305	3,778	20,210	4,155	21,891	3,910	
Squeteague.....							82,765	2,828	90,300	3,349	81,220	2,962	
Sturgeon.....											200	10	
Other fish.....	2,000	145					400	20	760	38	1,375	75	
Total.....	13,300	535	9,500	356	8,000	300	330,180	15,014	307,033	17,435	324,306	14,361	
Fyke nets:													
Bluefish.....							900	45	1,000	50	850	43	
Butter-fish.....							1,500	75	3,000	150	2,500	125	
Eels.....							24,950	1,130	43,150	2,787	22,750	1,570	
Flounders.....	900	39	1,500	60	15,000	670	42,600	1,724	29,900	1,247	29,200	1,210	
Menhaden.....							20,166	53	29,167	53	25,000	45	
Perch, white.....	5,500	330					4,000	288	5,100	339	2,800	200	
Scup.....							1,000	50	2,100	105	400	20	
Sea bass.....							1,000	48	1,100	53	800	40	
Shad.....	14,500	755	12,500	543	7,500	395	4,500	275	4,000	240	4,000	250	
Spots and croakers.....							5,000	180	6,500	265	3,500	125	
Squeteague.....	550	33	500	30			4,000	202	6,000	305	4,700	237	
Striped bass.....	5,200	516	2,400	192	200	16	2,150	212	2,550	274	1,050	208	
Tautog.....							2,400	81	2,000	115	2,100	90	
Other fish.....	600	40	500	25			1,700	85	2,700	71	23,050	224	
Total.....	27,250	1,703	17,400	850	22,700	1,081	124,866	4,449	130,167	6,054	123,600	4,387	
Pound nets:													
Albacore.....							1,206	40	1,176	40	810	34	
Alewives.....							47,500	713	45,300	681	41,000	90	
Bluefish.....							700	56	104,850	4,770	189,079	8,547	
Bonito.....							26,500	1,060	54,733	2,141	47,318	1,877	
Butter-fish.....							104,785	5,545	206,082	5,601	265,142	7,491	
Cero.....							630	26	847	38	1,010	98	
Cod.....							3,987	120	2,294	64	4,659	110	
Eels.....										50	3		
Flounders.....							500	30	122,545	3,145	189,767	4,461	
Kingfish.....							1,430	208	2,247	278	2,188	301	
Mackerel.....							9,819	975	25,017	2,304	18,607	2,105	
Menhaden.....	100,000	660	12,500	83	4,828,453	15,136	3,885,176	11,799	3,411,665	11,213			
Scup.....							8,720	260	12,982	311	22,400	580	
Sea bass.....							15,800	610	29,188	946	91,215	3,502	
Shad.....							83,610	4,075	61,118	5,802	91,163	5,978	
Sheepshead.....							9,266	1,385	17,240	2,629	23,123	3,290	
Spanish mack'l.....							22,570	3,100	30,981	4,885	76,163	8,547	
Spots and croakers.....							2,610	50	1,030	21	3,482	39	

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Middlesex.						Monmouth.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pound nets:												
Squeteague.....							673,507	\$39,380	2,840,299	\$65,156	4,786,500	\$96,796
Striped bass.....							4,500	360	6,000	480	5,000	400
Sturgeon.....							17,425	635	23,930	1,057	40,612	994
Tautog.....							4,870	98	12,437	261	4,235	81
Other fish.....					300	\$18	12,220	245	23,217	419	32,056	543
Total.....		100,000	\$660		14,000	187	6,106,953	82,804	7,697,060	117,981	9,550,143	158,376
Lines:												
Albacore.....									1,000	20	1,000	20
Bluefish.....							7,033,640	249,376	5,650,347	103,707	3,353,060	118,203
Bonito.....							81,650	2,900	68,000	2,580	24,125	925
Cod.....							634,100	16,584	689,417	20,684	541,900	14,000
Drum.....											900	18
Eels.....							12,300	195	13,700	224	6,380	110
Flounders.....							466,400	15,253	427,428	13,805	311,325	9,008
Haddock.....							11,210	338	12,040	475	13,570	387
Hake.....							12,040	188	12,080	204	8,526	89
Kingfish.....									500	90		
Scup.....							400	16	500	20	450	18
Sea bass.....							2,102,150	84,999	2,294,250	80,945	1,496,271	56,592
Sheepshead.....							100	20	100	20	100	20
Skates.....							9,300	465	7,050	353	5,700	286
Spanish mack'l.....							400	60	500	75	400	60
Squeteague.....							237,180	8,284	217,864	7,538	51,911	1,751
Striped bass.....							300	45	900	138		
Tautog.....							70,475	2,766	71,700	2,805	75,005	2,956
Other fish.....									500	20	5,000	10
Total.....									10,761,060	381,549	9,368,776	332,880
Pots:												
Eels.....	800	\$80	500	50	200	20	95,750	7,485	129,000	8,175	108,450	7,315
Minor apparatus:									99,300	7,136	92,750	6,670
Eels.....											97,000	6,565
Miscellaneous:												
Crabs, soft.....							225,500	26,125	241,100	29,900	365,400	32,610
Crabs, hard.....							6,800	204	8,000	240	6,200	192
Crabs, king.....									20,000	125	21,000	131
Lobsters.....							114,571	9,308	105,264	8,585	91,105	7,435
Terrapins.....									848	318	320	304
Turtles.....											1,545	35
Clams.....									790,270	45,090	803,000	45,780
Quahogs.....	4,800	480	5,440	544	2,400	225	994,080	107,331	947,080	115,170	572,450	32,780
Oysters, market.....	281,400	47,838	239,400	40,698	256,900	43,673	905,260	107,288	1,052,037	202,710	805,854	158,164
Oysters, seed.....	283,500	20,250	301,000	21,500	285,600	20,400	10,800	1,200	17,500	1,250	15,400	1,100
Total.....	569,700	68,568	545,840	62,742	544,900	64,298	3,143,881	386,000	3,194,829	404,084	2,092,474	352,413
Grand total.....	2,113,983	75,781	2,247,806	69,204	2,777,766	70,906	20,855,590	880,758	21,119,415	807,544	18,867,286	750,990
Apparatus and species.	Salem.						Union.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....	334,714	\$1,114	485,142	\$1,598	349,712	\$1,163						
Catfish.....	60,429	3,026	43,200	2,592	56,572	3,394						
Perch, white.....	26,144	1,569	22,714	1,363	20,572	1,234						
Perch, yellow.....	77,486	4,050	69,000	4,140	64,288	3,857						
Pike.....	1,029	103	1,029	110	686	69						
Shad.....	135,348	7,205	152,280	8,233	116,057	6,095						
Striped bass.....	3,000	300	3,857	386	2,743	275						
Suckers.....	3,057	184	1,072	119	1,288	77						
Other fish.....	600	30	420	22	514	26						
Total.....	611,807	18,871	779,623	18,563	612,428	16,190						
Gill nets:												
Shad.....	6,696,900	230,228	6,518,400	261,400	5,235,650	359,648						
Striped bass.....	10,039	1,205	8,457	1,015	10,999	1,320						
Total.....	6,706,939	231,433	6,526,857	262,415	5,246,649	360,968						
Miscellaneous:												
Quahogs.....							14,000	\$1,750	14,400	\$1,800	16,000	\$2,000
Oysters, seed.....							593,000	42,500	525,000	45,000	420,000	36,000
Total.....							609,000	44,250	539,400	46,800	436,000	38,000
Grand total.....	7,348,746	250,304	7,306,480	280,978	5,859,077	377,158	609,000	44,250	539,400	46,800	436,000	38,000

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Ocean.								Total.								
	1890.		1891.		1892.		1890.		1891.		1892.						
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Seines:																	
Alewives	397,200	\$4,857	461,500	\$4,325	598,500	\$5,490	1,591,090	\$12,359	1,783,470	\$12,128	1,713,080	\$12,269					
Bluefish	13,400	536	5,300	215	4,000	187	68,900	3,838	29,000	1,567	26,900	1,082					
Butter-fish	2,000	49	1,700	41	2,500	81	20,100	790	18,750	721	25,500	891					
Catfish	8,800	292	9,000	280	11,250	362	109,625	6,138	88,600	4,824	102,603	5,653					
Drum									3,000	36	8,240	90	13,000	137			
Eels	14,150	1,135	11,100	890	12,100	970	76,250	4,853	72,200	4,518	74,100	4,780					
Flounders	1,400	56	9,200	44	2,400	100	87,300	4,331	93,600	4,266	90,300	4,607					
Kingfish	800	100	500	65	400	33	18,500	1,252	17,400	1,142	13,900	873					
Menhaden	77,000	524	88,000	612	166,300	1,044	1,741,433	3,804	1,803,416	4,461	2,458,716	5,736					
Mullet	500	20	650	26	600	23	92,400	5,131	88,350	4,902	43,500	2,458					
Perch, white	7,600	432	9,100	507	12,800	792	112,148	7,324	104,715	6,561	98,877	6,087					
Perch, yellow	363,500	18,175	377,500	18,875	280,500	14,040	463,824	24,165	469,058	24,360	364,457	19,045					
Pike	5,200	520	5,500	550	6,400	640	17,555	1,737	17,485	1,738	16,280	1,573					
Sea bass	1,500	60	1,200	48	1,900	76	6,500	320	8,400	458	4,900	286					
Shad									791,982	46,008	788,175	45,452	685,255	40,568			
Sheepshead	3,000	710	4,100	760	2,500	465	6,600	995	6,000	955	4,000	615					
Spanish mackarel													500	50			
Spots and croakers	900	33	700	26	1,000	43	16,400	793	11,200	521	16,100	568					
Squeteague	107,600	4,244	88,600	3,544	56,000	2,320	794,400	36,084	775,600	36,089	540,625	26,423					
Striped bass	70,600	13,965	80,700	15,750	56,050	10,050	104,380	28,961	180,658	27,276	118,200	18,543					
Suckers	2,400	96	2,300	115	2,200	110	12,021	480	10,730	417	10,870	372					
Tautog	500	20	400	16	400	16	2,100	180	1,900	136	1,400	98					
Other fish	2,900	58	2,150	43	2,750	58	19,552	938	19,290	994	18,036	938					
Total	1,081,350	45,952	1,159,200	46,792	1,221,150	37,800	6,246,660	190,517	6,399,146	184,470	6,442,650	153,630					
Gill nets:																	
Alewives	2,900	42	7,700	89	7,500	90	8,300	100	13,700	160	13,380	158					
Bluefish	154,700	7,218	133,000	6,292	100,800	4,908	307,335	14,146	254,900	11,767	223,400	9,535					
Bonito			300	12	200	8			300	12	200	8					
Butter-fish	2,200	78	2,900	107	2,600	94	22,300	681	3,000	110	2,720	98					
Cod							60,000	150	77,000	190	56,000	140					
Dogfish											5,000	50					
Drum											4,600	137					
Flounders	2,600	58	2,400	60	1,900	49	3,600	88	3,400	100	3,800	35					
Kingfish	800	74	550	77	200	35	15,800	524	550	77	200	87					
Mackerel	100	12	100	12	000	87	100	12	100	12	600	87					
Menhaden	52,200	206	45,500	190	44,500	188	109,275	530	214,763	1,507	141,700	1,033					
Perch, white	500	25	200	10	200	10	18,450	1,553	14,500	1,262	6,200	474					
Perch, yellow	9,000	900	19,000	1,900	16,750	1,675	9,000	900	19,000	1,900	16,750	1,675					
Pike									1,385	122	1,900	166					
Shad									9,552,487	350,891	9,196,938	385,889	7,811,150	528,034			
Sheepshead	1,100	122	950	109	8,500	952	1,100	122	950	100	8,500	952					
Spanish mackarel																	
Spots and croakers	7,275	1,232	9,000	1,535	8,100	1,350	31,580	5,030	35,410	5,710	30,191	5,280					
Squeteague	900	27	200	6	200	6	10,000	527	1,700	81	1,200	56					
Striped bass	80,100	3,184	92,400	3,844	45,800	1,523	198,365	7,432	210,800	8,407	158,020	5,865					
Sturgeon	3,400	850	6,900	1,500	6,000	1,400	52,861	6,745	49,371	6,618	47,305	6,344					
Suckers									400	12	500	15	1,000	30			
Other fish	1,200	36	1,400	48	1,200	40	10,200	786	13,400	651	13,575	665					
Total	318,975	14,084	322,500	15,851	243,050	12,415	10,857,778	401,584	10,586,442	455,908	8,945,666	568,484					
Fyke nets and bag nets:																	
Alewives							183,850	931	200,350	1,011	184,495	931					
Black bass							2,060	288	2,800	392	4,885	684					
Bluefish							900	45	1,000	50	850	43					
Butter-fish							1,500	75	3,000	150	2,500	125					
Carp							2,525	202	2,000	160	2,025	162					
Catfish							37,700	2,896	33,565	2,625	31,025	2,499					
Eels	8,500	360	4,500	300	4,000	400	57,400	3,616	69,080	4,594	47,500	3,410					
Flounders	23,700	948	54,500	2,180	104,500	4,180	70,120	2,857	88,100	3,597	151,100	6,180					
Frostfish or tomcod	4,500	185	1,400	42	2,000	60	4,500	135	1,400	42	2,000	60					
Menhaden	7,300	558	5,000	430	7,600	708	29,166	53	29,107	53	25,000	45					
Perch, white	7,300	558	5,000	430	7,600	708	63,880	6,360	73,700	5,692	77,210	6,077					
Perch, yellow							15,200	1,201	11,080	934	18,025	1,042					
Scup							1,000	50	2,100	105	400	20					
Sea bass							1,000	48	1,100	53	800	40					
Shad							192,340	7,617	147,024	6,071	148,450	6,844					
Spots and croakers							5,000	180	6,500	265	3,500	125					
Squeteague							11,050	430	12,500	515	9,700	387					
Striped bass	3,400	708	1,500	300	1,700	354	49,555	8,922	35,700	6,350	33,995	6,533					
Suckers							43,525	3,422	45,450	3,576	41,560	3,265					
Tautog	2,300	69	2,300	69	4,000	120	4,700	153	5,200	184	6,100	210					
Other fish							500	20	13,425	950	14,125	948					
Total	49,700	3,268	69,200	3,321	124,500	5,842	810,486	40,431	780,210	37,820	820,025	39,639					

Statement by counties, apparatus, and species of the yield of the shore fisheries of New Jersey—Continued.

Apparatus and species.	Ocean.						Total.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pound nets:												
Albacore.....					3,100	\$102	1,296	\$40	1,176	\$40	3,910	\$136
Alewives.....							47,500	713	45,300	681	41,000	590
Bluefish.....			23,000	1,180	104,850	4,770	189,979	8,547	131,713	5,541		
Bonito.....			21,000	860	26,500	1,060	54,733	2,141	68,318	2,737		
Butter fish.....			73,000	2,240	194,785	5,545	206,052	5,601	338,142	9,731		
Cero.....			1,700	74	630	26	847	38	3,610	172		
Cod.....					2,987	120	2,294	64	4,059	110		
Eels.....					1,300	91	1,200	84	650	45		
Flounders.....			50,500	1,715	130,345	3,357	196,867	4,645	52,047	11,336		
Kingfish.....			300	65	1,430	206	2,247	278	2,483	366		
Mackerel.....			3,700	555	9,819	975	25,017	2,304	22,307	2,660		
Menhaden.....					4,828,453	15,136	3,985,176	12,459	3,424,165	11,206		
Perch, white.....					800	24	800	24	600	18		
Perch, yellow.....					500	25	500	25	100	5		
Scup.....			14,500	545	8,720	260	12,982	311	36,000	1,125		
Sea bass.....			51,500	2,445	15,860	610	29,188	946	142,715	5,947		
Shad.....			9,600	730	85,910	5,143	93,318	6,026	101,663	6,775		
Sheepshead.....			2,614	484	9,266	1,385	17,246	2,029	25,737	3,774		
Spanishmackerel.....			7,500	1,420	22,570	3,100	36,981	4,885	83,663	9,967		
Spots and croakers.....					2,610	50	1,080	21	3,482	39		
Squeateague.....			680,900	20,427	678,507	44,910	3,012,299	70,336	5,547,940	119,950		
Striped bass.....					14,900	1,088	17,400	1,278	9,200	684		
Sturgeon.....			5,200	260	17,425	635	23,930	1,057	45,812	1,254		
Tautog.....			200	10	4,870	98	12,437	261	4,435	91		
Other fish.....					12,220	245	23,217	419	32,356	501		
Total.....			948,314	33,112	6,425,053	89,672	7,902,260	125,100	10,602,007	194,919		
Lines:												
Albacore.....	2,500	\$50	2,000	\$40	1,500	30	2,500	50	3,000	60	2,500	50
Black bass.....							4,875	585	6,450	774	7,150	858
Bluefish.....	1,238,200	42,474	779,000	31,005	556,730	22,692	8,503,440	304,725	6,520,047	235,612	4,230,810	157,810
Bonito.....	35,000	1,073	25,000	5,024	11,000	230	118,250	4,084	95,600	7,704	37,125	1,255
Catfish.....							10,000	701	11,650	816	10,350	725
Cod.....	25,000	1,000	10,000	400	5,000	200	659,100	17,584	709,417	21,444	592,900	16,900
Drum.....	2,500	100	1,800	72	2,000	80	23,900	690	29,000	777	21,650	703
Eels.....							21,625	848	21,250	753	12,880	564
Flounders.....	82,500	3,180	91,300	3,484	74,000	3,425	632,000	21,458	604,028	21,018	448,125	14,885
Haddock.....	7,500	300	5,000	200	2,500	100	18,710	638	17,940	675	16,070	487
Hake.....							12,040	183	12,080	204	8,526	89
Kingfish.....	400	48	300	36	200	24	13,800	748	13,500	801	10,200	634
Scup.....	600	24	600	24	400	16	3,500	140	9,100	364	10,850	434
Sea bass.....	617,000	24,835	290,500	12,080	258,523	11,215	3,339,850	131,146	3,544,350	140,621	3,612,896	142,238
Sheepshead.....							6,600	1,270	2,100	320	1,100	120
Skates.....							9,300	465	7,050	353	5,700	280
Spanishmackerel.....	4,500	1,450	5,500	1,950	2,500	550	4,900	1,510	6,000	2,025	2,900	610
Spots and croakers.....							43,100	1,786	86,200	3,633	159,900	6,630
Squeateague.....	201,000	7,545	113,000	5,040	124,000	6,830	2,149,688	89,999	1,983,364	84,938	1,276,711	55,077
Striped bass.....							16,500	1,929	14,975	1,774	10,975	1,291
Tautog.....	2,300	92	2,200	88	2,000	80	78,275	3,223	70,900	3,313	81,695	3,326
Other fish.....							2,225	134	3,125	178	7,250	146
Total.....	2,219,600	82,182	1,326,800	59,533	1,040,375	45,472	15,674,185	583,901	13,780,726	528,167	10,568,243	401,602
Pots:												
Eels.....	99,500	4,975	105,100	5,255	117,450	6,195	226,050	14,340	270,000	15,640	247,900	15,005
Minor apparatus:												
Alewives.....							30,000	350	24,000	280	33,000	413
Eels.....	62,500	4,465	61,000	4,530	64,500	4,805	180,800	12,068	173,250	12,295	173,500	12,095
Total.....							210,800	13,016	197,250	12,575	206,500	12,508
Miscellaneous:												
Crabs, soft.....	50,000	5,550	48,400	5,480	44,120	5,032	275,500	31,075	289,500	35,380	400,520	37,642
Crabs, hard.....							40,000	2,529	46,000	2,805	46,260	2,892
Crabs, king.....							3,335,700	8,573	2,798,080	7,534	2,025,460	5,360
Lobsters*.....	8,000	640	5,000	400	3,000	240	144,071	11,083	130,264	9,985	103,105	8,425
Shrimp.....	1,050	525	1,200	600	750	500	1,050	525	1,200	600	750	500
Terrapins.....	1,050	375	1,002	390	1,078	385	2,560	770	3,280	1,074	2,598	997
Turtles.....							1,250	25			2,795	00
Clams.....	23,000	2,000	24,000	1,920	23,000	1,840	815,270	47,090	827,000	47,700	505,450	34,620
Quahogs.....	252,704	24,235	257,600	25,250	749,904	74,759	2,832,192	283,561	2,782,728	290,516	2,490,408	277,655
Oysters, market.....	316,900	30,212	289,275	35,726	450,002	52,490	2,826,300	475,867	2,874,536	470,576	2,071,950	442,858
Oysters, seed.....	430,710	15,533	460,775	16,600	908,765	34,812	2,637,495	184,514	2,741,718	141,770	3,196,710	152,120
Total.....	1,085,474	88,070	1,087,342	86,372	2,241,869	170,092	12,910,228	906,187	12,405,206	1,017,000	11,549,052	903,147
Grand total	4,917,500	242,996	4,131,142	221,054	6,001,208	315,733	53,361,250	2,329,648	52,507,840	2,356,189	49,388,552	2,352,024

* Taken in pots.

FISHERIES OF PENNSYLVANIA.

General features of the fisheries.—The fishing industry of Pennsylvania is of less extent than in any other Middle State except Delaware, and, if only the local waters are considered, the fisheries are insignificant. The rank of Pennsylvania among the coast and lake States, including the fisheries of Lake Erie, which are not covered by the present report, is eighteenth.

Pennsylvania is the only State of this region that does not have a frontage on salt water. By means of a small fleet of vessels, however, it maintains extensive fisheries in salt water, in Delaware Bay and the adjacent ocean. Two very important rivers, the Delaware and the Susquehanna, are within the State, and contain an abundance of resident and anadromous fish. In these all of the commercial fishing is done. The larger part of the yield is marketed in Philadelphia and Baltimore. Besides receiving large quantities of fishery products from points within the State, Philadelphia also has an exceedingly extensive fish trade with Chesapeake Bay, Delaware Bay, and the ocean shores of New Jersey, Delaware, Maryland, and Virginia. The city is the principal catfish and eel market of the United States.

The leading branches of the industry are the extensive seine and gill-net fisheries for shad in the two rivers and the oyster vessel fishery in Delaware Bay tributary to Philadelphia. This is the only State in which the oyster fishery is not of prime importance. Alewives are taken under the same conditions as shad, and rank second among the fishes found in the State limits, but are less valuable than the sea bass caught in the salt-water vessel fisheries.

Statistical summary.—The extent of the fisheries of this State in 1889, 1890, 1891, and 1892 is shown in the three following tables.

The number of persons engaged in the industry in 1892 was less than in any of the preceding years, the decrease being mostly due to a reduced fleet of oyster vessels. The fishing population in 1889 was 2,331, and in 1892 was 2,220. In the last year the vessel fishermen numbered 288, the shore and boat fishermen 1,615, the shooersmen 310, and the transporters 7.

The investment in 1892 was \$976,011, and was larger than in any of the other years, the decline in vessel property being more than compensated for in shore property and cash capital. Forty vessels were employed, against 58 in 1889. The small boats numbered 817. Seines, gill nets, and fyke nets were the only important apparatus for fish proper; these were valued at \$45,169, while all other apparatus was worth only \$5,047.

The product of the fisheries in 1892 was 6,324,508 pounds, valued at \$284,031. In 1889, 7,165,777 pounds were taken, worth \$324,530. The decrease was chiefly in shad and oysters, the catch of the former being reduced on account of an unfavorable season, the diminished output of the latter being due to less extensive operations.

Persons employed in the fisheries of Pennsylvania.

How engaged.	1889.	1890.	1891.	1892.
In vessel fisheries	382	365	348	288
In shore fisheries	1,652	1,619	1,631	1,615
On transporting vessels	6	5	5	7
On shore, in markets, etc.....	201	302	289	310
Total	2,331	2,291	2,273	2,220

Vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Pennsylvania.

Designation.	1889.		1890.		1891.		1892.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Vessels fishing	56	\$103,350	51	\$93,650	47	\$84,900	37	\$68,125
Tonnage	1,388	10,005	1,270	10,895	1,194	19,410	957	16,835
Outfit								3,350
Vessels transporting	2	3,700	2	3,000	2	2,875	3	3,350
Tonnage	42	—	26	—	26	—	33	—
Outfit		135		120		110		130
Boats	850	30,950	837	31,046	837	30,652	817	29,535
Apparatus—vessel fisheries:								
Dredges	208	6,210	188	5,675	164	5,035	132	4,025
Lines		156		176		206		136
Apparatus—shore fisheries:								
Seines	153	20,185	151	19,130	151	19,405	141	18,750
Gill nets	220	22,340	210	22,320	209	21,450	205	21,200
Fyke nets	2,611	5,523	2,583	5,384	2,534	5,264	2,532	5,219
Lines		410		412		427		308
Minor nets		501		467		494		488
Shore property and accessories		416,970		440,410		450,162		495,420
Cash capital		298,640		295,600		303,750		312,400
Total		928,075		937,285		944,140		976,011

Products of the fisheries of Pennsylvania.

Species.	1880.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	1,989,985	\$13,325	2,447,500	\$18,894	2,331,775	\$13,449	2,059,015	\$12,144
Black bass	22,015	2,278	21,125	2,190	22,885	2,368	21,743	2,242
Carp	3,295	177	3,435	180	3,800	199	3,784	197
Codfish	147,771	7,038	142,217	6,690	132,468	6,223	134,650	6,203
Eels	41,762	2,249	42,545	2,258	40,050	2,174	44,085	2,305
Perch, white	7,160	413	7,068	402	6,020	341	6,170	343
Perch, yellow	10,415	685	13,160	705	12,625	674	12,308	468
Pike	8,805	813	5,520	777	4,975	697	5,481	777
Sea bass	614,420	24,140	802,600	28,606	947,500	33,805	901,564	37,555
Shad	2,752,572	125,717	2,898,551	131,226	2,692,864	128,274	1,996,482	110,200
Strawberry bass	987	89	750	70	880	80	1,050	102
Striped bass	24,360	2,374	22,865	2,233	24,015	2,406	23,352	2,320
Sturgeon	63,750	750	58,650	810	52,700	640	60,180	728
Suckers	53,895	2,568	48,105	2,369	42,550	2,115	43,570	2,213
Other fish	87,165	4,394	85,825	4,339	83,350	4,156	84,414	4,204
Oysters	* 1,397,420	137,520	11,249,200	131,450	† 1,183,700	124,420	§ 926,660	101,850
Total		7,165,777	324,530	7,849,206	328,100	7,583,657	322,021	6,324,508
								284,081

* 191,060 bushels.

† 178,470 bushels.

‡ 109,100 bushels.

§ 132,380 bushels.

Statistics of the fisheries by counties.—Two counties in Pennsylvania on the Susquehanna River and seven on the Delaware River have commercial fisheries. The following tables indicate the extent to which each of these was interested in the fishing industry in 1890, 1891, and 1892.

The counties bordering on the Delaware River, viz., Bucks, Delaware, Monroe, Philadelphia, and Pike, had a fishing population in 1892 of 1,585, and those on the Susquehanna—Lancaster and York—had 635. Of the former number, 940 were in Philadelphia County. Lancaster County had 471 and Bucks County 438 persons, all of whom were shore fishermen.

The capital invested in the fishing industry of the counties bordering on the Delaware River was \$963,570, of which \$916,485 was credited to Philadelphia County. The value of the fishery investment on the Susquehanna River was \$12,441. All the vessels in the State belong in Philadelphia County, which also has rather important fishing carried on with seines, gill nets, and fyke nets. Seines and gill nets, however, are used in larger numbers in Bucks County than elsewhere, while fykes are more numerous in Philadelphia County than in all the remainder of the State.

The yield of the fisheries of the Delaware River, including the salt-water fishing by Philadelphia vessels, was 6,002,268 pounds, having a value to the fishermen of \$262,268, while the counties on the Susquehanna River took products to the quantity of 322,240 pounds, valued at \$21,763. Philadelphia County, with its extensive vessel fishery, easily takes first rank among the counties of the State, the value of the output being \$178,345, of which \$139,405 represents oysters and sea bass. In the extent of the fisheries prosecuted within the limits of the State, Bucks County occupies the first place, with a catch valued at \$44,585. The shad is the preeminent fish in Pennsylvania, and in every fishing county except Philadelphia is more valuable than all other fish combined.

Statement by counties of the number of persons employed in the fisheries of Pennsylvania.

Counties.	In vessel fisheries.			In shore fisheries.			On transporting vessels.			On shore, in markets, etc.			Total.		
	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.
Bucks.....				444	440	438							444	449	438
Delaware.....				188	184	186							188	184	186
Lancaster.....				458	460	471							458	460	471
Monroe and Pike.....				21	21	21							21	21	21
Philadelphia.....	365	348	288	348	340	335	5	5	7	302	289	310	1,020	982	940
York.....				160	168	164							160	168	164
Total.....	365	348	288	1,619	1,631	1,615	5	5	7	302	289	310	2,291	2,273	2,220

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Pennsylvania.

Designation.	Bucks.						Delaware.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Boats.....	254	\$9,770	245	\$9,460	223	\$8,490	93	\$5,960	91	\$5,830	92	\$5,895
Apparatus:												
Seines.....	80	11,060	77	11,180	66	10,460	1	500	1	500	1	500
Gill nets.....	56	4,690	51	4,340	49	4,250	110	12,360	107	12,520	108	12,630
Fyke nets.....	403	1,380	380	1,330	330	1,160	65	130	70	140	72	144
Lines.....		250		245		216						
Shore property and accessories.....		2,500		2,505		2,360		190		190		210
Total.....		20,719		20,060		19,936		10,640		10,180		10,379
Designation.	Lancaster.						Monroe and Pike.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Boats.....	278	\$4,287	280	\$4,464	283	\$4,510	8	\$105	8	\$105	8	\$105
Apparatus:												
Seines.....	40	2,370	43	2,495	44	2,550	4	420	4	420	4	420
Fyke nets.....	49	285	43	200	50	297						
Lines.....		121		130		140						
Minor nets.....	129	382	130	400	132	390						
Shore property and accessories.....		1,510		1,527		1,560		160		160		155
Total.....		8,955		9,265		9,447		775		705		770

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Pennsylvania—Continued.

Designation.	Philadelphia.						York.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	51	\$93,650	47	\$84,900	37	\$68,125						
Tonnage	1,270		1,194		957							
Outfit		19,895		19,410		16,835						
Vessels transporting	2	3,000	2	2,875	3	3,350						
Tonnage	26		26		33							
Outfit		120		110		130						
Boats	114	9,410	110	9,200	107	8,970	90	\$1,424	94	\$1,503	94	\$1,475
Apparatus—vessel fisheries:												
Dredges	188	5,675	164	5,035	132	4,025						
Lines		176		206		136						
Apparatus—shore fisheries:												
Seines	12	4,000	11	3,080	11	3,980	14	780	15	830	15	840
Gill nets	53	4,770	51	4,550	48	4,320	16	95	15	90	19	114
Fyke nets	2,050	3,485	2,026	3,444	2,061	3,504		41		43		42
Lines							31	85	34	94	36	98
Minor nets								300		430		425
Shore property and accessories	435,000		445,200		490,710							
Cash capital	295,600		303,750		312,400							
Total		875,381		882,800		916,485		2,815		2,990		2,994

Designation.	Total for State.					
	1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	51	\$93,650	47	\$84,900	37	\$68,125
Tonnage	1,270		1,194		957	
Outfit		19,895		19,410		16,835
Vessels transporting	2	3,000	2	2,875	3	3,350
Tonnage	26		26		33	
Outfit		120		110		130
Boats	837	31,046	837	30,652	817	29,535
Apparatus—vessel fisheries:						
Dredges	188	5,675	164	5,035	132	4,025
Lines		176		206		136
Apparatus—shore fisheries:						
Seines	151	19,130	151	19,405	141	18,750
Gill nets	219	22,320	209	21,450	205	21,200
Fyke nets	2,583	5,384	2,534	5,264	2,532	5,219
Lines		412		427		308
Minor nets	160	467	170	494	168	488
Shore property and accessories		440,410		450,162		495,420
Cash capital		295,600		303,750		312,400
Total		937,285		944,140		976,011

Statement by counties and species of the products of the fisheries of Pennsylvania.

Species.	Bucks.						Delaware.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	1,934,500	\$9,672	1,808,275	\$9,047	1,550,575	\$7,800	356,000	\$3,325	366,000	\$3,500	337,640	\$3,350
Black bass	4,845	561	5,385	618	5,635	639						
Carp	275	22	300	24	265	21						
Catfish	15,075	1,057	15,125	1,044	15,300	1,062	4,500	225	5,000	250	5,200	200
Eels	8,025	560	7,225	506	7,190	502	900	50	1,000	55	1,000	50
Perch, white	2,210	141	2,225	135	2,300	138						
Perch, yellow	1,860	112	2,125	122	1,700	108						
Shad	634,380	36,814	659,055	35,911	526,544	29,104	773,500	30,260	741,650	29,690	509,870	20,335
Striped bass	5,075	584	6,460	733	5,685	648	58,650	810	52,700	640	60,180	728
Sturgeon												
Suckers	18,550	1,303	19,850	1,308	19,700	1,378						
Other fish	62,975	3,226	61,450	3,120	61,724	3,185						
Total	2,087,770	54,052	2,587,485	52,587	2,205,018	44,555	1,193,550	34,070	1,166,350	34,135	973,890	33,723

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties and species of the products of the fisheries of Pennsylvania—Continued.

Species.	Lancaster.						Monroe and Pike.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....							99,000	\$537	99,500	\$542	97,800	\$534
Black bass.....	11,625	\$1,163	12,375	\$1,238	10,982	\$1,096	780	78	1,000	100	1,040	104
Carp.....	2,250	112	2,625	131	2,537	127						
Catfish.....	3,010	136	3,375	168	2,800	132	7,117	487	10,333	620	9,050	547
Eels.....	10,163	556	10,350	573	10,315	567						
Perch, white.....							1,858	111	1,595	96	1,470	83
Perch, yellow.....	6,375	319	5,850	292	6,420	132	2,800	168	2,700	102	2,490	138
Pike.....	3,375	506	3,000	450	3,456	524	1,020	102	975	97	1,025	103
Shad.....	130,235	0,303	95,520	6,823	120,484	8,607	70,637	3,019	72,020	3,646	73,706	3,761
Strawberry bass.....							750	70	880	80	1,050	102
Striped bass.....	9,750	878	10,650	950	9,620	869	990	99	855	85	1,175	117
Suckers.....	5,575	140	5,025	125	5,710	142						
Other fish.....	13,000	627	11,850	521	12,190	594	2,250	112	2,100	105	2,480	124
Total.....	195,307	13,740	160,620	11,280	184,574	12,700	187,202	5,383	192,958	5,543	191,266	5,615
Philadelphia.												
Species.	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	58,000	\$360	58,000	\$360	64,000	\$460	3,875	\$388	4,125	\$412	4,086	\$403
Black bass.....							910	46	875	44	982	49
Carp.....							1,006	45	1,125	56	1,240	62
Catfish.....	111,500	4,740	97,500	4,085	101,000	4,230	3,457	192	3,375	185	3,580	100
Eels.....	20,000	900	19,000	855	22,000	900						
Perch, white.....	3,000	150	2,200	110	2,400	120						
Perch, yellow.....							2,125	106	1,950	98	1,698	90
Pike.....							1,125	169	1,000	150	1,000	150
Sea bass.....	802,600	28,000	947,500	33,805	901,564	37,555						
Shad.....	1,215,375	46,578	1,018,150	45,007	594,650	32,180	74,424	4,652	105,560	6,597	111,228	7,213
Striped bass.....	3,800	380	3,000	300	3,200	320	3,250	202	3,550	319	3,672	366
Suckers.....	22,000	880	16,000	640	16,000	640	1,980	46	1,675	42	2,180	53
Other fish.....							7,000	374	7,950	391	8,020	391
Oysters.....	1,249,290*	131,450	1,183,700†	124,420	926,660‡	101,850						
Total.....	3,485,565	214,044	3,345,050	210,182	2,631,474	178,345	99,752	6,310	131,185	8,294	137,066	8,973
Total for State.												
Species.	1890.		1891.		1892.							
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....			2,447,500	\$13,894	2,331,775	\$13,449	2,059,015	\$12,144				
Black bass.....			21,125	2,190	22,885	2,368	21,743	2,242				
Carp.....			3,435	180	3,800	199	3,784	197				
Catfish.....			142,217	6,600	132,408	6,223	134,630	6,293				
Eels.....			42,545	2,258	40,050	2,174	44,085	2,305				
Perch, white.....			7,068	402	6,020	341	6,170	343				
Perch, yellow.....			13,180	705	12,625	674	12,308	468				
Pike.....			5,520	777	4,975	697	5,481	777				
Sea bass.....			802,600	28,600	947,500	33,805	901,594	37,555				
Shad.....			2,898,551	131,220	2,692,864	128,274	1,990,482	110,200				
Strawberry bass.....			750	70	880	80	1,050	102				
Striped bass.....			22,805	2,233	24,615	2,406	23,352	2,320				
Sturgeon.....			58,050	810	52,700	640	60,180	728				
Suckers.....			48,105	2,360	42,550	2,115	43,570	2,213				
Other fish.....			85,825	4,330	83,350	4,156	84,414	4,294				
Oysters.....			1,249,290	131,450	1,183,700	124,420	926,600	101,850				
Total.....		7,849,206	328,109	7,583,657	322,021	6,324,508	284,031					

* 178,470 bushels.

† 169,100 bushels.

‡ 132,380 bushels.

The products specified by apparatus of capture.—In the vessel fisheries of this State carried on from Philadelphia only sea bass and oysters were taken in 1892, the apparatus used being lines and dredges, respectively. The catch of sea bass was 901,564 pounds, valued at \$37,555, and the oyster production was 132,380 bushels, worth \$101,850. The results of the vessel fisheries in 1890, 1891, and 1892 are given.

The shore fisheries yielded 4,496,284 pounds of fish, with a value of \$144,626, of which seines took 3,104,386 pounds, valued at \$82,913; gill nets 1,118,140 pounds, valued at \$45,741; fyke nets 158,860 pounds, valued at \$7,152; lines 75,319 pounds, valued at \$6,094, and dip nets 39,579 pounds, valued at \$2,726. Seines are the most important means of capture in Bucks, Lancaster, Philadelphia, Pike, and York counties, while in Delaware County gill nets are the principal apparatus. Detailed figures showing the yield of each apparatus in each county are given in the table.

Statement by apparatus and species of the products of the vessel fisheries of Pennsylvania.

Apparatus and species.	1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:						
Catfish	9,500	\$400	9,000	\$380	.....	.....
Sea bass	802,600	28,606	947,500	33,805	901,564	\$37,555
Total.....	812,100	29,006	956,500	34,185	901,564	37,555
Dredges:						
Oysters.....	* 1,249,290	131,450	† 1,183,700	124,420	‡ 926,660	101,850
Grand total.....	2,061,390	160,456	2,140,200	158,605	1,828,224	139,405

* 178,470 bushels.

† 169,100 bushels.

‡ 132,380 bushels.

Statement by counties, apparatus, and species of the yield of the shore fisheries of Pennsylvania.

Apparatus and species.	Lancaster.						Monroe and Pike.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....	-	-	-	-	-	-	90,000	\$537	99,500	\$542	97,800	\$534
Black bass.....	-	-	-	-	-	-	780	78	1,000	100	1,040	104
Catfish	-	-	-	-	-	-	7,117	487	10,333	620	9,050	547
Perch, white.....	-	-	-	-	-	-	1,858	111	1,595	98	1,470	85
Perch, yellow.....	-	-	-	-	-	-	2,800	168	2,700	162	2,490	138
Pike.....	-	-	-	-	-	-	1,020	102	975	97	1,025	103
Shad.....	94,654	\$6,761	71,435	\$5,102	80,850	\$6,410	70,037	3,619	72,020	3,616	73,700	3,761
Strawberry bass.....	-	-	-	-	-	-	750	70	880	80	1,050	102
Striped bass.....	-	-	-	-	-	-	990	99	955	95	1,175	117
Other fish.....	9,700	480	9,100	403	8,990	450	2,250	112	2,100	105	2,480	124
Total	104,354	7,241	80,535	5,505	98,840	6,880	187,202	5,383	192,958	5,543	191,286	5,615
Fyke nets:												
Carp.....	2,250	112	2,625	131	2,537	127	-	-	-	-	-	-
Eels.....	3,450	207	3,225	194	3,175	190	-	-	-	-	-	-
Suckers.....	5,575	140	5,025	125	5,710	142	-	-	-	-	-	-
Total	11,275	459	10,875	450	11,422	450	-	-	-	-	-	-
Dip nets:												
Eels.....	1,575	94	1,800	113	2,000	120	-	-	-	-	-	-
Shad.....	35,581	2,542	24,094	1,721	30,625	2,188	-	-	-	-	-	-
Other fish.....	1,500	75	800	40	1,250	62	-	-	-	-	-	-
Total	38,656	2,711	26,694	1,874	33,875	2,370	-	-	-	-	-	-
Lines:												
Black bass.....	11,625	1,163	12,375	1,238	10,982	1,096	-	-	-	-	-	-
Catfish	3,019	136	3,375	168	2,860	132	-	-	-	-	-	-
Eels.....	5,138	255	5,325	266	5,140	257	-	-	-	-	-	-
Perch, yellow.....	6,375	319	5,850	292	6,420	132	-	-	-	-	-	-
Pike.....	3,375	506	3,000	450	3,456	524	-	-	-	-	-	-
Striped bass.....	9,750	878	10,650	959	9,620	869	-	-	-	-	-	-
Other fish.....	1,800	72	1,950	78	1,950	82	-	-	-	-	-	-
Total	41,082	3,320	42,525	3,451	40,428	3,092	-	-	-	-	-	-
Grand total....	195,367	13,740	160,829	11,280	184,574	12,790	187,202	5,383	192,958	5,543	191,286	5,615

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Pennsylvania—Cont'd.

