PART II.

THE FISHERIES OF NEW HAMPSHIRE.

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ANALYSIS.

A.—Review of New Hampshire and its Fisheries:
51. General description with statistics.
B.—Portsmouth and Vicinity:
52.—The fisheries of Portsmouth and neighboring towns.
C.—The Isles of Shoals:
53. The Isles of Shoals as a fishing station.

PART II.

THE FISHERIES OF NEW HAMPSHIRE.

A.—REVIEW OF NEW HAMPSHIRE AND ITS FISHERIES.

51. GENERAL DESCRIPTION WITH STATISTICS.

THE COAST LINE AND THE FISHERIES.—New Hampshire has an area of about 9,491 square miles, yet its only coast line is a short stretch of 18 miles wedged in between Maine and Massachusetts. In this limited space, there are some small coves for fishing vessels, but the only harbor for ships or the larger class of fishing vessels is that of Portsmouth, near the entrance of Piscataqua River. The ocean shore is mostly a sandy beach backed by salt marshes, and near the mouth of the river are some clam flats. A few miles off the coast in Ipswich Bay are the well-known Isles of Shoals which in years gone by were quite important as a fishing station, but now given over to summer hotels.

The entire coast and islands are included in one customs district, with Portsmouth as the port of entry. This is the principal city in the State, both in population and in commercial importance. The other places where fisheries are carried on are Exeter, New Market, New Castle, and the Isles of Shoals.

The inhabitants of the coast towns of New Hampshire have for very many years given attention to the fisheries as a means of support and profit. As early as 1623, "The Company of Laconia," organized by merchants from the west of England, obtained patents for a large tract of country, including portions of Maine, New Hampshire, and Massachusetts. This company established fishing stations in New Hampshire, on the Piscataqua River near Dover, and at Odiorne's Point. At Portsmouth a considerable foreign trade was carried on about a hundred years ago, and the bank fisheries for cod claimed much attention.

According to Belknap*, the fishery at Piscataqua and its neighborhood, for the year 1791, not including the fisheries at the Isles of Shoals, employed in the cod and scalefish fishery 27 schooners and 20 boats, measuring 630 tons, and 250 seamen. The products of the New Hampshire fisheries for the year 1791, including the fisheries of the Isles of Shoals, were 5,170 quintals merchantable fish, 14,217 quintals Jamaica fish, and 6,463 quintals scale fish; making the total, 25,850 quintals. The success of the fishery that season was uncommonly good. An estimate of the total number of seamen belonging to New Hampshire in the same year states that there were 500 in foreign trade, 50 in coasting trade, and 250 in the fisheries. Some of the seamen who in summer were employed in the fishery, were in the winter engaged in the coasting business or in foreign voyages.

The number of entries of vessels at Piscataqua in the coasting trade and cod fishery during the year ended October 1, 1791, was 50, and the tonnage was 1,166 tons.

THE FISHERIES FROM 1867 TO 1879.—From the records of the custom-house it appears that the fishing fleet of the Portsmouth district has at times numbered as high as from 100 to 125 sail.

* Belknap's History of New Hampshire. Boston: 1792. Vol. III.

There is no record of the value of the products prior to 1867. The returns from 1867 to 1879, as given by the collector of the port to the Bureau of Statistics, show the quantity and value of the different kinds of fish handled by Portsmouth dealers, and includes fish brought from the small fishing stations of Kittery and New Castle at the mouth of the harbor.

Fishery products of Portsmouth Customs District, 1867–1879.

Years.	Codfish, cured.		Mackerel, cured.		Herring, cured.		Other fish, cured.		Oysters.		Other shell-fish.	Fresh fish not shell-fish.		Oils, other than whale.		All other products of the fisheries.	Total value of all products.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Value.	Quantity.	Value.	Quantity.	Value.	Value.	
	Cwt.	*Dolls.*	*Cwt.*	*Dolls.*	*Cwt.*	*Dolls.*	*Cwt.*	*Dolls.*	*Bush.*	*Dolls.*	*Dolls.*	*Lbs.*	*Dolls.*	*Gall.*	*Dolls.*	*Dolls.*	*Dolls.*
1867	2,236	11,706	20	160	2,474	6,536	12,067	34,010	5,500	3,300	950	630,806	13,875	5,016	3,316