Apparatus and species.	Bucks.						Delaware.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Seines:													
Alewives.....	1,928,000	\$9,643	1,803,200	\$9,021	1,554,775	\$7,775	140,000	\$975	144,000	\$1,025	124,000	\$910	
Black bass.....	595	62	906	93	1,125	121	.....	.....	.....	.....	.....	.....
Catfish.....	4,225	296	4,050	309	5,050	338	.....	.....	.....	.....	.....	.....
Shad.....	489,200	29,906	510,580	29,205	392,468	22,907	56,000	2,200	56,350	2,250	46,900	2,085	
Striped bass.....	625	67	1,325	137	1,075	108	.....	.....	.....	.....	.....	.....
Suckers.....	6,450	451	7,100	497	6,400	481	.....	.....	.....	.....	.....	.....
Other fish.....	49,725	2,509	48,625	2,454	48,574	2,462	.....	.....	.....	.....	.....	.....
Total.....	2,470,720	42,934	2,382,380	41,716	2,009,467	34,192	196,000	3,175	200,350	3,275	170,900	2,095	
Gill nets:													
Alewives.....							216,000	2,350	222,000	2,475	213,640	2,440	
Shad.....	144,800	8,889	142,000	6,081	133,600	6,173	717,500	28,060	685,300	27,440	522,970	27,250	
Sturgeon.....							58,050	810	52,700	040	60,180	728	
Other fish.....	8,300	419	7,800	390	8,200	430	.....	.....	.....	.....	.....	.....
Total.....	153,100	7,308	140,800	7,071	141,800	6,003	992,150	31,220	900,000	30,555	796,700	30,418	
Fyke nets:													
Alewives.....	5,000	20	5,075	26	4,800	25	.....	.....	.....	.....	.....	.....
Black bass.....	600	61	675	68	525	52	.....	.....	.....	.....	.....	.....
Carp.....	275	22	300	24	265	21	.....	.....	.....	.....	.....	.....
Catfish.....	5,650	396	5,025	352	4,575	327	4,500	225	5,000	250	5,200	260	
Eels.....	8,200	223	8,100	218	2,675	186	900	50	1,000	55	1,000	50	
Perch, white.....	2,210	141	2,225	135	2,300	138	.....	.....	.....	.....	.....	.....
Perch, yellow.....	1,800	112	2,125	122	1,700	108	.....	.....	.....	.....	.....	.....
Shad.....	980	19	475	25	478	24	.....	.....	.....	.....	.....	.....
Striped bass.....	775	77	970	96	575	57	.....	.....	.....	.....	.....	.....
Suckers.....	12,100	852	12,750	811	13,800	897	.....	.....	.....	.....	.....	.....
Other fish.....	2,050	154	2,475	142	2,425	142	.....	.....	.....	.....	.....	.....
Total.....	35,300	2,086	35,195	2,010	33,616	1,977	5,400	275	6,000	305	6,200	310	
Lines:													
Black bass.....	3,650	438	3,810	457	3,985	466	.....	.....	.....	.....	.....	.....
Catfish.....	5,200	365	5,460	383	5,675	397	.....	.....	.....	.....	.....	.....
Eels.....	4,825	337	4,125	288	4,515	316	.....	.....	.....	.....	.....	.....
Striped bass.....	3,675	440	4,165	500	4,035	483	.....	.....	.....	.....	.....	.....
Other fish.....	2,300	144	2,550	158	2,525	151	.....	.....	.....	.....	.....	.....
Total.....	19,050	1,724	20,110	1,781	20,735	1,813	.....	.....	.....	.....	.....	.....
Grand total.....	2,087,770	54,052	2,587,485	52,587	2,205,618	44,585	1,193,550	34,070	1,106,350	34,135	973,800	33,723	
Apparatus and species.	Philadelphia.						York.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Seines:													
Alewives.....	58,000	\$300	58,000	\$300	64,000	\$400	.....	.....	.....	.....	.....	.....
Catfish.....	28,000	1,800	16,500	825	19,800	990	.....	.....	.....	.....	.....	.....
Perch, white.....	3,000	150	2,200	110	2,400	120	.....	.....	.....	.....	.....	.....
Shad.....	910,000	34,800	757,400	35,280	415,100	23,460	69,900	\$4,973	100,624	\$6,280	106,104	\$6,892	
Striped bass.....	3,800	380	3,000	300	3,200	320	.....	.....	.....	.....	.....	.....
Suckers.....	22,000	880	10,000	640	16,000	640	7,000	350	7,300	365	7,280	360
Other fish.....	.....	.....	.....	.....	.....	.....	7,000	350	7,300	365	7,280	360
Total.....	1,022,800	37,870	853,100	37,515	520,500	25,090	76,000	4,723	107,024	6,654	113,384	7,252	
Gill nets:													
Shad.....	305,375	11,778	260,750	10,327	170,550	8,720	.....	.....	.....	.....	.....	.....
Fyke nets:													
Carp.....	76,000	3,040	72,000	2,880	81,200	3,240	910	46	875	44	982	49	
Catfish.....	20,000	900	10,000	855	22,000	990	1,120	70	1,075	64	1,280	74	
Eels.....	.....	.....	.....	.....	.....	.....	1,980	46	1,075	42	2,160	53
Suckers.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	96,000	3,940	91,000	3,735	103,200	4,230	4,010	162	3,625	150	4,422	176	
Dip nets:													
Eels.....	.....	.....	.....	.....	.....	.....	620	37	525	32	580	35
Shad.....	.....	.....	.....	.....	.....	.....	4,464	279	4,030	308	5,124	321
Total.....	.....	.....	.....	.....	.....	.....	5,084	316	5,461	340	5,704	356

Statement by counties, apparatus, and species of the yield of the shore fisheries of Pennsylvania—Cont'd.

Apparatus and species.	Philadelphia.						York.					
	1890.		1891.		1892.		1891.		1890.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:												
Black bass.....							3,875	\$388	4,125	\$412	4,086	\$403
Catfish.....							1,006	45	1,125	56	1,240	62
Eels.....							1,717	85	1,775	89	1,720	87
Perch, yellow.....							2,125	106	1,950	98	1,608	90
Pike.....							1,125	169	1,000	150	1,000	150
Striped bass.....							3,250	292	3,550	319	3,672	366
Other fish.....							600	24	650	26	740	31
Total							13,698	1,109	14,175	1,150	14,156	1,189
Grand total....	1,424,175	\$53,588	1,204,850	\$51,577	803,250	\$38,940	99,752	6,310	131,185	8,294	137,066	8,973
Total for the State.												
Apparatus and species.						1890.						1892.
		Pounds.	Value.			Pounds.	Value.			Pounds.	Value.	
Seines :												
Alewives.....							2,225,900	\$11,515	2,104,700	\$10,948	1,840,575	\$0,679
Black bass.....							1,375	140	1,900	193	2,165	225
Catfish.....							37,342	2,083	31,483	1,754	33,900	1,875
Perch, white.....							4,858	261	3,795	206	3,870	205
Perch, yellow.....							2,800	168	2,700	162	2,490	138
Pike.....							1,020	102	975	97	1,025	103
Shad.....							1,690,451	81,659	1,575,309	81,772	1,124,137	65,524
Strawberry bass.....							750	70	880	80	1,050	102
Striped bass.....							5,415	546	5,280	532	5,450	545
Suckers.....							28,450	1,331	23,100	1,137	22,400	1,121
Other fish.....							68,675	3,451	67,125	3,327	67,324	3,306
Total							4,067,036	101,326	3,817,247	100,208	3,104,386	82,913
Gill nets :												
Alewives.....							216,000	2,350	222,000	2,475	213,640	2,440
Shad.....							1,167,675	46,727	1,088,050	44,448	836,120	42,143
Sturgeon.....							58,650	810	52,700	640	60,180	728
Other fish.....							8,300	419	7,800	390	8,200	430
Total							1,450,625	50,306	1,370,550	47,053	1,118,140	45,741
Fyke nets :												
Alewives.....							5,600	29	5,075	26	4,800	25
Black bass.....							600	61	675	68	525	52
Carp.....							3,435	180	3,800	199	3,784	197
Catfish.....							86,150	3,661	92,025	3,482	90,975	8,827
Eels.....							28,670	1,450	27,400	1,386	30,130	1,490
Perch, white.....							2,210	141	2,225	135	2,300	138
Perch, yellow.....							1,860	112	2,125	122	1,700	108
Shad.....							380	10	475	25	476	24
Striped bass.....							775	77	970	96	575	57
Suckers.....							19,655	1,038	10,450	978	21,170	1,092
Other fish.....							2,650	154	2,475	142	2,425	142
Total							151,985	6,922	146,695	6,650	158,800	7,152
Dip nets :												
Eels.....							2,195	131	2,325	145	2,580	155
Shad.....							40,045	2,821	20,030	2,029	35,749	2,509
Other fish.....							1,500	75	800	40	1,250	62
Total							43,740	3,027	32,155	2,214	30,570	2,726
Lines :												
Black bass.....							10,150	1,089	20,310	2,107	19,053	1,905
Catfish.....							9,225	546	9,960	607	9,775	691
Eels.....							11,680	677	11,225	643	11,375	660
Perch, yellow.....							8,500	425	7,800	390	8,118	222
Pike.....							4,500	675	4,000	600	4,456	674
Striped bass.....							16,075	1,610	18,365	1,778	17,327	1,718
Other fish.....							4,700	240	5,150	257	5,215	264
Total							74,430	6,162	76,810	6,382	75,319	6,094
Grand total.....							5,787,816	167,743	5,443,457	163,416	4,496,284	144,628

FISHERIES OF DELAWARE.

Importance and general aspects of the industry.—The fisheries of this State are the least extensive in the Middle Atlantic region, although, in proportion to the length of shore line, the industry is of considerable importance and is surpassed in value by that of Pennsylvania by only a few thousand dollars. The rank of Delaware as a fishing State is 21.

Delaware has a frontage on the ocean, on Delaware Bay and River, and also has a river of some size, the Nanticoke, tributary to Chesapeake Bay. Fishing is carried on along the ocean shore of the State, in Delaware Bay, and in the rivers mentioned, but is most extensive in Delaware Bay. The proximity of Wilmington, Philadelphia, and Baltimore affords a good market for the fishery products taken.

The oyster fishery is usually of greater importance than any other branch, although at times the shad fishery has become the most valuable. The taking of alewives, eels, perch, squeteague, striped bass, sturgeon, and crabs is also comparatively extensive. In the extent of its sturgeon fishery Delaware not only surpasses the other States of this section, but takes first rank among the coast States of the country. It is also noticeable as being the southernmost State in which lobster fishing is carried on.

Condensed statistical statement.—General statistics of the fisheries of Delaware in 1889, 1890, 1891, and 1892 are given in the three tables which follow.

Of the total fishing population in 1892, 153 persons were in the vessel fisheries, 1,692 in the shore fisheries, and 494 in menhaden factories and oyster houses. A slight annual increase in all classes of fishery employés is indicated by the returns.

The \$218,144 invested in the fishing industry of Delaware in 1892 consisted of \$42,540 in vessels and their outfits, \$29,754 in boats, \$50,050 in apparatus of capture, and \$95,800 in shore property and cash capital. During the four years covered by the inquiry, the variation in the aggregate investment and in the individual items was slight. Comparing 1892 with 1889, there was a small increase in the number of vessels, gill nets, pound nets, and eel pots, and a decrease in the number of boats, seines, fyke nets, and lobster pots.

The value of the products in 1892 was less than in any of the three previous years, owing to a diminished catch of shad, squeteague, sturgeon, and perch. The somewhat larger yield of eels, striped bass, crabs, and oysters was not sufficient to overcome the reduction in the other species. The fisheries resulted in the following returns to the fishermen: 1889, \$256,980; 1890, \$267,346; 1891, \$255,423; 1892, \$250,853.

Persons employed in the fisheries of Delaware.

How engaged.	1889.	1890.	1891.	1892.
In vessel fisheries	103	103	103	107
In shore fisheries	1,645	1,680	1,653	1,692
On transporting vessels	25	41	43	46
On shore, in factories, etc.	380	366	431	494
Total	2,153	2,179	2,230	2,339

Vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Delaware.

Designation.	1889.		1890.		1891.		1892.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Vessels fishing	25	\$22,035	25	\$21,740	25	\$21,525	26	\$21,175
Tonnage	297	3,575	297	3,555	304	3,390	313	3,630
Outfit								
Vessels transporting	11	13,450	15	12,550	16	13,250	17	15,580
Tonnage	225		207		224		256	
Outfit		1,395		1,865		1,975		2,155
Boats	971	29,040	972	28,965	946	29,233	968	29,754
Apparatus—vessel fisheries:								
Dredges	100	2,100	100	2,070	100	2,110	104	2,195
Apparatus—shore fisheries:								
Seines	204	10,010	206	10,340	203	10,263	199	10,083
Gill nets	1,502	33,469	1,587	33,424	1,586	33,946	1,603	34,373
Pound nets and weirs	20	280	22	380	20	305	27	455
Fyke nets	622	1,365	617	1,355	567	1,261	540	1,220
Cast nets	11	44	12	48	13	52	9	48
Crab nets	170	85	148	74	122	61	107	84
Eel pots	1,695	737	1,785	771	1,775	784	1,870	827
Lobster pots	45	112	40	100	40	100	21	53
Lines		36		21		20		20
Spears	170	85	170	85	170	85	195	100
Tongs and rakes	243	522	246	534	243	522	262	592
Shore property		49,080		45,900		44,800		48,300
Cash capital		42,300		43,000		44,400		47,500
Total		210,320		206,777		208,082		218,144

Products of the fisheries of Delaware.

Species.	1880.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	843,700	\$12,515	827,050	\$12,008	803,700	\$12,412	848,800	\$11,585
Catfish	75,200	4,231	75,800	4,261	73,800	4,074	72,095	4,010
Croakers and spots	68,200	3,470	56,900	2,995	42,400	2,280	39,190	1,911
Drum	32,000	400	34,000	425	30,000	380	31,020	383
Eels	249,900	9,895	220,100	9,124	223,500	8,967	269,120	10,035
Flounders	5,400	162	5,300	178	5,000	168	5,120	172
Kingfish	2,000	100	1,600	80	900	48	240	12
Menhaden	61,000	385	58,000	370	67,000	420	65,500	405
Mullet	36,750	1,141	36,400	1,116	38,900	1,125	40,300	1,204
Perch	255,500	16,563	251,750	16,204	255,855	16,139	211,415	1,019
Pike	24,110	1,511	24,400	1,530	24,950	1,548	25,840	1,604
Shad	1,498,053	64,908	1,797,218	66,812	1,500,198	64,009	1,120,369	60,255
Squateague	3,211,900	20,502	3,102,000	19,845	1,164,730	17,524	837,510	16,364
Striped bass	109,610	14,750	107,220	14,432	94,910	12,758	115,042	15,442
Sturgeon	1,327,300	26,730	1,301,600	29,350	1,304,800	30,448	1,051,590	24,510
Suckers	10,800	505	10,250	500	11,050	501	8,930	442
Tautog	5,000	200	5,000	200	8,000	320	8,300	332
Other fish	16,300	805	20,700	889	4,380	164	4,140	148
Crabs, soft	124,125	6,040	108,375	5,070	86,250	4,713	115,475	6,878
Crabs, horseshoe	800,000	700	760,000	665	740,000	647	1,049,200	918
Lobsters	9,600	480	7,200	360	8,200	410	5,600	285
Oysters	1,034,250	64,671	1,179,500	73,605	1,007,040	70,134	1,227,324	73,383
Quahogs or hard clams	19,840	1,901	21,600	2,067	21,920	2,094	21,240	2,035
Terrapins	18,025	2,820	14,800	2,740	11,988	2,190	11,638	2,136
Turtles	22,000	1,540	21,000	1,470	18,000	1,260	10,000	1,205
Total	9,859,163	256,980	10,053,823	267,346	7,697,649	255,423	7,194,688	250,853

The following figures represent the number of bushels of certain products given in pounds in the foregoing table:

Products.	Quantity.			
	1880.	1890.	1891.	1892.
Crabs, soft.....	number	372,375	325,125	258,750
Crabs, horseshoe	do	400,000	380,000	370,000
Oysters.....	bushels	147,750	168,500	156,720
Quahogs or hard clams.....	do	2,480	2,700	2,740
Terrapins.....	number	8,013	7,400	5,994

Statistics by counties.—The three counties of Delaware are all interested in the fisheries. Newcastle County borders on the Delaware River, Kent County partly on the river and partly on Delaware Bay, and Sussex County on the bay and ocean, as well as having an outlet to Chesapeake Bay through the Nanticoke River. The extent of the fisheries in each county is shown in the following tables.

Sussex County has the largest fishing population and the most invested capital, but the value of the fisheries of Kent County is greatest. The vessel fishing is practically confined to Kent County, and thus the larger part of the oyster product of the State becomes credited to that county, which also leads in the catch of squeteague. Newcastle County ranks second in the value of the yield. It leads the others in the output of shad and sturgeon. In Sussex County the catch of alewives, eels, and crabs is larger than elsewhere. This county also has, at Lewes and Seaford, respectively, important factories for the utilization of menhaden and oysters.

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Delaware.

Designation.	Newcastle.						Kent.						
	1890.		1891.		1892.		1890.		1891.		1892.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing	2	\$1,440	1	\$700	1	\$700	23	\$20,300	24	\$20,825	25	\$20,475	
Tonnage	18.09		8.29		8.29		278.70		295.97		304.55		
Outfit		275		135		115		3,280		3,255		3,515	
Vessels transporting	1	550	1	500	1	480							
Tonnage	5.73		5.73		5.73								
Outfit		65		75		75							
Boats	254	16,650	261	17,130	262	17,290	215	6,782	214	6,652	231	6,940	
Apparatus:													
Dredges	8	130	4	85	4	85	92	1,940	96	2,025	100	2,110	
Seines	9	590	9	570	9	570	56	4,190	56	4,190	55	4,135	
Gill nets	234	23,130	241	23,795	244	24,145	208	4,942	208	4,708	212	4,775	
Pound nets and weirs								4	200	3	150	10	300
Fyke nets	455	910	400	800	348	690	105	237	112	250	135	316	
Cast nets	125	125	160	100	164	104		12	48	13	52	9	48
Eel pots		5		5		5			9		8		
Lines								75	300	72	288	85	834
Spears								20	15	20	15	20	15
Oyster tongs									2,500		2,500		3,000
Clam rakes										1,500		1,500	
Shore property		4,300		5,300		5,300							
Cash capital		8,000		10,000		10,000							
Total		56,170		59,255		59,625		46,223		46,427		47,986	

Designation.	Sussex.						Total.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing							25	\$21,740	25	\$21,525	26	\$21,175
Tonnage							206.70		304.26		312.84	
Outfit									3,555		3,390	
Vessels transporting	14	\$12,000	15	\$12,750	16	\$15,100	15	12,550	16	13,250	17	15,580
Tonnage	201.00		218.19		249.87		206.78		223.92		255.00	
Outfit		1,800		1,600		2,080		1,805		1,975		2,155
Boats	503	5,553	471	5,451	475	5,524	972	28,965	946	29,233	908	29,734
Apparatus:												
Dredges							100	2,070	100	2,110	104	2,195
Seines	141	5,500	138	5,503	135	5,378	206	10,340	203	10,263	199	10,083
Gill nets	1,145	5,352	1,137	5,443	1,147	5,453	1,587	33,424	1,586	33,946	1,603	34,375
Pound nets and weirs	18	180	17	155	17	155	22	380	20	305	27	455
Fyke nets	57	208	55	202	57	208	617	1,355	567	1,201	540	1,220
Cast nets							12	48	13	52	9	48
Crab nets	148	74	122	61	167	84	148	74	122	61	167	84
Eel pots	1,600	646	1,615	624	1,712	663	1,785	771	1,775	784	1,876	827
Lobster pots	40	100	40	100	21	53	40	100	40	100	21	53
Lines		7		7		7		31		30		20
Spears	170	85	170	85	170	85	170	85	170	85	195	100
Oyster tongs	81	124	31	124	37	148	106	424	103	412	122	482
Clam rakes	120	95	120	95	120	95	140	110	140	110	140	110
Shore property		39,100		37,000		40,000		45,900		44,800		48,300
Cash capital		33,500		32,900		35,500		43,000		44,400		47,500
Total		104,384		102,400		110,593		206,777		208,082		218,144

Statement by counties of the number of persons employed in the fisheries of Delaware.

Counties.	In vessel fisheries.			In shore fisheries.			On transporting vessels.			On shore, in factories, etc.			Total.		
	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.	1890.	1891.	1892.
Kent.....	95	99	103	459	462	490	2	2	2	5	5	6	550	566	599
Newcastle.....	8	4	4	351	360	367	22	25	25	383	391	398			
Sussex.....				859	831	835	39	41	44	339	401	463	1,237	1,273	1,342
Total.....	103	103	107	1,660	1,653	1,692	41	43	46	366	431	494	2,179	2,230	2,339

Statement by counties and species of the products of the fisheries of Delaware.

Species.	Kent.						Newcastle.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	42,200	\$1,050	42,940	\$1,095	40,540	\$1,048	383,600	\$6,016	379,600	\$6,040	345,520	\$4,908
Catfish.....	23,600	1,344	24,600	1,411	25,640	1,475	33,900	2,122	32,760	1,998	29,960	1,820
Croakers.....	9,000	470	8,000	519	6,100	345						
Drum.....	26,000	325	19,000	240	19,800	248						
Eels.....	2,400	144	2,700	162	38,200	1,407	12,400	705	14,000	805	13,900	800
Mullet.....	5,000	150	4,500	135	4,500	135						
Perch.....	34,200	2,317	35,920	2,427	36,340	2,441	33,300	2,510	33,500	2,523	33,200	2,514
Pike.....	4,000	244	3,900	237	4,000	247	4,750	320	4,600	304	4,800	304
Shad.....	175,700	10,110	155,875	9,102	126,811	7,494	1,314,600	43,104	1,160,025	44,230	837,732	42,516
Squeteague.....	2,398,000	14,128	881,200	11,918	644,640	11,579						
Striped bass.....	36,120	4,709	33,280	4,493	34,157	4,516	33,050	4,069	34,230	4,065	37,930	4,619
Sturgeon.....	306,000	4,400	230,350	3,380	173,910	2,557	985,600	24,950	1,074,450	27,068	877,680	21,953
Suckers.....	4,850	230	5,400	249	5,180	247	2,400	180	2,150	147	2,150	147
Oysters.....	1,040,500	65,205	1,002,890	63,554	1,076,194	65,133	30,100	2,850	12,950	1,300	7,350	940
Quahogs or hard clams.....	2,560	256	2,400	240	2,280	228						
Crabs, horseshoe.....	760,000	665	740,000	647	1,049,200	918						
Terrapins.....	5,000	1,080	1,988	450	1,778	426						
Turtles.....	13,000	910	10,000	700	11,500	805						
Total.....	4,894,730	107,737	3,204,943	100,959	3,300,770	101,240	2,843,700	86,826	2,754,265	88,480	2,190,022	80,521
Species.	Sussex.						Total.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	401,250	\$5,032	441,220	\$5,277	462,830	\$5,629	827,050	\$12,098	863,760	\$12,412	848,890	\$11,585
Catfish.....	18,300	795	16,440	665	17,095	715	75,800	4,261	73,800	4,074	72,695	4,010
Croakers.....	47,900	2,525	34,460	1,761	33,090	1,566	56,900	2,995	42,460	2,280	39,190	1,911
Drum.....	8,000	100	11,000	140	11,220	145	34,000	425	30,000	380	31,020	303
Eels.....	211,300	8,275	206,800	8,000	217,020	8,428	226,100	9,124	223,500	8,967	269,120	10,935
Flounders.....	5,300	178	5,000	168	5,120	172	5,300	178	5,000	168	5,120	172
Kingfish.....	1,600	80	900	48	240	12	1,600	80	900	48	240	12
Menhaden.....	58,000	370	67,000	420	65,500	405	58,000	370	67,000	420	65,500	405
Mullet.....	31,400	966	34,400	990	35,800	1,069	36,400	1,116	38,900	1,125	40,300	1,204
Perch.....	184,250	11,437	186,435	11,189	141,875	9,064	251,750	16,264	255,855	16,139	211,415	14,019
Pike.....	15,710	966	16,450	1,007	17,240	1,053	24,460	1,530	24,050	1,548	25,840	1,004
Shad.....	306,918	13,598	178,296	11,367	145,826	10,245	1,797,218	66,812	1,500,196	64,699	1,110,360	60,255
Squeteague.....	703,400	5,717	283,530	5,606	192,870	4,785	3,102,000	10,845	1,164,730	17,524	837,510	16,364
Striped bass.....	38,050	3,654	27,400	4,200	42,955	6,307	107,220	14,432	94,910	12,758	115,042	15,442
Sturgeon.....							1,301,600	29,350	1,304,800	30,448	1,051,590	24,510
Suckers.....	3,000	90	3,500	105	1,000	48	10,250	500	11,050	501	8,930	442
Tautog.....	5,000	200	8,000	320	8,300	332	5,000	200	8,000	320	8,300	332
Other fish.....	20,700	889	4,380	164	4,140	148	20,700	889	4,380	164	4,140	148
Oysters.....	102,900	5,550	81,200	5,280	143,780	7,790	1,179,500	73,605	1,097,040	70,134	1,227,324	73,863
Lobsters.....	7,200	360	8,200	410	5,600	285	7,200	360	8,200	410	5,600	285
Quahogs or hard clams.....	19,040	1,811	19,520	1,854	18,960	1,807	21,600	2,067	21,920	2,094	21,240	2,035
Crabs, horseshoe.....							760,000	665	740,000	647	1,049,200	918
Crabs, soft.....	108,375	5,970	86,250	4,713	115,475	6,878	108,375	5,970	86,250	4,713	115,475	6,878
Terrapins.....	9,800	1,600	10,000	1,740	9,860	1,710	14,800	2,740	11,988	2,190	11,638	2,130
Turtles.....	8,000	560	8,000	560	7,500	490	21,000	1,470	18,000	1,260	19,000	1,295
Total.....	2,315,393	72,783	1,738,441	65,984	1,703,896	69,083	10,053,823	267,346	7,097,649	255,423	7,194,088	250,853

The catch by apparatus.—The quantity and value of the products taken by each kind of apparatus in each county are indicated in the following tables relating to the years 1890, 1891, and 1892. In the vessel fishery only oysters are taken, dredges being the apparatus employed. The yield in 1892 was 52,610 bushels, valued at \$40,491. In the shore and boat fisheries, gill nets are of prime importance, taking more than half the fish credited to the State and nearly half the money returns. Shad and sturgeon are the prominent fish thus secured. Seines rank next to gill nets in the quantity and value of the catch, squeteague being the most important fish obtained. All other forms of apparatus—pound nets, fyke nets, cast nets, pots, etc.—take very small quantities of fish.

Statement by counties of the products of the vessel fisheries of Delaware.

Designation.	1890.		1891.		1892.	
	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
Oysters:						
Kent	57,300	\$42,580	57,150	\$42,350	51,560	\$39,551
Newcastle	4,300	2,850	1,850	1,300	1,050	940
Total	61,600	45,430	59,000	43,650	52,610	40,491

Statement by counties, apparatus, and species of the yield of the shore fisheries of Delaware.

Apparatus and species.	Kent.						Newcastle.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	13,000	\$335	13,840	\$350	13,360	\$338	221,200	\$3,280	213,600	\$3,140	193,600	\$2,390
Catfish.....	4,000	200	3,600	180	3,640	182	12,200	700	13,000	785	12,500	745
Croakers.....	2,800	150	2,600	240	2,600	135	.....	.....	.....	.....	.....	.....
Drum	26,000	325	19,000	240	19,800	248	.....	.....	.....	.....	.....	.....
Perch	18,500	1,155	18,980	1,173	19,410	1,201	5,100	345	5,400	350	5,600	360
Pike .....	.....	.....	.....	.....	.....	.....	1,500	102	1,400	88	1,400	88
Shad	62,300	3,630	52,055	3,087	42,301	1,706	7,350	304	7,000	300	5,740	310
Squeteague	2,380,000	13,720	862,300	11,510	628,380	11,219	.....	.....	.....	.....	.....	.....
Striped bass	19,100	2,310	18,530	2,255	19,282	2,325	4,700	594	6,700	700	6,400	760
Suckers.....	3,000	120	3,400	130	2,980	119	2,100	165	1,800	130	1,800	130
Total	2,528,700	21,945	995,205	19,171	751,753	17,473	254,150	5,580	248,900	5,493	227,040	4,783
Gill nets:												
Alewives	28,000	685	28,100	720	26,180	685	162,400	2,736	160,000	2,960	151,920	2,518
Catfish.....	3,400	170	3,500	181	3,700	201	1,700	92	2,060	111	2,000	111
Croakers.....	6,200	320	5,400	279	3,500	210	.....	.....	.....	.....	.....	.....
Mullet	5,000	150	4,500	135	4,500	135	.....	.....	.....	.....	.....	.....
Perch	12,950	986	14,000	1,074	14,110	1,085	25,300	2,020	25,600	2,048	25,600	2,048
Pike	4,000	244	3,900	237	4,000	247	3,250	218	3,200	216	3,200	216
Shad	113,400	6,483	102,920	6,015	84,510	5,788	1,307,250	42,800	1,159,025	43,930	631,992	42,206
Squeteague	3,000	108	3,000	108	3,000	100	.....	.....	.....	.....	.....	.....
Striped bass	14,270	2,006	11,000	1,845	13,475	1,075	26,350	3,255	25,630	3,155	29,580	3,640
Sturgeon	306,000	4,400	230,350	3,380	173,910	2,557	995,600	24,950	1,074,450	27,068	877,680	21,953
Suckers.....	1,600	100	1,800	105	2,000	120	300	15	350	17	350	17
Total	498,420	15,649	410,080	14,079	382,885	13,103	2,522,150	70,086	2,456,315	79,445	1,922,382	72,709
Pound nets and weirs:												
Alewives	1,200	30	1,000	25	1,000	25	.....	.....	.....	.....	.....	.....
Catfish.....	500	40	400	32	100	8	.....	.....	.....	.....	.....	.....
Perch	700	63	640	55	220	15	.....	.....	.....	.....	.....	.....
Striped bass	2,000	300	1,750	265	520	95	.....	.....	.....	.....	.....	.....
Total	4,400	433	3,790	377	1,840	143	.....	.....	.....	.....	.....	.....
Fyke nets:												
Catfish.....	5,400	324	6,500	300	7,800	468	16,000	860	13,700	822	11,400	684
Eels.....	2,400	144	2,700	162	3,200	182	3,900	195	3,500	175	3,100	155
Perch	1,450	77	1,700	89	2,000	104	2,900	145	2,500	125	2,000	106
Striped bass	250	33	240	32	280	37	1,000	100	900	90	750	75
Suckers.....	250	10	200	8	200	8	.....	.....	.....	.....	.....	.....
Total	9,750	588	11,340	681	13,480	700	23,800	1,400	20,800	1,212	17,250	1,020

Statement by counties, apparatus, and species of the yield of the shore fisheries of Delaware—Continued.

Apparatus and species.	Kent.						Newcastle.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Cast nets:												
Catfish.....	9,300	\$560	9,000	\$578	9,400	\$560						
Pots:												
Eels.....							8,500	\$519	10,500	\$630	10,800	\$645
Spears:												
Eels.....					35,000	1,225						
Lines:												
Catfish.....	1,000	50	1,000	50	1,000	50	4,000	280	4,000	280	4,000	280
Perch.....	600	36	600	36	600	36						
Squeteague.....	15,000	300	15,300	300	13,260	260						
Striped bass.....	500	60	800	96	600	84	1,000	120	1,000	120	1,200	144
Total	17,100	446	17,700	482	15,460	430	5,000	400	5,000	400	5,200	424
Miscellaneous:												
Oysters.....	645,400	22,625	602,840	21,204	715,274	25,582						
Clams.....	2,560	253	2,400	240	2,280	228						
Crabs, horseshoe.....	700,000	665	740,000	617	1,049,200	918						
Terrapins.....	5,000	1,080	1,988	450	1,778	429						
Turtles.....	13,000	910	10,000	700	11,560	805						
Total	1,425,960	25,536	1,357,228	23,241	1,780,032	27,950						
Grand total	4,493,630	65,157	2,804,893	58,609	2,939,850	61,698	2,813,600	83,976	2,741,315	87,180	2,182,672	79,581
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Apparatus and species.	Sussex.						Total.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....	291,100	\$3,716	288,200	\$3,688	315,800	\$4,091	525,300	\$7,331	515,640	\$7,178	522,760	\$6,819
Catfish.....	7,300	335	4,400	170	4,600	185	23,500	1,325	21,000	1,135	20,740	1,112
Croakers.....	13,500	985	11,300	671	20,200	918	16,300	835	13,900	811	22,800	1,053
Drum.....	8,000	100	11,000	140	11,220	145	84,000	425	80,000	380	81,020	393
Flounders.....	5,300	178	5,000	168	5,120	172	5,300	178	5,000	168	5,120	172
Menhaden.....	8,000	40	8,000	40	10,000	50	8,000	40	8,000	40	10,000	50
Perch.....	112,650	6,595	119,400	6,097	62,480	3,876	135,250	8,095	143,780	8,220	87,490	5,437
Pike.....	6,400	470	6,400	470	6,300	465	7,000	572	7,800	558	7,700	553
Shad.....	107,998	5,096	55,419	3,753	45,755	3,544	177,648	9,030	115,374	7,140	93,796	5,560
Squeteague.....	657,600	4,373	252,600	4,078	174,410	4,229	3,037,600	18,093	1,114,900	10,188	802,790	15,448
Striped bass.....	29,300	4,305	19,620	3,003	33,555	4,885	53,100	7,209	44,850	5,958	59,237	7,970
Suckers.....							5,100	285	5,200	266	4,780	249
Other fish.....	8,500	425					8,500	425				
Total	1,259,448	26,432	785,139	23,492	692,840	22,662	4,042,298	53,957	2,029,244	48,156	1,071,633	44,918
Gill nets:												
Alewives.....	106,800	1,299	141,000	1,529	136,000	1,482	297,200	4,720	335,100	5,149	314,100	4,685
Catfish.....	6,800	250	7,100	259	6,600	244	11,900	512	12,660	551	12,360	550
Croakers.....	34,400	1,840	23,160	1,190	12,800	648	40,600	2,160	28,560	1,469	10,390	859
Kingfish.....	1,000	80	960	48	240	12	1,600	80	960	48	240	12
Menhaden.....	50,000	330	59,000	380	55,500	355	50,000	330	59,000	380	55,500	355
Mullet.....	27,600	852	30,600	876	32,400	907	92,600	1,002	35,100	1,011	36,900	1,102
Perch.....	58,200	4,092	53,915	3,780	66,170	4,455	96,450	7,098	93,515	6,902	105,880	7,588
Pike.....	8,760	463	9,550	507	10,330	551	16,010	925	16,650	960	17,530	1,014
Shad.....	106,820	8,430	120,385	7,473	97,727	6,580	1,017,470	57,719	1,382,330	57,418	1,014,229	54,574
Squeteague.....	29,300	849	19,920	598	13,660	412	32,900	957	23,530	706	16,600	512
Striped bass.....	8,350	1,289	7,480	1,152	8,840	1,346	48,970	6,550	45,070	6,152	51,895	6,061
Sturgeon.....	3,000	90	3,500	105	1,600	48	4,900	205	5,650	227	3,050	185
Suckers.....	6,500	325	500	30	400	24	6,500	325	500	30	400	24
Total	538,130	20,198	477,080	17,927	442,357	17,124	3,558,700	111,933	3,343,425	111,451	2,007,024	102,930
Pound nets and weirs:												
Alewives.....	3,350	17	12,020	60	11,030	56	4,550	47	13,020	85	12,030	81
Catfish.....	4,200	210	2,940	138	3,095	146	4,700	250	3,340	168	3,195	154
Perch.....	9,400	470	5,650	270	4,705	236	10,100	533	6,200	334	5,015	251
Pike.....	550	33	500	30	610	37	550	33	500	30	610	37
Shad.....	1,050	31	1,491	80	1,410	71	1,050	31	1,491	80	1,419	71
Striped bass.....	900	45	1,500	75	1,170	57	900	45	1,750	265	680	111
Total	19,450	806	24,101	660	22,279	619	23,850	1,239	27,801	1,037	24,110	762

Statement by counties, apparatus, and species of the yield of the shore fisheries of Delaware—Continued.

Apparatus and species.	Sussex.						Total.					
	1890.		1891.		1892.		1890.		1891.		1892.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Fyke nets:												
Catfish.....			2,000	\$100	2,800	\$140	21,400	\$1,284	22,200	\$1,312	22,000	\$1,202
Eels.....							6,300	339	6,200	337	6,300	337
Perch.....	4,000	\$280	7,470	433	8,430	497	8,350	502	11,670	647	12,430	707
Shad.....	1,050	32	1,001	61	925	50	1,050	32	1,001	61	925	50
Striped bass.....	400	60	300	45	400	60	1,650	193	1,440	167	1,430	172
Suckers.....							250	10	200	8	200	8
Other fish.....	4,800	94	2,380	59	2,570	67	4,800	94	2,380	59	2,570	67
Total	10,250	466	13,151	698	15,125	814	43,800	2,454	45,091	2,591	45,855	2,633
Cast nets:												
Catfish.....							9,300	560	9,600	578	9,400	566
Pots:												
Eels.....	91,300	3,715	86,800	3,440	91,420	3,644	99,800	4,225	97,300	4,070	102,220	4,289
Lobsters.....	7,200	360	8,200	410	5,600	285	7,200	360	8,200	410	5,600	285
Total	98,500	4,075	95,000	3,850	97,020	3,920	107,000	4,585	105,500	4,480	107,820	4,574
Spears:												
Eels.....	120,000	4,560	120,000	4,560	125,600	4,784	120,000	4,560	120,000	4,560	160,600	6,000
Lines:												
Catfish.....							5,000	330	5,000	330	5,000	330
Perch.....							600	36	600	36	600	36
Squeteague.....	16,500	495	11,000	330	4,800	144	31,500	795	26,300	630	18,060	404
Striped bass.....							1,500	180	1,800	216	1,800	223
Tautog.....	5,000	200	8,000	320	8,300	332	5,000	200	8,000	320	8,300	332
Total	21,500	695	19,000	650	13,100	476	43,600	1,541	41,700	1,532	33,760	1,330
Miscellaneous:												
Oysters.....	102,900	5,550	81,200	5,280	143,780	7,790	748,300	28,175	684,040	26,484	859,054	33,372
Clams.....	19,040	1,811	19,520	1,854	18,980	1,807	21,600	2,067	21,920	2,094	21,240	2,035
Crabs, horseshoe.....							760,000	665	740,000	647	1,049,200	918
Crabs, soft.....	168,375	5,970	86,250	4,713	115,475	6,878	108,375	5,970	86,250	4,713	115,475	6,878
Terrapins.....	9,800	1,660	10,000	1,740	9,800	1,710	14,800	2,740	11,988	2,190	11,638	2,136
Turtles.....	8,000	560	8,000	560	7,500	490	21,000	1,470	18,000	1,260	19,000	1,295
Total	248,115	15,551	204,970	14,147	295,575	18,675	1,674,075	41,087	1,562,198	37,988	2,075,007	46,634
Grand total.	2,315,303	72,783	1,738,441	65,984	1,703,806	60,083	6,022,023	221,916	7,284,040	211,773	6,820,418	210,362

Statistics of special industries.—The following table shows the extent of the wholesale oyster-opening trade of Seaford, located on the Nanticoke River, a tributary of Chesapeake Bay. While the business is small as compared with that in the adjoining State of Maryland, it is quite important in proportion to the general extent of the fishing industry of Delaware.

Summary of the oyster-packing industry of Delaware.

Designation.	1890.	1891.
Number of firms.....	4	4
Shore employees.....	267	251
Value of plants.....	\$19,100	\$19,100
Cash capital.....	\$20,800	\$20,000
Wages to employés.....	\$28,181	\$24,275
Oysters utilized..... bushels..	270,800	228,600
Cost.....	\$148,940	\$125,730
Opened oysters sold..... gallons..	174,444	155,000
Value.....	\$184,704	\$166,275

The business of preparing fertilizer from king crabs or horseshoe crabs is engaged in by one firm located in Kent County. Five or six men are regularly employed in making the scrap. The extent of this industry is shown for four years in the following table:

Summary of the king-crab industry of Delaware.

Items.	1880.	1890.	1891.	1892.
Number of crabs utilized	200,000	190,000	185,000	202,300
Cost	\$700	\$665	\$647	\$918
Number of tons of fertilizer made	100	94	97	134
Value	\$2,850	\$2,800	\$2,900	\$4,020

A very extensive wholesale trade in sturgeon, caviar, and shad is carried on in Newcastle County by firms who purchase the round fish directly from the fishermen and ship the products to the markets. In the case of sturgeon, the fish are dressed before shipment and caviar is prepared from their roe. The extent and principal features of this trade for four years are given in the following table. In other parts of the State the fishermen usually ship their own sturgeon and shad without the intervention of a wholesale dealer.

Summary of the wholesale sturgeon and shad trade of Delaware.

Items.	1889.	1890.	1891.	1892.
Number of firms.....	4	5	6	6
Value of plants.....	\$4,150	\$4,300	\$5,300	\$5,300
Cash capital.....	\$8,000	\$8,000	\$10,000	\$10,000
Number of men employed:				
White.....	12	14	16	16
Colored.....	8	8	9	9
Amount of wages paid.....	\$2,160	\$2,440	\$2,480	\$2,300
Number of sturgeon handled.....	3,900	3,740	4,035	3,362
Weight (round)..... pounds.	663,000	635,800	685,000	578,540
Value to fishermen.....	\$16,080	\$17,850	\$19,368	\$12,103
Dressed sturgeon sold..... pounds.	370,500	355,300	388,325	313,390
Value as sold.....	\$13,400	\$12,800	\$18,020	\$11,425
Caviar prepared..... pounds.	105,000	103,000	98,280	59,140
Value as sold.....	\$16,480	\$26,150	\$20,370	8,505
Number of shad handled.....	140,000	190,000	175,000	115,500
Value to fishermen.....	\$21,000	\$21,000	\$23,500	\$21,550
Value as sold	\$28,000	\$30,500	\$31,250	\$26,780

FISHERIES OF MARYLAND.

General importance of the industry.—In the items of persons employed, capital invested, and quantity and value of products, Maryland surpasses all the other States of this region. The fishing population also exceeds that of any other State, although the value of the catch and the investment are less than in Massachusetts.

The large extent of the fisheries of Maryland is due, in great measure, to the very favorable physical conditions. The State has been computed to have 2,170 miles of frontage on the ocean, bays, and navigable rivers. The shape of the State is such that a large part of it is brought into close relation, if not in actual contact, with waters containing commercial products, and few settlements in any of the tide-water counties are distant more than 5 or 6 miles from the water. In addition to an exceedingly tortuous coast line which increases the water area, Maryland has jurisdiction over a large part of Chesapeake Bay—the largest inland body of salt water on the coast of the United States—and has within its boundaries or on its borders several very important rivers, chief of which are the Potomac, Susquehanna, Patuxent, and Choptank. To the foregoing advantageous physical features is added an abundance of resident and migratory fish, crabs, terrapins, and the most productive oyster beds in the world.

Maryland partakes of the same advantage of proximity to excellent markets which is enjoyed by the other States of this section. The accessibility of Washington and Baltimore to steam and sail vessels, and the readiness with which the products may also be sent from the fishing-grounds by rail to these cities, as well as to the larger cities to the north and east, are important factors in the development of the fisheries.

As is well known, this State leads all others in the extent of its oyster fishery, which represents over 81 per cent of the value of the fishery products. This, however, is not the only branch in which the State is preeminent. The crab fishery, the terrapin fishery, the alewife fishery, the catfish fishery, the striped-bass fishery, the white-perch

fishery, the yellow-perch fishery, and the pike fishery are all more valuable than in any other State. The shad fishery ranks after that of New Jersey in importance, and the yield of bluefish, eels, menhaden, and squeteague is very large. This State is noteworthy for having the largest fleet of vessels engaged in the fisheries and the most extensive oyster packing and canning business.

Summarized statistics.—From the following series of tables it will be seen that in 1890 Maryland had a fishing population of 40,452, an invested capital of \$7,649,904, and products valued at \$6,019,165. In the next year the fishery employés numbered 39,944, the investment was \$7,466,718, and the gross receipts of the fishermen were \$6,460,759.

The number of persons engaged in vessel fisheries in 1891 was 8,342, the number of shore and boat fishermen was 19,867, and the number of shoresmen was 11,735.

The fishing fleet consisted of 1,627 vessels, having a tonnage of 34,183, valued, with their outfits, at \$1,838,249. The 9,825 boats had a value of \$579,488. The apparatus of capture comprised 536 seines, with a value of \$76,780; 733 pound nets, worth \$68,655; 11,976 gill nets, valued at \$97,289; 17,902 dredges and tongs, having a value of \$198,920; and other apparatus to the value of \$53,555.

The value of the oyster output in 1891 was \$5,295,866. The shad catch was worth \$211,575, and the yield of alewives \$131,245. Crabs ranked next to oysters, being worth \$303,716. The fish of which the largest quantity was taken were menhaden, but these were much less valuable than the shad, alewives, and striped bass.

Persons employed in the fisheries of Maryland.

How engaged.	1890.	1891.
In vessel fisheries	7,121	6,892
In shore fisheries.....	19,590	19,867
On transporting vessels	1,266	1,450
On shore, in factories, canneries, etc	12,475	11,735
Total	40,452	39,944

Vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Maryland.

Designation.	1890.		1891.	
	Number.	Value.	Number.	Value.
Vessels fishing	1,251	\$912,302	1,225	\$876,705
Tonnage.....	22,072	.....	21,033	.....
Outfit.....	.....	328,115	.....	331,709
Vessels transporting	354	530,485	402	570,150
Tonnage	11,805	.....	13,150	.....
Outfit.....	.....	54,208	.....	50,085
Boats	9,815	575,183	9,825	570,488
Apparatus—vessel fisheries:				
Seines	14	6,000	15	8,450
Dredges	2,700	115,992	2,419	111,374
Tongs	439	3,887	494	4,287
Apparatus—shore fisheries:				
Seines	520	70,790	521	68,930
Pound nets	808	74,730	733	66,055
Gill nets	12,641	98,002	11,976	97,289
Fyke nets	10,485	39,400	10,358	38,924
Trammel nets	25	2,785	23	2,725
Weirs	278	3,151	272	3,123
Pots	5,113	4,446	4,630	4,018
Lines .....	.....	2,069	.....	2,272
Dredges and scrapes.....	2,088	11,052	2,068	10,509
Tongs	12,433	68,810	12,921	72,750
Minor apparatus	1,430	2,987	1,503	2,498
Shore property .....	.....	2,467,800	.....	2,449,327
Cash capital .....	.....	2,260,520	.....	2,107,455
Total .....	.....	7,649,904	.....	7,466,718

Products of the fisheries of Maryland.

Species.	1890.		1891.		Species.	1890.		1891.	
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.	Pounds.	Value.
Alewives.....	19,766,994	\$143,773	17,418,850	\$131,245	Spots and croakers....	272,505	\$11,986	273,283	\$12,119
Butter-fish.....	30,226	738	31,955	785	Squeteague.....	687,173	24,681	750,405	25,902
Bluefish.....	460,160	21,266	516,364	22,761	Striped bass.....	1,305,928	105,759	1,244,093	97,770
Carp.....	26,920	657	27,628	780	Sturgeon.....	99,932	3,313	72,445	2,343
Catfish.....	1,327,552	46,675	1,296,752	45,502	Suckers.....	203,687	7,714	285,238	7,533
Eels.....	701,282	33,005	792,044	32,918	Other fish.....	449,463	14,899	438,683	14,561
Flounders.....	32,378	970	33,443	1,008	Crabs, hard.....	2,388,099	31,723	2,776,898	37,460
Menhaden.....	27,909,550	57,180	30,052,120	65,307	Crabs, soft.....	4,056,110	228,690	4,828,872	266,256
Mullet.....	101,300	2,901	101,540	2,974	Crawfish.....	6,250	502	7,350	695
Perch, white.....	1,150,296	58,898	1,109,273	57,038	Shrimp.....	7,556	3,720	8,044	3,960
Perch, yellow.....	1,369,551	46,081	1,385,352	48,040	Oysters.....	73,150,609	4,854,746	69,615,406	5,295,866
Pike.....	576,557	35,836	563,264	35,261	Quahogs.....	148,800	8,400	147,760	8,228
Sea bass.....	123,320	4,900	113,370	4,544	Terrapins.....	87,701	21,852	89,780	22,333
Shad.....	7,127,486	242,909	6,224,873	211,575	Turtles.....	3,080	227	4,060	231
Sheepshead.....	3,430	426	3,185	396	Total.....	143,005,576	6,010,165	141,177,827	6,460,750
Spanish mackerel.....	28,195	3,758	44,837	5,369					

A better conception of the quantities of certain products taken in this State may be obtained from the following table, in which the units of measure given correspond with those usually adopted in commerce:

Products.	Quantity.	
	1890.	1891.
Crabs, hard.....	number.....	7,014,297
Crabs, soft.....	do.....	12,168,830
Crawfish.....	do.....	75,000
Oysters.....	bushels.....	10,450,087
Clams.....	do.....	18,000
Terrapins.....	number.....	43,850
		8,330,604
		14,486,616
		88,203
		9,945,058
		18,470
		44,890

Extent of the fisheries in each county.—The detailed statistics given in the following tables show the importance and principal phases of the fishing industry in each county in Maryland having commercial fisheries. The data relate to the years 1890 and 1891. There are 16 counties in the State bordering on important bodies of water. One of these, Worcester, abuts on the ocean; the others are on Chesapeake Bay and the rivers already mentioned. The District of Columbia will be considered as a part of Maryland and will be included in the tables for that State.

Each of 11 counties of Maryland has over 1,000 persons engaged in the fishing industry. Baltimore County, owing to its extensive vessel fishery and oyster houses, has the largest number of fishery employés; in 1890 there were 12,153 and in 1891 11,052. No other county in the United States has so large a number of persons engaged in this industry, and only three States besides Maryland, viz., Massachusetts, Virginia, and New York, have such a numerous fishing population. Somerset County has a larger number of persons engaged in actual fishing than Baltimore, and in this respect surpasses any other single county in the United States with the probable exception of Essex County, Massachusetts. Dorchester, Talbot, Anne Arundel, St. Mary, and Wicomico counties also have a relatively large fishing population.

Baltimore County has the same prominence in the amount of its fishery investment that it holds as regards the persons employed. Of the \$4,357,488 credited to that county, however, \$3,752,001 represented the shore industries, and only \$605,487 the fisheries proper. The aggregate investment in Somerset County was \$1,221,669, of which \$878,639 was directly devoted to fishing property. While Baltimore County had 387 vessels employed in the fisheries, Somerset County had 578, a much larger number than is found in any other county in the country. The other counties referred to as having the largest number of fishermen also have the largest investments.

After Somerset comes Dorchester with \$596,546, Anne Arundel with \$223,218, Talbot with \$271,899, Wicomico with \$141,126, and St. Mary with \$121,060.

More than one-third the value of the products of the fisheries of Maryland in 1891 represented the operations of the fishermen of Somerset County, whose receipts were \$2,342,419. Of this sum, \$2,099,352 is to be credited to oysters, and more than half the remainder, or \$177,269, to crabs, in both of which products this county excels all others. Next to Somerset in the value of its fisheries is Dorchester County, \$913,528 accruing to its fishermen in 1891, of which \$825,982 was from the sale of oysters.

Numerous other counties have very valuable fisheries, as will be seen from the table. Those having products valued at over \$200,000 in 1891 were Baltimore with \$637,312, Talbot with \$395,140, Anne Arundel with \$394,847, St. Mary with \$368,469, Wicomico with \$293,880, Queen Anne with \$247,529, Calvert with \$203,684, and Kent with \$200,044.

Besides oysters and crabs, which are taken in largest quantities in Somerset County, the counties ranking first in the value of other important products are as follows: Harford, alewives and shad; Somerset, menhaden; Baltimore, striped bass; Worcester, squeteague; Kent, white perch and yellow perch; Talbot, terrapin.

Statement by counties of the number of persons employed in the fisheries of Maryland.

Counties.	In vessel fisheries.		On transporting vessels.		In shore fisheries.		On shore, in factories, etc.		Total.	
	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.
Anne Arundel.....	193	215	83	78	1,832	1,921	428	410	2,536	2,624
Baltimore.....	2,390	2,015	432	552	595	608	8,736	7,877	12,153	11,052
Calvert.....	100	130	96	84	1,113	1,189	.....	.....	1,300	1,383
Caroline.....	.....	.....	.....	.....	348	328	13	13	361	341
Cecil.....	.....	.....	.....	.....	808	783	85	85	888	868
Charles.....	.....	.....	4	.....	486	488	.....	.....	490	488
Dorchester.....	1,301	1,309	186	198	2,229	2,182	789	745	4,504	4,434
Harford.....	.....	.....	.....	.....	868	906	135	215	1,003	1,121
Kent.....	29	11	73	87	840	916	10	10	952	1,024
Prince George.....	.....	.....	.....	.....	206	143	.....	.....	206	143
Queen Anne.....	12	12	44	45	846	1,025	.....	.....	902	1,082
St. Mary.....	58	85	70	74	1,888	2,007	.....	.....	2,016	2,166
Somerset.....	2,768	2,862	217	260	3,059	3,015	1,488	1,613	7,532	7,756
Talbot.....	186	158	11	11	2,327	2,335	716	632	3,220	3,136
Wicomico.....	97	88	39	46	1,330	1,285	75	135	1,547	1,554
Worcester.....	7	7	.....	.....	654	580	.....	.....	661	593
District of Columbia.....	.....	.....	11	9	101	170	.....	.....	172	179
Total.....	7,121	6,802	1,206	1,450	19,590	19,807	12,475	11,735	40,452	39,944

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Maryland.

Designation.	Caroline.				Cecil.				Charles.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels transporting.....	.....	.....	.....	.....	.....	.....	.....	.....	1	\$1,000	.....	.....
Tonnage.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....
Outfit.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145	.....	.....
Boats.....	208	\$3,029	197	\$2,848	346	\$11,782	317	\$11,141	280	12,570	276	\$12,040
Apparatus—shore fisheries:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seines.....	27	2,580	20	2,775	27	4,870	25	4,750	5	1,350	5	1,300
Pound nets.....	31	2,170	24	1,500	101	12,885	127	10,170	90	9,050	87	9,725
Gill nets.....	1,940	9,370	1,785	8,755	389	11,116	384	10,390	123	8,597	123	8,465
Fyke nets.....	237	2,214	239	2,374	2,836	5,732	2,923	5,626	.....	.....	.....	.....
Trammel nets.....	.....	.....	.....	.....	8	1,000	8	1,000	.....	.....	.....	.....
Weirs.....	23	345	25	375	31	205	30	200	.....	.....	.....	.....
Lines.....	.....	37	.....	35	.....	20	.....	22	.....	38	.....	35
Tongs.....	.....	.....	.....	.....	.....	.....	.....	.....	188	090	192	1,020
Minor apparatus.....	.....	.....	.....	.....	30	.....	32	.....	.....	13	.....	11
Shore property.....	6,900	.....	7,000	.....	18,700	.....	18,000	.....	5,500	.....	5,405	.....
Cash capital.....	4,500	.....	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	31,145	.....	30,222	.....	66,340	.....	61,331	.....	40,150	.....	38,001	.....

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Maryland—Continued.

Designation.	Anne Arundel.				Baltimore.				Calvert.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing.....	55	\$28,840	66	\$35,405	279	\$278,813	235	\$228,645	21	\$20,650	28	\$28,150	
Tonnage.....	450	.....	562	.....	8,937	.....	7,581	.....	345	.....	487	.....
Outfit.....	6,135	.....	6,755	.....	.....	105,944	.....	86,352	.....	3,815	.....	3,785
Vessels transporting.....	31	32,785	28	27,050	123	201,875	152	219,675	25	51,650	29	49,175	
Tonnage.....	536	.....	492	.....	4,891	.....	5,742	.....	933	.....	894	.....
Outfit.....	2,555	.....	2,253	.....	14,614	.....	16,899	.....	3,870	.....	3,465	.....
Boats.....	844	49,850	874	52,890	245	9,551	255	9,750	547	27,033	586	27,066	
Apparatus—vessel fisheries:													
Seines.....					9	3,500	5	2,150					
Dredges and scrapes.....	20	750	14	550	556	23,020	470	21,150	26	1,040	38	1,235	
Tongs.....	130	1,300	175	1,750	.....	.....	.....	.....	20	200	25	250
Apparatus—shore fisheries:													
Seines.....	23	1,495	24	1,560	69	11,070	72	12,505	15	1,050	16	1,120	
Pound nets.....	45	4,950	44	4,840	13	1,240	15	1,420	16	2,400	18	2,700	
Gill nets.....	76	266	72	252	28	273	33	303	152	532	158	553	
Fyke nets.....	20	360	22	396	1,666	5,979	1,781	6,113	.....	.....	.....	.....
Weirs.....					20	160	21	165	.....	.....	.....	.....
Pots.....	320	320	343	343	155	122	167	134	.....	50	.....	50
Lines.....	430	.....	440	.....	30	.....	32	.....	43	1,290	7	210
Dredges and scrapes.....	129	645	126	630	.....	.....	.....	.....	931	9,310	1,052	10,520
Tongs.....	1,697	10,182	1,782	10,692	.....	.....	.....	.....	.....	6	.....	7
Minor apparatus.....	86	.....	88	.....	185	.....	184	.....	.....	689	.....	736
Shore property.....	38,347	.....	36,844	.....	2,004,426	.....	2,033,001	.....	.....	.....	.....	.....
Cash capital.....	40,500	40,500	1,899,000	1,719,000	
Total		219,790	222,218	4,622,702	4,357,488	123,585	128,962
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Designation.	Dorchester.				Harford.				Kent.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing.....	298	\$150,888	299	\$151,150	.....	.....	.....	.....	3	\$2,600	2	\$1,075
Tonnage.....	3,069	.....	3,100	.....	.....	.....	.....	.....	95	.....	31	.....
Outfit.....	61,387	.....	64,762	.....	.....	.....	.....	.....	.....	1,050	.....	352
Vessels transporting.....	42	92,125	45	98,100	.....	.....	.....	.....	32	15,350	40	20,350
Tonnage.....	1,819	.....	1,982	.....	.....	.....	.....	.....	471	.....	637	.....
Outfit.....	10,175	.....	10,735	.....	.....	.....	.....	.....	.....	3,714	.....	3,873
Boats.....	1,376	72,779	1,312	70,517	218	\$8,705	230	\$9,295	682	26,269	624	27,850	
Apparatus—vessel fisheries:													
Seines.....			2	1,100	.....	.....	.....	.....	6	395	2	125
Dredges and scrapes.....	610	27,218	612	26,671	6	395	2	12
Tongs.....	72	589	108	823	.....	.....	.....	.....	.....	.....	.....	.....
Apparatus—shore fisheries:													
Seines.....	51	4,335	46	4,140	15	15,320	16	14,200	23	2,310	22	2,170	
Pound nets.....	127	8,255	108	5,400	217	6,536	206	8,860	51	3,770	55	3,940	
Gill nets.....	2,750	11,410	2,425	9,740	217	6,536	206	8,860	338	4,740	336	4,590	
Fyke nets.....	1,700	7,994	1,470	6,053	1,230	4,325	1,140	4,010	214	3,908	211	3,856	
Trammel nets.....					17	1,785	15	1,725	.....	.....	.....	.....
Weirs.....	87	1,310	85	1,285	.....	.....	.....	.....	4	50	4	47
Pots.....	1,440	1,296	1,125	1,013	430	473	415	456	68	82	90	110	
Lines.....	245	.....	307	.....	55	.....	53	.....	.....	38	.....	30
Dredges and scrapes.....	360	1,935	365	1,950	.....	.....	.....	.....	687	3,435	797	4,305
Tongs.....	1,425	7,125	1,335	6,075	.....	.....	.....	.....	.....	48	.....	48
Minor apparatus.....	675	.....	675	.....	28,824	.....	28,532	.....	10,306	.....	10,440	.....
Shore property.....	50,985	.....	57,450	.....	.....	.....	.....	.....	4,800	.....	4,800	.....
Cash capital.....	78,350	.....	77,400	.....	.....	.....	.....	.....	.....	83,015	.....	87,991
Total		504,556	506,546	66,023	67,131	83,015	87,991

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Maryland—Continued.

Designation.	Prince George.				Queen Anne.				St. Mary.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing					1	\$1,000	1	\$1,000	11	\$5,925	19	\$13,225	
Tonnage					23		23		128		229		
Outfit						575		550		1,085		2,490	
Vessels transporting					17	10,850	18	14,400	19	26,000	21	23,050	
Tonnage					280		329		532		530		
Outfit						2,182		2,336		2,543		2,742	
Boats	81	\$2,065	76	\$1,640	504	26,348	504	31,844	931	48,379	1,001	51,924	
Apparatus—vessel fisheries:													
Seines					1	600	1	600	22	933	32	1,355	
Dredges and scrapes													
Tongs											3	20	
Apparatus—shore fisheries:													
Seines	18	3,000	17	1,360	26	3,620	24	3,495	19	1,455	18	1,380	
Pound nets	7	700	6	600	11	900	9	710	56	9,950	50	10,450	
Gill nets	114	479	110	470	373	1,985	335	1,795	137	409	144	556	
Fykenets					52	803	74	1,435					
Weirs					9	45	9	45					
Pots					158	155	160	157	180	90	210	105	
Lines						32		74		40		40	
Dredges and scrapes					827	4,135	1,018	5,065	54	1,505	37	1,025	
Tongs							43	70		9,090	1,461	10,390	
Minor apparatus										90		90	
Shore property					515	475		3,471		3,829		1,580	
Cash capital								1,300				1,618	
Total		6,925		4,717			58,104		68,705		109,863		121,060
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Somerset.													
Designation.	1890.				1891.				1890.				
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing	522	\$387,676	518	\$383,805	43	\$19,000	41	\$18,875	15	\$15,425	13	\$14,225	
Tonnage	8,280		8,332		374		377		343		305		
Outfit		133,780		153,453		8,360		8,310		5,299		4,815	
Vessels transporting	49	80,890	60	91,150	3	5,200	3	5,200	8	16,700	10	19,500	
Tonnage	1,823		2,005		101		101		332		384		
Outfit		11,250		13,822		600		590		2,035		2,495	
Boats	1,482	150,125	1,457	149,400	1,008	74,440	1,115	72,685	535	37,140	513	35,573	
Apparatus—vessel fisheries:													
Seines	4	2,800	7	4,000									
Dredges and scrapes	1,281	54,986	1,134	54,866	88	3,700	83	3,680	41	1,890	34	1,742	
Tongs	208	1,713	172	1,344	2	15	2	18					
Apparatus—shore fisheries:													
Seines	13	1,100	11	950	41	6,355	47	7,755	33	8,270	28	2,765	
Pound nets	38	2,850	21	1,305	86	8,600	78	8,580	63	4,725	59	4,720	
Gill nets	1,885	9,425	1,625	8,125	2,136	20,560	2,286	22,272	1,010	6,255	900	5,500	
Fyke nets	1,172	2,480	1,179	2,505	607	2,614	570	2,888	726	2,791	708	2,807	
Weirs	28	350	28	350	27	248	19	216	36	380	36	380	
Pots	1,075	907	940	840	325	293	310	287	362	348	296	272	
Lines		225		231		348		433		371		367	
Dredges and scrapes	987	3,437	901	3,440	325	1,910	332	1,985	100	1,140	210	1,260	
Tongs	2,247	7,932	2,249	7,938	1,875	9,975	1,890	9,450	975	6,850	945	5,670	
Minor apparatus		260		290		513		518		335		375	
Shore property		148,257		151,780		57,880		61,855		13,100		18,600	
Cash capital		176,350		191,250		48,220		46,305		13,500		20,000	
Total		1,176,769		1,221,060		209,191		271,809		130,554		141,126	

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Maryland—Continued.

Designation.	Worcester.				District of Columbia.				Total.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	3	\$1,175	3	\$1,150					1,251	\$912,392	1,225	\$876,705
Tonnage	21	.....	26	.....					22,074	.....	21,072	.....
Outfit . . . . .	.....	85	.....	85					328,115	.....	331,709	.....
Vessels transporting . . . . .	.....	.....	.....	.....	4	\$2,150	3	\$1,900	354	536,485	402	570,150
Tonnage . . . . .	.....	.....	.....	.....	61	.....	55	.....	11,805	.....	13,151	.....
Outfit . . . . .	.....	.....	.....	.....	.....	525	.....	495	.....	.54,208	.....	59,685
Boats	367	12,083	322	10,301	71	2,435	76	2,715	9,815	575,180	9,825	579,488
Apparatus—vessel fisheries:												
Seines									14	6,900	15	8,450
Dredges and scrapes									2,700	115,902	2,419	111,374
Tongs	7	70	7	70					439	3,887	494	4,287
Apparatus—shore fisheries:												
Seines	116	4,535	115	4,430	8	2,175	6	1,675	529	70,700	521	68,330
Pound nets					13	1,325	23	2,475	808	74,730	733	68,655
Gill nets	928	4,384	921	4,288	45	2,475	43	2,375	12,641	98,002	11,976	97,280
Fyke nets	25	80	32	111					10,485	39,400	10,358	38,924
Trammel nets									25	2,785	23	2,725
Weirs	13	52	15	60					278	3,151	272	3,123
Pots	600	300	580	290					5,113	4,440	4,030	4,013
Lines		34		32						2,060		2,272
Dredges and scrapes									2,088	11,952	2,008	10,509
Tongs	276	1,380	205	1,025					12,433	68,810	12,921	72,750
Minor apparatus		13		13						2,387		2,498
Shore property	11,596		10,067		645		635			2,467,800		2,446,327
Cash capital	3,000		2,400							2,269,520		2,107,455
Total		30,387		34,322		11,730		12,270		7,040,904		7,466,718

Statement by counties and species of the yield of the fisheries of Maryland.

Species.	Somerset.				Talbot.				Wicomico.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	377,000	\$1,883	331,500	\$1,056	715,680	\$4,208	635,564	\$3,832	1,788,300	\$8,741	1,675,360	\$8,179
Bluefish	30,200	1,026	37,200	1,102	59,600	2,080	53,400	2,658	34,600	1,712	31,950	1,577
Catfish	35,200	1,543	34,420	1,489	96,900	2,521	106,000	2,786	214,090	8,158	186,763	7,544
Eels	70,010	2,780	62,010	2,458	48,960	1,732	44,775	1,031	84,070	3,318	111,220	4,458
Menhaden	12,544,600	25,050	15,481,100	30,578	98,200	230	91,100	200	.....	.....	.....	.....
Mullet	16,300	326	15,900	324								
Perch, white	33,150	1,326	30,030	1,237	64,850	2,519	63,305	2,463	80,965	4,305	74,885	3,936
Perch, yellow	33,500	1,005	32,040	1,039	106,810	3,039	102,964	2,983	62,076	2,177	65,645	2,295
Pike	11,400	684	5,840	351	7,892	403	11,664	690	15,850	954	14,370	805
Sea bass	1,320	40	1,260	38								
Shad	273,434	9,366	267,975	8,995	917,791	31,467	656,106	22,497	715,874	24,024	621,744	21,517
Sheepshead	1,150	130	1,020	115								
Spots and croakers	67,450	2,720	67,830	2,760	32,875	1,305	23,600	944	19,900	955	27,188	1,355
Squeteague	114,500	4,232	111,500	4,037	39,055	1,902	29,940	1,440	14,160	638	14,350	642
Striped bass	58,210	3,053	60,900	3,193	123,550	7,571	110,906	6,637	94,964	7,092	86,500	6,413
Sturgeon	2,680	130	2,700	80	16,400	820	9,400	478	18,192	738	11,785	497
Suckers	6,900	242	5,000	202	43,130	1,179	49,550	1,364	45,000	1,094	43,560	1,053
Other fish	26,600	1,064	26,660	1,064	39,050	1,633	36,989	1,636	47,765	1,640	49,134	1,692
Oysters	27,227,504	1,755,730	29,660,974	2,090,352	4,685,355	301,855	4,571,000	326,492	3,140,795	201,908	2,769,880	108,706
Clams (guana-hogs)	38,400	2,880	21,520	1,614								
Crabs, hard	483,334	7,250	558,334	8,375	225,134	3,377	291,833	4,377	72,133	1,082	108,433	1,620
Crabs, soft	2,498,536	149,913	2,814,885	168,894	166,733	5,002	208,433	6,253	366,734	16,503	648,567	29,185
Terrapins	12,500	2,500	16,200	3,240	17,500	5,250	10,200	5,700	6,800	1,980	7,800	2,340
Turtle	2,300	127	2,470	136								
Total	43,966,238	1,975,909	40,651,128	2,542,410	7,515,465	379,053	7,116,840	395,140	0,822,868	287,914	6,561,084	293,880

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties and species of the yield of the fisheries of Maryland—Continued.

Species.	Anne Arundel.				Baltimore.				Calvert.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Alewives.....	571,800	\$4,548	545,900	\$4,485	375,350	\$2,389	392,400	\$2,550	460,000	\$3,080	322,800	\$2,820	
Bluefish.....	51,200	2,500	72,500	3,425	9,920	496	10,100	505	50,400	2,466	64,200	2,924	
Catfish.....	9,170	292	9,050	284	128,850	5,708	135,970	6,015	42,857	1,500	40,570	1,420	
Eels.....	32,160	1,286	33,840	1,334	52,850	2,211	59,945	2,495					
Menhaden.....	25,000	90	23,600	86	9,210,000	17,687	7,576,000	17,783	766,500	1,755	727,500	1,675	
Porch, white.....	27,260	1,470	26,090	1,462	148,178	8,089	151,253	8,290	34,650	1,874	35,780	1,789	
Perch, yellow.....	35,010	1,345	37,160	1,410	220,480	0,059	244,400	7,424	27,465	973	31,170	1,112	
Pike.....	5,940	421	6,050	428	138,534	8,693	142,045	8,974					
Shad.....	116,025	5,967	122,500	6,344	78,106	3,311	80,164	3,406	48,517	1,855	57,463	2,096	
Spanish mackerel.....									9,500	1,330	16,200	1,944	
Spots and croakers.....	27,580	1,655	28,470	1,701	12,050	365	11,600	351	5,000	250	6,000	800	
Squeteague.....	1,000	50	1,600	80	6,910	346	5,050	285	9,000	450	10,700	535	
Striped bass.....	53,520	5,171	54,930	5,328	189,152	14,499	192,210	14,716	20,469	2,837	29,927	2,692	
Suckers.....					5,200	130	6,000	150					
Other fish.....	32,285	972	32,400	982	39,690	1,042	40,640	1,070	27,175	810	30,610	920	
Oysters.....	6,420,659	379,508	4,307,835	337,830	7,636,172	590,031	5,369,322	554,231	2,530,040	168,353	2,248,900	182,977	
Crabs, hard.....	955,333	11,284	897,333	10,768	30,000	450	31,200	498	8,285	97	9,165	110	
Crabs, soft.....	180,533	19,620	177,000	18,900	38,000	4,275	40,300	4,641	2,840	342	3,200	360	
Shrimp.....					7,556	3,720	8,044	3,900					
Total.....	8,553,475	436,217	8,377,104	394,847	18,233,003	670,411	14,498,203	637,312	4,052,269	188,572	3,634,245	203,684	
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Species.	Caroline.				Cecil.				Charles.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Alewives.....	498,080	\$4,241	384,100	\$3,289	5,104,750	\$24,156	4,021,870	\$20,115	1,602,413	\$11,006	993,645	\$10,025	
Bluefish.....					61,485	2,280	152,240	5,844	143,210	1,125	75	1,280	
Catfish.....	66,803	2,493	61,485	2,280					25,900	785	28,325	883	
Eels.....	20,150	806	19,835	793	107,615	4,864	100,501	4,612	5,750	212	6,790	248	
Perch, white.....	29,100	1,473	25,520	1,303	118,085	0,105	110,320	5,730	26,000	1,379	25,093	1,273	
Perch, yellow.....	63,835	2,415	60,295	1,878	806,090	8,849	283,890	8,192	16,200	689	16,750	742	
Pike.....	17,767	1,068	17,645	1,060	148,514	9,473	135,121	8,622					
Shad.....	520,136	17,818	419,302	14,419	1,194,753	37,863	1,042,299	33,098	686,379	18,382	625,440	15,920	
Spots and croakers.....					700	35	540	27	1,500	75	1,475	73	
Squeteague.....					2,546	77,480	5,423	65,650	4,635	126,792	8,997	112,666	7,829
Striped bass.....	34,600	2,381	37,133	2,546					60,000	1,500	45,600	1,140	
Sturgeon.....					695	60,560	1,003	52,080	1,339	4,750	155	2,760	100
Suckers.....	18,780	538	24,100	695	60,560	1,003	52,080	1,339	8,210	800	7,103	213	
Other fish.....	20,855	790	28,600	839	50,370	1,511	45,445	1,361	485,520	28,410	381,026	27,849	
Oysters.....									86,500	675	96,800	726	
Crabs, hard.....									600	334	630	357	
Terrapins.....													
Total.....	1,296,775	34,021	1,068,015	29,102	7,321,757	105,580	6,000,896	93,095	2,630,594	74,220	2,348,343	67,002	
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Species.	Dorchester.				Harford.				Kent.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Alewives.....	763,265	\$3,922	712,220	\$3,069	4,809,700	\$49,904	4,039,500	\$43,004	622,100	\$4,042	676,525	\$4,955	
Bluefish.....	21,210	851	20,700	913					44,900	1,715	42,987	1,006	
Catfish.....	100,738	3,339	99,696	3,361	105,016	3,750	94,744	3,479	179,792	5,859	163,095	5,484	
Eels.....	65,700	2,931	62,740	2,510	97,500	3,953	99,270	4,018	40,830	1,324	39,350	1,172	
Menhaden.....	173,600	626	4,808,820	10,443									
Perch, white.....	59,325	2,970	52,150	2,500	96,666	5,060	82,204	4,327	159,000	9,352	173,444	10,658	
Perch, yellow.....	85,808	2,798	76,125	2,611	97,286	3,405	102,733	3,700	176,363	8,235	181,664	8,245	
Pike.....	28,790	1,570	27,485	1,519	57,785	4,045	52,786	3,754	71,100	5,081	70,010	5,277	
Shad.....	446,548	15,330	445,865	15,300	1,143,394	42,352	950,431	35,320	360,024	12,843	320,873	11,548	
Spanish mackerel.....									10,095	1,320	8,387	1,120	
Spots and croakers.....	30,300	1,798	33,800	1,672					7,400	360	6,500	317	
Squeteague.....	20,548	754	18,335	687					8,280	104	3,110	155	
Striped bass.....	58,125	4,322	57,485	4,205	73,370	6,505	61,577	5,473	65,275	4,809	54,775	4,170	
Sturgeon.....	2,680	130	2,000	148									
Suckers.....	44,204	1,064	43,038	1,090	47,927	1,255	41,755	1,100	9,080	233	8,950	228	
Other fish.....	51,690	1,423	50,831	1,478	35,445	1,064	33,884	1,024	30,005	1,160	30,330	1,081	
Oysters.....	11,060,987	711,189	11,563,622	825,082					1,070,984	121,738	1,075,100	143,538	
Crabs, hard.....	290,100	4,351	493,400	7,250					43,300	622	27,500	450	
Crabs, soft.....	633,500	10,005	760,107	22,805									
Terrapins.....	18,300	5,490	17,400	5,220									
Total.....	13,901,398	783,890	19,426,394	913,528	6,564,698	121,290	5,564,884	105,289	3,494,378	178,917	3,482,609	200,044	

Statement by counties and species of the yield of the fisheries of Maryland—Continued.

Species.	Prince George.				Queen Anne.				St. Mary.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	320,146	\$2,831	265,581	\$2,515	245,610	\$2,559	208,200	\$2,148	1,105,000	\$7,587	1,306,300	\$9,766
Bluefish					27,330	1,340	25,445	1,242	106,675	5,255	136,542	5,953
Catfish	86,270	3,135	83,340	2,878	62,700	1,886	62,602	1,880	28,000	670	39,208	912
Eels					45,450	1,880	34,230	1,668	6,300	253	8,520	341
Menhaden					4,200,000	8,750	1,200,000	2,500	741,656	1,652	749,500	1,561
Perch, white	9,417	565	11,610	568	106,600	5,958	88,061	4,770	39,889	2,149	43,883	2,426
Perch, yellow	5,725	220	5,200	210	100,070	3,960	123,244	5,075	15,588	547	19,372	.087
Pike					18,960	1,403	20,357	1,537				
Shad	92,533	2,851	54,391	1,975	50,610	2,346	61,420	2,823	202,100	6,597	230,200	8,555
Sheepshead									2,280	296	2,165	281
Spanish mackerel									8,600	1,108	20,250	2,305
Spots and croakers					6,050	237	5,220	208	45,200	1,797	50,450	1,977
Squeteague					2,700	147	3,700	268	233,065	7,368	240,410	7,614
Striped bass	5,610	515	6,131	585	156,210	14,717	114,290	11,198	107,070	8,082	105,788	8,115
Suckers					866	13	1,330	20				
Other fish	17,940	486	15,230	395	26,550	801	20,435	537	45,752	1,618	48,908	1,688
Oysters					2,850,150	165,168	2,571,625	204,374	4,189,508	265,826	3,689,511	301,465
Crabs, hard					90,500	1,280	169,000	2,070	63,500	675	68,900	715
Crabs, soft					9,834	590	18,500	1,110	150,400	13,440	157,700	14,108
Crawfish	6,250	562	7,350	695			29,401	4,408	26,590	3,986		
Terrapins							1,680	100	1,590	95		
Turtle												
Total	543,891	11,174	448,833	9,801	8,040,271	217,433	4,755,848	247,529	7,091,273	324,820	6,917,067	368,469
Species.	Worcester.				District of Columbia.				Total for State.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	442,800	\$3,871	441,900	\$3,802	474,400	\$4,135	465,485	\$4,435	19,766,094	\$143,793	17,418,850	\$131,245
Bluefish	23,000	690	20,000	600					460,160	21,166	516,364	22,701
Catfish	19,913	751	21,374	805	7,150	214	11,050	341	1,327,502	46,675	1,296,752	45,502
Eels	79,200	3,876	72,808	3,518					791,282	33,005	792,044	32,919
Menhaden	210,000	540	205,000	472					27,989,556	57,180	30,952,120	65,307
Mullet	85,000	2,375	85,040	2,050					101,300	2,901	101,540	2,974
Perch, white	110,831	3,959	109,595	3,959	5,135	275	4,250	241	1,150,296	58,898	1,109,273	57,038
Perch, yellow	7,820	216	7,680	216	3,425	140	3,120	131	1,369,551	46,981	1,385,352	48,040
Pike	54,025	1,983	58,985	2,164					576,557	35,836	563,264	35,201
Sea bass	122,000	4,860	112,110	4,506					123,320	4,900	113,370	4,544
Shad	51,800	2,371	48,521	2,383	229,462	6,260	213,200	5,370	7,127,486	242,900	6,224,873	211,575
Sheepshead									3,430	420	3,185	396
Spanish mackerel									28,195	3,758	44,837	5,369
Spots and croakers	10,500	425	10,610	434					272,505	11,986	273,283	12,119
Squeteague	240,000	8,450	308,750	10,013					687,173	24,651	750,465	25,002
Striped bass	205,112	9,050	108,375	9,510	7,350	675	5,390	485	1,365,928	105,759	1,264,693	97,770
Sturgeon									99,932	3,813	72,445	2,343
Suckers	5,720	143	5,520	138	1,000	35	1,000	54	293,667	7,714	285,238	7,533
Other fish	28,285	905	31,049	995	7,050	279	3,470	150	541,587	17,394	531,709	17,134
Oysters	1,333,185	105,032	806,001	93,070					73,150,600	4,854,746	69,615,406	5,295,866
Clams (quahogs)	110,400	5,520	126,240	6,612					148,800	8,400	147,760	8,226
Crabs, hard	40,000	600	35,000	525					2,388,090	31,723	2,776,898	37,400
Crabs, soft									4,056,110	228,690	4,828,872	266,256
Crawfish									6,250	562	7,350	.095
Shrimp									7,550	3,720	8,044	3,961
Terrapins	2,600	1,890	1,060	1,430					87,701	21,852	89,780	22,333
Turtles									3,980	227	4,060	231
Total	3,082,191	217,707	2,618,109	147,802	734,972	12,013	707,565	11,216	143,905,576	6,019,165	141,177,827	6,400,759

The products taken by each apparatus.—In the vessel fisheries of Maryland the only products obtained are oysters and menhaden. The yield of these in each county in 1890 and 1891 is shown in the following table. The use of vessels in the oyster fishery is observed in 10 counties, and menhaden are thus taken in 4 counties. The results of the vessel fisheries in 1891 were 4,814,114 bushels of oysters, valued at \$2,615,840, and 28,816,000 pounds of menhaden, worth \$60,533.

The results of the shore and boat fisheries with reference to the apparatus used are given in great detail for each county in the second table. In 1891 this branch yielded \$3,784,386, of which oysters represented \$2,680,026. The most important apparatus used in the capture of fish proper were seines, which took 14,312,398 pounds, valued at \$265,443; alewives, shad, and striped bass constitute the principal part of the catch. Seines are most prominent in Harford, Baltimore, Worcester, and Cecil counties. Gill nets rank next to seines in the value of the output, although in the quantity of products taken pound nets are second. The gill-net catch was 8,447,291 pounds, valued at \$211,291; more than half this amount represented shad. This form of apparatus is especially important in Cecil, Harford, Kent, and Talbot counties. The pound-net catch in 1891 was 8,458,299, worth \$153,471. The fish thus taken having the greatest value are alewives, shad, and striped bass. St. Mary and Cecil counties excel all others in the value of their pound-net fishery. Of other prominent kinds of apparatus, fyke nets are credited with a catch of 1,546,864 pounds, valued at \$60,549; lines, 970,135 pounds, valued at \$35,271; pots, 389,740 pounds, valued at \$16,030; weirs, 416,891 pounds, valued at \$11,952, and trammel nets, 123,996 pounds, valued at \$5,797. Under the head of miscellaneous apparatus are included all products except fish, although some of these, crabs and terrapins, for instance, are taken with appliances that are also employed in the capture of fish.

Statement by counties and species of the yield of the vessel fisheries of Maryland.

Counties.	Menhaden.				Oysters.				Total value.	
	1890.		1891.		1890.		1891.		1890.	1891.
	Pounds.	Value.	Pounds.	Value.	Bushels.	Value.	Bushels.	Value.		
Anne Arundel.....					125,612	\$63,356	118,605	\$67,000	\$63,356	\$67,000
Baltimore.....	9,210,000	\$17,687	7,576,000	\$17,783	1,070,506	590,031	767,046	554,231	607,718	572,014
Calvert.....					61,060	36,348	63,270	40,465	36,348	40,465
Dorchester.....			4,740,000	9,875	1,084,291	488,057	1,141,246	570,732	488,057	580,607
Kent.....					10,737	7,281	2,800	2,150	7,281	2,150
Queen Anne.....	4,200,000	8,750	1,200,000	2,500					8,750	2,500
Somerset.....	12,347,600	23,724	15,300,000	30,375	2,252,091	1,018,824	2,483,227	1,247,804	1,044,548	1,278,179
St. Mary.....					27,250	13,210	34,770	20,400	13,210	20,400
Talbot.....					145,465	65,470	142,500	71,242	65,470	71,242
Wicomico.....					86,285	38,828	75,590	38,656	38,828	38,656
Worcester.....					5,400	2,950	5,060	3,160	2,950	3,160
Total.....	25,757,600	52,161	28,816,000	60,533	4,874,787	2,324,355	4,814,114	2,615,840	2,376,516	2,670,373

Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland.

Apparatus and species.	Anne Arundel.				Baltimore.				Calvert.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	45,000	\$340	58,000	\$385	243,600	\$1,580	258,350	\$1,722	156,000	\$1,300	141,200	\$1,250
Bluefish	10,000	500	14,500	725	9,200	400	9,500	475	.....	.....	.....	.....
Catfish	1,250	42	1,500	50	33,550	3,722	87,100	3,884	.....	.....	.....	.....
Eels	.....	.....	.....	.....	12,630	505	13,000	520	364,000	050	340,000	900
Menhaden	9,500	570	9,850	591	98,373	5,400	101,500	5,579	19,500	1,090	18,000	1,005
Perch, white.	16,000	640	17,000	680	113,925	3,879	117,300	3,972	13,140	460	14,710	515
Perch, yellow.	3,585	256	3,720	265	82,648	5,320	86,010	5,543	.....	.....	.....	.....
Pike	12,775	657	14,700	800	63,000	2,700	65,338	2,800	11,900	010	14,700	630
Shad	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spots and croakers	9,000	540	9,800	580	12,050	365	11,600	351	.....	.....	.....	.....
Squeteague	1,000	50	1,600	80	6,910	340	5,650	283	.....	.....	.....	.....
Striped bass	32,160	3,216	34,630	3,463	174,407	13,270	177,370	13,486	4,280	430	4,807	485
Suckers	.....	.....	.....	.....	5,200	600	6,000	150	.....	.....	.....	.....
Other fish	6,735	202	7,500	225	26,800	670	29,000	726	8,210	240	11,600	350
Total	147,005	7,013	172,800	7,844	932,295	38,347	967,718	39,491	577,090	5,080	546,197	5,135
Pound nets:												
Alewives	480,000	3,820	440,000	3,700	91,750	528	92,250	538	280,000	2,000	144,000	1,080
Bluefish	22,000	1,100	36,000	1,600	720	36	600	80	5,400	216	7,200	324
Catfish	1,125	45	1,000	40	5,100	162	5,670	180	.....	.....	.....	.....
Eels	.....	.....	.....	.....	3,875	155	4,100	164	.....	.....	.....	.....
Menhaden	25,000	90	23,000	86	.....	.....	.....	.....	287,500	575	270,000	540
Perch, white.	13,600	695	13,420	688	2,966	178	2,800	188	3,550	219	7,200	324
Perch, yellow.	8,880	155	3,985	159	14,280	403	16,310	442	2,325	93	5,300	212
Pike	103,250	5,310	107,800	5,544	5,409	332	6,440	380	.....	.....	.....	.....
Shad	.....	.....	.....	.....	2,604	111	2,261	98	32,000	1,030	37,800	1,296
Span' h mack'	.....	.....	.....	.....	.....	.....	.....	.....	9,500	1,330	16,200	1,944
Spots and croakers	18,580	1,115	18,670	1,121	.....	.....	.....	.....	5,000	250	6,000	300
Squeteague	12,000	1,080	11,500	1,035	6,625	585	6,640	582	9,000	450	10,700	535
Striped bass	13,660	410	13,700	414	1,960	47	1,050	25	14,680	1,462	10,900	1,082
Other fish	.....	.....	.....	.....	600,735	14,385	135,269	2,538	138,121	2,616	658,145	7,897
Total	693,095	13,820	693,735	14,385	.....	.....	.....	.....	7,960	523,900	.....	.....
Gill nets:												
Alewives	34,800	340	25,400	350	40,000	280	41,800	290	24,000	380	37,000	490
Bluefish	10,200	960	22,000	1,100	.....	.....	.....	.....	45,000	2,250	57,000	2,600
Catfish	2,800	85	2,620	78	.....	.....	.....	.....	115,000	230	117,500	235
Menhaden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perch, white.	4,160	205	3,720	185	3,056	163	4,210	229	11,600	565	9,520	470
Perch, yellow.	12,300	465	12,850	471	8,320	273	8,980	291	12,000	420	11,160	385
Pike	2,145	150	2,050	143	15,227	925	15,750	958	.....	.....	.....	.....
Shad	.....	.....	.....	.....	12,502	500	12,565	508	4,557	155	4,968	170
Striped bass	5,860	525	5,000	450	3,750	300	3,860	308	10,500	945	14,160	1,125
Other fish	8,030	265	8,300	259	900	25	740	20	9,835	295	10,350	310
Total	89,955	2,905	91,940	3,036	83,755	2,466	87,905	2,604	232,492	5,240	262,253	5,785
Fyke nets:												
Alewives	12,000	48	12,500	50	.....	.....	.....	.....	.....	.....	.....	.....
Catfish	3,935	120	3,870	116	33,400	1,560	35,860	1,669	.....	.....	.....	.....
Eels	.....	.....	.....	.....	7,200	380	9,040	452	.....	.....	.....	.....
Perch, white.	.....	.....	.....	.....	38,956	2,117	37,243	2,039	.....	.....	.....	.....
Perch, yellow.	2,830	85	3,325	100	47,125	1,329	58,350	1,627	.....	.....	.....	.....
Pike	210	15	286	20	28,650	1,706	27,875	1,657	.....	.....	.....	.....
Striped bass	3,500	350	3,800	380	1,440	124	1,520	128	.....	.....	.....	.....
Other fish	3,260	95	2,900	84	8,760	209	8,500	205	.....	.....	.....	.....
Total	25,735	713	26,681	750	165,531	7,485	178,388	7,837	.....	.....	.....	.....
Weirs:												
Catfish	.....	.....	.....	.....	5,300	200	5,820	212	.....	.....	.....	.....
Perch, white.	.....	.....	.....	.....	4,820	241	5,500	275	.....	.....	.....	.....
Perch, yellow.	.....	.....	.....	.....	42,600	1,065	43,100	1,078	.....	.....	.....	.....
Pike	.....	.....	.....	.....	6,600	410	6,870	427	.....	.....	.....	.....
Striped bass	.....	.....	.....	.....	2,930	220	2,820	212	.....	.....	.....	.....
Other fish	.....	.....	.....	.....	1,240	31	1,350	34	.....	.....	.....	.....
Total	.....	.....	.....	.....	63,490	2,167	65,260	2,238	.....	.....	.....	.....
Lines:												
Catfish	.....	.....	.....	.....	1,600	64	1,720	70	42,857	1,500	40,570	1,420
Eels	.....	.....	.....	.....	520	26	680	34	.....	.....	.....	.....
Perch, yellow.	.....	.....	.....	.....	250	10	360	14	.....	.....	.....	.....
Total	.....	.....	.....	.....	2,370	100	2,760	118	42,857	1,500	40,570	1,420
Pots:												
Eels	32,160	1,286	33,840	1,334	28,625	1,145	33,125	1,325	.....	.....	.....	.....
Miscellaneous:												
Oysters	5,541,375	316,150	3,477,600	270,830	.....	.....	.....	.....	2,103,220	132,005	1,806,070	142,512
Crabs, hard	955,333	11,264	897,333	10,768	30,000	450	31,200	468	8,265	97	9,165	110
Crabs, soft	189,533	10,020	177,000	18,900	38,000	4,275	40,360	4,641	2,840	842	3,200	360
Shrimp	.....	.....	.....	.....	7,556	3,720	8,044	3,960	.....	.....	.....	.....
Total	6,686,241	347,034	4,551,033	300,498	75,550	8,445	79,604	9,060	2,114,325	132,444	1,818,435	142,982
Grand total	7,674,191	372,861	5,546,929	327,847	1,486,891	62,093	1,552,881	65,298	3,624,849	152,224	3,191,355	163,219

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Caroline.				Cecil.				Charles.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	240,600	\$1,805	185,200	\$1,389	2,780,500	\$13,002	2,650,500	\$13,252	416,800	\$3,125	395,000	\$3,060
Bluefish									1,125	75	1,280	76
Catfish	17,500	613	16,430	575	7,770	350	6,880	310	9,200	305	9,900	300
Eels	9,400	376	9,010	360	885	40	711	32				
Perch, white	11,500	505	6,300	325	3,500	175	3,200	180	1,000	55	1,250	58
Perch, yellow	21,600	875	18,500	740	68,400	1,710	67,200	1,680	3,600	165	3,850	179
Pike	10,200	612	10,020	554	10,571	740	10,060	705				
Shad	170,975	5,845	105,088	3,042	300,628	9,637	284,200	8,922	70,000	2,200	57,084	1,712
Spots and croakers					700	35	540	27	1,500	75	1,475	73
Squeteagne									2,355	150	2,360	148
Striped bass	10,214	715	9,800	672	11,175	894	9,500	675	2,988	245	3,190	255
Suckers	9,900	297	13,900	417	3,600	90	3,280	82				
Other fish	9,165	275	8,500	255	5,330	160	4,000	120	900	30	1,100	35
Total	511,054	12,008	383,508	9,030	3,190,059	27,733	3,040,131	25,905	508,268	6,425	476,480	5,902
Pound nets:												
Alewives	135,800	1,079	105,200	850	1,300,000	5,030	780,500	3,800	600,813	7,071	531,845	6,280
Catfish	23,125	925	10,845	795	50,570	1,770	39,285	1,375	18,700	480	18,425	577
Eels					41,250	1,650	33,250	1,330	5,750	212	6,790	248
Perch, white	6,300	315	8,800	440	52,700	2,635	44,800	2,240	17,900	915	17,260	804
Perch, yellow	24,285	860	15,145	630	150,830	4,795	131,865	3,055	12,000	524	12,900	563
Pike	1,567	94	1,765	106	74,165	4,450	62,000	3,720				
Shad	66,325	2,274	53,038	1,830	131,509	4,509	111,475	3,822	111,956	3,120	114,416	2,800
Striped bass	5,850	410	6,070	425	41,930	2,035	33,200	2,410	95,820	6,395	88,580	5,810
Suckers	3,000	75	3,280	82	42,800	1,110	36,800	920	4,750	155	2,760	100
Other fish	5,020	150	6,000	180	16,330	490	13,500	405	2,350	118	2,550	90
Total	271,272	6,182	210,743	5,247	1,917,084	29,374	1,286,735	23,977	808,639	18,996	795,520	17,372
Gill nets:												
Alewives	98,600	1,090	70,500	775	945,700	4,728	521,000	2,604	75,000	900	66,800	705
Catfish					7,100	284	5,750	230				
Perch, white					12,200	620	11,400	570	7,700	409	6,583	351
Perch, yellow					7,300	210	7,500	225				
Pike					24,613	1,725	20,150	1,410				
Shad	276,325	9,474	253,838	8,705	743,400	23,264	634,298	19,935	504,423	14,056	453,040	11,348
Striped bass	8,930	625	11,740	822	17,800	1,068	14,050	843	27,984	2,357	20,806	1,704
Sturgeon									60,000	1,500	45,600	1,140
Suckers												
Other fish	7,500	225	8,360	260	6,880	206	6,435	193	4,960	158	3,453	88
Total	301,355	11,414	344,738	10,562	1,709,363	32,223	1,225,183	26,125	680,067	19,380	597,272	15,396
Fyke nets:												
Alewives	10,800	94	9,200	88	51,300	350	45,800	329				
Catfish	7,750	310	5,500	220	57,875	2,315	61,125	2,445				
Eels	6,750	270	6,025	265	65,480	3,174	66,000	3,280				
Perch, white	2,800	140	1,500	90	35,910	1,975	35,100	1,925				
Perch, yellow	6,250	270	4,750	190	44,065	1,340	49,335	1,480				
Pike	4,300	258	3,200	192	20,970	1,408	21,228	1,486				
Shad	1,530	55	1,313	47	3,000	105	4,360	149				
Striped bass	5,075	355	4,643	325	3,125	250	3,525	282				
Suckers	3,800	114	4,000	138	9,800	294	7,400	222				
Other fish	2,020	60	1,700	52	12,335	370	10,350	810				
Total	51,075	1,926	43,091	1,607	304,526	11,647	304,824	11,908				
Trammel nets:												
Catfish					5,650	225	6,750	270				
Perch, white					6,300	315	7,700	385				
Perch, yellow					12,335	370	13,607	410				
Pike					15,165	910	18,583	1,115				
Striped bass					2,700	216	4,375	350				
Other fish					6,105	185	7,500	225				
Total					48,315	2,221	58,575	2,755				
Weirs:												
Alewives	12,880	173	14,000	187	10,000	50	15,000	62				
Catfish	7,857	275	8,570	300	7,100	215	7,430	225				
Eels	4,000	100	4,200	168								
Perch, white	7,300	363	7,500	380	5,000	250	5,100	255				
Perch, yellow	11,700	410	11,900	418	12,500	375	13,000	390				
Pike	1,700	102	1,760	108	3,000	180	3,100	180				
Shad	4,081	170	5,425	185	10,150	348	7,875	270				
Striped bass	4,600	276	5,080	303								
Suckers	2,080	52	2,320	53								
Other fish	3,150	80	3,020	92	3,350	100	3,000	108				
Total	60,248	2,001	64,435	2,108	51,100	1,518	55,105	1,490				

Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Caroline.				Cecil.				Charles.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Lines:												
Catfish.....	10,571	\$370	11,140	\$390	16,175	\$485	15,990	\$470	.....	.....	.....	.....
Perch, white.....	1,200	60	1,360	68	1,700	85	1,450	70	.....	.....	.....	.....
Striped bass.....	.....	.....	.....	.....	750	60	940	75	.....	.....	.....	.....
Total.....	11,771	430	12,500	458	18,625	630	18,380	624	.....	.....	.....	.....
Minor apparatus:												
Alewivies.....					11,250	90	9,070	68	.....	.....	.....	.....
Perch, white.....					1,375	110	1,570	125	.....	.....	.....	.....
Perch, yellow.....					1,060	40	1,323	52	.....	.....	.....	.....
Total.....					13,685	240	11,963	245	.....	.....	.....	.....
Miscellaneous:												
Oysters.....									485,520	\$28,410	881,620	\$27,840
Crabs, hard.....									80,500	675	96,800	726
Terrapins.....									600	334	630	357
Total.....									572,620	29,419	479,050	28,032
Grand total.	1,296,775	34,021	1,068,015	29,102	7,321,757	105,586	6,000,896	93,095	2,630,594	74,220	2,348,343	67,602
Apparatus and species.	Dorchester.				Harford.				Kent.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewivies.....	210,800	\$1,054	185,400	\$927	4,270,500	\$46,928	3,562,000	\$40,397	36,500	\$228	68,500	\$393
Bluefish.....	9,100	364	8,500	425	.....	.....	.....	.....	26,500	705	22,667	680
Catfish.....	15,290	535	12,575	440	11,625	465	8,550	342	64,460	2,012	58,730	1,816
Eels.....	120	.....	102	.....	10,550	475	9,335	420	2,000	100	1,500	75
Menhaden.....	26,800	120	23,400	102	53,800	2,690	41,500	2,075	35,400	2,002	35,200	2,100
Perch, white.....	13,700	685	10,100	505	71,000	2,485	77,733	2,015	31,428	1,100	28,714	1,005
Perch, yellow.....	24,143	845	18,290	640	15,143	1,060	11,730	880	11,200	896	11,400	912
Pike.....	7,875	315	6,720	269	551,250	22,050	442,400	17,606	13,825	504	11,816	445
Shad.....	83,563	2,865	71,225	2,442	.....	.....	.....	.....	5,428	700	4,267	640
Spanishmackerel.....	.....	.....	.....	.....	.....	.....	.....	.....	4,000	200	4,200	210
Spots and croakers.....	11,500	558	11,300	547	.....	.....	.....	.....	17,700	1,481	16,500	1,485
Squeteague.....	8,648	279	7,280	245	.....	.....	.....	.....	100	.....	.....	.....
Striped bass.....	9,860	690	8,930	625	21,590	1,835	15,588	1,325	100	.....	.....	.....
Sturgeon.....	960	45	1,040	52	.....	.....	.....	.....	100	4,200	105	5,700
Suckers.....	10,200	204	11,500	230	9,860	250	7,600	190	6,300	215	5,150	142
Other fish.....	11,835	355	10,935	328	9,667	230	7,015	228	.....	.....	.....	176
Total.....	444,274	8,914	387,105	7,777	5,024,985	78,528	4,183,451	66,468	250,141	10,393	274,344	10,079
Pound nets:												
Alewivies.....	170,400	852	160,500	802	.....	.....	.....	.....	349,100	2,072	402,100	2,970
Bluefish.....	11,300	452	10,900	436	.....	.....	.....	.....	2,000	100	3,000	150
Catfish.....	28,143	985	30,571	1,070	.....	.....	.....	.....	28,060	860	24,055	840
Eels.....	120	.....	102	.....	.....	.....	.....	.....	8,730	286	6,000	200
Menhaden.....	16,200	114	12,120	98	.....	.....	.....	.....	24,800	1,200	28,400	1,615
Perch, white.....	18,000	930	17,500	875	.....	.....	.....	.....	32,530	1,290	28,500	1,185
Perch, yellow.....	30,035	95	28,285	900	.....	.....	.....	.....	5,100	255	4,000	276
Pike.....	3,665	20	4,265	256	.....	.....	.....	.....	20,209	733	17,066	615
Shad.....	74,900	2,568	79,450	2,724	.....	.....	.....	.....	950	38	750	30
Spots and croakers.....	14,000	700	12,400	620	.....	.....	.....	.....	3,280	164	3,110	155
Squeteague.....	10,650	425	9,875	895	.....	.....	.....	.....	15,625	1,250	8,875	730
Striped bass.....	8,400	630	9,160	687	.....	.....	.....	.....	.....	.....	.....	.....
Sturgeon.....	1,700	85	1,920	96	.....	.....	.....	.....	.....	.....	.....	.....
Suckers.....	25,200	652	22,100	602	.....	.....	.....	.....	5,330	120	5,980	140
Other fish.....	12,725	380	13,578	475	.....	.....	.....	.....	490,314	8,368	533,010	8,908
Total.....	425,918	9,888	412,622	10,120	.....	.....	.....	.....	4,042	.....	.....	.....
Trammel nets:												
Catfish.....	.....	.....	.....	.....	21,104	740	19,505	685	.....	.....	.....	.....
Perch, white.....	.....	.....	.....	.....	10,720	500	9,810	540	.....	.....	.....	.....
Perch, yellow.....	.....	.....	.....	.....	5,000	175	5,429	190	.....	.....	.....	.....
Pike.....	.....	.....	.....	.....	7,642	535	7,285	510	.....	.....	.....	.....
Striped bass.....	.....	.....	.....	.....	10,722	905	7,606	600	.....	.....	.....	.....
Suckers.....	.....	.....	.....	.....	11,200	280	8,600	215	.....	.....	.....	.....
Other fish.....	.....	.....	.....	.....	8,333	250	7,066	212	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	74,721	3,535	65,421	3,042	.....	.....	.....	.....

Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Dorchester.				Harford.				Kent.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Gill nets:												
Alewives	320,800	\$1,604	306,100	\$1,520	425,200	\$2,126	389,500	\$1,947	144,400	\$892	126,100	\$825
Bluefish												
Catfish												
Menahden	130,600	302	122,800	368								
Perch, white	16,800	840	14,620	721	14,180	780	13,450	740	69,500	4,350	79,544	5,068
Perch, yellow	13,500	468	13,200	458	3,715	130	2,857	100	46,000	2,300	52,500	2,375
Pike	10,950	657	9,820	590	23,428	1,640	22,485	1,574	33,000	2,235	30,450	2,200
Shad	281,750	9,060	280,275	9,918	502,144	20,302	514,031	17,624	318,115	11,273	285,050	10,243
Spanish mackerel												
Squeteague	1,250	50	1,180	47								
Striped bass	23,100	1,848	22,000	1,760	36,445	3,280	33,778	3,040	25,450	1,608	22,900	1,445
Suckers					8,400	210	7,600	190				
Other fish	19,930	493	18,420	460	6,665	200	5,833	175	6,125	245	6,500	260
Total	818,680	16,012	797,415	15,851	1,111,321	28,708	990,440	25,422	667,157	24,388	629,484	23,045
Fyke nets:												
Alewives	26,600	132	23,400	117								
Catfish	8,540	270	7,430	260	53,514	1,873	48,000	1,800	49,285	1,478	40,260	1,208
Eels	35,260	1,710	29,700	1,188	38,250	1,530	35,735	1,430	1,500	55	1,100	35
Perch, white	2,800	140	1,800	90	15,636	800	14,009	820	25,500	1,530	27,000	1,050
Perch, yellow	9,300	325	6,430	225	17,571	615	16,714	585	62,000	8,445	66,050	3,568
Pike	4,800	288	5,400	324	11,572	810	11,286	790	21,600	1,683	23,300	1,814
Shad	3,500	135	3,220	120					7,875	338	6,041	245
Spots and croakers												
Striped bass	3,285	230	3,995	280	3,722	355	3,560	320	3,000	180	3,500	210
Suckers	8,804	238	9,433	258	7,800	195	6,790	170	3,700	111	2,500	75
Other fish	4,500	135	5,020	150	7,000	210	9,135	274	10,350	485	10,150	413
Total	107,329	3,603	95,828	3,012	155,065	6,428	146,129	6,189	278,440	10,268	261,151	10,055
Weirs:												
Alewives	34,665	280	36,820	204					900	9	725	7
Catfish	26,800	784	25,310	760								
Eels	1,100	45	1,240	50								
Perch, white	6,600	330	7,150	355								
Perch, yellow	8,250	247	9,420	283					2,680	32	3,490	40
Pike	1,500	90	1,280	80					200	12	260	15
Shad	2,835	108	2,695	105								
Spots and croakers	3,200	160	3,000	150								
Striped bass	11,200	784	10,900	763								
Suckers									1,130	17	750	11
Other fish	2,700	60	2,880	65					600	15	720	18
Total	98,850	2,888	100,695	2,905					5,510	85	5,945	91
Lines:												
Bluefish	810	35	1,360	52								
Catfish	21,065	765	23,810	831	18,220	638	17,714	620	6,070	200	7,300	210
Perch, white	825	45	980	50	2,830	140	2,585	152	3,800	270	3,300	225
Perch, yellow	580	18	500	15					1,725	68	1,810	72
Spots and croakers	7,600	380	7,100	355								
Striped bass	2,280	140	2,500	150	900	90	985	98	3,500	350	3,000	300
Other fish					1,530	46	2,000	60	2,000	80	1,850	74
Total	34,000	1,383	36,250	1,453	22,089	914	23,234	930	17,695	968	17,260	800
Pots:												
Eels	20,400	1,176	31,800	1,272	48,700	1,948	54,200	2,168	28,600	883	30,750	862
Minor apparatus:												
Alewives					114,000	850	88,000	660				
Catfish					10,067	320	11,165	335	27,237	1,204	28,050	1,228
Suckers					2,250	68	2,835	75				
Other fish												
Total					126,917	1,238	102,000	1,070	27,237	1,204	28,050	1,228
Miscellaneous:												
Oysters	3,470,050	223,132	3,574,900	255,250					1,595,825	114,457	1,655,500	141,388
Crabs, hard	290,100	4,351	483,400	7,250					43,300	622	27,500	450
Crabs, soft	633,500	19,005	760,167	22,805								
Terrapins	18,300	5,400	17,400	5,220								
Total	4,412,850	251,978	4,835,807	290,525					1,639,125	115,079	1,683,000	141,838
Grand total	6,371,301	295,842	6,097,672	332,921	6,564,098	121,299	5,564,884	105,280	3,410,219	171,636	3,403,000	197,894

Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Prince George.				Queen Anne.				St. Mary.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	263,046	\$2,234	205,981	\$1,835	80,100	\$831	61,800	\$630	100,000	\$750	80,000	\$600
Bluefish					15,800	790	12,210	611	6,550	440	8,762	404
Catfish	32,700	1,200	28,540	900	31,600	944	29,572	873	5,500	125	9,000	208
Eels					1,400	70	2,200	110	100	5	520	21
Menhaden									30,000	880	300,000	800
Perch, white	6,500	390	6,800	400	59,000	3,392	41,601	2,356	20,200	1,090	19,830	1,041
Perch, yellow	5,725	220	5,200	210	60,550	2,800	81,744	3,817	5,865	207	4,615	169
Pike					14,650	1,071	14,492	1,030				
Shad	85,421	2,656	44,786	1,720	15,575	712	21,091	904	9,100	390	10,150	435
Spots and croakers					4,300	172	3,670	147	8,500	420	8,070	417
Squeteague					2,200	132	3,100	250	14,250	605	14,080	608
Striped bass	1,280	125	1,520	150	107,500	10,095	71,240	7,120	12,020	1,050	11,650	1,006
Other fish	15,040	401	12,200	305	20,250	491	14,340	320	6,150	183	4,740	144
Total	409,712	7,205	305,027	5,530	412,925	21,500	357,120	18,240	521,285	6,205	472,017	5,853
Pound nets:												
Alewives	46,000	510	50,000	600	132,500	1,375	115,000	1,200	943,000	6,257	1,165,500	8,008
Bluefish					1,330	40	1,535	46	9,500	455	10,780	499
Catfish					1,400	28	1,610	32	22,500	545	29,008	704
Eels					6,800	300	7,530	350				
Menhaden					17,560	970	17,000	900	411,056	672	449,500	761
Perch, white					6,000	120	4,000	80	6,889	419	11,943	780
Perch, yellow					5,250	240	4,375	200	6,583	230	11,100	390
Shad	5,950	155	8,000	200					193,000	6,207	220,050	8,120
Spanish mackerel									6,200	868	14,000	1,680
Spots and croakers					1,750	65	1,550	61	8,500	402	11,240	536
Squeteague					500	15	600	18	36,180	1,810	37,250	1,701
Striped bass					10,100	900	5,500	500	33,200	2,600	30,798	2,355
Other fish	500	25	800	35	2,800	70	2,120	53	31,335	1,168	33,558	1,209
Total	52,450	690	58,800	835	185,930	4,123	160,870	3,440	1,708,552	21,655	2,025,327	27,401
Gill nets:												
Alewives	11,100	87	9,600	80	26,500	290	24,500	250	62,000	580	60,800	560
Bluefish					10,200	510	11,700	585	55,000	2,750	88,000	3,600
Catfish					1,700	44	1,730	46				
Perch, white	2,917	175	4,810	168	7,600	456	4,000	240	12,800	640	12,110	605
Perch, yellow					4,000	160	4,300	165	3,140	110	3,057	128
Pike					1,310	118	1,300	123				
Shad	1,162	40	1,605	55	29,785	1,394	35,963	1,050				
Spanish mackerel									2,400	240	6,250	625
Spots and croakers									2,100	105	2,640	132
Squeteague									3,600	180	6,030	295
Striped bass	4,330	390	4,011	415	20,950	2,092	17,100	1,708	14,000	1,280	18,140	1,690
Other fish	2,400	60	2,230	55					2,187	65	3,210	95
Total	21,909	752	22,856	773	102,046	5,064	100,653	4,770	157,207	5,950	200,837	7,730
Fyke nets:												
Alewives					4,910	48	5,600	55				
Catfish					26,000	810	27,200	854				
Perch, white					19,500	960	22,000	1,144				
Perch, yellow					24,200	825	26,600	943				
Pike					2,000	190	4,005	365				
Striped bass					13,600	1,230	16,890	1,520				
Other fish					2,000	80	2,550	110				
Total					92,870	4,143	105,735	4,991				
Weirs:												
Alewives					1,000	15	1,300	13				
Perch, yellow					5,320	55	6,000	70				
Pike					400	24	500	30				
Snakers					866	13	1,330	20				
Other fish					500	10	600	12				
Total					8,680	117	10,330	145				
Lines:												
Bluefish									32,025	1,610	29,000	1,450
Catfish	53,570	1,875	54,800	1,918	2,000	60	2,500	75				
Perch, white					3,000	180	2,500	130	2,280	206	2,165	281
Sheepshead									20,100	870	28,500	892
Spots and croakers									179,026	4,713	183,050	5,010
Squeteague									47,850	8,152	45,200	8,064
Striped bass									6,100	180	7,400	180
Other fish												
Total	53,570	1,875	54,800	1,918	10,000	680	9,325	588	204,581	10,821	205,315	10,877

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Prince George.				Queen Anne.				St. Mary.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pots:												
Eels.....					37,250	\$1,510	24,500	\$1,208	6,200	\$248	8,000	\$320
Miscellaneous:												
Oysters.....					2,859,150	105,168	2,571,625	204,374	3,998,848	252,616	3,446,121	281,065
Crabs, hard.....					90,500	1,280	160,000	2,070	63,500	675	68,900	715
Crabs, soft.....	6,250	\$562	7,350	\$695	9,834	590	18,500	1,110	150,400	13,440	157,700	14,108
Crawfish.....												
Terrapins.....					29,401	4,408	26,590	3,986				
Turtles.....					1,080	100	1,590	98				
Total	6,250	562	7,350	695	2,990,605	171,546	2,787,905	211,635	4,212,748	266,731	3,672,781	295,888
Grand total ..	543,891	11,174	448,833	9,801	3,840,271	208,683	3,555,848	245,028	8,900,523	311,610	6,674,277	348,069
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Apparatus and species.	Somerset.				Talbot.				Wicomico.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....	51,400	\$257	41,500	\$207	135,000	\$687	120,500	\$602	845,000	\$4,715	840,500	\$4,185
Bluefish.....	1,300	52	2,500	100	18,900	945	20,200	1,010	5,300	265	10,400	520
Catfish.....	8,200	410	9,500	475	35,500	1,065	52,000	1,560	28,680	1,005	24,960	875
Eels.....	1,056	31	900	27	2,800	114	3,000	120				
Menhaden.....	11,000	21	9,000	16								
Mullet.....	8,700	174	9,300	186								
Perch, white.....	4,800	184	3,400	136	21,300	852	20,700	828	13,600	680	10,500	525
Perch, yellow.....	5,200	156	4,160	175	31,200	936	35,200	1,050	22,100	775	20,570	720
Shad.....	24,325	834	28,525	978	24,934	855	27,384	939	184,013	6,325	165,746	5,682
Spots and croakers.....	700	30	620	25	9,900	380	11,600	464				
Squeteague.....	13,600	408	12,260	367	12,500	625	13,400	670	8,100	165	2,830	142
Striped bass.....	1,300	65	3,200	160	22,215	1,448	21,231	1,380	14,050	980	13,145	920
Sturgeon.....	1,300	65	200	35	9,400	470	3,200	108	3,060	95	1,800	62
Suckers.....					11,200	336	10,900	597	9,800	195	8,700	175
Other fish.....	2,800	140	3,500	175	20,500	615	17,034	529	8,850	810	9,060	317
Total	155,475	2,827	129,265	3,062	356,000	9,384	305,949	9,923	1,238,153	15,510	1,108,211	14,123
Pound nets:												
Alewives.....	80,500	402	51,300	256	180,080	1,230	144,244	1,942	285,700	1,428	305,100	1,533
Bluefish.....	2,000	104	1,200	48	24,600	1,230	18,500	925	27,500	1,375	19,500	975
Catfish.....	8,700	435	6,400	320	38,300	766	84,200	685	27,800	975	24,886	870
Eels.....					9,100	188	8,200	168	20,270	720	26,120	1,054
Menhaden.....	180,000	195	105,000	175	18,200	60	12,500	52				
Mullet.....	6,500	130	5,800	116								
Perch, white.....	9,300	372	7,300	292	19,500	682	17,200	602	21,300	1,065	25,800	1,280
Perch, yellow.....	7,400	222	10,100	303	22,800	513	19,500	430	23,940	840	30,285	1,000
Pike.....	7,300	438	1,700	102	5,800	348	6,700	582	11,200	672	10,500	630
Shad.....	34,216	1,173	41,700	1,251	36,491	1,251	20,741	711	118,370	4,059	108,763	3,729
Spots and croakers.....	10,100	467	9,800	448	17,700	708	7,700	308	13,900	655	20,260	1,010
Squeteague.....	9,800	490	6,500	323	21,200	1,060	10,500	525	8,000	153	2,800	140
Striped bass.....	2,700	135	1,700	85	16,400	984	17,500	1,050	10,900	872	10,475	838
Sturgeon.....	1,380	65	1,800	45	7,000	350	6,200	310	9,715	340	5,285	185
Suckers.....	3,500	140	2,600	130	22,400	503	19,900	403	28,200	705	25,920	648
Other fish.....	6,500	325	4,800	240	8,000	267	8,700	231	9,500	328	12,140	435
Total	370,496	5,093	317,700	4,136	393,471	10,200	355,285	8,421	611,355	14,193	627,634	14,377
Gill nets:												
Alewives.....	220,400	1,102	213,800	1,069	410,000	2,082	342,000	1,690	408,900	2,044	450,900	1,954
Bluefish.....	9,100	364	8,900	336	15,000	780	14,100	695				
Menhaden.....	6,000	10	7,100	12	85,000	170	78,600	157				
Perch, white.....	3,100	124	2,800	114	11,025	405	14,125	565	30,363	1,820	23,065	1,420
Perch, yellow.....	2,800	84	2,700	81	10,000	570	18,267	548				
Shad.....	211,043	7,236	193,634	6,634	840,216	20,013	600,000	20,592	387,188	18,380	326,025	11,109
Spots and croakers.....	2,050	63	1,800	55	3,275	131	2,550	102				
Squeteague.....	9,250	413	9,050	396	4,875	195	5,500	220				
Striped bass.....	36,900	1,845	38,900	1,045	62,600	3,756	52,000	2,945	29,850	2,388	21,200	1,696
Sturgeon.....									5,417	298	4,700	250
Other fish.....	6,800	288	7,140	815	1,600	48	1,870	56	17,145	600	14,100	490
Total	507,443	11,520	485,884	10,957	1,466,391	37,210	1,120,612	27,570	938,865	20,530	840,590	16,919

Statement by counties, apparatus and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Somerset.				Talbot.				Wicomico.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Fyke nets:												
Alewives.....	17,700	\$88	17,400	\$87	17,400	\$97	14,300	\$71	38,800	\$192	32,900	\$159
Catfish.....	3,800	190	3,470	173	15,600	390	14,400	360	64,250	2,570	66,110	2,050
Eels.....	26,500	1,060	21,500	860	12,500	450	10,200	408	32,400	1,296	38,700	1,548
Mullet.....	1,100	22	800	22								
Perch, white.....	1,600	64	1,300	52	10,125	405	9,580	383	5,600	280	4,800	240
Perch, yellow.....	5,700	171	4,800	144	6,330	190	6,182	185	11,286	395	9,610	335
Pike.....	2,900	174	2,800	168	2,092	115	1,964	108	4,200	252	3,500	210
Shad.....	2,275	78	2,541	87	10,150	348	7,441	255	4,813	165	3,570	120
Spots and croakers.....	1,400	64	1,560	70								
Squeteague.....	2,600	104	2,450	98								
Striped bass.....	2,700	135	3,200	160	19,800	1,188	17,500	1,050	37,714	2,640	39,500	2,765
Suckers.....	3,400	102	2,400	72	8,400	252	8,700	250	6,500	164	7,000	190
Other fish.....	2,700	81	2,400	72	2,500	75		02	6,080	210	7,684	270
Total	74,375	2,333	66,621	2,065	104,897	3,500	92,332	3,132	211,043	8,164	213,974	8,487
Weirs:												
Alewives.....	7,000	34	7,500	37	3,200	40	4,800	60	35,300	270	32,460	258
Catfish.....	5,200	181	4,950	167	4,500	225	2,300	115	12,800	348	9,257	224
Perch, white.....	1,400	56	1,220	49	2,300	115	1,700	85	5,000	280	6,000	300
Perch, yellow.....	3,600	108	3,200	98	4,380	130	3,515	105	4,030	145	4,580	160
Pike.....									450	30	370	25
Shad.....	1,575	45	1,575	45					8,815	140	3,360	115
Spots and croakers.....	600	25	500	20								
Squeteague.....	1,100	42	1,000	40								
Striped bass.....	7,060	420	6,800	408	1,250	100	1,550	125	500	45	380	34
Suckers.....					1,130	28	1,050	26	1,100	30	1,340	40
Other fish.....	1,000	25	1,280	35	950	28	1,300	40	900	32	1,000	35
Total	28,535	938	28,085	899	17,710	666	16,215	556	64,555	1,320	58,747	1,191
Lines:												
Bluefish.....	17,200	506	24,600	708	500	25	600	28	1,800	72	2,050	82
Catfish.....	9,300	327	10,100	354	1,400	35	1,520	38	89,560	3,200	73,550	2,925
Eels.....	610	15	860	21								
Perch, white.....	13,150	526	14,850	594					4,000	160	3,520	141
Perch, yellow.....	8,800	204	7,920	238								
Pike.....	1,200	72	1,340	81								
Sea bass.....	1,320	40	1,260	38								
Sheepshead.....	1,150	130	1,020	115								
Spots and croakers.....	52,600	2,080	53,550	2,142	2,000	80	1,750	70	6,000	300	6,928	345
Squeteague.....	78,150	2,775	80,300	2,811	2,480	22	540	25	8,000	320	8,720	360
Striped bass.....	7,550	453	7,100	435	1,285	95	1,185	87	1,100	90	900	80
Other fish.....	6,800	205	7,540	227	750	25	820	28	4,800	145	4,500	135
Total	197,830	7,303	210,440	7,764	6,415	282	6,415	276	106,260	4,347	100,168	4,068
Pots:												
Eels.....	41,850	1,674	38,750	1,550	24,500	980	23,375	935	31,400	1,206	46,400	1,856
Minor apparatus:												
Alewives.....					12,800	82	9,720	67	14,000	92	13,500	90
Catfish.....					1,600	40	1,580	38				
Perch, white.....									500	20	800	30
Perch, yellow.....					23,100	700	21,300	650	720	22	000	20
Shad.....									17,675	855	14,280	762
Striped bass.....					3,850	575	4,600	690	850	77	900	80
Other fish.....									430	15	650	20
Total					41,350	1,397	37,200	1,445	34,175	1,081	30,730	1,002
Miscellaneous:												
Clams (quahogs).....	38,400	2,880	21,520	1,614								
Oysters.....	11,462,927	736,900	12,418,985	851,548	3,677,100	236,385	3,573,500	255,250	2,536,800	163,080	2,240,700	160,050
Crabs, hard.....	483,334	7,250	558,334	8,375	225,134	3,377	291,833	4,377	72,138	1,082	108,433	1,626
Crabs, soft.....	2,498,536	149,913	2,814,885	168,894	166,733	5,002	208,433	6,233	306,734	16,503	048,567	29,185
Terrapins.....	12,500	2,500	16,200	3,210	17,500	5,250	10,200	5,760	6,800	1,080	7,800	2,340
Turtles.....	2,300	127	2,470	136								
Total	14,497,997	899,576	15,831,794	1,033,807	4,086,407	250,014	4,092,968	271,640	2,982,467	182,645	3,005,500	193,201
Grand total.	15,854,001	931,361	17,108,539	1,064,240	6,497,210	318,583	6,119,349	823,898	6,218,873	249,086	6,031,954	255,224

Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Worcester.				District of Columbia.				Total.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewivess.....	330,500	\$3,252	324,000	\$3,163	226,400	\$1,700	177,200	\$1,550	10,532,746	\$84,633	9,350,231	\$75,547
Bluefish.....									106,775	4,686	110,519	5,026
Catfish.....	11,670	350	12,420	370	3,350	100	5,000	150	367,845	13,303	373,257	13,194
Eels.....									40,875	1,716	40,176	1,685
Menhaden.....	90,000	240	80,000	160					821,800	2,211	752,400	1,978
Mullet.....	30,000	1,200	35,000	1,400					38,700	1,374	44,300	1,586
Perch, white.....	59,100	2,364	62,750	2,510	3,435	190	2,340	140	434,010	22,404	395,941	20,334
Perch, yellow.....	5,720	150	5,280	142	2,125	88	1,660	66	501,721	17,500	521,726	18,681
Pike.....	31,625	1,245	34,025	1,365					187,495	11,515	189,677	11,632
Sea bass.....	120,000	4,760	110,000	4,400					120,000	4,760	110,000	4,400
Shad.....	25,725	900	25,021	1,005	30,375	922	25,600	680	1,692,384	60,671	1,414,854	51,493
Spanis h mackerel.....									5,428	700	4,267	640
Spots and croakers.....	5,000	150	5,200	156					67,150	2,931	68,075	2,997
Squeteague.....	115,000	4,600	135,000	5,400					179,563	7,420	197,560	8,193
Striped bass.....	74,600	6,980	80,500	7,525	5,850	540	3,280	295	523,189	44,059	486,001	41,027
Sturgeon.....									14,720	675	6,940	317
Suckers.....	5,000	125	4,520	113					68,960	1,732	81,100	2,096
Other fish.....	10,960	310	11,780	325	5,750	230	1,200	50	175,442	5,117	159,374	4,617
Total.....	914,900	26,035	926,696	28,034	286,285	3,770	216,280	2,931	15,878,805	287,517	14,812,398	265,443
Pound nets:												
Alewivess.....					248,000	2,435	288,285	2,885	5,279,643	36,000	4,775,824	36,422
Bluefish.....									106,950	5,108	109,215	5,039
Catfish.....					3,800	114	6,050	191	255,923	8,090	242,255	7,079
Eels.....									95,775	3,517	91,090	3,514
Menhaden.....									933,556	1,706	932,720	1,712
Mullet.....									6,500	130	5,800	116
Perch, white.....					1,700	85	1,910	101	216,605	10,680	231,133	11,167
Perch, yellow.....					1,300	52	1,460	65	347,768	10,992	318,735	10,373
Pike.....									114,206	6,809	100,070	6,061
Shad.....					7,087	388	29,600	740	943,177	33,194	957,195	33,749
Spanis h mackerel.....									15,700	2,198	30,200	3,624
Spots and croakers.....									90,480	4,400	88,370	4,434
Squeteague.....									93,079	4,567	81,385	3,794
Striped bass.....					1,500	135	2,110	190	275,730	20,373	243,068	17,779
Sturgeon.....									19,795	840	15,205	636
Suckers.....					1,000	35	1,600	54	130,850	8,435	114,900	8,027
Other fish.....					1,300	49	2,270	109	127,340	4,244	120,384	4,351
Total.....					205,087	3,293	333,265	4,835	9,053,677	156,373	8,458,299	153,471
Gill nets:												
Alewivess.....	100,500	590	110,500	605					3,420,500	19,115	2,806,000	15,723
Bluefish.....									170,500	8,434	219,020	9,782
Cattish.....									16,304	558	15,115	500
Menhaden.....	120,000	300	125,000	312					456,600	1,102	481,000	1,084
Mullet.....	55,000	1,375	50,640	1,250					55,000	1,375	50,640	1,250
Perch, white.....	50,500	1,520	45,610	1,375					258,103	13,132	250,227	12,821
Perch, yellow.....	21,100	660	22,900	715					132,075	5,199	137,971	5,227
Pike.....	24,850	1,420	23,100	1,330	183,000	4,950	158,000	8,930	131,803	8,110	125,025	7,773
Shad.....									4,416,403	140,117	3,787,737	123,780
Spanis h mackerel.....									7,067	800	10,370	1,105
Spots and croakers.....	4,000	200	4,250	210					11,425	499	11,240	499
Squeteague.....	65,000	1,950	63,750	1,813					83,975	2,788	85,510	2,871
Striped bass.....	29,500	1,975	26,900	1,885					357,949	26,282	327,235	23,841
Sturgeon.....									65,417	1,798	50,300	1,390
Suckers.....	8,000	240	9,510	295					12,760	319	12,200	305
Other fish.....									109,577	3,413	106,751	3,331
Total.....	484,510	10,230	482,220	9,890	183,000	4,950	158,000	3,050	9,705,515	239,041	8,447,291	211,291
Trammel nets:												
Cattish.....									26,754	965	26,315	955
Perch, white.....									17,020	905	17,510	925
Perch, yellow.....									17,335	645	19,096	600
Pike.....									22,807	1,445	25,868	1,625
Striped bass.....									13,422	1,181	12,041	1,040
Suckers.....									11,200	280	8,000	215
Other fish.....									14,498	435	14,566	437
Total.....									123,036	5,756	123,996	5,797

Statement by counties, apparatus, and species of the yield of the shore fisheries of Maryland—Continued.

Apparatus and species.	Worcester.				District of Columbia.				Total.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Fyke nets:												
Alewives									270,710	\$1,801	240,200	\$1,716
Catfish									323,929	11,886	313,225	11,755
Eels	8,400	\$336	7,200	\$288					234,180	10,281	226,400	9,754
Mullet									1,100	22	800	22
Perch, white	1,000	60	900	54					159,427	8,531	157,052	8,487
Perch, yellow	1,580	45	1,800	50					238,837	9,035	254,546	9,432
Pike	1,300	78	1,400	84					105,194	7,037	106,244	7,218
Shad									33,209	1,219	28,487	1,023
Spots and croakers									3,850	186	3,110	147
Squeteague									2,600	104	2,450	98
Striped bass									97,021	7,017	101,633	7,420
Suckers									52,204	1,470	49,423	1,375
Other fish	600	30	800	40					62,105	2,100	63,314	2,102
Total	12,880	549	12,100	516					1,584,366	60,750	1,546,804	60,549
Weirs:												
Alewives	5,800	29	6,800	34					111,345	900	119,405	952
Catfish	743	26	854	30					70,300	2,254	64,291	2,033
Eels									5,100	205	5,440	218
Perch, white	231	15	335	20					33,251	1,650	34,565	1,719
Perch, yellow	520	21	600	24					95,580	2,588	99,465	2,666
Pike									13,850	848	14,140	871
Shad	1,225	42	1,400	48					24,581	853	22,330	768
Spots and croakers									3,800	185	3,500	170
Squeteague									1,100	42	1,000	40
Striped bass	330	30	285	28					27,870	1,875	27,815	1,872
Suckers	720	18	1,000	25					7,026	158	7,700	180
Other fish	665	20	800	24					15,115	401	17,150	403
Total	10,234	201	12,074	233					408,918	11,959	416,891	11,952
Lines:												
Bluefish	23,000	690	20,000	600					75,935	2,938	77,610	2,920
Catfish									264,897	9,579	260,714	9,339
Eels	800	40	608	30					1,930	81	2,148	85
Perch, white									30,005	1,466	30,495	1,430
Perch, yellow									11,355	360	10,500	339
Pike									1,200	72	1,340	81
Sea bass	2,000	100	2,110	100					3,320	140	3,370	144
Sheepshead									3,430	426	3,185	396
Spots and croakers	1,500	75	1,160	68					95,800	3,785	98,088	3,872
Squeteague	60,000	1,900	110,000	2,700					326,256	9,730	382,610	10,006
Striped bass	682	65	690	72					69,897	4,805	66,000	4,711
Other fish	8,000	305	8,150	311					30,980	1,026	33,085	1,048
Total	95,982	3,175	142,718	3,887					915,005	34,498	970,135	35,271
Pots:												
Eels	70,000	3,500	65,000	3,200					378,085	15,646	389,740	16,030
Minor apparatus:												
Alewives									152,050	1,114	120,280	885
Catfish	7,500	375	8,100	405					1,800	40	1,580	38
Eels									34,737	1,579	36,150	1,633
Perch, white									1,875	130	2,370	155
Perch, yellow									24,880	762	23,223	722
Shad									17,675	855	14,280	762
Striped bass									850	77	900	80
Suckers									10,667	320	11,165	335
Other fish									6,530	658	8,085	785
Total	7,500	375	8,100	405					250,804	5,535	218,048	5,395
Miscellaneous:												
Clams (qua-hogs)	110,400	5,520	126,240	6,612					148,800	8,400	147,760	8,226
Oysters	1,295,385	162,082	770,581	89,910					30,027,100	2,530,391	35,916,608	2,080,026
Crabs, hard	40,000	600	35,000	525					2,388,090	31,723	2,776,898	37,460
Crabs, soft									4,056,110	228,690	4,828,872	206,250
Crayfish									6,250	562	7,350	695
Shrimp									7,556	3,720	8,044	3,960
Terrapins	2,600	1,890	1,060	1,430					87,701	21,852	89,780	22,333
Turtles									3,980	227	4,060	231
Total	1,448,385	170,092	933,781	98,477					45,725,506	2,825,565	43,770,372	3,019,187
Grand total	3,044,391	214,757	2,582,089	144,642	734,972	\$12,013	707,565	\$11,216	84,024,467	3,642,640	78,663,029	3,784,386

FISHERIES OF VIRGINIA.

Importance and prominent features of the industry.—In the item of persons employed, Virginia ranks second among the Middle Atlantic States, while in the matter of invested capital and value of products it occupies the third position. Considering the entire country, the rank of Virginia as a fishing State, based on the value of the catch, is fifth.

Virginia shares with Maryland the excellent physical advantages which have contributed so materially to the development of the fishing industry. The natural resources of the waters are very similar to those possessed by Maryland. Fishing operations are extensively carried on in Chesapeake Bay, in the two large sounds forming a part thereof—Tangier and Pocomoke—in the Potomac, Wicomico, Rappahannock, York, and James rivers, which enter the western side of the Chesapeake, and in the ocean from those parts of the State above and below the entrance to the bay.

The oyster fishery of Virginia overshadows all other branches and is more prominent than in any other State except Maryland. Next in importance are the shad fishery, the menhaden fishery, the squeteague fishery, the alewife fishery, the bluefish fishery, and the Spanish-mackerel fishery. In the catch of Spanish mackerel, menhaden, pompano, spots, and croakers, Virginia surpasses all the other States of this region. The shad fishery is next in importance to that of Maryland. Virginia ranks next to Maryland in the number of vessels engaged in the fishing industry and in the extent of the oyster-packing trade; while its menhaden industry is more important than in any other State. The increase in the pound-net fishery in recent years constitutes one of the most prominent features of the industry, and no other coast State now has so many pound nets.

Condensed statistics.—A summarized statistical presentation of the fisheries of Virginia is contained in the three following tables, relating to the years 1890 and 1891.

Of the 23,595 persons engaged in the industry in the latter year, 3,603 were vessel fishermen, 16,027 were shore and boat fishermen, 705 were on vessels employed in transporting fishery products, and 3,260 were in the shore branches connected with the fisheries, such as oyster packing, the manufacture of menhaden oil and fertilizer, etc.

The money value of the fishing property in Virginia in 1891 was \$2,948,659. The factors in this amount were 943 vessels valued, with their outfits, at \$939,136; 9,247 boats, worth \$463,722; apparatus to the value of \$360,514; shore property and cash capital, \$1,185,287.

Of the total value of the fisheries, \$3,647,845 in 1891, \$2,524,348 accrued from the sale of oysters; shad were worth \$207,394; menhaden, \$197,523; squeteague, \$124,645; alewives, \$93,905; bluefish, \$67,545, and Spanish mackerel, \$50,756.

Persons employed in the fisheries of Virginia.

How engaged.	1890.	1891.
In vessel fisheries	3,027	3,603
In shore fisheries	15,718	16,027
On transporting vessels	710	705
On shore, in factories, etc	2,714	3,260
Total	22,769	23,595

Vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Virginia.

Designation.	1890.		1891.		Designation.	1890.		1891.	
	No.	Value.	No.	Value.		No.	Value.	No.	Value.
Vessels fishing.....	730	\$503, 100	729	\$498, 440	Apparatus—shore fisheries—Cont'd.				
Tonnage.....	9, 110		9, 087		Pound nets.....	862	\$162, 295	801	\$105, 090
Outfit.....		172, 549		169, 933	Tykenets.....	335	5, 585	339	5, 770
Vessels transporting.....	211	246, 705	214	241, 695	Weirs.....	50	1, 000	50	1, 000
Tonnage.....	5, 124		5, 084		Minor nets.....	889	442	888	442
Outfit.....		29, 280		29, 068	Lines.....		3, 306		3, 432
Boats.....	9, 153	457, 038	9, 247	463, 722	Pots, eel.....	110	95	110	95
Apparatus—vessel fisheries:					Spears.....	15	10	15	10
Seines.....	42	26, 250	41	25, 650	Tongs, rakes, and nippers.....	10, 694	49, 726	10, 756	50, 203
Lines.....		10		30	Dredges.....	182	3, 995	198	4, 640
Dredges.....	470	18, 480	400	18, 210	Shore and accessory property.....		604, 095		717, 787
Tongs.....	1, 324	6, 323	1, 367	6, 482	Cash capital.....		444, 800		467, 500
Apparatus—shore fisheries:					Total.....		2, 871, 376		2, 048, 659
Seines.....	172	30, 615	178	32, 470					
Gill nets.....	5, 702	45, 587	5, 979	46, 030					

Products of the fisheries of Virginia.

Species.	1890.		1891.		Species.	1890.		1891.	
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.	Pounds.	Value.
Alewives.....	10, 641, 698	\$91, 674	11, 013, 485	\$93, 005	Shad.....	7, 266, 207	\$228, 897	6, 498, 242	\$207, 394
Black bass.....	7, 500	450	7, 000	430	Sheepshead.....	22, 775	1, 266	23, 871	1, 344
Bluefish.....	1, 471, 671	57, 195	1, 842, 264	67, 545	Spanish mackrel.....	648, 703	47, 161	730, 910	50, 756
Butter-fish.....	138, 753	3, 442	120, 000	2, 900	Spots.....	651, 478	25, 426	650, 157	25, 275
Carp.....	8, 735	385	13, 370	576	Squatterneague.....	672, 304	130, 740	3, 929, 899	124, 645
Catfish.....	939, 902	27, 833	935, 244	28, 487	Striped bass.....	529, 150	47, 202	483, 436	42, 127
Cobia or crab-eater.....	104, 537	4, 798	195, 250	4, 948	Sturgeon.....	817, 670	24, 514	723, 046	21, 304
Croakers.....	1, 124, 525	38, 645	1, 075, 690	36, 847	Suckers.....	118, 067	3, 190	116, 364	8, 153
Drum.....	186, 950	4, 154	179, 502	4, 011	Other fish.....	1, 602, 636	41, 247	1, 514, 657	38, 675
Eels.....	71, 930	3, 019	71, 619	2, 907	Crabs, hard.....	2, 584, 794	28, 210	2, 308, 071	32, 633
Flounders.....	126, 135	4, 209	127, 205	4, 109	Crabs, soft.....	440, 340	26, 054	585, 956	29, 379
Kingfish and whiting.....	168, 056	7, 920	149, 565	7, 097	Crawfish.....			833	75
Menhaden.....	107, 341, 713	209, 588	105, 980, 334	197, 523	Oysters.....	42, 518, 174	2, 482, 348	43, 134, 602	2, 524, 348
Mullet.....	104, 500	2, 555	110, 700	2, 736	Quahogs or hard clams.....	551, 888	36, 815	550, 278	36, 030
Perch, white.....	306, 521	12, 445	299, 813	12, 010	Frogs.....	20, 232	2, 055	21, 000	2, 754
Perch, yellow.....	184, 493	7, 420	169, 020	6, 799	Terrapins.....	52, 519	10, 066	52, 215	18, 494
Pike.....	16, 558	1, 039	12, 415	795	Turtles.....	203, 928	4, 270	189, 121	3, 934
Pompano.....	86, 246	8, 466	93, 700	9, 520	Total.....	185, 282, 705	3, 036, 351	183, 903, 834	3, 647, 845
Sea bass.....	61, 323	2, 044	66, 310	2, 270					

In the following supplementary table the quantities of certain products shown in the foregoing table are given on another basis than pounds:

Species.	1890.	1891.
Oysters.....	bushels.....	6, 074, 025
Clams.....	do.....	66, 486
Crabs, hard.....	number.....	7, 754, 382
Crabs, soft.....	do.....	1, 321, 020
Crawfish.....	do.....	1, 757, 868
Frogs.....	do.....	49, 464
Terrapins.....	do.....	26, 259
		26, 103

Statistics of the fisheries in each county.—Thirty-four counties in Virginia have commercial fisheries, and the extent of the industry in each of these is shown in the tables which follow.

Norfolk County, with its extensive oyster business, leads in the number of persons employed, having 3,653 in 1891, of which 1,821 were shoresmen. Accomac County ranks next, with 3,633, but surpasses Norfolk County in the number of vessel and

shore fishermen. Lancaster and Middlesex counties have between 2,000 and 3,000 persons, and Elizabeth City, Gloucester, Mathews, and Northumberland counties are credited with over 1,000 persons each.

Norfolk County also has the largest capital invested in the fishing industry. In 1891 this amounted to \$707,881, of which, however, \$518,250 represented shore property and cash capital. Accomac County, with an investment of \$493,553, has much the largest amount devoted to actual fishing. In the items of vessels and seines this county also has the first place. Northumberland County has the largest number of pound nets, James City of gill nets, and York of fyke nets.

The value of the fisheries of Accomac County is about twice that of any other county in Virginia, except Lancaster. In 1891 it was \$731,613, of which \$568,410 represented the sale of oysters and \$43,055 menhaden, the next important product. Lancaster County fishermen took fish and oysters to the value of \$496,010, of which \$351,370 accrued from the oyster fishery and \$79,893 from the menhaden fishery. The fisheries of Norfolk County yielded \$245,807, of which \$228,400 was the value of the oyster output. Elizabeth City County exceeded Norfolk in the aggregate value of the fisheries, having \$306,495 to its credit, although the oyster yield was only \$168,988. The value of the products taken in the fisheries of Northumberland County was \$250,116, oysters constituting \$120,160. In Middlesex County, the fishing industry gave an income of \$244,060, including \$231,560 worth of oysters. The fisheries of Northampton County were worth \$236,955, the value of the oysters being \$167,756.

Statement by counties of the number of persons employed in the fisheries of Virginia.

Counties.	On fishing ves-		On transport-		In shore fish-		On shore, in fish-		Total.	
	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.
Accomac.....	1,393	1,300	124	113	1,812	1,037	217	283	3,546	3,633
Alexandria.....	.....	.....	35	37	122	138	.....	.....	157	175
Caroline.....	.....	.....	.....	.....	22	32	.....	.....	22	32
Charles City.....	.....	.....	.....	.....	228	228	.....	.....	228	228
Chesterfield.....	.....	.....	.....	.....	75	75	.....	.....	75	75
Dinwiddie.....	.....	.....	.....	.....	25	25	.....	.....	25	25
Elizabeth City.....	130	143	12	16	539	539	298	303	970	1,001
Essex.....	.....	.....	8	5	369	309	.....	25	877	420
Fairfax.....	.....	.....	.....	.....	200	217	.....	.....	206	217
Gloucester.....	121	129	71	68	872	872	.....	.....	1,064	1,069
Hanover.....	.....	.....	.....	.....	62	62	.....	.....	62	62
Henrico.....	8	8	.....	.....	40	40	.....	.....	48	48
Isle of Wight.....	69	67	.....	.....	378	378	16	16	468	461
James City.....	.....	.....	4	4	226	227	.....	.....	230	231
King and Queen.....	.....	.....	.....	.....	154	154	.....	.....	154	154
King George.....	16	20	14	14	238	240	33	19	301	293
King William.....	.....	.....	.....	.....	10	10	171	166	2,740	2,735
Lancaster.....	132	123	16	10	2,421	2,430	.....	.....	1,124	1,088
Mathews.....	65	49	110	109	949	930	.....	.....	2,133	2,133
Middlesex.....	14	14	38	37	1,861	1,885	185	197	2,098	2,098
Nansemond.....	132	140	10	10	370	370	105	105	623	631
New Kent.....	.....	.....	9	9	196	196	.....	.....	205	205
Norfolk.....	818	805	143	141	860	886	1,493	1,821	3,254	3,653
Northampton.....	89	120	33	44	490	523	10	33	631	720
Northumberland.....	275	299	37	43	994	989	183	183	1,480	1,514
Prince George.....	.....	.....	.....	.....	97	97	.....	.....	97	97
Princess Anne.....	.....	.....	.....	.....	221	221	45	45	266	266
Prince William.....	.....	.....	.....	.....	73	77	.....	.....	73	77
Richmond.....	15*	15	10	13	470	481	16	56	517	505
Stafford.....	.....	.....	.....	.....	139	139	.....	.....	139	139
Surry.....	.....	.....	.....	.....	48	48	.....	.....	48	48
Warwick.....	46	49	3	3	170	170	.....	8	227	230
Westmoreland.....	89	113	18	14	456	461	.....	.....	563	588
York.....	215	200	9	9	374	374	.....	.....	598	592
Total.....	3,627	3,603	710	705	15,737	16,027	2,720	3,260	22,803	23,505

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Virginia.

Designation.	Accomac.				Alexandria.				Caroline.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	249	\$233,370	235	\$219,800	.....	.....	.....	.....	.....	.....	.....	.....
Tonnage	3,496	.....	3,292	.....	.....	.....	.....	.....	.....	.....	.....	.....
Outfit	55,451	.....	50,775	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vessels transporting	34	66,090	32	54,320	12	\$11,200	13	\$12,200	.....	.....	.....	.....
Tonnage	1,187	.....	1,061	.....	179	.....	193	.....	.....	.....	.....	.....
Outfit	3,803	.....	3,705	.....	.....	1,750	.....	1,850	.....	.....	.....	.....
Boats	1,222	68,124	1,273	73,052	43	2,275	50	2,655	19	\$105	21	\$225
Apparatus—vessel fisheries:												
Seines	14	8,900	15	9,400	.....	.....	.....	.....	.....	.....	.....	.....
Dredges	328	11,480	310	10,850	.....	.....	.....	.....	.....	.....	.....	.....
Tongs	148	1,485	150	1,500	.....	.....	.....	.....	.....	.....	.....	.....
Apparatus—shore fisheries:												
Seines	68	1,865	70	1,940	2	2,000	3	2,500	1	1,200	2	2,400
Pound nets	26	2,850	29	3,250	2	200	2	200	4	800	4	800
Gill nets	155	930	105	990	35	2,625	37	2,775	20	400	20	400
Fyke nets	4	80	3	60	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous nets	20	10	10	10	.....	.....	.....	.....	.....	.....	.....	.....
Lines .....	.....	203	.....	201	.....	.....	.....	.....	.....	.....	.....	.....
Spears	15	10	15	10	.....	.....	.....	.....	.....	.....	.....	.....
Dredges	154	2,670	170	3,315	.....	.....	.....	.....	.....	.....	.....	.....
Tongs, rakes, and nippers	1,399	6,720	1,470	7,313	.....	.....	.....	.....	.....	.....	.....	.....
Shore property .....	.....	37,170	.....	40,002	.....	275	.....	225	.....	.....	.....	.....
Cash capital .....	.....	13,500	.....	13,000	.....	.....	.....	.....	.....	.....	.....	.....
Total .....	.....	514,711	.....	498,553	.....	20,325	.....	22,405	.....	2,595	.....	3,825
Designation.	Charles City.				Chesterfield.				Dinwiddie.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Boats	115	\$1,544	115	\$1,544	85	\$1,275	85	\$1,275	15	\$225	15	\$225
Apparatus—shore fisheries:												
Seines	6	1,855	6	1,855	3	1,050	3	1,050	4	600	4	600
Gill nets	135	4,660	135	4,660	625	1,875	625	1,875	15	375	15	375
Lines	40	40	40	40	.....	.....	.....	.....	.....	.....	.....	.....
Shore property .....	.....	1,600	.....	1,600	.....	500	.....	500	.....	.....	.....	.....
Total .....	.....	9,699	.....	9,699	.....	4,700	.....	4,700	.....	1,200	.....	1,200
Designation.	Elizabeth City.				Essex.				Fairfax.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	21	\$11,375	24	\$12,575	.....	.....	.....	.....	.....	.....	.....	.....
Tonnage	288	.....	323	.....	.....	.....	.....	.....	.....	.....	.....	.....
Outfit	7,927	.....	8,488	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vessels transporting	4	4,300	5	5,000	3	\$750	2	\$350	.....	.....	.....	.....
Tonnage	84	.....	111	.....	37	.....	15	.....	.....	.....	.....	.....
Outfit	290	.....	360	.....	193	.....	106	.....	.....	.....	.....	.....
Boats	297	20,680	299	20,720	285	5,227	290	5,282	55	\$5,775	59	\$5,805
Apparatus—vessel fisheries:												
Seines	3	1,950	3	1,950	.....	.....	.....	.....	.....	.....	.....	.....
Dredges	32	1,600	34	1,700	.....	.....	.....	.....	.....	.....	.....	.....
Tongs	75	300	81	324	.....	.....	.....	.....	.....	.....	.....	.....
Apparatus—shore fisheries:												
Seines	6	1,200	6	1,200	1	150	1	150	2	7,500	2	7,500
Pound nets	71	16,150	73	16,500	30	4,500	30	4,500	17	1,775	23	2,335
Gill nets .....	.....	.....	.....	.....	646	2,623	721	2,698	27	2,700	27	2,700
Fyke nets	4	200	4	200	15	225	18	270	.....	.....	.....	.....
Lines	1,375	.....	1,375	.....	55	.....	55	.....	.....	.....	.....	.....
Pots .....	.....	.....	.....	.....	10	20	10	20	.....	.....	.....	.....
Tongs, rakes, and nippers	450	1,800	450	1,800	224	898	224	898	.....	.....	.....	.....
Shore property	92,025	.....	95,825	.....	1,000	.....	1,800	.....	86,805	.....	86,805	.....
Cash capital	78,000	.....	80,000	.....	.....	.....	4,000	.....	.....	.....	.....	.....
Total	239,172	248,017	15,630	20,127	54,615	55,205

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Virginia—Continued.

Designation.	Gloucester.				Hanover.				Henrico.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing	38	\$10,550	38	\$23,740					1	\$1,000	1	\$1,000	
Tonnage.....	302		437						15		15		
Outfit.....		5,544		6,029						357		357	
Vessels transporting	19	30,100	19	29,200									
Tonnage.....	602		575										
Outfit.....		3,254		3,117									
Boats.....	527	30,055	527	30,055	31	\$475	31	\$475	30	300	30	300	
Apparatus—vessel fisheries:													
Tongs	92	368	98	392					6	24	6	24	
Apparatus—shore fisheries:													
Seines	29	605	29	665					1	300	1	300	
Pound nets	96	18,900	98	18,900									
Gill nets	110	530	110	530	65	1,300	65	1,300	50	1,500	50	1,500	
Fyke nets	38	475	38	475						50	1,000	50	1,000
Weirs													
Miscellaneous nets	40	20	40	20									
Lines		40		40									
Tongs, rakes, and nippers.....	616	2,358	616	2,358									
Shore property		6,725		6,725									
Total		118,584		122,246					2,475		2,675		
	Isle of Wight.				James City.				King and Queen.				
Designation.	1890.		1891.		1890.		1891.		1890.		1891.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing	21	\$6,500	20	\$6,400									
Tonnage.....	180		171										
Outfit.....		3,964		3,719									
Vessels transporting													
Tonnage.....													
Outfit.....													
Boats	197	8,995	197	8,995	90	\$3,729	90	\$3,729	107	2,635	107	2,635	
Apparatus—vessel fisheries:													
Tongs	52	208	48	192									
Apparatus—shore fisheries:													
Seines.....	1	60	2	100	1	80	1	80	2	500	2	500	
Gill nets	156	886	156	886	869	2,105	869	2,105	347	2,025	347	2,025	
Fyke nets	28	420	28	420	60	675	60	675	18	225	18	225	
Lines		375		375									
Pots	100	75	100	75									
Tongs, rakes, and nippers.....	202	808	202	808	84	336	84	336	80	320	80	320	
Shore property		13,900		13,900		1,050		1,050		4,680		4,680	
Total		36,101		35,870		7,975		7,975		12,620		12,620	
	King George.				King William.				Lancaster.				
Designation.	1890.		1891.		1890.		1891.		1890.		1891.		
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	
Vessels fishing					5	\$2,900	6	\$3,500	11	\$32,050	12	\$20,000	
Tonnage.....					40		49		351		319		
Outfit.....						1,030		1,248		11,320		7,880	
Vessels transporting					4	2,400	4	3,800	5	4,000	3	2,200	
Tonnage.....					54		75		153		103		
Outfit.....						571		598		886		470	
Boats	79	\$1,765	80	\$1,805	119	1,905	119	1,905	1,422	88,700	1,422	89,055	
Apparatus—vessel fisheries:													
Seines													
Dredges													
Tongs													
Apparatus—shore fisheries:													
Seines	3	900	3	900									
Pound nets	66	8,970	68	9,195	1	240	1	240	93	12,900	93	12,900	
Gill nets	80	1,600	80	1,600	245	4,900	245	4,900					
Miscellaneous nets													
Lines													
Tongs, rakes, and nippers.....					12	48	12	52	2	100	2	100	
Shore property									6	24	11	70	
Cash capital													
Total		13,225		13,500		23,685		25,625		290,081		278,326	

Statement by counties of the vessels, boats, apparatus, shore property, and cash capital employed in the fisheries of Virginia—Continued.

Designation.	Mathews.				Middlesex.				Nansemond.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	16	\$6,200	15	\$6,000	5	\$2,350	5	\$2,350	32	\$18,000	35	\$15,600
Tonnage	171	.....	162	.....	40	.....	40	.....	328	.....	349	.....
Outfit	3,817	.....	3,878	.....	654	.....	604	.....	7,823	.....	8,166	.....
Vessels transporting	80	32,000	30	32,100	10	11,900	10	11,900	8	3,800	8	3,800
Tonnage	747	.....	745	.....	303	.....	303	.....	68	.....	68	.....
Outfit	4,588	.....	4,588	.....	1,356	.....	1,307	.....	755	.....	755	.....
Boats	788	38,175	783	38,100	827	39,050	827	39,650	209	11,430	209	11,430
Apparatus—vessel fisheries:												
Seines	2	1,300	2	1,300	.....	.....	.....	.....	.....	.....	.....	.....
Lines .....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....
Dredges	6	300	2	100	.....	.....	.....	.....	.....	.....	.....	.....
Tongs	28	112	29	116	10	40	10	40	94	376	99	396
Apparatus—shore fisheries:												
Seines	12	180	12	180	.....	.....	.....	.....	.....	.....	.....	.....
Pound nets	96	16,800	87	15,225	25	4,250	24	4,100	1	200	1	200
Gill nets	25	125	25	125	.....	.....	.....	.....	.....	.....	.....	.....
Fyke nets .....	.....	.....	.....	.....	.....	.....	.....	8	400	8	400	.....
Miscellaneous nets	50	50	50	50	.....	.....	.....	.....	.....	.....	.....	.....
Tongs, rakes, and nippers	808	4,322	808	4,322	1,506	10,204	1,506	10,264	350	1,400	350	1,400
Shore property .....	.....	800	.....	650	.....	7,900	.....	10,500	.....	10,000	.....	10,000
Cash capital .....	.....	.....	.....	.....	16,800	.....	16,900	.....	20,000	.....	20,000	.....
Total	108,769	.....	106,744	.....	95,104	.....	97,615	.....	74,184	.....	72,147	.....

Designation.	New Kent.				Norfolk.				Northampton.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing .....	.....	.....	.....	.....	164	\$67,395	161	\$66,695	29	\$15,610	32	\$16,870
Tonnage .....	.....	.....	.....	.....	1,537	1,495	1,495	1,495	298	.....	316	.....
Outfit .....	.....	.....	.....	.....	45,223	44,358	44,358	44,358	2,350	.....	3,425	.....
Vessels transporting	2	\$6,500	2	\$6,500	41	38,900	41	35,900	13	11,810	18	15,825
Tonnage	110	.....	110	.....	801	777	777	777	200	.....	258	.....
Outfit	284	.....	354	.....	6,631	6,666	6,666	6,666	1,650	.....	1,750	.....
Boats	117	1,583	117	1,583	442	30,685	433	29,415	302	18,105	332	19,990
Apparatus—vessel fisheries:												
Seines .....	.....	.....	.....	.....	.....	10	.....	20	1	700	1	700
Lines .....	.....	.....	.....	.....	2	100	2	100	4	190	6	270
Dredges .....	.....	.....	.....	.....	524	2,136	522	2,088	62	310	88	440
Tongs .....	.....	.....	.....	.....	.....	400	425	425	14	1,120	16	1,280
Apparatus—shore fisheries:												
Seines	4	775	4	775	2	800	2	800	6	1,200	6	1,200
Pound nets .....	.....	.....	.....	.....	.....	.....	.....	21	19,115	22	19,840	
Gill nets	623	2,249	623	2,249	.....	.....	.....	.....	14	1,120	16	1,280
Fyke nets	10	125	10	125	.....	.....	.....	.....	215	.....	228	.....
Lines .....	.....	.....	18	70	835	3,340	810	3,264	473	1,445	502	1,540
Tongs, rakes, and nippers	17	65	18	70	.....	282,950	328,750	4,360	4,360	4,360	4,325	500
Shore property .....	.....	2,100	.....	2,095	168,000	189,500	189,500	189,500	5,000	.....	5,000	.....
Cash capital .....	.....	.....	.....	.....	646,570	707,881	707,881	707,881	83,180	.....	88,183	.....
Total	13,681	.....	13,751	.....	.....	.....	.....	.....	.....	.....	.....	.....

Designation.	Northumberland.				Prince George.				Princess Anne.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing	39	\$40,650	44	\$47,650	.....	.....	.....	.....	.....	.....	.....	.....
Tonnage	836	930	930	935	.....	.....	.....	.....	.....	.....	.....	.....
Outfit	11,273	.....	14,865	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vessels transporting	13	13,550	15	16,050	.....	.....	.....	.....	.....	.....	.....	.....
Tonnage	270	323	323	323	.....	.....	.....	.....	.....	.....	.....	.....
Outfit	1,501	.....	1,614	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boats	568	25,822	565	25,958	56	\$745	56	\$745	101	\$2,080	101	\$2,080
Apparatus—vessel fisheries:												
Seines	9	5,500	9	5,500	.....	.....	.....	.....	.....	.....	.....	.....
Dredges	66	3,260	70	3,460	.....	.....	.....	.....	.....	.....	.....	.....
Tongs	2	8	4	16	.....	.....	.....	.....	.....	.....	.....	.....
Apparatus—shore fisheries:												
Seines	2	200	2	200	2	300	2	300	11	3,125	11	3,125
Pound nets	120	19,425	130	20,730	.....	.....	.....	.....	7	10,500	7	10,500
Gill nets .....	.....	.....	.....	.....	74	2,795	74	2,795	13	445	13	445
Miscellaneous nets	247	.....	247	.....	.....	30	.....	30	.....	75	.....	75
Lines	150	.....	150	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dredges	2	90	2	90	.....	.....	.....	.....	50	75	50	75
Tongs, rakes, and nippers	566	2,699	536	2,610	.....	1,400	.....	1,400	42,300	.....	42,300	.....
Shore property .....	.....	38,680	.....	38,880	1,400	.....	1,400	.....	4,000	.....	4,000	.....
Cash capital	49,500	.....	49,500	.....	.....	5,270	.....	5,270	62,610	.....	62,610	.....
Total	212,555	227,520	5,270	5,270	62,610	62,610

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties of the vessels, boats, apparatus, shore property, and cash capital, etc.—Continued.

Designation.	Prince William.				Richmond.				Stafford.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing					6	\$2,500	6	\$2,500				
Tonnage			51		51		51					
Outfit					774		666					
Vessels transporting			4	1,655	4	5,600						
Tonnage			51		111							
Outfit					365		550					
Boats	37	\$1,355	30	\$1,455	283	9,174	283	8,804	39	\$8,325	41	\$8,385
Apparatus—vessel fisheries:												
Tongs					14	88	12	48				
Apparatus—shore fisheries:												
Seines									2	4,000	2	4,000
Pound nets	14	1,750	18	2,250	40	6,000	40	6,000	28	1,960	35	2,450
Gill nets	20	2,500	20	2,500	701	1,185	741	1,235	22	2,750	22	2,750
Fyke nets					6	90	6	90				
Tongs, rakes, and nippers					360	1,440	360	1,440				
Shore property						3,500		3,500		2,775		2,775
Cash capital						8,000		15,000				
Total		5,605		6,205		34,781		45,523		14,810		15,360
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Designation.	Surry.				Warwick.				Westmoreland.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing					10	\$3,700	11	\$3,850	15	\$6,850	18	\$7,650
Tonnage			153		165		195		195		258	
Outfit					2,721		2,894		2,403		3,051	
Vessels transporting			1	300	1	300	5	3,150	4	2,850		
Tonnage			10		10		140		124			
Outfit					50		50		831		656	
Boats	23	\$650	23	\$650	83	4,880	83	4,880	246	9,742	251	9,912
Apparatus—vessel fisheries:												
Dredges									30	1,450	36	1,730
Tongs					86	144	98	152				
Apparatus—shore fisheries:												
Seines	1	110	1	75	3	900	3	900	79	11,360	1	75
Pound nets	620	1,414	770	1,532					24	480	82	12,100
Gill nets										5		480
Miscellaneous nets										5		5
Lines		40		40		119		119		15		15
Dredges									26	1,235	26	1,235
Tongs, rakes, and nippers		500		500	128	512	128	512	283	1,415	283	1,415
Shore property						10,855		10,855				
Cash capital						200		300				
Total		2,714		2,707		24,381		24,812		38,930		40,674
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Designation.	York.				Total for State.							
	1890.		1891.		1890.		1891.					
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing			68	\$33,100	66	\$32,000	730	\$503,100	729	\$498,440		
Tonnage		739		715		9,110		9,087				
Outfit					9,621		172,549		169,938			
Vessels transporting	2	2,800	2	2,800	211		246,705		214		241,095	
Tonnage	80		80		5,124		5,084					
Outfit		437		437			29,280		29,068			
Boats	204	15,758	204	15,758	9,153		457,038		9,247		463,722	
Apparatus—vessel fisheries:												
Seines					42		26,250		41		25,050	
Lines							10				30	
Dredges					470		18,480		460		18,210	
Tongs	168	652	158	632	1,324		6,323		1,367		6,482	
Apparatus—shore fisheries:												
Seines					172		30,615		178		32,470	
Pound nets		22	2,750	23	2,875		862		162,295		891	
Gill nets					5,702		45,587		5,979		46,030	
Fyke nets	124	1,550	124	1,550	335		5,585		330		5,770	
Weirs					50		1,000		50		1,000	
Miscellaneous nets							442				442	
Lines		150		150		3,300					3,432	
Pots					110		95		110		95	
Spears					15		10		15		10	
Dredges					182		3,985		198		4,640	
Tongs, rakes and nippers	578	1,051	578	1,051	10,694		49,726		10,756		50,263	
Shore property		1,145		1,145		664,095					717,787	
Cash capital							444,800				467,500	
Total		70,103		69,410		2,871,376					2,948,659	

Statement by counties and species of the yield of the fisheries of Virginia.

Species.	Accomac.				Alexandria.				Caroline.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	380,000	\$1,890	310,000	\$1,520	330,000	\$2,550	389,600	\$3,895	23,840	\$239	25,500	\$255
Bluefish.....	245,100	10,992	400,500	16,100	.....	.....	1,460	58	.....	.....	.....	.....
Carp.....	.....	.....	.....	.....	800	32	9,820	285	10,040	305	12,600	380
Catfish.....	.....	.....	13,730	403	.....	.....	.....	.....	.....	.....	.....	.....
Cobia or crab-eater.....	15,800	510	16,900	540	.....	.....	.....	.....	.....	.....	.....	.....
Croakers.....	64,690	2,055	64,710	2,052	.....	.....	.....	.....	.....	.....	.....	.....
Drum.....	75,490	1,663	75,220	1,780	.....	.....	.....	.....	.....	.....	.....	.....
Eels.....	25,400	850	26,500	855	.....	.....	.....	.....	830	35	1,160	53
Flounders.....	37,580	1,231	41,785	1,380	.....	.....	.....	.....	.....	.....	.....	.....
Kingfish and whiting.....	29,785	675	33,580	765	.....	.....	.....	.....	.....	.....	.....	.....
Menhaden.....	33,458,700	58,389	25,155,700	43,055	.....	.....	.....	.....	.....	.....	.....	.....
Mullet.....	62,500	1,250	68,000	1,380	.....	.....	.....	.....	.....	.....	.....	.....
Perch.....	15,000	450	18,500	555	16,494	753	5,922	310	9,070	480	10,500	525
Pompano.....	9,850	815	11,500	860	.....	.....	.....	.....	.....	.....	.....	.....
Sea bass.....	14,360	621	15,000	680	.....	.....	.....	.....	.....	.....	.....	.....
Shad.....	93,030	3,850	104,125	4,243	258,300	6,990	254,500	6,275	27,815	795	22,575	645
Sheepshead.....	7,045	415	8,086	508	.....	.....	.....	.....	.....	.....	.....	.....
Spanish mackerel.....	190,420	10,060	188,150	9,090	.....	.....	.....	.....	.....	.....	.....	.....
Spots.....	121,900	4,020	125,950	4,020	.....	.....	.....	.....	.....	.....	.....	.....
Squeteague.....	545,340	20,760	610,640	22,010	.....	.....	.....	.....	.....	.....	.....	.....
Striped bass.....	12,310	1,205	17,000	1,470	9,016	991	4,200	403	500	50	1,000	100
Sturgeon.....	1,170	30	1,315	40	.....	.....	.....	.....	.....	.....	.....	.....
Suckers.....	880	25	1,000	30	6,020	150	2,010	60	2,145	58	2,000	55
Other fish.....	204,590	6,231	277,264	6,860	1,240	41	1,038	82	10,860	307	15,710	400
Oysters.....	9,514,288	612,718	9,178,505	508,410	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	45,875,109	781,620	37,589,602	731,613	635,600	11,850	669,510	11,368	85,700	2,209	91,045	2,413
Species.	Elizabeth City.				Essex.				Fairfax.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewifes.....	151,130	\$1,511	106,000	\$1,060	168,200	\$1,682	127,800	\$1,278	807,059	\$5,852	317,576	\$3,049
Bluefish.....	153,280	7,383	114,170	5,385	.....	.....	.....	.....	1,335	60	3,845	151
Carp.....	.....	.....	.....	.....	118,400	3,484	94,780	2,888	40,000	1,320	95,085	2,961
Catfish.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cobia or crab-eater.....	24,333	486	18,250	365	.....	.....	.....	.....	.....	.....	.....	.....
Croakers.....	481,870	14,458	429,350	12,880	.....	.....	.....	.....	.....	.....	.....	.....
Drum.....	71,905	1,815	61,282	1,541	.....	.....	.....	.....	.....	.....	.....	.....
Eels.....	8,500	350	7,320	290	5,300	225	5,100	220	2,000	120	1,568	94
Flounders.....	42,880	1,340	44,000	1,235	300	12	200	8	.....	.....	.....	.....
Kingfish and whiting.....	65,300	1,960	53,000	1,500	.....	.....	.....	.....	.....	.....	.....	.....
Menhaden.....	12,579,000	21,253	11,412,000	19,224	.....	.....	.....	.....	.....	.....	.....	.....
Mullet.....	12,000	240	8,500	170	.....	.....	.....	.....	.....	.....	.....	.....
Perch.....	5,250	157	4,500	135	20,450	1,288	20,700	1,029	16,945	810	20,180	1,327
Pompano.....	49,600	4,060	37,200	3,720	.....	.....	.....	.....	.....	.....	.....	.....
Sea bass.....	13,240	410	15,000	490	.....	.....	.....	.....	.....	.....	.....	.....
Shad.....	598,111	20,506	428,165	14,080	227,552	6,496	178,500	5,007	478,405	14,218	342,504	10,942
Sheepshead.....	10,033	521	7,960	420	.....	.....	.....	.....	.....	.....	.....	.....
Spanish mackerel.....	155,332	15,533	116,500	11,650	.....	.....	.....	.....	.....	.....	.....	.....
Spots.....	306,125	9,183	305,500	9,165	.....	.....	.....	.....	.....	.....	.....	.....
Squeteague.....	1,019,130	30,584	69,750	29,993	26,400	1,320	19,500	990	8,035	765	11,920	967
Striped bass.....	16,400	1,640	12,400	1,240	52,850	4,565	45,800	3,726	770	30	110	4
Sturgeon.....	298,600	8,900	224,000	6,720	16,500	330	5,500	110	3,460	93	11,365	341
Suckers.....	2,000	40	3,000	60	4,365	110	3,460	568	7,800	370	12,600	877
Other fish.....	137,180	2,724	97,040	2,073	23,535	766	10,000	568	.....	.....	8,610	131
Oysters.....	2,712,220	173,005	2,874,480	168,988	262,500	15,000	315,000	15,000	.....	.....	.....	.....
Quahogs (hard clams).....	40,000	3,000	29,088	2,000	.....	.....	.....	.....	.....	.....	.....	.....
Crabs, hard.....	1,057,250	0,766	679,375	8,090	.....	.....	.....	.....	.....	.....	833	75
Turtles.....	156,250	3,125	136,250	2,725	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	20,167,046	331,910	18,224,080	306,495	932,352	35,278	832,805	31,007	1,375,404	23,892	818,831	20,678

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties and species of the yield of the fisheries of Virginia—Continued.

Species.	Charles City.				Chesterfield.				Dinwiddie.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	300,961	\$2,521	299,654	\$2,510	305,000	\$3,000	360,000	\$2,650	44,600	\$96	40,000	\$90
Catfish	15,300	490	10,500	495	27,800	570	26,500	542	.....	.....	.....	.....
Perch	32,384	1,092	28,315	964	63,000	1,950	62,000	1,700	.....	.....	.....	.....
Pike	5,006	336	1,532	92	3,810	230	2,965	180	.....	.....	.....	.....
Shad	400,267	10,942	319,581	9,228	108,375	2,812	76,502	1,868	42,234	1,086	37,934	960
Striped bass	17,024	1,095	14,522	1,409	5,000	500	4,900	400	.....	.....	.....	.....
Sturgeon	38,701	1,281	34,520	993	.....	.....	.....	.....	.....	.....	.....	.....
Other fish	221,078	5,073	201,541	4,667	123,390	2,020	100,535	2,258	11,600	219	11,100	209
Turtles	530	11	600	13	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,032,751	23,411	916,825	20,371	729,375	11,082	641,502	9,658	98,434	1,401	88,434	1,250
Species.	Gloucester.				Hanover.				Henrico.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	455,500	\$4,555	455,500	\$4,555	.....	.....	.....	.....	314,500	\$2,645	350,000	\$2,700
Bluefish	55,500	1,600	57,000	1,728	.....	.....	.....	.....	9,960	212	8,800	182
Catfish	5,000	150	5,400	162	.....	.....	.....	.....	.....	.....	.....	.....
Cobia or crab-eater	50,000	1,000	45,000	900	.....	.....	.....	.....	.....	.....	.....	.....
Croakers	44,400	1,332	44,300	1,329	.....	.....	.....	.....	.....	.....	.....	.....
Drum	8,000	320	8,500	340	.....	.....	.....	.....	.....	.....	.....	.....
Flounders	3,200	160	4,200	210	.....	.....	.....	.....	.....	.....	.....	.....
Kingfish and whiting	20,000	600	15,000	450	.....	.....	.....	.....	.....	.....	.....	.....
Menhaden	500,000	1,000	500,000	1,000	.....	.....	.....	.....	.....	.....	.....	.....
Mullet	15,000	375	18,000	450	.....	.....	.....	.....	49,540	1,488	52,000	1,500
Perch	4,100	164	2,900	116	.....	.....	.....	.....	.....	.....	.....	.....
Pompano	25,000	2,500	23,000	2,300	.....	.....	.....	.....	3,000	200	2,000	200
Shad	499,100	14,952	520,084	15,888	81,900	\$2,457	65,520	\$1,960	17,630	455	18,200	460
Spanish mackerel	25,000	2,500	35,000	3,500	.....	.....	.....	.....	.....	.....	.....	.....
Spots	17,600	628	24,400	912	.....	.....	.....	.....	.....	.....	.....	.....
Squeteague	116,000	3,498	111,800	3,354	.....	.....	.....	.....	.....	.....	.....	.....
Striped bass	1,850	183	1,050	165	.....	.....	.....	.....	.....	.....	.....	.....
Sturgeon	75,000	1,875	78,000	1,950	.....	.....	.....	.....	.....	.....	.....	.....
Suckers	.....	.....	.....	.....	.....	.....	.....	.....	22,985	500	24,200	528
Other fish	53,000	840	58,000	945	.....	.....	.....	.....	115,000	2,538	115,500	2,425
Oysters	2,463,510	159,585	2,453,717	144,583	.....	.....	.....	.....	35,000	2,450	35,000	2,250
Quahogs (hard clams)	20,320	1,270	20,256	1,266	.....	.....	.....	.....	.....	.....	.....	.....
Crabs, hard	114,000	950	120,000	1,000	.....	.....	.....	.....	.....	.....	.....	.....
Terrapins	16,112	8,692	15,280	8,152	.....	.....	.....	.....	.....	.....	.....	.....
Turtles	15,000	450	10,000	462	.....	.....	.....	.....	.....	.....	.....	.....
Total	4,602,793	209,241	4,645,587	195,717	81,900	2,457	65,520	1,960	567,615	10,488	605,700	10,314
Species.	Isle of Wight.				James City.				King and Queen.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	5,000	\$50	3,500	\$35	20,828	\$183	18,271	\$165	78,300	\$780	65,250	\$652
Catfish	16,850	811	14,300	682	6,288	180	5,753	170	26,620	797	22,956	679
Croakers	125,000	5,000	122,000	4,880	7,005	292	7,995	918	.....	.....	.....	.....
Drum	1,875	93	1,500	75	.....	.....	.....	.....	.....	.....	.....	.....
Eels	8,125	312	2,500	250	.....	.....	.....	.....	.....	.....	.....	.....
Menhaden	150,000	350	150,000	350	.....	.....	.....	.....	.....	.....	.....	.....
Mullet	8,000	480	9,000	540	.....	.....	.....	.....	.....	.....	.....	.....
Perch	40,075	2,372	34,440	2,020	24,385	930	20,627	770	25,648	826	21,172	676
Pike	.....	.....	.....	.....	1,206	72	1,155	69	.....	.....	.....	.....
Shad	198,875	8,437	157,500	6,750	132,181	3,855	118,498	3,480	178,020	5,892	142,618	4,251
Sheepshead	3,125	187	2,500	150	.....	.....	.....	.....	.....	.....	.....	.....
Spots	17,750	712	15,500	580	.....	.....	.....	.....	.....	.....	.....	.....
Squeteague	40,377	1,531	38,500	1,285	9,000	860	8,199	827	.....	.....	.....	.....
Striped bass	69,500	6,950	56,000	5,600	1,285	1,205	1,205	1,154	7,682	749	7,851	775
Sturgeon	3,840	115	4,120	120	17,838	485	14,556	432	18,538	394	12,968	360
Other fish	20,210	947	27,640	1,005	18,600	551	13,771	399	8,680	170	7,000	180
Oysters	821,080	42,742	780,540	41,013	122,500	7,800	126,000	7,500	52,500	3,000	52,150	3,080
Turtles	.....	.....	.....	.....	302	7	400	9	.....	.....	.....	.....
Total	1,528,032	71,080	1,414,549	65,345	455,090	18,585	406,663	17,056	391,868	12,048	331,905	10,632

Statement by counties and species of the yield of the fisheries of Virginia—Continued.

Species.	King George.				King William.				Lancaster.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	788,895	\$8,891	627,163	\$7,511	20,000	\$200	25,000	\$250	618,000	\$4,215	620,225	\$4,202
Bluefish									73,537	4,438	80,000	4,600
Carp	1,100	55	1,260	63								
Catfish	15,150	447	19,626	605	89,700	2,745	87,920	2,638				
Croakers									17,800	715	16,320	662
Eels	4,060	167	4,230	165								
Flounders									11,140	340	10,080	310
Menhaden									29,700,000	70,995	40,740,000	70,893
Perch	16,800	840	19,700	985								
Shad	237,580	6,788	215,054	5,795	314,884	9,421	252,210	7,544	606,065	24,091	610,750	24,480
Spanish mackerel									12,000	960	10,000	800
Spots									14,716	1,177	14,000	1,120
Squeteague									374,142	15,729	373,867	15,685
Striped bass	36,160	2,980	22,140	1,788	7,680	768	8,575	858				
Sturgeon	2,185	68	1,880	57					49,441	2,180	47,425	1,985
Suckers	8,510	255	9,390	282								
Other fish	65,445	3,888	74,880	3,875					126,505	3,047	120,600	2,903
Oysters									5,330,500	287,760	5,286,400	351,370
Crabs, hard	4,200	30	4,160	32	128,100	7,450	130,000	6,770				
Crabs, soft					13,800	69	15,300	77				
Frogs	4,032	605	4,050	608					81,440	8,144	80,000	8,000
Total	1,184,117	24,514	1,003,527	21,766	574,164	20,653	519,905	18,187	37,010,886	423,791	48,009,667	496,010
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Species.	Mathews.				Middlesex.				Nansemond.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	553,400	\$5,534	538,800	\$4,388	304,625	\$2,916	270,000	\$2,610	4,450	\$128	4,000	\$120
Bluefish	158,000	4,700	175,000	5,250								
Cobia or crab-eater	85,000	2,550	95,000	2,850					9,550	392	10,000	400
Croakers	550,000	1,100	402,534	924								
Menhaden	7,000	210	7,200	216					1,000	40	800	32
Perch	651,000	19,530	588,000	17,540	181,250	3,750	108,500	3,100	1,655	84	1,575	81
Shad												
Spanish mackerel	15,000	1,500	15,300	1,530								
Spots	3,500	105	3,000	90	9,104	366	9,135	700				
Squeteague	247,300	7,419	224,746	6,744	100,414	5,018	95,008	4,750	12,600	505	10,000	400
Striped bass					2,828	282	2,450	245	7,080	580	6,700	550
Sturgeon	147,000	2,940	130,500	2,610	10,332	310	10,000	300				
Other fish	59,000	1,770	44,500	1,335	22,500	675	26,250	795	2,700	108	2,500	100
Oysters	2,211,850	141,615	2,478,350	141,620	4,079,600	216,870	3,006,700	231,560	1,622,600	80,855	1,629,600	89,855
Quahogs (hard clams)	42,000	3,000	51,200	3,200								
Crabs, soft	19,200	1,200	14,400	900								
Terrapins	936	534	1,080	660								
Turtles	25,000	500	26,500	530								
Total	4,775,186	194,207	4,856,104	190,387	4,660,713	230,187	4,428,025	244,060	1,661,035	91,692	1,665,175	91,038
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Species.	Prince William.				Richmond.				Stafford.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	62,000	\$610	70,200	\$790	195,750	\$1,988	150,000	\$1,500	1,264,160	\$10,889	1,053,300	\$9,745
Carp	2,100	68	1,980	64					2,800	140	4,175	208
Catfish	2,050	66	2,710	92	119,750	3,665	94,250	2,907	9,800	302	19,700	591
Eels	1,500	60	1,820	70	4,980	180	4,265	150	2,785	140	2,430	120
Perch	7,315	284	7,865	286	29,812	1,491	21,760	1,088	34,285	1,410	37,242	1,575
Pike									3,920	280	4,820	337
Shad	102,620	2,932	84,400	2,360	183,312	5,237	134,575	3,845	64,400	1,090	55,200	1,805
Squeteague					32,500	1,950	24,375	1,462		750	7,000	
Striped bass	8,649	668	8,490	738	63,000	6,300	52,150	5,215	150	5		
Sturgeon												
Suckers	520	16	720	21	2,175	52	1,845	43	2,340	72	1,955	69
Other fish	3,526	106	4,035	130	27,550	882	20,390	682	5,560	185	6,900	247
Oysters					941,800	48,630	851,200	55,250		600		
Frogs	15,000	1,875	15,600	1,950					75	690	860	
Total	205,280	6,085	207,820	6,510	1,603,629	70,375	1,554,800	72,142	1,398,406	16,328	1,193,412	15,473

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties and species of the yield of the fisheries of Virginia—Continued.

Species.	New Kent.				Norfolk.				Northampton.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	121,992	\$1,172	104,986	\$1,007	97,900	\$3,350	137,280	\$4,640	367,500	\$1,029	1,269,000	\$3,340
Bluefish	20,450	614	17,623	533	—	—	—	—	201,133	5,841	427,640	13,161
Catfish	—	—	—	—	—	—	—	—	—	—	—	—
Cobia or crab-eater	—	—	—	—	—	—	—	—	10,404	252	20,100	293
Croakers	—	—	—	—	82,000	2,800	73,650	2,459	35,000	1,000	31,300	895
Drum	—	—	—	—	—	—	—	—	29,680	263	33,000	275
Eels	—	—	—	—	—	—	—	—	2,360	70	1,700	50
Flounders	—	—	—	—	—	—	—	—	2,835	36	3,420	45
Kingfish and whiting	—	—	—	—	10,000	1,000	7,000	700	4,971	125	3,895	103
Menhaden	—	—	—	—	—	—	—	—	237,213	472	230,000	460
Perch	25,142	748	22,210	666	—	—	—	—	—	—	—	—
Pike	2,016	121	1,943	117	—	—	—	—	—	—	—	—
Pompano	—	—	—	—	—	—	—	—	1,796	101	22,000	2,640
Sea bass	—	—	—	—	—	—	—	—	81,723	913	34,210	995
Shad	196,154	5,714	162,431	4,728	—	—	—	—	78,700	2,207	55,475	2,597
Sheepshead	—	—	—	—	—	—	—	—	572	43	3,400	170
Spanish mackerel	—	—	—	—	—	—	—	—	—	—	—	—
Spots	—	—	—	—	51,015	4,050	46,980	3,729	163,590	7,933	286,000	14,300
Squeteague	—	—	—	—	255,775	6,175	218,650	5,969	420,783	6,418	306,532	5,858
Striped bass	11,946	1,105	9,607	894	—	—	—	—	33,230	1,467	55,200	2,760
Sturgeon	4,754	190	4,280	171	—	—	—	—	2,100	18	1,850	20
Suckers	1,460	44	1,700	53	—	—	—	—	—	—	—	—
Other fish	83,793	2,513	69,327	2,076	—	—	—	—	24,549	548	10,705	378
Oysters	48,300	2,587	50,400	2,700	4,051,677	233,540	4,018,415	228,400	2,599,226	125,774	3,627,792	187,750
Quahogs (hard clam)	—	—	—	—	—	—	—	—	65,280	4,135	63,926	4,040
Crabs, hard	—	—	—	—	—	—	—	—	540,166	18,450	633,430	15,735
Terrapins	1,786	36	1,251	45	—	—	—	—	2,000	800	1,600	700
Total	517,703	14,844	445,818	12,991	4,548,367	250,015	4,496,075	245,807	4,880,359	173,453	7,141,725	236,055

Species.	Northumberland.				Prince George.				Princess Anne.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	1,406,238	\$14,162	2,108,085	\$21,064	151,370	\$1,240	144,675	\$1,197	316,725	\$11,379	316,230	\$11,340
Bluefish	51,495	2,148	78,623	3,130	—	—	—	—	—	—	—	—
Carp	600	30	650	32	—	—	—	—	—	—	—	—
Catfish	81,300	8,252	119,475	4,779	—	—	—	—	220,773	9,230	227,315	9,092
Croakers	2,000	100	1,980	90	—	—	—	—	—	—	—	—
Eels	6,210	200	7,840	325	—	—	—	—	—	—	—	—
Flounders	500	25	610	31	—	—	—	—	—	—	—	—
Kingfish and whiting	30,090,000	54,933	27,262,100	52,532	—	—	—	—	35,000	3,500	34,000	3,409
Menhaden	15,498	775	17,935	897	9,600	480	8,350	417	—	—	—	—
Perch	2,000	100	2,100	105	—	—	—	—	—	—	—	—
Sea bass	653,170	21,195	842,892	27,380	204,092	6,204	188,140	6,091	—	—	—	—
Shad	2,000	100	1,925	96	—	—	—	—	—	—	—	—
Sheepshead	—	—	—	—	—	—	—	—	—	—	—	—
Spanish mackerel	14,350	718	17,385	869	—	—	—	—	86,250	8,000	91,980	9,168
Spots	54,644	2,492	74,050	3,331	—	—	—	—	35,000	2,450	32,419	2,289
Squeteague	66,687	5,468	75,733	6,073	14,100	1,130	12,250	970	589,892	18,471	644,825	16,308
Striped bass	34,080	1,248	70,250	2,574	28,730	1,058	26,580	803	—	—	—	—
Sturgeon	143,141	2,644	174,126	3,184	14,280	425	11,500	340	47,600	1,448	27,980	854
Other fish	2,135,000	121,647	2,028,700	120,160	—	—	—	—	87,607	27,825	89,039	28,450
Oysters	24,400	180	25,500	185	—	—	—	—	668,645	5,300	675,000	5,350
Crabs, hard	38,800	2,155	39,600	2,360	—	—	—	—	—	—	—	—
Crabs, soft	—	—	—	—	19,250	650	21,175	802	—	—	—	—
Terrapins	—	—	—	—	—	—	—	—	—	—	—	—
Total	34,810,214	283,567	32,939,600	250,116	441,422	11,100	410,730	10,710	2,087,402	88,203	2,139,808	86,238

Statement by counties and species of the yield of the fisheries of Virginia—Continued.

Species.	Surry.				Warwick.				Westmoreland.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives					68,300	\$512	53,300	\$400	1,167,000	\$9,875	1,047,100	\$10,267
Bluefish					25,795	1,289	20,906	1,045	61,200	3,060	8,325	416
Catfish	292,314	\$7,225	220,852	\$5,808	17,737	751	21,410	878	19,400	726	32,200	1,102
Croakers												
Eels									4,820	250	5,180	265
Menhaden									76,800	96	68,000	85
Perch	9,200	460	7,500	375					11,420	571	14,725	736
Shad	202,765	8,364	152,834	6,375	16,800	480	12,810	366	210,900	6,157	190,865	5,114
Spanish mackerel					1,200	75	2,000	120				
Spots					13,865	579	12,278	491				
Squeteague					26,607	1,120	25,631	1,077	64,300	3,265	32,840	1,642
Striped bass	12,000	1,200	9,265	926	1,000	106	1,300	130	38,200	3,008	17,955	1,436
Sturgeon	16,572	705	13,276	536								
Suckers	4,900	118	5,530	135					13,180	385	15,200	445
Other fish	16,980	473	13,100	381	16,437	716	8,291	379	28,580	1,574	30,835	1,692
Oysters					963,060	87,056	906,703	34,298	583,485	42,755	516,250	43,650
Crabs, hard									70,000	625	68,640	818
Crabs, soft									600	80	1,040	104
Frogs									600	100	600	110
Total	554,731	18,605	431,357	14,536	1,150,801	42,684	1,154,719	39,184	2,356,485	72,617	2,049,875	67,882
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Species.	York.						Total for State.					
	1890.		1891.		1890.		1890.		1891.			
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.		
Alewives	75,000	\$750	50,000	\$500	10,641,698	\$91,674	11,013,485	\$93,905				
Bluefish	32,000	960	25,000	750	1,471,671	57,195	1,842,264	67,545				
Carp					8,735	385	13,370	576				
Catfish					939,902	27,833	935,244	28,487				
Cobia, or crab-eater					194,537	4,798	195,250	4,948				
Croakers	16,700	530	25,300	903	1,124,525	38,615	1,075,090	36,847				
Drum					186,950	4,154	179,502	4,011				
Eels					71,930	3,019	71,619	2,907				
Flounders	27,700	1,065	23,000	890	126,135	4,209	127,265	4,109				
Kingfish and whiting	3,000	60	3,000	60	168,056	7,920	149,565	7,097				
Menhaden					107,341,713	209,588	105,980,334	197,523				
Mullet					104,500	2,555	110,760	2,730				
Perch					491,014	19,865	468,833	18,809				
Pike					16,558	1,039	12,415	795				
Pompano					86,246	8,466	93,700	9,520				
Sea bass					61,323	2,044	66,310	2,270				
Shad	62,415	1,630	53,665	1,450	7,266,207	228,897	6,498,242	207,394				
Sheepshead					22,775	1,266	23,871	1,344				
Spanish mackerel					648,793	47,161	739,910	50,750				
Spots	30,000	970	30,300	945	651,473	25,426	650,157	25,275				
Squeteague	127,500	4,125	116,000	3,460	4,072,304	130,740	3,929,899	124,645				
Striped bass	6,000	600	3,350	335	529,159	47,202	483,436	42,127				
Sturgeon	10,000	150	10,000	150	817,070	24,514	723,646	21,364				
Suckers					118,067	3,190	116,364	3,153				
Other fish	38,600	1,240	32,100	963	1,748,889	45,139	1,641,657	42,005				
Oysters	1,751,821	83,189	1,717,702	72,185	42,518,174	2,482,648	48,134,602	2,524,348				
Quahogs (hard clams)	103,920	6,495	103,638	6,480	551,888	36,815	559,278	36,030				
Crabs, hard					2,584,794	28,210	2,308,071	32,683				
Crabs, soft					440,340	26,054	585,956	29,379				
Crawfish							833	75				
Frogs					20,232	2,055	21,000	2,754				
Terrapins	3,150	2,700	3,150	2,700	52,519	19,068	52,215	18,494				
Turtles	5,000	150	5,000	150	203,928	4,279	189,121	3,934				
Total	2,292,206	104,614	2,201,205	91,921	185,282,705	3,636,351	183,993,834	3,647,845				

The products taken with the different appliances.—The following tables, relating to the vessel fisheries and the boat fisheries, respectively, show the quantity and value of the products resulting from the use of each of the important forms of apparatus. Separate figures are given for each county; the data relate to 1890 and 1891.

Vessels are employed in the fisheries of 17 counties in Virginia, in all of which oysters constitute a conspicuous part of the yield. In Lancaster and Northumberland counties menhaden are the most valuable products taken. The aggregate value

of the vessel fisheries of the State in 1891 was \$814,792, of which sum oysters represented \$626,607 and fish \$188,185. The output of oysters was 1,643,931 bushels, of which 490,230 bushels were taken with dredges and 1,153,701 bushels with tongs. The value of the vessel fisheries of Accomac and Norfolk counties was \$427,022, or more than that of all the other counties combined.

The value of the shore fisheries of Virginia was \$2,833,053. Omitting from consideration the apparatus used in taking oysters, it appears from the table that pound nets are much more important means of capture than any other appliances. These caught 23,796,835 pounds of fish in 1891, for which the fishermen received \$471,560. The combined yield of fish by all other apparatus was 12,592,943 pounds, valued at \$340,403. Alewives, menhaden, and shad constitute about two-thirds the quantity and more than one-third the value of the catch. Gill nets rank next to pound nets, followed by lines, seines, fyke nets, weirs, and pots. The shad is the most valuable fish in the pound-net and gill-net fisheries, the squeteague in the seine and line fisheries, and the striped bass in the fyke-net fishery.

Statement by counties, apparatus, and species of the yield of the vessel fisheries of Virginia.

Counties.	Seines.								Lines.			
	Bluefish.				Menhaden.				Bluefish.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Accomac					92,930,700	\$57,614	24,620,700	\$41,155				
Elizabeth City.....					11,715,000	19,525	10,800,000	18,000				
Lancaster.....					29,340,000	70,275	40,365,000	79,143				
Norfolk.....									1,650	\$50	10,000	\$400
Northumberland.....			10,000	\$300	27,360,000	50,250	24,000,000	47,750			35,000	1,050
Total			10,000	\$300	101,354,700	107,604	100,685,700	186,048	1,650	50	45,000	1,450
Lines.												
Counties.	Cronkers.				Spots.				Squeteague.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
	2,500	\$100	5,650	\$160	1,015	\$50	980	\$49	5,775	\$175	5,650	\$169
Total.....	2,500	100	5,650	160	1,015	50	980	49	5,775	175	5,650	169
Oysters by tongs.												
Counties.	1890.				1891.				1890.			
	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
	203,740	\$32,875	244,495	\$40,740	420,810	\$168,470	343,240	\$182,600	258,050	\$204,405	258,780	56,738
Accomac	45,000	21,575	48,400	21,280	34,960	17,080	37,240	17,458	23,800	24,985	2,450	2,250
Elizabeth City.....	56,930	22,009	65,450	24,065							10,957	8,412
Gloucester.....	5,000	2,450	5,000	2,250							6,100	5,570
Henrico	35,620	10,957	29,400	8,412							72,235	82,813
Isle of Wight	15,300	6,100	15,700	5,570							8,055	8,640
King William	2,500	1,060	4,700	1,970	2,000	900	2,000	800	1,200	1,950	2,010	
Lancaster.....	14,850	6,645	18,600	7,440	4,900	2,310	3,000				34,205	35,005
Mathews	4,200	1,950	4,100	2,010							107,455	102,527
Middlesex.....	86,800	34,205	92,800	35,005							19,665	20,375
Nansemond.....	408,161	163,930	407,570	161,090	7,000	3,150					79,225	78,700
Norfolk.....	62,750	15,565	90,300	24,285	7,900	4,000	10,050	5,690	20,030		2,270	1,250
Northampton.....	000	270	1,600	720	70,900	28,705	66,600				8,252	7,515
Northumberland.....	5,600	2,270	2,800	1,250							16,310	16,500
Richmond	22,000	8,252	23,700	7,545	30,705	16,310	27,500	16,500			33,785	27,297
Warwick	107,800	33,785	98,080	27,297								
Total	1,076,351	364,498	1,153,701	372,429	588,175	241,534	490,230	254,178	804,071			

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia.

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Accomac.				Alexandria.				Caroline.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pots and spears:												
Eels	4,200	\$210	3,500	\$175	...	...	...	...	...	...	...	...
Miscellaneous:												
Oysters	5,079,438	411,368	5,064,360	345,070	...	...	...	...	...	...	...	...
Quahogs	280,388	18,915	291,160	19,035	...	...	...	...	...	...	...	...
Crabs, hard	93,333	840	86,666	780	...	...	...	...	...	...	...	...
Crabs, soft	305,200	14,475	450,916	18,015	...	...	...	...	...	...	...	...
Terrapins	11,070	5,690	9,930	5,480	...	...	...	...	...	...	...	...
Total	5,769,409	451,288	5,903,032	388,380	...	...	...	...	...	...	...	...
Grand total	8,500,649	522,661	8,854,757	467,118	635,800	\$11,850	669,510	\$11,368	85,700	\$2,209	91,045	\$2,413
Apparatus and species.	Isle of Wight.				James City.				King and Queen.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	600	\$24	800	\$32	10,828	\$97	9,671	\$87	78,300	\$780	65,250	\$652
Catfish	2,200	100	8,940	190	526	16	455	14	18,250	540	15,000	460
Perch					931	27	854	25	14,500	435	12,500	375
Shad					319	28	266	21	4,520	452	5,315	531
Striped bass					975	39	820	33				
Sturgeon												
Suckers	3,840	115	4,120	120	700	21	665	20				
Other fish	5,960	265	9,940	410								
Total	12,600	504	18,800	752	14,279	226	12,731	200	115,570	2,218	98,005	2,008
Gill nets:												
Alewives					9,500	86	8,000	78				
Menhaden	150,000	350	150,000	350								
Mullet	8,000	480	9,000	540								
Perch	31,000	1,800	25,000	1,500	15,783	603	12,147	455	7,020	285	5,000	100
Pike					1,206	72	1,155	69				
Shad	198,875	8,437	157,500	6,750	131,250	3,828	112,044	3,455	178,920	5,332	142,618	4,251
Striped bass	62,000	6,200	50,000	5,000	4,310	345	3,493	278	930	74	700	00
Sturgeon					80,550	8,037	63,240	2,218				
Suckers					16,962	459	13,500	400	10,910	315	9,800	265
Other fish					17,900	530	13,106	379	8,660	170	7,000	160
Total	447,875	17,327	391,500	14,140	277,461	8,980	227,885	7,332	207,040	6,176	165,118	4,926
Fyke nets:												
Alewives	5,000	50	8,500	35								
Catfish	5,000	225	4,500	200	6,288	180	5,753	176	8,870	251	7,958	229
Croakers					7,005	282	7,995	318				
Perch	2,500	150	2,000	120	8,076	311	8,025	307	3,528	106	3,072	110
Squeteague					9,000	880	8,190	927				
Striped bass	3,750	375	8,000	300	9,248	924	8,559	855	2,232	228	1,330	184
Suckers					870	26	1,056	82	2,028	79	3,168	95
Other fish	1,500	45	1,500	45								
Total	17,750	845	14,500	700	40,488	2,092	39,587	2,015	16,758	659	16,632	618
Lines:												
Catfish	11,250	562	9,000	450								
Croakers	125,000	5,000	122,000	4,880								
Drum	1,875	93	1,500	75								
Perch	4,975	202	3,500	210								
Sheepshead	8,125	187	2,500	150								
Spots	17,750	712	15,500	590								
Squeteague	40,875	1,531	33,500	1,285								
Striped bass	3,750	375	3,000	300								
Other fish	18,750	637	16,200	550								
Total	226,252	9,359	206,700	8,490								
Pots and spears:												
Eels	3,125	312	2,500	250								
Miscellaneous:												
Oysters	571,000	31,785	574,749	32,601	122,500	7,300	126,000	7,500	52,500	3,000	52,150	3,080
Turtles					362	7	460	0				
Total	571,000	31,785	574,749	32,601	122,802	7,307	126,400	7,509	52,500	3,000	52,150	3,080
Grand total	1,279,292	60,132	1,208,749	56,933	455,090	18,585	406,603	17,056	391,803	12,048	331,965	10,632

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Charles City.				Chesterfield.				Dinwiddie.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	150,961	\$1,021	149,654	\$1,010	45,000	\$450	35,000	\$350	32,000	\$70	30,000	\$65
Catfish	12,000	360	13,000	390	25,000	500	24,000	480	.....	.....	.....	.....
Perch	25,720	892	24,705	856	20,000	600	15,000	450	31,734	816	28,000	720
Shad	99,092	2,551	95,161	1,678	.....	.....	.....	.....	.....	.....	.....	.....
Striped bass	6,419	634	6,226	615	5,000	500	4,000	400	.....	.....	.....	.....
Sturgeon	1,401	56	1,320	53	.....	.....	.....	.....	.....	.....	.....	.....
Other fish	98,920	2,038	83,915	1,738	17,000	660	15,000	450	10,500	200	10,000	190
Total	394,513	7,552	343,981	6,340	112,000	2,710	93,000	2,130	74,234	1,086	68,000	975
Gill nets:												
Alewives	150,000	1,500	150,000	1,500	350,000	2,550	325,000	2,300	12,000	20	10,000	25
Catfish	.....	.....	.....	.....	2,800	70	2,500	62	.....	.....	.....	.....
Perch	6,664	200	3,610	108	45,000	1,350	47,000	1,310	.....	.....	.....	.....
Pike	5,608	336	1,532	92	3,810	230	2,965	180	.....	.....	.....	.....
Shad	301,175	8,301	254,420	7,550	109,375	2,812	76,562	1,868	10,500	270	9,334	240
Striped bass	4,505	361	1,796	144	.....	.....	.....	.....	.....	.....	.....	.....
Sturgeon	37,300	1,225	33,200	940	.....	.....	.....	.....	.....	.....	.....	.....
Other fish	122,158	3,035	117,626	2,929	100,390	1,960	94,535	1,808	1,100	19	1,100	19
Total	627,408	15,048	562,184	13,263	617,375	8,972	548,562	7,528	24,200	315	20,434	284
Lines:												
Catfish	3,300	100	3,500	105	.....	.....	.....	.....	.....	.....	.....	.....
Striped bass	7,000	700	6,500	650	.....	.....	.....	.....	.....	.....	.....	.....
Total	10,300	800	10,000	755	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous:												
Turtles	530	11	660	13	.....	.....	.....	.....	.....	.....	.....	.....
Grand total	1,032,751	23,411	916,825	20,371	729,375	11,682	641,562	9,058	98,434	1,401	88,434	1,259
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Apparatus and species.	King George.				King William.				Lancaster.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	130,000	\$1,300	120,500	\$1,455	.....	.....	.....	.....	.....	.....	.....	.....
Catfish	1,650	50	3,500	117	.....	.....	.....	.....	.....	.....	.....	.....
Perch	4,000	200	5,200	260	.....	.....	.....	.....	.....	.....	.....	.....
Shad	26,250	750	18,000	550	.....	.....	.....	.....	.....	.....	.....	.....
Striped bass	10,000	800	12,700	1,016	.....	.....	.....	.....	.....	.....	.....	.....
Other fish	28,000	1,400	25,800	1,290	.....	.....	.....	.....	.....	.....	.....	.....
Total	199,900	4,500	185,700	4,088	.....	.....	.....	.....	.....	.....	.....	.....
Pound nets:												
Alewives	658,895	7,591	506,663	6,056	20,000	\$200	25,000	\$250	613,000	\$4,215	620,225	\$4,202
Bluefish	.....	.....	.....	.....	.....	.....	.....	.....	73,537	4,438	70,000	4,200
Carp	1,100	55	1,260	63	.....	.....	.....	.....	17,800	715	16,320	662
Catfish	13,500	397	15,520	488	3,500	105	3,300	99	.....	.....	.....	.....
Croakers	4,060	167	4,230	165	.....	.....	.....	.....	11,140	340	10,080	310
Eels	.....	.....	.....	.....	.....	.....	.....	.....	360,000	720	375,000	750
Flounders	.....	.....	.....	.....	.....	.....	.....	.....	12,000	960	10,000	800
Menhaden	.....	.....	.....	.....	.....	.....	.....	.....	14,716	1,177	14,000	1,120
Perch	12,800	640	14,500	725	.....	.....	.....	.....	374,142	15,729	373,867	15,685
Shad	106,330	3,038	113,654	2,845	6,184	159	5,250	135	606,665	24,091	610,750	24,480
Spanish mackrel	.....	.....	.....	.....	.....	.....	.....	.....	126,505	3,047	120,000	2,903
Spots	.....	.....	.....	.....	.....	.....	.....	.....	12,000	960	10,000	800
Squeteague	26,160	2,180	9,440	772	2,000	200	2,300	230	14,716	1,177	14,000	1,120
Striped bass	2,185	68	1,880	57	.....	.....	.....	.....	49,441	2,180	47,425	1,985
Sturgeon	8,510	255	9,390	282	.....	.....	.....	.....	.....	.....	.....	.....
Suckers	37,445	1,988	49,080	2,585	.....	.....	.....	.....	126,505	3,047	120,000	2,903
Total	870,985	16,379	725,617	14,038	31,684	684	35,850	714	2,258,046	57,612	2,268,267	57,097
Gill nets:												
Shad	105,000	3,000	84,000	2,400	308,700	9,262	246,960	7,409	.....	.....	.....	.....
Lines:												
Catfish	.....	.....	.....	.....	80,200	2,640	84,020	2,530	.....	.....	.....	.....
Striped bass	.....	.....	.....	.....	5,680	508	6,275	628	.....	.....	.....	.....
Total	.....	.....	.....	.....	91,880	3,208	90,895	3,107	.....	.....	.....	.....
Miscellaneous:												
Oysters	4,200	30	4,100	32	13,800	09	15,300	77	.....	.....	.....	.....
Crabs, hard	.....	.....	.....	.....	.....	.....	.....	.....	81,440	8,144	80,000	8,000
Crabs, soft	4,032	605	4,050	603	.....	.....	.....	.....	.....	.....	.....	.....
Frogs	8,232	635	8,210	640	34,800	1,419	36,300	1,277	5,380,440	293,944	5,310,500	356,600
Total	.....	.....	.....	.....	.....	.....	.....	.....	12,567	7,639,380	351,556	7,587,767
Grand total	1,184,117	24,514	1,003,527	21,766	487,064	14,553	410,005	12,567	7,639,380	351,556	7,587,767	413,697

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Elizabeth City.				Essex.				Fairfax.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives												
Bluefish	7,800	\$390	4,500	\$225	8,000	\$80	7,000	\$70	609,650	\$3,872	93,610	\$980
Carp												
Catfish					5,000	150	2,500	75	1,335	60	1,045	47
Drum	1,200	60	600	30					12,000	480	10,875	435
Eels												
Mullet	12,000	240	8,500	170								
Perch												
Shad												
Spots	2,300	69	1,500	45								
Squeteague	3,500	105	2,500	75								
Striped bass	2,000	200	1,500	150	500	50	400	40	3,435	275	3,000	293
Sturgeon												
Suckers												
Other fish	4,100	82	2,300	46	4,000	200	4,000	200	7,165	215	6,000	190
Total	32,900	1,146	21,400	741	17,500	480	13,900	385	905,960	13,882	303,808	9,130
Pound nets:												
Alewives	151,130	1,511	100,000	1,060	150,000	1,500	120,000	1,200	108,000	1,080	223,966	2,669
Bluefish	114,666	5,833	70,000	3,800								
Carp					90,000	2,700	60,000	2,070	28,000	840	2,800	104
Catfish												
Cobia or crab-eater	24,333	436	18,250	365								
Croakers	62,660	1,880	47,350	1,420								
Drum	34,395	1,030	29,840	895								
Eels	8,560	350	7,320	290	3,800	150	3,281	130				
Flounders	28,315	850	27,100	715								
Kingfish and whiting	65,300	1,960	53,000	1,500								
Menhaden	864,000	1,728	612,000	1,224								
Perch					23,850	1,170	17,400	870	12,600	630	25,400	1,166
Pompano	49,600	4,960	37,200	3,720								
Shad	508,111	20,506	428,165	14,680	22,050	630	15,750	450	13,335	381	10,520	269
Sheepshead	8,933	446	6,700	335								
Spanish mackerel	155,333	15,533	116,500	11,650								
Spots	44,500	1,335	35,500	1,065								
Squeteague	166,330	5,000	117,250	3,518	26,400	1,320	19,500	990				
Striped bass	14,400	1,440	10,900	1,090	45,000	3,840	36,000	2,880	3,500	280	7,560	604
Sturgeon	298,660	8,960	224,000	6,720								
Suckers												
Other fish	111,380	1,900	67,740	1,190	18,335	530	12,269	347	4,200	126	6,000	187
Total	2,800,600	75,798	2,020,815	55,327	391,200	12,000	295,650	9,000	266,635	4,587	363,786	7,628
Gill nets:												
Shad					203,752	5,821	161,700	4,620	200,700	5,213	149,704	3,775
Striped bass					5,350	535	6,100	610	2,100	210	700	70
Sturgeon					16,500	330	5,500	110				
Total					225,602	6,686	173,300	5,340	202,800	5,423	150,404	8,845
Fyke nets:												
Alewives					1,200	12	800	8				
Catfish					1,400	84	1,500	9				
Croakers	2,800	84	2,000	60								
Flounders					300	12	200	8				
Perch	5,250	157	4,500	135	2,600	118	3,300	159				
Shad					1,750	45	1,050	27				
Spots	4,200	120	3,500	105								
Squeteague	6,800	204	5,000	150								
Striped bass					2,000	140	2,800	106				
Suckers	2,000	40	3,000	60	1,600	40	1,000	30				
Other fish					1,200	36	700	21				
Total	21,050	611	18,000	510	12,050	487	11,350	530				
Lines:												
Bluefish	80,820	1,160	93,070	1,360								
Catfish					22,000	550	21,780	653				
Croakers	410,410	12,414	380,000	11,400								
Drum	36,310	725	30,842	616								
Flounders	14,565	490	16,000	520								
Sea bass	13,240	410	15,000	490								
Sheepshead	1,100	75	1,260	85								
Spots	255,125	7,653	205,000	7,950								
Squeteague	842,500	25,275	876,000	26,250								
Other fish	21,700	652	27,000	837								
Total	1,631,770	48,934	1,645,572	49,508	22,000	550	21,780	653				

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Elizabeth City.				Essex.				Fairfax.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pots and spears:												
Eels					1,500	\$75	1,825	\$90				
Miscellaneous:												
Oysters	2,152,500	\$123,750	2,275,000	\$130,250	262,500	15,000	315,000	15,000				
Quahogs	40,000	3,000	29,088	2,000	.....	.....	.....	.....
Crabs, hard	1,057,250	6,768	679,375	8,690	.....	.....	.....	.....
Crawfish											833	\$75
Turtles	150,250	3,125	136,250	2,725	.....	.....	.....	.....
Total	3,406,000	146,041	3,119,713	143,071	262,500	15,000	315,000	15,000			833	75
Grand total.	7,892,326	273,130	6,825,500	249,757	932,352	35,278	832,805	31,007	1,375,404	\$28,892	818,831	20,078
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Apparatus and species.	Mathews.				Middlesex.				Nansemond.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Mullet	7,000	\$210	7,200	\$216	.....	.....	.....	.....	.....	.....	.....	.....
Other fish	3,000	00	3,000	90	.....	.....	.....	.....	.....	.....	.....	.....
Total	10,000	300	10,200	306	.....	.....	.....	.....	.....	.....	.....	.....
Pound nets:												
Alewives	550,400	5,504	535,000	4,350	304,625	\$2,916	270,000	\$2,010	.....	.....	.....	.....
Bluefish	158,000	4,700	175,000	5,250	.....	.....	.....	.....	.....	.....	.....	.....
Cobia or crab-eater	85,000	2,550	95,000	2,850	.....	.....	.....	.....	.....	.....	.....	.....
Menhaden	550,000	1,100	462,534	924	.....	.....	.....	.....	.....	.....	.....	.....
Shad	651,000	19,530	588,000	17,540	131,250	8,750	108,500	3,100	990	\$50	875	\$45
Spanish mackerel	15,000	1,500	15,300	1,530	.....	.....	.....	.....	.....	.....	.....	.....
Spots	244,000	7,320	221,000	6,630	100,414	5,018	95,000	4,750	800	80	700	70
Squeteague .....	.....	.....	.....	.....	2,828	282	2,450	245	.....	.....	.....	.....
Striped bass	147,000	2,940	130,500	2,610	10,332	810	10,000	800	2,700	108	2,500	100
Other fish	55,000	1,050	40,000	1,200	22,500	675	26,250	795	.....	.....	.....	.....
Total	2,455,400	46,794	2,262,334	42,884	581,118	13,317	521,325	12,500	4,400	238	4,075	215
Gill nets:												
Alewives	3,000	80	3,800	38	.....	.....	.....	.....	.....	.....	.....	.....
Spots	3,500	105	3,000	90	.....	.....	.....	.....	.....	.....	.....	.....
Squeteague	3,300	99	3,740	114	.....	.....	.....	.....	.....	.....	.....	.....
Other fish	1,000	30	1,500	45	.....	.....	.....	.....	.....	.....	.....	.....
Total	10,800	264	12,040	287	.....	.....	.....	.....	.....	.....	.....	.....
Fyke nets:												
Alewives .....	.....	.....	.....	.....	.....	.....	.....	.....	4,450	128	4,000	120
Croakers .....	.....	.....	.....	.....	.....	.....	.....	9,550	892	10,000	400	400
Perch .....	.....	.....	.....	.....	.....	.....	.....	1,000	40	800	32	32
Shad .....	.....	.....	.....	.....	.....	.....	.....	665	34	700	36	36
Squeteague .....	.....	.....	.....	.....	.....	.....	.....	12,600	505	10,000	400	400
Striped bass .....	.....	.....	.....	.....	.....	.....	.....	6,280	500	6,000	480	480
Total .....	.....	.....	.....	.....	.....	.....	.....	34,545	1,599	31,500	1,408	1,408
Miscellaneous:												
Oysters	2,073,600	132,060	2,327,150	132,980	4,050,200	214,920	3,878,000	229,550	1,015,000	55,650	980,000	53,750
Quahogs	42,000	8,000	51,200	3,200	.....	.....	.....	.....	.....	.....	.....	.....
Crabs, soft	19,200	1,200	14,400	900	.....	.....	.....	.....	.....	.....	.....	.....
Terrapins	936	534	1,080	660	.....	.....	.....	.....	.....	.....	.....	.....
Turtles	25,000	500	26,500	580	.....	.....	.....	.....	.....	.....	.....	.....
Total	2,160,736	137,894	2,420,330	138,270	4,050,200	214,920	3,878,000	229,550	1,015,000	55,650	980,000	53,750
Grand total.	4,036,936	185,252	4,704,904	181,747	4,031,313	228,297	4,390,325	242,050	1,054,035	57,487	1,015,875	55,433

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Gloucester.				Hanover.				Henrico.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives									43,000	\$230	65,000	\$350
Catfish									8,960	182	8,000	160
Mullet	15,000	\$375	18,000	\$450								
Perch									4,540	138	5,000	150
Squeteague	12,000	360	15,000	450								
Striped bass									3,000	200	2,000	200
Other fish	3,000	90	5,000	150					2,500	150	2,000	80
Total	30,000	825	38,000	1,050					62,000	900	82,000	940
Pound nets:												
Alewives	430,500	4,305	435,500	4,355								
Bluefish	39,800	1,194	40,800	1,224								
Cobia or crab-eater												
Croakers	50,000	1,000	45,000	900								
Drum	38,500	1,155	38,000	1,140								
Kingfish and whiting	8,000	320	8,500	340								
Menhaden	20,000	600	15,000	450								
Pompano	500,000	1,000	500,000	1,000								
Shad	25,000	2,500	23,000	2,300								
Spanish mackerel	492,100	14,762	522,784	15,718								
Spots												
Squeteague	25,000	2,500	35,000	3,500								
Sturgeon	10,000	400	18,000	720								
Other fish	75,800	2,274	70,800	2,124								
Total	1,830,700	34,635	1,883,384	36,616								
Gill nets:												
Alewives	25,000	250	20,000	200					280,000	2,300	275,000	2,250
Bluefish	13,000	390	14,500	435								
Catfish									1,000	30	800	22
Shad	3,500	100	2,800	80	81,900	\$2,457	65,520		45,000	1,350	18,084	1,410
Squeteague	18,000	540	16,500	495					1,968	17,500	450	465
Suckers										4,000	120	4,200
Other fish									90,000	1,800	88,900	1,720
Total	50,500	1,280	53,800	1,210	81,900	2,457	65,520	1,968	417,500	6,050	433,584	5,995
Fyke nets:												
Catfish	5,000	150	5,400	162								
Croakers	4,500	135	5,800	150								
Flounders	8,200	160	4,200	210								
Perch	4,100	164	2,900	118								
Shad	3,500	90	3,500	90								
Spots	6,300	189	5,200	156								
Squeteague	8,300	249	7,500	225								
Striped bass	1,850	185	1,650	165								
Total	36,750	1,322	35,050	1,283								
Weirs:												
Alewives									11,500	115	10,000	100
Shad									130	5	118	4
Suckers									18,985	380	20,000	400
Other fish									22,500	588	25,000	625
Total									53,115	1,088	55,110	1,129
Lines:												
Bluefish	2,700	76	2,300	69								
Croakers	1,400	42	1,000	30								
Spots	1,300	39	1,200	36								
Squeteague	2,500	75	2,000	60								
Total	7,900	232	6,500	195								
Miscellaneous:												
Oysters	2,065,000	136,976	1,995,567	119,618								
Quahogs	20,320	1,270	20,256	1,266								
Crabs, hard	114,000	950	120,000	1,000								
Terrapins	16,113	8,602	15,280	8,152								
Turtles	15,000	450	19,000	402								
Total	2,230,433	148,338	2,170,103	130,408								
Grand total	4,204,283	186,632	4,187,437	170,752	81,900	2,457	65,520	1,968	532,615	8,038	570,700	8,064

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	New Kent.				Norfolk.				Northampton.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives	121,932	\$1,172	104,986	\$1,007								
Bluefish					51,250	\$1,800	50,000	\$1,750	33,210	\$1,028	24,000	\$720
Catfish	15,800	474	13,200	400								
Croakers					30,000	1,200	25,000	1,000				
Kingfish and whiting					10,000	1,000	7,000	700	2,240	57	1,685	40
Perch	18,493	555	16,220	489					2,103	85	1,575	67
Shad	4,050	116	3,703	105					9,040	190	6,700	134
Spots					10,000	800	8,000	640	17,380	518	11,000	375
Squeteague					100,000	3,000	95,000	2,850			4,360	220
Striped bass	7,777	747	6,506	625							3,100	155
Sturgeon	4,754	190	4,280	171								
Other fish	3,240	97	3,160	94					3,860	67	1,615	26
Total	176,106	3,351	152,155	2,891	201,250	7,800	185,000	6,940	72,793	2,160	49,075	1,517
Pound nets:												
Alewives									367,500	1,029	1,269,000	3,340
Bluefish									147,923	4,068	380,000	11,600
Cobia or crab-eater												
Eels									19,404	252	20,100	293
Drum									2,380	70	1,700	50
Flounders									20,680	263	33,000	275
Kingfish and whiting									2,835	36	3,420	45
Menhaden												
Pompano									2,731	68	2,210	63
Sea bass									237,213	472	230,000	460
Shad									1,796	191	22,000	2,640
Sheepshead									1,113	8	1,340	10
Spanish mackerel									68,712	1,766	46,200	2,200
Spots									572	43	8,400	170
Squeteague												
Striped bass									163,500	7,933	286,000	14,300
Sturgeon									1,848	28	2,020	41
Other fish									352,388	4,099	231,082	3,550
Total									19,390	773	44,000	2,200
Gill nets:									2,100	18	1,950	20
Perch	4,684	140	3,850	116					5,819	132	2,060	60
Pike	2,016	121	1,943	117								
Shad	192,104	5,598	158,728	4,624								
Striped bass	2,920	234	2,082	167								
Other fish	80,553	2,416	66,167	1,962								
Total	282,286	8,509	232,770	7,006								
Fyke nets:												
Catfish	4,650	140	4,423	133								
Perch	1,965	53	2,040	61								
Shad									7,945	356	7,700	330
Squeteague									10,015	801	9,450	283
Striped bass	1,240	124	1,019	102					9,480	474	8,100	405
Suckers	1,460	44	1,760	53								
Other fish									10,610	214	8,600	172
Total	9,315	361	9,242	349					38,050	1,345	33,850	1,190
Lines:												
Bluefish					45,000	1,500	52,280	1,840	20,000	750	23,640	841
Croakers					49,500	1,500	43,000	1,290	35,000	1,000	31,360	895
Sea bass									30,610	905	32,870	985
Spots					40,000	3,200	38,000	3,040	5,000	250	4,000	200
Squeteague					150,000	3,000	118,000	2,050	50,000	1,500	55,000	1,650
Other fish									4,260	135	8,890	120
Total					284,500	9,200	251,280	9,120	144,870	4,540	150,760	4,691
Miscellaneous:												
Oysters	48,300	2,587	50,400	2,700	1,145,550	66,460	1,160,425	67,310	2,104,676	106,209	2,921,142	137,781
Quahogs									65,280	4,135	63,936	4,049
Crabs, hard.									540,108	13,450	633,430	16,735
Terrapins									2,000	800	1,000	700
Turtles	1,786	36	1,251	45								
Total	50,060	2,623	51,651	2,745	1,145,550	66,460	1,160,425	67,310	2,712,122	124,504	3,620,108	158,265
Grand total	517,703	14,844	445,818	12,991	1,631,300	82,460	1,598,705	83,370	4,394,809	153,888	6,435,075	206,980

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Northumberland.				Prince George.				Princess Anne.				
	1890.		1891.		1890.		1891.		1890.		1891.		
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	
Seines:													
Alewives					2,870	\$29	2,675	\$27	175,000	\$6,125	165,320	\$5,786	
Bluefish													
Carp	600	\$30	650	\$32									
Croakers									108,773	4,750	112,315	4,492	
Kingfish and whiting													
Shad					18,592	557	16,275	552	35,000	3,500	34,090	3,409	
Spots	2,400	120	2,600	130					35,000	2,450	32,419	2,269	
Squeteague	5,000	250	5,120	256					353,714	12,399	402,325	10,058	
Striped bass	12,000	600	12,100	605									
Other fish					10,000	800	8,000	240	1,400	50	1,940	58	
Total	20,000	1,000	20,470	1,023	81,462	886	26,950	810	708,887	29,274	748,400	26,072	
Pound nets:													
Alewives	1,406,238	14,102	2,108,085	21,064									
Bluefish	46,495	1,893	58,773	2,588					130,000	4,550	140,000	4,900	
Catfish	81,300	3,252	119,475	4,779									
Croakers									112,000	4,480	115,000	4,600	
Eels	6,210	280	7,840	325									
Menhaden	2,730,000	4,683	2,362,100	4,782									
Perch	15,499	775	17,935	897									
Shad	653,170	21,135	842,892	27,380									
Spanish mackerel													
Spots	1,950	98	3,185	159					85,000	8,500	90,460	9,046	
Squeteague	36,644	1,502	55,650	2,411					225,000	5,625	230,000	5,750	
Striped bass	44,037	4,468	59,583	5,958									
Sturgeon	34,080	1,248	70,250	2,574									
Other fish	141,641	2,569	172,601	3,108					45,000	1,350	24,540	730	
Total	5,107,914	56,135	5,878,369	76,025					597,000	24,505	600,000	25,032	
Gill nets:													
Alewives					148,500	1,220	142,000	1,170					
Bluefish						9,600	480	8,350	417	11,725	704	10,900	654
Perch					185,500	5,647	169,865	5,539					
Shad													
Spanish mackerel									1,250	100	1,500	120	
Squeteague									11,178	447	12,500	500	
Striped bass					14,100	1,130	12,250	970					
Sturgeon					28,730	1,058	26,580	893					
Other fish					4,280	125	3,560	100	1,200	48	1,500	60	
Total					390,710	9,080	362,605	9,080	25,353	1,209	26,400	1,384	
Lines:													
Bluefish	5,000	250	4,850	242									
Croakers	2,000	100	1,980	99									
Flounders	500	25	610	31									
Sea bass	2,000	100	2,100	105									
Sheepshead	2,000	100	1,925	96									
S.ots	10,000	500	11,600	580									
Squeteague	13,000	650	13,280	604									
Striped bass	4,000	400	4,100	410									
Other fish	1,500	75	1,525	76									
Total	40,000	2,200	41,970	2,303									
Miscellaneous:													
Oysters	1,634,500	92,672	1,546,300	89,510					87,607	27,825	89,099	28,450	
Crabs, hard	23,400	180	25,500	105					668,645	5,300	675,000	5,350	
Crabs, soft	33,900	2,155	39,600	2,360									
Terrapins					19,250	650	21,175	802					
Total	1,691,800	95,007	1,611,400	92,065	19,250	650	21,175	802	756,252	33,125	764,900	33,800	
Grand total	6,949,714	154,342	7,552,200	171,416	441,422	11,196	410,730	10,710	2,087,492	88,203	2,139,808	86,238	

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Prince William.				Richmond.				Stafford.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Seines:												
Alewives									712,160	\$5,201	620,000	\$5,700
Perch									21,714	850	18,028	700
Shad									59,500	1,850	51,000	1,700
Striped bass									7,600	750	7,000	700
Sturgeon									150	5		
Other fish									1,865	75	2,000	100
Total									802,980	8,731	698,028	8,900
Pound nets:												
Alewives	62,000	\$610	79,200	\$790	198,750	\$1,988	150,000	\$1,500	112,000	1,288	140,000	525
Carp	2,100	68	1,980	64					2,800	140	4,175	208
Catfish	2,050	66	2,710	92	112,500	3,375	86,250	2,587	9,800	392	19,700	501
Eels	1,500	60	1,820	70	4,980	180	4,265	150	2,785	140	2,430	120
Perch	3,815	158	4,640	173	29,812	1,491	21,750	1,088	12,571	560	19,214	875
Pike									3,920	280	4,820	837
Shad	15,120	432	14,400	360	31,062	887	19,687	563	4,900	140	4,200	105
Squeteague					32,500	1,950	24,375	1,462				
Striped bass	4,199	356	4,910	417	56,250	5,825	45,000	4,500				
Suckers	520	16	720	21	2,175	52	1,845	43	2,346	72	1,955	59
Other fish	1,476	44	1,840	73	23,970	702	16,390	482	3,095	110	4,900	147
Total	92,780	1,810	112,220	2,060	491,990	16,250	369,562	12,375	154,817	3,122	201,394	2,907
Gill nets:												
Alewives									440,000	4,400	293,300	3,520
Perch	3,500	126	3,225	113								
Shad	87,500	2,500	70,000	2,000	152,250	4,350	114,888	3,282				
Striped bass	4,450	312	4,580	321	8,750	675	7,150	715				
Other fish	2,050	62	2,195	66								
Total	97,500	3,000	80,000	2,500	159,000	5,025	122,038	3,997	440,000	4,400	293,300	3,520
Fyke nets:												
Catfish					7,250	290	8,000	320				
Other fish					3,580	180	4,000	200				
Total					10,830	470	12,000	520				
Miscellaneous:												
Oysters					902,000	46,360	831,600	54,000				
Frogs	15,000	1,875	15,000	1,950					600	75	690	86
Total	15,000	1,875	15,600	1,950	902,600	46,360	831,600	54,000	600	75	690	86
Grand total	205,280	6,685	207,820	6,510	1,504,420	68,105	1,335,200	70,892	1,398,400	16,328	1,193,412	15,473

Apparatus and species.	Surry.				Warwick.				Westmoreland.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Seines:												
Alewives											32,500	\$267
Catfish	6,170	\$250	8,800	\$330								
Perch	8,400	420	7,000	350								
Striped bass	11,300	1,130	8,765	876							1,075	158
Suckers	4,900	118	5,530	135								
Other fish	16,980	473	13,100	881								
Total	47,750	2,301	42,695	2,072							34,475	425
Pound nets:												
Alewives					68,300	\$512	53,300	\$400	1,167,000	\$9,875	1,014,600	10,000
Bluefish					11,000	550	8,000	400	61,200	3,060	8,325	416
Catfish									19,400	720	32,200	1,102
Croakers					2,700	150	1,100	66				
Eels									4,820	250	5,180	205
Menhaden									76,800	98	68,900	85
Perch									11,420	571	14,725	736
Shad					16,800	480	12,810	366	185,400	5,237	165,665	4,894
Spanish mackeral					1,200	75	2,000	120				
Squeteague					2,800	168	2,600	156	64,300	3,265	32,840	1,042
Striped bass					1,060	108	1,300	130	38,200	3,098	15,980	1,278
Suckers									13,180	385	15,260	445
Other fish					8,400	383	4,760	238	28,580	1,574	30,835	1,692
Total					112,200	2,484	85,870	1,876	1,070,300	28,127	1,403,610	22,056

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	Surry.				Warwick.				Westmoreland.			
	1890.		1891.		1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Gill nets:												
Perch.....	800	\$40	500	\$25								
Shad.....	202,765	8,364	152,834	6,375					31,500	\$920	25,200	\$720
Striped bass.....	700	70	500	50								
Sturgeon.....	16,572	765	13,276	536								
Total.....	220,837	9,239	167,110	6,986					31,500	920	25,200	720
Lines:												
Bluefish.....					14,705	\$730	12,906	\$645				
Catfish.....	286,144	6,975	221,552	5,478	15,037	601	20,310	812				
Croakers.....					13,805	570	12,278	491				
Spots.....					23,807	952	23,031	921				
Squeteague.....					8,037	323	3,531	141				
Other fish.....												
Total.....	286,144	6,975	221,552	5,478	75,541	3,194	72,056	3,010				
Miscellaneous:												
Oysters.....					800,060	28,804	830,893	26,753	368,550	26,436	323,750	27,150
Crabs, hard.....									70,000	625	68,640	818
Crabs, soft.....									600	80	1,040	104
Frogs.....									600	100	660	110
Total.....					809,060	28,804	830,893	26,753	439,750	27,241	394,090	28,182
Grand total	554,781	18,605	431,357	14,536	890,861	34,432	988,819	31,639	2,141,550	56,298	1,857,375	51,382
 York.												
Apparatus and species.	1890.				1891.				1890.			
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Seines:												
Alewives.....									2,269,770	\$16,802	1,733,846	\$15,985
Bluefish.....									267,260	9,338	243,820	8,481
Carp.....									2,735	122	3,155	137
Catfish.....									120,160	3,449	110,085	8,214
Croakers.....									162,073	6,765	157,815	6,192
Drum.....									1,200	60	600	30
Eels.....									2,000	120	1,568	94
Flounders.....									3,800	114	4,000	120
Kingfish and whiting.....									49,225	4,607	44,935	4,214
Menhaden.....									95,000	950	100,000	1,000
Mullet.....									96,500	2,075	101,700	2,196
Perch.....									154,232	5,570	135,350	4,880
Sea bass.....									5,600	316	6,000	360
Shad.....									518,612	15,076	398,848	13,061
Spots.....									135,340	5,908	131,219	5,618
Squeteague.....									630,284	21,047	687,585	18,750
Striped bass.....									87,746	7,535	80,773	6,888
Sturgeon.....									8,050	320	6,530	261
Suckers.....									21,925	628	17,660	505
Other fish.....									228,925	6,036	210,463	6,060
Total.....									4,869,437	108,030	4,176,362	98,074
Gill nets:												
Alewives.....									1,398,600	12,362	1,227,700	11,081
Bluefish.....									76,725	2,844	81,400	3,060
Catfish.....									3,800	100	3,300	84
Menhaden.....									150,000	350	150,000	350
Perch.....									169,051	6,434	155,882	5,644
Pike.....									12,638	759	7,505	458
Shad.....									2,972,068	90,152	2,410,861	73,460
Spanish mackerel.....									14,250	1,200	14,000	1,170
Mullet.....									8,000	480	9,000	540
Spots.....									16,000	645	14,500	550
Squeteague.....									67,478	2,686	70,740	2,950
Striped bass.....									108,124	10,140	89,351	8,385
Sturgeon.....									179,652	6,415	141,796	4,097
Suckers.....									31,872	894	27,500	703
Other fish.....									480,291	12,015	448,280	11,368
Total.....									5,089,087	147,482	4,837,214	124,617

Statement by counties, apparatus, and species of the yield of the shore fisheries of Virginia—Continued.

Apparatus and species.	York.				Total for State.			
	1890.		1891.		1890.		1891.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Pound nets:								
Alewives.....	75,000	\$750	50,000	\$500	6,951,178	\$62,205	8,033,639	\$86,566
Bluefish.....	20,000	600	15,000	450	970,721	39,028	1,292,398	47,648
Carp.....					6,000	263	10,215	439
Catfish.....					369,090	12,128	442,965	14,654
Cobia, or crab-eater.....					194,537	4,798	195,250	4,948
Croaker.....					292,160	9,120	247,980	8,675
Drum.....					120,405	2,361	117,340	2,210
Eels.....					61,105	2,302	62,226	2,298
Flounders.....					61,000	1,776	61,885	1,700
Kingfish and whiting.....					95,331	2,843	70,130	2,373
Menhaden.....					5,742,013	10,624	5,044,634	10,125
Perch.....					130,737	6,410	143,564	6,930
Pike.....					3,920	280	4,820	337
Pompano.....					86,246	8,466	93,700	9,520
Sea bass.....					1,113	8	1,340	10
Shad.....	33,250	755	29,165	750	3,732,434	121,064	3,645,467	119,677
Sheepshead.....					14,405	729	16,200	855
Spanish mackerel.....					634,543	45,001	725,010	49,580
Spots.....					105,578	4,104	108,880	4,565
Squeteague.....	51,000	1,530	39,500	1,185	1,969,368	63,435	1,759,464	58,718
Striped bass.....					270,164	23,908	256,623	21,824
Sturgeon.....	10,000	150	10,000	150	629,968	17,770	575,320	10,400
Suckers.....					35,841	1,034	40,220	1,155
Other fish.....	10,500	315	10,000	300	880,761	21,564	837,665	20,341
Total.....	199,750	4,100	153,065	3,335	23,328,618	462,790	23,790,835	471,560
Fyke nets:								
Alewives.....					10,050	190	8,300	163
Catfish.....					37,958	1,320	37,532	1,310
Croakers.....	1,700	80	8,300	890	25,555	973	33,595	1,327
Flounders.....	11,700	585	10,000	500	17,000	793	15,900	748
Perch.....					32,019	1,189	30,737	1,145
Shad.....	29,165	875	24,500	700	43,025	1,400	37,450	1,183
Spots.....	3,500	175	1,800	90	14,000	490	10,500	351
Squeteague.....	30,000	1,200	38,000	1,120	76,715	2,819	78,149	2,505
Striped bass.....	6,000	600	3,350	335	42,695	3,570	36,814	3,012
Suckers.....					9,444	254	10,084	300
Other fish.....	17,500	625	11,100	333	34,390	1,100	25,900	771
Total.....	99,565	4,140	97,050	3,468	343,451	14,107	325,861	12,845
Weirs:								
Alewives.....					11,500	115	10,000	100
Shad.....					130	5	116	4
Suckers.....					18,985	380	20,000	400
Other fish.....					22,500	588	25,000	625
Total.....					53,115	1,088	55,116	1,129
Lines:								
Bluefish.....	12,000	360	10,000	300	155,315	5,935	169,646	6,597
Catfish.....					408,894	10,827	340,452	9,225
Croakers.....	15,000	450	17,000	513	672,237	21,687	631,150	20,484
Drum.....					65,345	1,733	61,502	1,771
Flounders.....	16,000	480	13,000	390	44,335	1,526	45,510	1,541
Kingfish and whiting.....	3,000	60	3,000	60	25,500	470	25,500	510
Perch.....					4,375	262	3,500	210
Sea bass.....					54,010	1,720	58,970	1,900
Sheepshead.....					8,370	537	7,671	489
Spots.....	26,500	795	28,500	855	379,540	14,228	384,078	14,142
Squeteague.....	46,500	1,395	38,500	1,155	1,313,684	40,578	1,328,311	41,535
Striped bass.....					20,480	2,048	19,875	1,988
Other fish.....	10,000	300	11,000	330	102,022	3,230	94,340	2,831
Total.....	129,000	3,840	121,000	3,603	3,252,657	104,782	3,170,565	103,223
Pots and spears:								
Eels.....					8,825	597	7,825	515
Miscellaneous:								
Oysters.....	1,000,721	49,404	1,024,100	44,888	30,866,492	1,876,316	31,627,085	1,897,741
Quahogs.....	103,920	6,495	103,638	6,480	551,888	36,815	559,278	36,030
Crabs, hard.....					2,584,794	28,210	2,308,071	32,083
Crabs, soft.....					440,340	26,054	585,050	29,379
Crawfish.....							833	75
Frogs.....					20,282	2,655	21,000	2,754
Terrapins.....	3,150	2,700	3,150	2,700	52,519	19,066	52,215	18,494
Turtles.....	5,000	150	5,000	150	203,928	4,270	189,121	3,934
Total.....	1,112,791	58,749	1,135,888	54,218	34,720,193	1,993,395	35,343,559	2,021,090
Grand total.....	1,541,100	70,829	1,507,003	64,624	72,265,383	2,832,280	71,733,387	2,833,058

Statistics of oyster-packing and crab-packing trades.—One of the most important branches of the fishing industry of Virginia is the wholesale trade in raw and canned oysters, which is centered at Norfolk. In 1891, 50 firms were engaged in this business. These gave employment to 2,395 persons on shore, to whom \$405,000 was paid in wages. The quantity of oysters utilized was 2,617,647 bushels, for which \$1,184,694 was paid. The products as sold consisted of 1,667,040 gallons, for which \$1,509,542 was received; 225,013 bushels disposed of in the shell, bringing \$269,208; and 396,626 cans of oysters, having a market value of \$56,610. The details of this branch in 1890 and 1891 are shown in the table:

Summary of the oyster-packing trade of Virginia.

Designation.	1890.	1891.
Number of firms.....	39	50
Number of persons employed.....	1,902	2,395
Value of property.....	\$10,500	\$35,000
Cash capital.....	\$268,300	\$295,000
Wages paid.....	\$337,196	\$405,306
Oysters handled.....	bushels Value.....	2,185,078 \$971,847
Sold opened.....	gallons Value.....	1,348,600 \$1,208,798
Sold in the shell.....	bushels Value.....	228,753 \$290,848
Canned.....	quart cans Value.....	396,626 \$52,947

The business of extracting the meat of cooked hard crabs and shipping it in buckets is engaged in by a few firms at Norfolk and Hampton. In 1891 three firms employed 317 persons, to whom \$15,367 was paid in wages. Over 10,000 barrels of hard crabs, equivalent to 3,352,000 crabs, having a value of about \$12,500, were utilized in preparing 216,480 pounds of meat, worth \$40,776. A summary of this branch of the fishing industry for 1890 and 1891 is given in the following table:

Summary of the crab-packing industry of Virginia.

Designation.	1890.	1891.
Number of firms.....	2	3
Number of persons employed:		
Male, white.....	17	22
Male, colored.....	25	40
Female, colored.....	190	255
Total	232	317
Value of property.....	\$24,000	\$24,000
Cash capital.....	\$14,000	\$17,000
Wages paid.....	\$19,250	\$15,367
Number of barrels of crabs used:		
Cost.....	10,363	10,158
Pounds of crab meat prepared.....	\$9,090	\$12,481
Value	252,024	216,480

STATISTICS OF SPECIAL FISHERIES.

THE SHAD FISHERIES.

The shad is the most valuable fish taken in the Middle Atlantic States and is second only to the oyster among all the fishery products of the region. In every State it is the most important fish taken. In being the fish which has been most extensively propagated in the United States, the shad has additional interest, and much of the present importance of the shad fishery is undoubtedly due to the effects of the fish-cultural operations of the General Government and the States.

The following tables show the full extent of the shad fishery in each of the States of this section. In the preceding tables only the quantity of shad taken and the value of the catch are given. In the present statistics, however, the number of shad fishermen and the quantity and value of the shad apparatus are exhibited. The figures relate to each State and the entire region, and apply to the year 1891.

The first table shows the number of persons in each State who fished especially for shad and used the forms of apparatus indicated. While it is probable that slight duplication occurs in some localities in which fishermen may operate more than one kind of apparatus for shad, the extent of this practice is very limited.

The number of shad fishermen was 11,592, of whom the greatest number, 3,835, were in Maryland, and the smallest, 658, in Delaware. More than half the men employed gill nets, and about a fourth used seines, these two forms of apparatus being prominent in every State. A few persons fished shad fykes in New Jersey, and a small number used dip nets in Pennsylvania. Pound-net fishermen, who were found only in Maryland and Virginia, rank after the gill-net and seine men in number.

The value of the apparatus, boats, and other property devoted to the shad fishery of the Middle Atlantic States was \$1,018,466. The principal items in this sum were gill nets, of which 23,197, valued at \$325,767, were fished. The 5,858 boats employed in the various branches of the fishery had a value of \$314,867. The number of pound nets set was 1,333, with a value of \$193,390. Next in value were the 564 seines, \$100,918. Two hundred and twenty-four fyke nets worth \$4,050, and 170 dip nets with a value of \$494, complete the list of apparatus. Reels and other shore property connected with the fishery had a value of \$78,930. The largest investment was in Maryland, which had the most seines and gill nets. Virginia ranked next in aggregate investment, and took precedence in the number of pound nets.

Apparatus used specially for shad took 8,247,191 fish, for which the fishermen received \$1,187,969, or an average of 14.4 cents per fish. The number of shad taken incidentally in apparatus fished primarily for other fish was 190,955, worth \$28,620. Two-thirds of the shad were caught with gill nets. Pound nets ranked next, and then seines. The catch of the other apparatus was relatively insignificant. Gill nets as means of capture were most important in New Jersey, seines in Pennsylvania, pound nets in Virginia.

Persons engaged in the shad fisheries of the Middle Atlantic States.

How engaged.	New York.	New Jersey.	Pennsyl-vania.	Delaware.	Mary-land.	Virginia.	Total.
Seine fishery.....	253	351	719	261	1,255	93	2,932
Gill-net fishery.....	988	1,724	350	397	2,102	1,585	7,146
Pound-net fishery.....					478	894	1,372
Fyke-net fishery.....		23					23
Dip-net fishery.....			119				110
Total.....	1,241	2,098	1,188	658	3,835	2,572	11,592

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Apparatus, boats, and shore property employed in the shad fisheries of the Middle Atlantic States.

Designation.	New York.		New Jersey.		Pennsylvania.	
	No.	Value.	No.	Value.	No.	Value.
Seines	56	\$8,395	45	\$14,965	146	\$18,745
Boats	90	5,190	98	7,810	280	13,076
Shore property		3,668		4,150		5,362
Gill nets	2,930	58,770	3,300	101,280	184	18,770
Boats	701	38,776	943	96,150	189	11,165
Shore property		6,016		6,345		
Fyke nets			224	4,050		
Boats			17	1,550		
Shore property				900		
Dip nets					170	494
Boats					97	1,064
Total		120,814		287,209		68,676

Designation.	Delaware.		Maryland.		Virginia.		Total.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Seines	76	\$3,053	214	\$36,650	27	\$18,510	564	\$100,018
Boats	88	1,815	261	14,080	42	1,415	859	44,295
Shore property		350		9,340		2,520		25,390
Gill nets	236	16,833	10,254	90,680	6,287	39,464	23,197	325,767
Boats	201	8,826	1,112	63,987	874	12,060	4,020	230,963
Shore property		450		6,120		7,920		26,861
Pound nets			625	59,510	708	138,880	1,333	193,390
Boats			251	11,310	614	25,685	865	36,995
Shore property				8,880		21,950		25,820
Fyke nets							224	4,050
Boats							17	1,550
Shore property								900
Dip nets							170	494
Boats							97	1,064
Total		31,927		296,486		263,404		1,018,466

Yield of shad in the Middle Atlantic States.

Apparatus.	New York.		New Jersey.		Pennsylvania.	
	Number.	Value.	Number.	Value.	Number.	Value.
Special apparatus:						
Seines	82,622	\$16,068	211,223	\$43,733	420,615	\$81,772
Gill nets	660,923	139,032	2,000,100	385,889	305,802	44,448
Fyke nets			32,500	5,261		
Dip nets					8,118	2,029
Total	743,545	156,600	2,843,823	434,883	743,535	128,249
Other apparatus:						
Seines	412	80	9,107	1,719		
Pound nets	10,163	2,458	26,662	6,026		
Fyke nets	3,826	2,073	4,490	810	120	25
Total	19,401	4,609	40,250	8,555	120	25
Grand total	762,946	161,200	2,884,082	443,438	743,655	128,274

Apparatus.	Delaware.		Maryland.		Virginia.		Total.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Special apparatus:								
Seines	32,964	\$7,140	360,072	\$47,280	117,946	\$12,994	1,243,442	\$209,587
Gill nets	394,952	57,418	1,018,263	121,896	708,240	73,082	5,688,280	922,665
Pound nets			254,832	31,898	1,020,010	116,531	1,274,851	148,427
Fyke nets							32,500	5,261
Dip nets							8,118	2,029
Total	427,946	64,558	1,642,167	201,072	1,846,205	202,607	8,247,191	1,187,969
Other apparatus:								
Seines			28,526	4,213	705	67	38,750	6,079
Gill nets			16,160	1,853	4,438	987	20,598	2,240
Pound nets	566	80	19,678	2,652	35,345	3,146	92,414	14,360
Fyke nets	428	61	8,371	1,023	12,843	1,183	35,076	5,175
Minor apparatus			4,080	702	39	4	4,110	766
Total	992	141	76,815	10,503	53,368	4,787	190,955	28,620
Grand total	428,908	64,699	1,718,982	211,675	1,800,573	207,394	8,438,146	1,210,589

The average price of the shad varies considerably with the apparatus and the State in which the fish are taken. Considering the aggregate catch, the fish obtained with seines have a higher valuation than those secured by other means, and the shad taken in New York bring the best price.

The average prices received for shad in 1891, specified by States and by apparatus in which taken

States.	Gill nets.	Pound nets.	Seines.	Fyke nets.	All other nets.	Total.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
New York.....	21.2	24.2	20.2	23.5	.....	21.1
New Jersey.....	14.8	22.6	20.6	16.4	.....	15.4
Pennsylvania.....	14.5	.....	19.0	20.8	25.0	17.2
Delaware.....	11.5	14.1	21.7	14.3	.....	15.1
Maryland.....	12.0	12.6	12.9	12.2	18.7	12.3
Virginia.....	10.3	11.3	14.1	9.2	10.3	10.9
Total	14.4	11.9	16.8	15.4	22.8	14.4

THE GENERAL MOLLUSCAN FISHERIES.

The taking of economic mollusks is the most important branch of the fishing industry of the Middle Atlantic States. More persons are engaged and more capital is invested in the shellfish fisheries of the region than in all other branches combined, and the value of these products is about four-fifths that of the entire fishery output. The mollusks which have commercial importance are oysters, mussels, scallops, quahogs or hard clams, soft clams, and several species of univalve shells locally known as "jingles" and "quarter-decks," which are employed in oyster planting. The appended tables relating to 1891 indicate the various phases of the business.

Of 49,653 persons engaged in the fisheries for mollusks, 21,878 were in Maryland and 16,352 in Virginia, in addition to the large number of employés connected with the oyster-shucking and oyster-canning trades, which are not now under consideration.

The capital invested in the molluscan fisheries was \$6,154,329, of which \$2,562,178 is credited to Maryland, and over \$1,000,000 to each of the States of Virginia, New York, and New Jersey. Of the 3,008 vessels employed in taking shellfish, 1,223 were in Maryland, 707 in Virginia, 516 in New York, and 496 in New Jersey. The transporting fleet numbered 723, of which 611 were in Maryland and Virginia. Over 21,500 boats were employed, of which 6,974 were in Virginia and 6,692 in Maryland.

The value of the mollusks taken was \$13,690,810. Of this amount Maryland had \$5,304,092, New York \$3,570,211, Virginia \$2,560,378, New Jersey \$2,059,481, Pennsylvania \$124,420, and Delaware \$72,228. The quantity of products taken was 23,112,640 bushels, of which oysters constituted 21,346,107 bushels, valued at \$12,402,925, and round clams or quahogs 1,088,438 bushels, valued at \$1,068,904. Oysters are taken by citizens of every State of this region, and quahogs in every State but Pennsylvania, while soft clams and mussels have commercial importance only in New York and New Jersey, and scallops and shells only in New York.

Persons engaged in the molluscan fisheries of the Middle Atlantic States.

States.	Fishermen.	Transporters.	Total.
New York.....	5,970	101	6,071
New Jersey.....	4,677	134	4,811
Pennsylvania.....	233	.....	233
Delaware.....	265	43	308
Maryland.....	20,434	1,444	21,878
Virginia.....	15,642	710	16,352
Total	47,221	2,432	49,653

Apparatus, vessels, boats, and shore property employed in the molluscan fisheries of the Middle Atlantic States.

States.	Value of apparatus.	Vessels fishing.			Vessels transporting.			Boats (shore).		Floats and shore property.	Total investment.
		No.	Value.	Value of outfit.	No.	Value.	Value of outfit.	No.	Value.		
New York.....	\$119,912	516	\$391,270	\$55,682	41	\$44,100	\$5,710	4,810	\$318,985	\$144,500	\$1,080,159
New Jersey.....	62,949	406	479,070	106,545	55	70,250	7,036	2,918	185,292	166,380	1,078,122
Pennsylvania.....	5,085	41	73,650	11,525	.....	.....	.....	112	1,746	.....	90,210
Delaware.....	2,522	25	21,525	3,390	16	13,250	1,975	.....	2,860	.....	47,268
Maryland.....	192,626	1,223	877,505	325,658	899	569,000	50,100	6,692	516,849	21,350	2,562,178
Virginia.....	75,511	707	385,180	132,875	212	242,895	29,421	6,074	412,030	18,500	1,296,302
Total ...	458,555	3,008	2,228,180	635,675	723	939,495	103,932	21,515	1,434,902	353,590	6,154,329

Products of the molluscan fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Pennsylvania.	
	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
Oysters.....	2,611,062	\$2,748,509	2,302,081	\$1,630,648	160,100	\$124,420
Quahogs or hard clams	505,565	650,621	431,753	371,933	.....	.....
Soft clams or long clams	150,550	105,891	82,700	47,700	.....	.....
Mussels	2,100	900	500	200	.....	.....
Scallops	69,565	48,840	.....	.....	.....	.....
Shells.....	372,580	15,950	.....	.....	.....	.....
Total.....	3,771,422	3,570,211	2,817,134	2,050,481	169,100	124,420

Species.	Delaware.		Maryland.		Virginia.		Total.	
	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
Oysters.....	156,720	\$70,134	9,945,058	\$5,295,866	6,162,088	\$2,524,348	21,346,107	\$12,402,925
Quahogs or hard clams	2,740	2,094	18,470	8,226	69,910	36,030	1,088,438	1,068,904
Soft clams or long clams .....	.....	.....	.....	.....	.....	.....	233,250	153,591
Mussels .....	.....	.....	.....	.....	.....	.....	2,700	1,100
Scallops .....	.....	.....	.....	.....	.....	.....	69,565	48,840
Shells.....	.....	.....	.....	.....	.....	.....	372,580	15,950
Total.....	159,460	72,228	9,963,528	5,304,002	6,231,996	2,560,378	23,112,640	13,600,810

THE OYSTER INDUSTRY.

The following series of tables illustrates the extent of the most important branch of the fishing industry of the Middle Atlantic region. In the consideration of the general molluscan fisheries, the oyster fishery was included, but no separate figures for the persons and for the vessels, boats, and apparatus were given, and the shore industry connected with the fishery was not shown.

It appears from the first table that 60,631 persons were engaged in this industry, of whom 13,192 were vessel fishermen, 29,479 boat fishermen, 2,418 transporters, and 15,542 shore employés. In each of these items Maryland held the first rank, and the total for the State was 32,104.

The capital invested in the oyster industry was \$13,047,094, of which more than half, or \$6,697,302, is to be credited to Maryland. The 2,839 fishing vessels employed were valued, with their outfits and apparatus, at \$3,018,003, and the 723 transporting vessels had a value of \$1,039,802. The value of the 17,830 boats used in the shore fisheries was \$1,222,356, and the apparatus employed in connection with the boat fishing had a value of \$189,118.

The output of the oyster fishery was 21,346,107 bushels, valued at \$12,402,925. The yield in the vessel fishery was 9,468,156 bushels, valued at \$5,614,368, and in the shore fishery 11,877,951 bushels, having a value of \$6,788,557. The shore fishery was more important than the vessel fishery in New York, Maryland, and Virginia. In the

value of its oyster fishery New York ranks next to Maryland, although the quantity of oysters taken is less than half that in Virginia.

Persons engaged in the oyster industry of the Middle Atlantic States.

States.	In vessel fishery.	In shore fishery.	On trans- porting vessels.	On shore, in markets, etc.	Total.
New York.....	1,126	2,458	96	1,145	4,825
New Jersey.....	1,647	1,942	184	329	4,052
Pennsylvania.....	233	.....	.....	172	405
Delaware.....	103	153	43	353	652
Maryland.....	6,862	12,505	1,444	11,293	32,104
Virginia.....	3,221	12,421	701	2,250	18,593
Total.....	13,192	29,479	2,418	15,542	60,631

Vessels, boats, apparatus, shore property, and cash capital employed in the oyster industry of the Middle Atlantic States.

Designation.	New York.		New Jersey.		Pennsylvania.	
	No.	Value.	No.	Value.	No.	Value.
Vessels fishing.....	441	\$357,457	402	\$430,995	41	\$73,650
Tonnage.....	4,556	.....	6,540	.....	1,007	.....
Outfit.....	84,635	.....	95,170	.....	.....	11,525
Dredges.....	34,380	.....	1,520	88,930	164	5,035
Tongs and rakes.....	1,420	6,690	13	60	.....	.....
Vessels transporting.....	41	44,100	55	70,250	.....	.....
Tonnage.....	796	.....	1,038	.....	.....	.....
Outfit.....	5,710	.....	7,636	.....	.....	.....
Boats fishing.....	2,771	206,505	2,123	145,599	.....	.....
Dredges.....	1,310	13,150	28	675	.....	.....
Rakes.....	1,260	9,917	40	160	.....	.....
Tongs.....	3,937	24,268	2,430	11,472	.....	.....
Shore property and floats.....	674,550	.....	226,380	.....	.....	284,500
Cash capital.....	828,000	.....	467,850	.....	.....	183,750
Total.....	.....	2,289,360	.....	1,495,177	.....	558,460

Designation.	Delaware.		Maryland.		Virginia.		Total.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels fishing.....	25	\$21,525	1,223	\$868,505	707	\$385,100	2,839	\$2,137,202
Tonnage.....	304	20,981	.....	.....	8,155	.....	41,543	.....
Outfit.....	3,390	.....	325,658	.....	132,775	.....	.....	653,153
Dredges.....	100	2,110	2,419	111,374	460	18,210	6,128	210,039
Tongs and rakes.....	.....	.....	494	4,287	1,367	6,482	3,294	17,519
Vessels transporting.....	16	13,250	399	569,000	212	239,895	723	936,405
Tonnage.....	224	13,111	.....	.....	5,114	.....	20,278	.....
Outfit.....	1,975	.....	59,190	.....	.....	28,796	.....	103,307
Boats fishing.....	103	1,586	5,859	456,036	6,974	412,030	17,830	1,222,356
Dredges.....	.....	1,726	8,303	99	4,045	3,163	26,233	.....
Rakes.....	.....	.....	.....	.....	.....	1,300	10,077	.....
Tongs.....	103	412	12,367	69,814	9,880	46,844	28,717	152,808
Shore property and floats.....	10,880	.....	2,282,525	.....	.....	356,930	.....	3,844,765
Cash capital.....	18,500	.....	1,041,950	.....	.....	293,000	.....	3,733,050
Total.....	.....	82,628	.....	6,697,302	.....	1,024,187	.....	18,047,094

Yield of the oyster fishery of the Middle Atlantic States.

States.	Vessel fishery.		Shore fishery.		Total.	
	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
New York.....	1,282,252	\$1,185,549	1,328,810	\$1,562,060	2,611,082	\$2,748,509
New Jersey.....	1,499,750	1,018,302	802,322	821,346	2,302,081	1,639,648
Pennsylvania.....	169,100	124,420	.....	.....	169,100	124,420
Delaware.....	59,000	43,650	97,720	26,484	156,720	70,184
Maryland.....	4,814,114	2,615,840	5,180,944	2,680,026	9,945,058	5,295,868
Virginia.....	1,643,981	626,607	4,518,155	1,897,741	6,162,086	2,524,348
Total.....	9,468,156	5,614,308	11,877,951	6,788,557	21,346,107	12,402,925

THE LOBSTER FISHERY.

Although the taking of lobsters is not one of the prominent branches of the fishing industry of this region, it possesses special interest in that the lobster here reaches the southern limits of its range as an economic product, Delaware being the southernmost State in which it is obtained.

Eighty-four persons in the three most northern coast States of the region were engaged in this fishery in 1891; of these, 55 were in New York, 27 in New Jersey, and 2 in Delaware. The pots used numbered 3,235 and had a value of \$4,987. The catch consisted of 338,957 pounds, for which the fishermen received \$28,528. The yield was largest in New Jersey, but the value of the output was greatest in New York.

Extent of the lobster fishery of the Middle Atlantic States.

Designation.	New York.		New Jersey.		Delaware.		Total.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Persons employed	55		27		2		84	
Apparatus, vessels, and boats:								
Pots	2,240	\$3,469	955	\$1,418	40	\$100	3,235	\$4,987
Vessels	2	8,020	1	1,100			3	9,120
Outfit		1,860		375				2,235
Boats	34	1,140	12	870	1	40	47	2,050
Total		14,480		3,763		140		18,392
Products:								
Lobsters, pounds..	165,093	15,055	105,064	12,463	8,200	410	338,957	28,528

THE SEINE FISHERIES.

The seine is one of the most generally used forms of apparatus employed in the fisheries of the region, and in some States and some fisheries is more prominent than any other means of capture. The output of the seines is larger and more valuable than that of any other apparatus used in taking fish, considering the entire region. The extent of the fisheries thus prosecuted is shown in the following tabulations.

The number of persons engaged in seine fishing in the Middle Atlantic States in 1891 was 8,157; the number of seines used was 1,808, valued at \$278,230; the number of vessels engaged was 80, valued at \$535,000; the boats used numbered 2,187 and were worth \$131,425; the value of the shore property was \$79,557; the total investment was \$1,113,210; the quantity of products taken was 278,159,491 pounds, for which \$1,427,790 was received.

The most valuable fish taken with seines is the menhaden; this is also secured in larger quantities than any other fish. The catch in 1891 was 245,861,226 pounds, valued at \$580,677. Almost the entire yield is taken with vessels employing purse seines. The shad ranks next in value, although the alewives are obtained in larger quantities. The production was 4,624,645 pounds, having a value of \$215,666. Of alewives, 16,622,834 pounds were taken, worth \$136,411; of squeteague, 3,176,675 pounds, valued at \$99,932; and of striped bass 893,065 pounds, with a value of \$90,087.

Of the prominent fish taken with seines, the menhaden is most valuable in New York, the squeteague and the yellow perch in New Jersey, the shad in Pennsylvania, the alewives, the white perch, and the striped bass in Maryland, and the spot in Virginia.

Persons, apparatus, vessels, boats, and shore property employed in the seine fisheries of the Middle Atlantic States.

States.	No. of persons.	Seines.		Vessels.			Boats.		Shore property.	Total investment.
		No.	Value.	No.	Value.	Value of outfit.	No.	Value.		
New York	1,410	327	\$75,640	26	\$245,000	\$47,655	385	\$27,980	\$4,886	\$401,161
New Jersey	1,459	372	38,022	11	40,050	10,987	423	17,476	9,340	115,875
Pennsylvania	731	151	10,405	.....	.....	.....	284	13,155	5,357	37,917
Delaware	694	203	10,263	.....	.....	.....	217	4,610	2,230	17,103
Maryland	2,487	536	76,780	13	20,500	4,010	590	58,764	26,544	136,698
Virginia	1,376	219	58,120	30	229,450	26,346	282	9,440	31,100	354,456
Total	8,157	1,808	278,430	80	535,000	88,998	2,187	131,425	79,557	1,113,210

Products of the seine fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Pennsylvania.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	1,136,597	\$14,615	1,783,470	\$12,128	2,104,700	\$10,948
Bluefish	1,230,495	50,228	20,900	1,567	.....	.....
Catfish	17,025	996	88,609	4,824	31,483	1,754
Drum .....	.....	.....	95,240	203	.....	.....
Eels	10,748	725	72,200	4,518	.....	.....
Flounders	15,650	750	95,500	4,260	.....	.....
Kingfish	124,318	7,759	17,400	1,142	.....	.....
Menhaden	90,057,690	288,123	18,441,436	42,955	.....	.....
Mullet	160,060	7,878	88,350	4,902	.....	.....
Perch	41,808	2,901	573,773	30,921	6,495	368
Pike .....	.....	.....	17,585	1,738	975	97
Sea bass	248,614	12,715	8,400	458	.....	.....
Shad	332,085	16,748	788,175	45,452	1,575,309	81,772
Sheepshead	57,604	4,031	6,000	955	.....	.....
Spanish mackerel .....	.....	.....	11,200	521	.....	.....
Spots and croakers	401,030	19,803	775,600	36,989	.....	.....
Squeteague	95,503	8,406	180,658	27,276	5,280	532
Striped bass .....	.....	.....	.....	.....	.....	.....
Sturgeon .....	.....	.....	10,730	417	23,100	1,137
Suckers	1,800	110	1,900	136	.....	.....
Tautog	179,150	7,166	.....	.....	.....	.....
Tomcod or frostfish	78,197	2,997	38,040	1,715	69,905	3,600
Other fish .....	.....	.....	.....	.....	.....	.....
Total	103,188,374	445,051	21,124,166	223,077	8,817,247	100,208

Species.	Delaware.		Maryland.		Virginia.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	515,640	\$7,178	9,356,231	\$75,547	1,733,846	\$15,995	16,630,484	\$136,411
Bluefish .....	.....	.....	110,519	5,026	253,820	8,781	1,624,734	55,692
Catfish	21,000	1,135	373,257	13,194	110,995	3,214	642,369	25,117
Drum	30,000	380	.....	.....	600	30	125,840	613
Eels	5,000	108	40,176	1,685	1,568	94	124,692	7,022
Flounders .....	.....	.....	.....	.....	4,000	120	120,150	5,298
Kingfish .....	.....	.....	.....	.....	44,935	4,214	186,653	13,115
Menhaden	8,000	40	29,568,400	62,511	100,785,700	187,048	245,801,226	580,677
Mullet	3,800	114	44,300	1,586	101,700	2,190	398,210	16,676
Perch	143,780	8,220	917,667	39,015	135,550	4,880	1,818,873	86,305
Pike	7,800	558	189,677	11,632	.....	.....	216,097	14,025
Sea bass .....	.....	.....	110,000	4,400	6,000	380	373,014	17,933
Shad	115,374	7,140	1,414,854	51,493	398,848	13,061	4,624,645	215,666
Sheepshead .....	.....	.....	.....	.....	.....	6,000	.....	955
Spanish mackerel .....	.....	.....	4,267	640	.....	.....	61,871	4,671
Spots and croakers	13,900	811	68,075	2,907	288,534	11,810	381,709	16,189
Squeteague	1,114,900	16,188	197,560	8,193	687,585	18,750	3,176,875	99,932
Striped bass	44,850	5,958	486,001	41,027	80,773	6,888	893,065	90,087
Sturgeon .....	.....	.....	6,940	317	6,530	261	13,470	578
Suckers	5,200	268	81,100	2,098	17,660	.505	137,790	4,421
Tautog .....	.....	.....	.....	.....	.....	3,700	.....	246
Tomcod or frostfish .....	.....	.....	150,374	4,017	213,618	6,206	178,150	7,166
Other fish .....	.....	.....	.....	.....	.....	559,134	19,135	.....
Total	2,029,244	48,156	43,128,398	325,976	104,872,062	284,422	278,159,491	1,427,790

THE GILL-NET FISHERIES.

In 1891 the gill-net fisheries of this region gave employment to 9,134 persons, a larger number than was found in any other fishery, with the exception of the oyster. Of these, 2,368 were in New Jersey, 2,235 in Maryland, 1,664 in New York, 1,564 in Virginia, 906 in Delaware, and 397 in Pennsylvania.

Of the total amount of capital devoted to this fishery, viz., \$820,182, \$419,722 represented the 30,158 gill nets employed; \$328,282 the 5,079 boats used, and \$72,178 the shore property required for the proper prosecution of the fishery. Maryland had a larger number of nets than any other State; but the value of the nets was greatest in New Jersey, and the aggregate investment in the latter State was also greatest.

The yield of the gill-net fisheries was 33,682,198 pounds, valued at \$1,159,031. The fishermen of New Jersey took 10,586,442 pounds and received \$435,908 for their catch. New York is credited with an output of 4,953,280 pounds, valued at \$222,014. Maryland ranks third, with 8,571,287 pounds, for which \$217,088 was received. Virginia fishermen took 4,857,214 pounds, having a value of \$124,617.

The preeminent fish in the gill-net fishery is the shad; the catch was 20,515,161 pounds, worth \$824,936. Bluefish, squeteague, striped bass, sturgeon, and alewives are the next important species.

Persons, apparatus, boats, and shore property employed in the gill-net fisheries of the Middle Atlantic States.

States.	No. of persons.	Gill nets.		Boats.		Shore property.	Total investment.
		No.	Value.	No.	Value.		
New York.....	1,664	6,402	\$88,450	995	\$59,715	\$15,566	\$163,731
New Jersey.....	2,368	8,983	129,832	1,201	143,014	44,742	317,588
Pennsylvania.....	397	209	21,450	211	12,705	480	34,635
Delaware.....	806	1,586	33,046	471	22,132	1,250	57,328
Maryland.....	2,235	11,999	100,014	1,194	74,571	2,280	176,865
Virginia.....	1,564	5,979	46,080	947	16,145	7,800	70,035
Total.....	9,134	30,158	410,722	5,079	328,282	72,178	820,182

Products of the gill-net fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Pennsylvania.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives.....	987,440	\$7,780	13,700	\$160	222,000	\$2,475
Bluefish.....	709,650	37,467	254,600	11,767	.....	.....
Cod.....	.....	.....	45,800	1,603	.....	.....
Menhaden.....	.....	.....	214,763	1,507	.....	.....
Mullet.....	.....	.....	.....	.....	.....	.....
Perch.....	17,150	1,527	33,500	3,102	.....	.....
Pike.....	.....	.....	1,900	166	.....	.....
Sea bass.....	75,041	6,017	.....	.....	.....	.....
Shad.....	2,643,695	139,932	9,190,938	385,889	1,088,050	44,448
Spanish mackerel.....	.....	.....	35,410	5,710	.....	.....
Spots and croakers.....	438,517	23,153	1,700	81	.....	.....
Squeteague.....	14,200	1,701	210,800	8,407	.....	.....
Striped bass.....	7,560	302	49,371	6,618	.....	.....
Sturgeon.....	8,070	650	428,700	9,562	52,700	040
Suckers.....	51,357	2,885	500	15	.....	.....
Other fish.....	.....	.....	98,760	1,261	7,800	390
Total.....	4,953,280	222,014	10,586,442	435,908	1,370,550	47,953

Products of the gill-net fisheries of the Middle Atlantic States—Continued.

Species.	Delaware.		Maryland.		Virginia.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	335,100	\$5,149	2,806,900	\$15,723	1,227,700	\$11,081	5,592,840	\$42,368
Bluefish .....	.....	219,020	9,782	81,400	3,069	1,264,670	62,085	
Cod .....	.....	.....	.....	.....	.....	46,800	1,603	
Menhaden	59,000	380	451,000	1,084	150,000	350	874,763	3,321
Mullet	35,100	1,011	50,640	1,250	9,000	540	94,740	2,801
Perch	93,515	6,902	424,804	19,578	155,652	5,644	724,651	36,808
Pike	16,650	960	150,893	9,398	7,595	458	177,038	10,982
Sea bass .....	.....	.....	.....	.....	.....	75,041	6,617	
Shad	1,382,330	57,418	3,787,787	123,780	2,416,361	73,469	20,516,161	824,936
Spanish mackerel .....	.....	.....	10,370	1,105	14,000	1,170	59,780	7,985
Spots and croakers	28,660	1,469	11,240	499	14,500	550	50,000	2,509
Squteague	23,530	706	85,510	2,871	70,740	2,950	829,097	38,096
Striped bass	45,070	6,152	339,276	24,881	89,351	8,385	537,268	47,737
Sturgeon	1,304,800	30,448	50,300	1,390	141,706	4,697	1,085,856	47,039
Suckers	5,050	227	20,800	520	27,500	793	63,120	2,205
Other fish	14,120	629	162,747	5,232	451,589	11,452	786,378	21,849
Total	3,843,425	111,451	8,571,287	217,088	4,857,214	124,617	33,082,198	1,150,031

THE POUND-NET FISHERIES.

Pound nets are operated in all the Middle Atlantic States except Pennsylvania. The fishery is especially important in the Chesapeake region on account of the number of nets used and the large quantities of fish taken, and in New York and New Jersey because of the opposition encountered. The extent of the fisheries with pound nets proper and with the closely related traps and weirs is indicated in the following tables, which relate to the year 1891.

Of the 2,512 persons engaged in these fisheries, 1,304 were in Virginia, 691 in Maryland, 261 in New Jersey, 244 in New York, and 12 in Delaware.

While Maryland had the largest number of nets, many of them were of small size. The 1,005 operated were valued at only \$71,778, while 941 in Virginia were worth \$166,990. The 263 nets shown for New York include 90 trap nets operated by vessels—a feature which is not observed in any other State. The value of the 1,557 boats used was \$72,908. Of the total investment of \$550,470, Virginia is credited with \$232,446, New York with \$127,620, and Maryland with \$102,293.

These nets took 50,657,120 pounds of fish, valued at \$888,083. The fishermen of Virginia caught 23,851,951 pounds, for which they received \$472,689, thus obtaining nearly half the quantity and more than half the value of the pound-net yield. In Maryland 8,875,190 pounds were taken, worth \$165,423. The output in New York was larger, viz., 9,909,828 pounds, but the value was only \$123,834. The New Jersey fishermen took 7,992,260 pounds, for which they received \$125,100. The Delaware pound nets caught 27,891 pounds, worth \$1,037. In some of the States small numbers of lobster, king crabs, and squid were also taken in the pound nets, but are not shown in the table.

Considering the entire region, the most prominent fish taken in the pound-net fisheries is the squteague or weakfish. The quantity taken was 6,433,104 pounds, valued at \$180,995. Shad ranked next in value; of this fish, 4,756,243 pounds were taken, for which \$162,760 were received. Alewives to the quantity of 13,035,391 pounds were obtained; these had a value of \$105,533. The squteague was the most important fish in New York and New Jersey, the alewives were most prominent in Maryland, and the shad had first rank in Virginia.

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Persons, apparatus, vessels, boats, and shore property employed in the pound-net, trap-net, and weir fisheries of the Middle Atlantic States.

States.	No. of persons.	Pound nets, trap nets, and weirs.		Vessels.		Value of outfit.	Boats.		Shore property.	Total investment.
		No.	Value.	No.	Value.		No.	Value.		
New York.....	244	263	\$71,340	21	\$17,600	\$15,090	136	\$8,620	\$14,970	\$127,620
New Jersey.....	281	185	55,370	.....	.....	.....	71	8,382	23,939	87,601
Delaware.....	12	20	305	.....	.....	.....	10	115	.....	420
Maryland.....	691	1,005	71,778	.....	.....	.....	450	19,815	10,700	102,293
Virginia.....	1,304	941	166,990	.....	.....	.....	884	35,976	29,490	232,446
Total.....	2,512	2,414	365,783	21	17,600	15,090	1,557	72,908	70,080	550,470

Products of the pound-net, trap-net, and weir fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Delaware.		Maryland.		Virginia.		Total.		
	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	Lbs.	Value.	
Alewives.....	38,203	\$727	45,300	\$681	13,020	\$85	4,895,229	\$37,374	8,043,639	\$66,666	18,035,391	\$105,533	
Bluefish.....	166,050	8,845	189,978	5,547	.....	.....	103,215	5,038	1,292,398	47,648	1,757,642	68,073
Bonito.....	1,750	150	54,733	2,141	.....	.....	.....	.....	.....	.....	56,483	2,291
Butter-fish.....	794,046	12,340	206,052	5,601	.....	.....	3,340	168	306,546	9,712	442,905	1,000,098
Catfish.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,654	752,851	24,534
Cobia or crab-eater.....	.....	.....	.....	.....	.....	.....	.....	.....	195,250	4,948	195,250	4,948
Drum.....	.....	.....	.....	.....	.....	.....	.....	.....	117,340	2,210	117,340	2,210
Eels.....	75,014	3,500	1,200	84	.....	.....	97,480	3,732	62,226	2,298	235,870	9,614
Flounders.....	221,698	4,934	196,807	4,645	.....	.....	21,500	050	61,885	1,700	501,950	11,929
King fish or whiting.....	16,328	2,076	2,247	278	.....	.....	.....	.....	79,130	2,373	97,705	4,727
Mackerel.....	5,154,424	6,672	3,985,176	12,459	25,017	2,304	932,720	1,712	5,044,634	10,125	15,116,954	30,968
Menhaden.....	.....	.....	1,300	49	6,290	334	673,898	25,025	143,564	6,930	825,052	33,238
Perch.....	.....	.....	.....	.....	500	30	115,110	6,932	4,820	337	120,430	7,299
Pike.....	.....	.....	.....	.....	.....	.....	.....	.....	93,700	9,520	93,700	9,520
Pompano.....	310,358	6,206	12,982	311	.....	.....	.....	.....	.....	.....	823,340	6,517
Scup.....	140,489	7,093	29,188	946	.....	.....	.....	.....	1,340	10	171,017	8,049
Sea bass.....	36,886	2,456	93,318	6,020	1,491	80	979,465	34,517	3,045,583	110,081	4,756,243	162,760	
Shad.....	19,523	3,500	17,240	2,629	.....	.....	.....	.....	16,200	855	52,068	6,084
Skates.....	101,897	2,022	.....	.....	.....	.....	.....	.....	.....	.....	101,897	2,022
Spanish mack'l.....	17,282	3,224	36,981	4,885	30,200	3,624	725,910	49,586	810,323	61,310
Spots and croakers.....	17,501	700	1,080	21	.....	.....	91,870	4,004	356,860	13,240	467,311	18,565
Squeteague.....	1,579,000	48,107	3,012,299	70,336	.....	.....	82,335	3,834	1,750,464	58,718	6,493,104	180,095
Striped bass.....	49,498	6,100	17,400	1,278	1,750	265	270,883	19,651	250,028	21,824	596,124	49,118	
Sturgeon.....	21,001	559	23,930	1,057	.....	.....	15,205	636	575,320	16,406	935,460	18,658
Suckers.....	73,042	2,983	12,437	261	.....	.....	122,750	3,207	60,220	1,555	182,970	4,762
Tautog.....	286,829	716	.....	.....	.....	.....	.....	.....	.....	.....	86,370	3,244
Refuse fish.....	788,083	2,924	27,534	501	1,500	75	130,834	4,280	872,880	21,405	1,821,431	716	
Total.....	9,009,828	123,834	7,092,260	125,100	27,891	1,037	8,875,190	105,423	23,851,951	472,089	50,657,120	888,083	

THE FYKE-NET AND POT FISHERIES.

Fyke nets and pots are very extensively used in this region and contribute very materially to the income of a large class of semiprofessional fishermen as well as constituting a part of the fishing outfit employed by regular fishermen who operate more important kinds of apparatus. These nets are set in both fresh and salt water, but are fished in largest numbers in the rivers.

The number of persons who devoted more or less attention to fyke-net and pot fishing was 2,370, of whom 1,071 were in New York and 764 in Maryland. The nets used numbered 47,635, and were valued at \$144,710. In operating them, 2,067 boats were required, which had a value of \$56,145. The total investment was thus \$200,855, although many of the boats were also employed in other fisheries.

The aggregate catch of these appliances amounted to 6,985,374 pounds, for which the fishermen received \$265,652. The yield in New York was 3,357,913 pounds, valued at \$108,904. In that State a larger quantity of salt-water fish is taken than else-

where in the region. The values of the fishery in the remaining States were \$76,579 in Maryland, \$53,679 in New Jersey, \$13,170 in Virginia, \$6,661 in Delaware, and \$6,659 in Pennsylvania. The most important fish taken were eels, flounders, catfish, striped bass, white perch, yellow perch, and shad, in the order named. The small quantities of king crabs and terrapins taken in fyke nets and of lobsters obtained with pots are not included in these figures.

Persons, apparatus, and boats employed in the fyke-net and eel-pot fisheries of the Middle Atlantic States.

States.	No. of persons.	Fyke nets and eel pots.		Boats.		Total investment.
		No.	Value.	No.	Value.	
New York	1,071	21,954	\$69,474	* 1,026	\$31,058	\$101,432
New Jersey	307	5,362	18,125	† 278	11,087	29,212
Pennsylvania.....	60	2,534	5,264	59	1,004	6,868
Delaware.....	76	2,342	2,045	69	985	3,030
Maryland.....	764	14,904	42,937	564	8,256	52,193
Virginia.....	92	448	6,865	71	1,255	8,120
Total	2,370	47,635	144,710	2,067	56,145	200,855

* Includes one vessel valued at \$700.

† Includes two vessels valued at \$1,050.

Products of the fyke-net and eel-pot fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Pennsylvania.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives	32,320	\$404	200,350	\$1,011	5,075	\$26
Bluefish	28,350	1,134	1,000	50	.....	.....
Butter-fish.....	43,200	648	3,000	150	.....	.....
Catfish.....	77,945	3,198	33,565	2,625	82,025	3,482
Eels	1,006,451	61,651	385,380	20,944	27,400	1,386
Flounders	1,064,180	26,488	88,100	3,597	.....	.....
Frostfish or tomcod	48,600	1,172	1,400	42	.....	.....
Menhaden	648,000	810	29,167	53	.....	.....
Perch.....	20,555	1,453	85,389	6,626	4,350	257
Scup.....	40,500	810	2,100	105	.....	.....
Sea bass	8,100	405	1,100	58	.....	.....
Shad	32,790	2,073	147,024	6,071	475	25
Spots and croakers	.....	.....	6,500	265	.....	.....
Squeteague	112,970	3,480	12,500	515	.....	.....
Striped bass	16,205	2,000	35,760	6,350	970	96
Suckers and mullet.....	16,708	895	45,450	3,576	19,450	978
Tautog or blackfish.....	18,125	805	5,200	184	.....	.....
Refuse fish	97,200	243	.....	.....	.....	.....
Other fish.....	45,614	1,235	18,925	1,462	6,950	409
Total	3,357,913	108,904	1,071,910	53,679	146,695	6,659

Species.	Delaware.		Maryland.		Virginia.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Alewives .....	.....	.....	240,200	\$1,716	8,300	\$163	486,245	\$8,320
Bluefish .....	.....	.....	.....	.....	.....	.....	29,350	1,184
Butter-fish.....	22,200	\$1,312	313,225	11,755	37,532	1,810	46,200	798
Catfish.....	103,500	4,407	616,140	25,784	4,000	325	2,112,871	23,682
Flounders .....	.....	.....	.....	.....	15,900	748	1,165,180	30,833
Frostfish or tomcod .....	.....	.....	.....	.....	.....	.....	50,000	1,214
Menhaden .....	.....	.....	.....	.....	.....	.....	677,107	603
Perch.....	11,670	647	411,578	17,919	30,737	1,145	564,270	28,047
Pike .....	.....	.....	106,244	7,218	.....	.....	106,244	7,218
Scup.....	.....	.....	.....	.....	.....	.....	42,600	915
Sea bass	1,001	61	28,487	1,023	37,450	1,183	9,200	458
Shad .....	.....	.....	3,110	147	44,095	1,078	53,705	2,090
Spots and croakers .....	.....	.....	2,450	98	78,149	2,505	206,068	6,598
Squeteague	1,440	187	101,633	7,420	36,814	3,042	192,022	19,075
Striped bass	200	8	50,228	1,307	10,984	300	143,015	7,154
Suckers and mullet.....	.....	.....	.....	.....	.....	.....	23,325	989
Tautog or blackfish .....	.....	.....	.....	.....	.....	.....	97,200	243
Refuse fish	2,380	59	63,314	2,102	25,900	771	163,083	6,038
Total	142,391	6,661	1,936,604	76,579	329,861	18,170	6,985,374	265,652

THE LINE FISHERIES.

In considering the most primitive means of capture employed in the commercial fisheries of the Middle Atlantic region, it is interesting to observe that lines yield larger money returns than pound nets, although the quantity of fish taken is only half that obtained with pound nets. In New York and New Jersey, in which the pound-net fishery has received most attention from anglers and the general public, the value of the line catch is more than three times as great as the output of pound nets, and the quantity of fish thus taken in the year 1891 was over 3,000,000 pounds more.

Line fishing was followed in 1891 by 4,669 people. More than one-third of these were employed in New Jersey, whose line fisheries for bluefish, sea bass, cod, flounders, and squeteague are very extensive.

The prominent feature of this fishery in New Jersey is the important operations carried on from small boats, while in New York there is a considerable fleet of fine vessels engaged in the line fisheries. Vessel fishing is also relatively important in Pennsylvania, but in the other States only the boat fishery has any prominence. The aggregate amount of money invested in this fishery in 1891 was \$386,403, of which New York and New Jersey had \$309,205.

The line catch in the entire region was 26,183,621 pounds, valued at \$1,003,096. The line fishermen of New Jersey took 14,254,026 pounds, having a value of \$543,687. These figures include 6,752,447 pounds of bluefish, worth \$242,232, and 3,692,850 pounds of sea bass, worth \$146,236, both of which fish are here secured in larger quantities with lines than in any other State. Cod, flounders, and squeteague are also obtained in important quantities in the line fisheries of New Jersey. The professional line fishermen of New York took 6,656,605 pounds of fish, for which they received \$276,979, bluefish constituting 3,372,030 pounds, valued at \$141,336, and cod 2,277,458 pounds, valued at \$89,921. In Pennsylvania most of the line catch is made up of sea bass, in Maryland catfish and squeteague are the more prominent fishes, and in Virginia catfish, squeteague, spots, and croakers constitute most of the yield.

There is in all the coastal States of this region, more especially in New York and New Jersey, an enormous quantity of fish taken by anglers, of which no record can be obtained. The fish thus taken in largest quantities are bluefish, squeteague, sea bass, flounders, and perch.

Persons, vessels, boats, apparatus, and shore property employed in the line fisheries of the Middle Atlantic States.

States.	No. of persons.	Value of lines.	Vessels.			Boats.		Shore property.	Total investment.
			No.	Value.	Value of outfit.	No.	Value.		
New York.....	1,166	\$11,745	43	\$100,325	\$48,101	394	\$30,875	\$3,420	\$194,466
New Jersey....	1,939	5,178	12	18,200	4,746	986	64,130	22,485	114,739
Pennsylvania ..	488	633	9	15,075	8,710	206	8,237	100	27,815
Delaware	46	20	.....	.....	.....	26	680	85	785
Maryland.....	762	2,272	.....	.....	.....	524	14,028	3,080	20,575
Virginia	1,268	8,402	2	3,240	620	1,113	18,426	4,275	28,023
Total.....	5,669	28,810	68	130,840	62,177	3,249	129,971	34,105	386,403

Products of the line fisheries of the Middle Atlantic States.

Species.	New York.		New Jersey.		Pennsylvania.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Black bass.....			6,450	\$774	20,810	\$2,107
Bluefish.....	3,372,030	\$141,336	6,752,447	242,232		
Bonito.....			95,600	7,704		
Catfish.....	22,210	950	11,650	816	18,960	987
Cod.....	2,277,458	89,921	792,017	24,334		
Drum.....			29,000	777		
Eels.....			21,250	758	11,225	643
Flounders.....	107,737	4,033	604,028	21,018		
Haddock.....	147,730	3,890	17,040	675		
Hake.....			12,080	204		
Kingfish or whiting.....	16,630	917	13,500	801		
Perch.....	8,612	448			7,800	390
Pike.....					4,000	600
Sea bass.....	206,930	9,085	3,692,850	146,286	947,500	83,805
Sheepshead.....			2,100	320		
Skates.....			7,050	353		
Spanish mackerel.....			6,000	2,025		
Spots and croakers.....			86,200	3,633		
Squeteague.....	321,130	16,758	1,991,364	85,268		
Striped bass.....	29,973	3,182	14,975	1,774	18,385	1,778
Tautog.....	77,305	3,720	79,900	3,313		
Other fish.....	68,854	2,739	16,725	677	5,150	257
Total	6,656,605	276,979	14,254,026	543,687	1,033,310	40,567

Species.	Delaware.		Maryland.		Virginia.		Total.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Black bass.....							26,760	\$2,881
Bluefish.....			77,610	\$2,920	214,646	\$8,047	10,416,733	394,535
Bonito.....							95,600	7,704
Catfish.....	5,000	\$330	260,714	9,339	340,452	9,225	658,986	21,647
Cod.....					61,562	1,771	3,070,375	114,255
Drum.....							90,562	2,548
Eels.....			2,148	85	45,610	1,541	34,028	1,481
Flounders.....							757,275	26,502
Haddock.....							185,670	4,665
Hake.....							12,080	204
Kingfish or whiting.....					25,500	510	55,630	2,228
Perch.....	600	36	41,085	1,760	3,500	210	61,597	2,853
Pike.....			1,340	81			5,340	681
Sea bass.....			3,370	144	58,970	1,800	4,909,626	191,170
Sheepshead.....			3,185	396	7,671	489	12,958	1,205
Skates.....							7,050	353
Spanish mackerel.....			98,988	3,872	1,021,858	34,844	6,000	2,025
Spots and croakers.....	26,300	630	382,610	10,906	1,333,961	41,704	1,207,046	42,349
Squeteague.....	1,800	216	66,000	4,711	19,875	1,088	4,055,365	155,266
Striped bass.....	8,000	320					150,988	18,649
Tautog.....			33,085	1,048	94,340	2,831	165,205	7,353
Other fish.....							218,154	7,552
Total	41,700	1,532	970,135	35,271	3,227,845	105,000	26,183,621	1,003,096

THE MENHADEN INDUSTRY.

Fishing for menhaden is prosecuted in all the States of this region except Pennsylvania. The fishery is more important than in any of the other coast sections, and the shore industry dependent thereon is one of the most prominent branches of the fisheries in the Middle Atlantic States.

The industry is most extensive in New York and Virginia. The former State has the larger investment in the business and the greater number of steam vessels engaged, but the latter leads in the number of factories, the number of persons, the aggregate number of vessels engaged, and the quantity of fish taken. In Delaware the fishing is carried on by several steam vessels belonging in Connecticut and landing a part of their catch at the two factories in Delaware. The vessels and their equipment and crews are credited to Connecticut, and do not appear in the accompanying statistics.

The following tables show for each State the extent of the fishery and shore business. It is not possible to present, for each of the years covered by the figures, satisfactorily complete statistics for each State, owing to the different times at which the inquiries in the several States were prosecuted.

Some vessels fishing for menhaden in New Jersey sell large quantities of fish for bait to the professional line fishermen. In 1891, 7,231,500 menhaden were thus sold for \$11,575, and 5,197,000 fish, valued at \$16,698, were thus utilized in 1892. The largest consumption of menhaden for bait is in the extensive bluefish and sea-bass line fishery of Monmouth County.

Persons engaged in the menhaden industry of the Middle Atlantic States.

States.	Fishermen.				Factory hands.				Total.	
	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.	1890.	1891.
New York	517	501	560	(*)	567	617	594	(*)	1,178	1,154
New Jersey	90	102	129	103	108	107	85	78	209	214
Delaware	(t)	(t)	(t)	(t)	(*)	88	90	90	88	90
Maryland	(*)	32	18	(*)	(*)	37	48	(*)	69	66
Virginia	(*)	601	675	(*)	555	554	(*)	(*)	1,216	1,229
Total		1,356	1,382	.....		1,404	1,371	.....	2,760	2,753

* Complete data for these years not available.

† Same persons fish for a factory in Connecticut and are properly credited to that State.

Factories, vessels, etc., employed in the menhaden industry of the Middle Atlantic States.

Items.	New York.			New Jersey.				Delaware.		
	1889.	1890.	1891.	1889.	1890.	1891.	1892.	1890.	1891.	1892.
Factories in operation	12	13	13	7	6	6	6	2	2	2
Value of plants	\$320,900	\$330,600	\$327,500	\$47,150	\$51,650	\$52,650	\$52,650	\$20,000	\$20,500	\$21,000
Cash capital	\$356,000	\$386,500	\$376,000	\$35,000	\$41,000	\$32,500	\$31,500	\$18,500	\$14,000	\$18,000
Steam vessels	24	20	27	3	3	4	3	.....	.....	.....
Value	\$210,500	\$248,000	\$245,000	\$24,000	\$24,000	\$31,000	\$28,000	.....	.....	.....
Outfit	\$53,125	\$56,580	\$58,107	\$5,168	\$5,650	\$6,672	\$5,938	.....	.....	.....
Tonnage	1,608.20	1,875.02	1,875.02	114.25	114.25	109.58	126.07	.....	.....	.....
Sail fishing vessels .....	.....	.....	.....	5	6	7	6	.....	.....	.....
Value .....	.....	.....	.....	\$5,800	\$5,300	\$9,050	\$12,000	.....	.....	.....
Outfit .....	.....	.....	.....	\$3,190	\$3,050	\$4,315	\$3,785	.....	.....	.....
Tonnage .....	.....	.....	.....	100.28	113.63	117.11	137.70	.....	.....	.....
Sail transporting vessels .....	.....	.....	.....	3	6	5	3	.....	.....	.....
Value .....	.....	.....	.....	\$2,750	\$4,050	\$3,950	\$3,700	.....	.....	.....
Outfit .....	.....	.....	.....	\$355	\$530	\$441	\$381	.....	.....	.....
Tonnage .....	.....	.....	.....	46.28	76.73	69.41	41.08	.....	.....	.....
Seines	67	74	72	9	10	12	10	.....	.....	.....
Value	\$39,250	\$43,175	\$41,700	\$5,150	\$5,600	\$6,100	\$5,450	.....	.....	.....
Total investment	\$979,775	\$1,064,855	\$1,048,307	\$128,563	\$141,400	\$146,678	\$138,404	\$33,500	\$34,500	\$34,000

Items.	Maryland.		Virginia.		Total.	
	1890.	1891.	1890.	1891.	1890.	1891.
Factories in operation	1	1	20	21	42	43
Value of plants	\$4,500	\$4,500	\$102,300	\$103,900	\$599,050	\$599,050
Cash capital	\$6,000	\$6,000	\$181,500	\$167,000	\$628,500	\$595,500
Steam vessels	2	1	12	12	43	44
Value	\$13,700	\$7,200	\$90,000	\$103,250	\$384,700	\$386,450
Outfit	\$5,800	\$3,380	\$42,101	\$39,525	\$110,981	\$107,684
Tonnage	138.96	62.54	601.20	637.22	2,789.40	2,744.36
Sail fishing vessels .....	.....	.....	31	33	37	40
Value .....	.....	.....	\$45,710	\$51,450	\$51,010	\$60,500
Outfit .....	.....	.....	\$35,855	\$39,739	\$39,505	\$44,054
Tonnage .....	.....	.....	94.27	1,055.06	1,059.90	1,172.17
Sail transporting vessels .....	.....	.....	32	30	38	35
Value .....	.....	.....	\$31,325	\$31,000	\$35,975	\$34,050
Outfit .....	.....	.....	\$8,548	\$8,326	\$4,078	\$3,767
Tonnage .....	.....	.....	686.80	704.33	763.53	773.74
Seines	4	2	58	60	146	146
Value	\$2,800	\$1,600	\$33,600	\$36,600	\$85,295	\$86,000
Total investment	\$32,880	\$22,680	\$665,029	\$665,790	\$1,037,734	\$1,017,955

Fish utilized and products prepared in the menhaden industry of the Middle Atlantic States.

Items.	New York.			New Jersey.				Delaware.	
	1889.	1890.	1891.	1889.	1890.	1891.	1892.	1891.	1892.
Menhaden utilized (No.)	185,743,850	205,410,300	160,150,450	31,366,000	33,695,100	17,428,800	12,654,500	23,926,500	23,009,000
Value	\$301,456	\$336,185	\$291,165	\$32,082	\$35,776	\$21,189	\$19,812	\$29,907	\$28,760
Gallons oil made	1,257,465	1,310,775	1,118,951	95,270	98,694	72,118	72,057	107,212	105,080
Value	\$321,042	\$352,793	\$282,770	\$21,366	\$19,636	\$18,642	\$22,169	\$29,093	\$27,895
Tons dry scrap made	13,033	14,517	11,406	1,532	1,870	1,098	897	-----	-----
Value	\$255,450	\$286,390	\$230,917	\$34,920	\$38,980	\$27,592	\$23,735	-----	-----
Tons crude and acidulated scrap made	3,812	4,657	2,833	1,330	1,100	280	185	3,307	2,986
Value	\$46,070	\$55,884	\$33,990	\$12,604	\$10,900	\$2,366	\$2,325	\$43,875	\$38,826
Total value	\$624,782	\$695,073	\$547,683	\$68,890	\$69,516	\$48,600	\$48,229	\$72,968	\$66,721
Gross profits	\$322,306	\$358,888	\$256,518	\$35,808	\$33,740	\$27,411	\$28,417	\$43,061	\$37,961
Items.		Maryland.			Virginia.			Total.	
		1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.
Menhaden utilized (number)	20,570,400	12,500,000	216,400,500	191,365,500	476,085,300	405,371,250			
Value	\$25,724	\$15,625	\$237,923	\$226,041	\$635,608	\$584,527			
Gallons oil made	30,550	32,900	293,758	306,575	1,734,777	1,727,756			
Value	\$7,637	\$8,225	\$70,167	\$93,706	\$450,233	\$432,526			
Tons dry scrap made	-----	-----	5,953	5,835	22,340	18,339			
Value	-----	-----	\$119,938	\$119,225	\$446,814	\$377,734			
Tons crude and acidulated scrap made	1,575	1,200	14,053	11,219	21,385	18,900			
Value	\$30,725	\$19,800	\$130,570	\$111,422	\$228,079	\$211,479			
Total value	\$38,362	\$28,025	\$320,675	\$324,443	\$1,123,626	\$1,021,719			
Gross profits	\$12,638	\$12,400	\$82,752	\$97,802	\$488,018	\$437,102			

COMPARISONS WITH 1880.

The figures obtained for the Tenth Census permit a fairly satisfactory comparison between the extent and condition of the fisheries of this region in 1880 and 1891. While a somewhat different method of treatment precludes a detailed statistical exposition for the years named, the general comparisons which may be drawn and some special data that may be presented for a number of important items will give a clear idea of the changes which have taken place in the decade indicated.

The fishing population of the Middle Atlantic States in 1880 was ascertained to be 59,853, of whom 44,370 were fishermen proper and 15,483 were shoresmen. In 1891 the number was 90,923, consisting of 73,619 fishermen and 18,304 shoresmen. The increase amounted to 31,070 persons, or about 52 per cent, and was participated in by every State. The increase was apparently most marked in Pennsylvania, in which the figures show an advance of over 400 per cent. While it is known that a large augmentation in the fishing industry of that State has occurred since 1880, it is thought that the very striking increase shown is due to the fact that the oyster vessel-fishery tributary to Philadelphia, which is now very extensive, was not credited to that city in 1880, but to Delaware, in the waters of which State the vessels operated. While Pennsylvania has no oyster-grounds within the limits of the State, a good-sized fleet of vessels owned in Philadelphia engages in the oyster industry of Delaware Bay, and it seems entirely proper to credit this business to Pennsylvania. Next to this State, the greatest increase in fishing population occurred in New York, where it amounted to 93 per cent. The change was least marked in Delaware, in which the advance was only 13 per cent. For the same reason that the advance in Pennsylvania has been apparently more pronounced than was probably the case, that in Delaware has been less so. These remarks apply also to the investment and catch in the two States named.

The investment in the fishing industry in 1880 was \$14,596,759; in 1891 it was \$4,721,905, or 32 per cent greater. The increase occurred in New York, New Jersey, Pennsylvania, and Maryland, while the other States showed a decline. About 200 fewer vessels were employed in 1891, but the value of vessels in the latter year was somewhat greater, indicating an improvement in their size and quality. The number of boats employed increased about 15,000 and their value \$860,000. The use of gill nets, pound nets, fykes, pots, and minor apparatus greatly increased. Perhaps the most remarkable change in respect to the apparatus employed was in the pound nets. Of these, only 348 were operated in 1880, while in 1891 there were 2,414. In Maryland the number rose from 83 to 1,005 and in Virginia from 185 to 941. The only important form of apparatus which underwent a decline was the seine, of which 2,580 were used in the former year and only 1,808 in the latter. The decrease occurred in New York, New Jersey, and Delaware. The shore property connected with the industry was augmented more than 55 per cent, and the cash capital increased about 13 per cent, although in Virginia there was a conspicuous diminution in the last-named item.

Reducing all the products to the common unit of a pound, as explained in the introductory chapter, it appears that in 1880 the yield of the fisheries was 662,789,681 pounds, valued at \$16,835,238. The figures for 1891 are 590,454,369 pounds, worth \$19,023,474. The apparent inconsistency of a diminished catch and an augmented value is easily understood from an examination of the table. The decreased yield may be regarded as being made up almost wholly of menhaden, of which 148,175,390 fewer pounds were obtained in 1891 than in 1880. The omission of this relatively cheap fish from the statistics would leave the year 1891 with an augmented yield of over 75,000,000 pounds, having a value of over \$2,500,000. The fishery objects which have undergone a noticeable increase in importance, as judged by a larger catch, are numerous. Chief among these is the shad, the yield of which was 18,000,000 pounds greater in 1891. The catch of alewives was 15,613,000 pounds more, bluefish 6,826,000 pounds, and sea bass 4,051,000 pounds, the rate of increase for these fish being 148 per cent, 77 per cent, 82 per cent, and 272 per cent, respectively. Cod, scup, sheepshead, Spanish mackerel, and striped bass have decreased in abundance. The figures for oysters show a small increase; soft crabs and round clams present a marked advance; while the yield of soft clams, hard crabs, and terrapins has greatly declined.

The three tables which follow give comparative figures for the fisheries of this region:

Comparative statement of number of persons employed in the fisheries of the Middle Atlantic States in 1880 and 1891.

States.	Fishermen and transporters.		Shoersmen.		Total.		Increase or decrease in 1891.	Percent-age of increase or decrease in 1891.
	1880.	1891.	1880.	1891.	1880.	1891.		
New York.....	4,723	11,204	1,616	2,042	6,344	12,246	+ 5,902	+ 98.03
New Jersey.....	5,650	10,107	501	532	6,220	10,039	+ 4,419	+ 71.05
Pennsylvania.....	397	1,984	41	289	438	2,273	+ 1,885	+418.95
Delaware.....	1,662	1,709	817	431	1,979	2,230	+ 261	+ 12.68
Maryland.....	15,873	28,200	10,135	11,735	26,008	30,944	+13,936	+ 54.43
Virginia.....	16,051	20,316	2,813	3,275	18,864	23,501	+ 4,727	+ 25.06
Total	44,370	73,019	15,483	18,304	59,853	90,923	+31,070	+ 51.91

Comparative statement of the vessels, boats, apparatus, shore property, and capital employed in the fisheries of the Middle Atlantic States in 1880 and 1891.

Designation.	New York.				New Jersey.			
	1880.		1891.		1880.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels	540	\$774,000	650	\$817,542	590	\$545,900	607	\$649,670
Boats	3,270	279,885	6,227	373,670	4,065	223,093	5,742	412,373
Seines	1,505	127,063	327	75,040	435	38,570	372	38,622
Gill nets	3,866	70,627	6,402	88,450	852	25,203	3,983	120,832
Pound nets and weirs	53	29,500	263	71,340	27	19,800	185	55,370
Fyke nets and pots	3,950	6,750	22,144	72,856	8,417	15,966	6,447	24,220
Miscellaneous apparatus and outfit		116,310		309,733		132,600		209,967
Shore property		1,046,900		1,794,969		470,000		409,561
Cash capital		119,500		1,678,000		20,000		538,850
Total		2,570,535		5,283,200		1,492,202		2,467,865
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Designation.	Pennsylvania.				Delaware.			
	1880.		1891.		1880.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels	11	\$10,500	49	\$87,775	69	\$51,600	41	\$34,775
Boats	119	9,572	837	30,652	839	33,227	946	29,233
Seines	42	8,260	151	19,405	245	21,330	203	10,263
Gill nets	167	4,744	209	21,450	1,457	27,793	1,588	33,940
Pound nets and weirs							20	305
Fyke nets and pots	2,167	4,384	2,584	5,264	1,831	1,831	2,382	2,145
Miscellaneous apparatus and outfit		4,700		25,682		19,370		8,215
Shore property		50,000		450,162		105,080		44,800
Cash capital		3,000		303,750		8,000		44,400
Total		95,110		944,140		268,231		208,082
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Designation.	Maryland.				Virginia.			
	1880.		1891.		1880.		1891.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Vessels	1,450	\$1,750,000	1,627	\$1,446,855	1,446	\$571,000	944	\$740,135
Boats	2,825	186,448	9,825	579,488	6,018	292,720	9,247	463,722
Seines	140	53,050	536	76,780	153	70,970	219	58,120
Gill nets	1,462	44,880	11,090	100,014	3,532	35,220	5,079	46,030
Pound nets and weirs	83	13,375	1,005	71,778	185	98,590	941	160,900
Fyke nets and pots	4,050	6,600	14,984	42,937	100	900	449	5,865
Miscellaneous apparatus and outfit		178,340		595,084		355,283		282,510
Shore property		1,611,700		2,446,827		480,636		717,787
Cash capital		2,497,150		2,107,455		1,014,119		467,500
Total		6,342,443		7,466,718		3,828,238		2,948,659
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Designation.	Total.				Increase or decrease in value in 1891.	Percentage of increase or decrease in value in 1891.		
	1880.		1891.					
	Number.	Value.	Number.	Value.				
Vessels	4,106	\$3,703,000	3,927	\$3,776,752	+ \$73,752	+ 1.99		
Boats	17,736	1,025,815	82,824	1,889,138	+ 863,323	+ 84.18		
Seines	2,580	320,143	1,808	278,230	- 41,913	- 13.09		
Gill nets	10,836	208,407	30,158	419,722	+ 211,255	+101.34		
Pound nets and weirs	348	161,065	2,414	365,783	+ 204,718	+127.10		
Fyke nets and pots	15,515	36,381	48,950	153,287	+ 116,906	+321.31		
Miscellaneous apparatus and outfit		806,803		1,431,101	+ 624,398	+ 77.39		
Shore property		3,775,316		5,863,006	+ 2,080,290	+ 55.40		
Cash capital		4,561,769		5,140,955	+ 579,186	+ 12.70		
Total		14,596,759		19,318,664	+ 4,721,905	+ 32.35		

FISHERIES OF THE MIDDLE ATLANTIC STATES.

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Comparative statement of the products of the fisheries of the Middle Atlantic States in 1880 and 1891.

Products	New York.		New Jersey.		Pennsylvania.		Delaware.	
	1880.	1891.	1880.	1891.	1880.	1891.	1880.	1891.
Fish:								
Alewives	256,000	2,194,500	500,000	2,068,820				
Bluefish	3,000,000	5,505,575	3,635,000	7,227,926	30,000		2,396,700	863,760
Butter-fish	500,000	837,246	200,000	230,802			45,800	
Catfish	50,000	117,180	135,004	133,824	117,000	132,468	196,200	73,800
Cod	3,580,000	2,277,458	1,807,000	841,011				
Eels	1,361,300	1,610,213	551,000	623,280			40,950	
Flounders	1,000,000	1,581,086	75,000	987,895				
Kingfish	40,000	157,541	15,000	33,007				
Menhaden	288,031,200	104,860,114	29,134,000	20,670,542				
Perch	545,000	88,125	630,000	693,902	60,000	18,645	476,500	255,855
Scup	1,500,000	350,858	50,000	25,682				
Sea bass	750,000	678,180	160,000	3,731,538	550,000	947,500	1,260	
Shad	2,783,600	3,044,956	864,000	10,225,456	559,600	2,692,864	1,050,000	1,500,196
Sheepshead	400,000	10,523	275,000	26,290				
Spanish mackerel	25,000	74,836	200,000	78,391				
Spots and croakers	235,000	17,501	250,000	106,680				
Squeteague	4,000,000	2,852,653	4,430,000	6,002,563	15,000			
Striped bass	785,000	205,449	442,000	298,104	43,400	24,015	247,900	94,910
Sturgeon	144,000	30,261	300,000	452,630	150,000	52,700	570,000	1,304,800
All others	4,054,140	2,250,506	1,384,226	708,902	150,000	168,440	731,850	117,280
Total	313,894,240	128,742,431	45,897,826	55,226,054	1,080,000	6,399,957	9,081,550	5,714,251
Reptiles, mollusks, and crustaceans:								
Terrapins	1,800		9,000	3,280			30,708	11,988
Turtles							15,300	18,000
Clams, soft or long	3,407,750	1,505,560	660,280	827,000				
Clams, hard or round	2,795,840	4,524,520	3,132,280	3,454,024			5,544	21,920
Oysters	7,308,100	18,277,432	18,825,000	16,114,567		1,183,700	2,100,000	1,097,040
Scallops	290,500	313,042						
Shells		16,706,100						
Crabs	1,624,583	529,066	1,470,300	519,611			84,951	86,250
Lobsters	135,000	165,093	156,800	165,664			150	8,200
All others		61,830	2,800,180					740,000
Total	15,558,578	42,142,591	19,253,660	23,890,826		1,183,700	2,236,653	1,983,398
Grand total	329,452,813	170,885,022	65,151,486	70,116,380	1,080,000	7,583,657	11,918,203	7,097,640
Value	\$4,225,695	\$4,817,369	\$3,176,589	\$3,520,057	\$83,100	\$322,021	\$967,695	\$265,423
Products.	Maryland.		Virginia.		Total.		Increase or decrease.	
	1880.	1891.	1880.	1891.	1880.	1891.	Quantity.	Per cent.
Fish:								
Alewives	Pounds. 9,203,050	Pounds. 17,418,850	Pounds. 6,925,413	Pounds. 11,013,485	Pounds. 20,270,072	Pounds. 35,889,250	+15,613,178	+ 77.00
Bluefish	10,000	516,364	1,546,417	1,842,264	8,207,217	15,083,129	+ 6,825,912	+ 82.57
Butter-fish		31,955			700,000	1,239,003	+ 520,003	+ 74.29
Catfish	420,000	1,296,752	500,000	635,244	1,418,200	2,689,268	+ 1,271,068	+ 89.63
Cod					5,247,000	3,118,469	- 2,128,531	- 40.57
Eels	15,000	792,044	125,000	71,619	2,176,300	3,367,600	+ 1,191,300	+ 54.74
Flounders	5,000	33,443	40,000	71,619	1,136,500	2,715,329	+ 1,578,829	+ 135.92
Kingfish	3,000		175,000	149,505	230,500	341,763	+ 105,263	+ 44.51
Menhaden	3,903,000	30,952,120	88,313,800	105,980,334	410,705,500	262,539,110	- 148,175,390	- 36.08
Perch	880,000	2,404,625	745,000	408,839	3,346,500	4,020,045	+ 673,545	+ 20.13
Scup					1,550,000	376,540	- 1,173,460	- 75.71
Sea bass	5,000	118,370	20,000	66,310	1,486,200	5,537,898	+ 4,051,698	+ 727.02
Shad	3,774,426	6,224,873	3,171,953	6,498,242	12,159,579	30,186,586	+ 18,038,007	+ 148.38
Sheepshead	12,000	3,185	508,666	23,871	1,201,566	72,869	- 1,128,097	- 93.94
Spanish mackerel.	18,000	44,887	1,609,063	798,010	1,852,003	937,974	- 914,680	- 49.37
Spots and croakers	40,000	273,288	1,150,000	1,795,847	2,349,100	2,165,771	- 183,329	- 7.80
Squeteague	65,000	750,465	1,476,000	8,929,809	12,604,500	14,700,310	+ 2,095,810	+ 16.63
Striped bass	700,000	1,264,093	625,000	488,436	2,853,900	2,871,267	- 482,038	- 16.89
Sturgeon	144,000	72,445	411,558	723,646	1,719,558	2,036,482	+ 916,924	+ 53.32
All others	1,067,518	1,410,353	1,106,279	2,242,958	8,494,013	6,954,439	- 1,539,574	- 18.13
Total	20,275,903	63,699,657	108,344,740	137,142,758	409,774,288	390,925,108	- 102,840,160	- 20.55
Reptiles, mollusks, and crustaceans:								
Terrapins	30,000	89,780	165,600	52,215	287,108	157,263	- 79,845	- 33.67
Turtles		4,060		189,121	15,300	211,181	+ 195,881	+ 1280.27
Clams, soft or long	40,000	147,760	363,820	559,278	4,068,030	2,332,500	- 1,735,530	- 42.66
Clams, hard or round	74,200,000	69,615,406	47,861,240	49,134,002	145,280,340	149,422,749	+ 4,133,409	+ 37.40
Oysters					290,500	313,042	+ 22,542	+ 7.76
Scallops								
Shells								
Crabs	1,166,667	7,805,770	2,130,200	2,894,027	6,485,701	11,634,724	+ 5,149,023	+ 79.39
Lobsters					291,050	338,987	+ 47,007	+ 16.10
All others		15,394		21,833		3,645,243	+ 3,645,243	
Total	75,436,667	77,478,170	50,529,860	46,851,076	163,015,413	103,529,261	+30,518,848	+ 18.72
Grand total	95,712,570	141,177,827	158,874,609	183,993,834	662,769,081	500,454,369	- 72,335,312	- 10.91
Value	\$5,221,713	\$6,460,750	\$3,124,444	\$3,647,845	\$16,835,288	\$19,028,474	+\$2,188,236	+ 19.00

* Not separately reported and included in "all others."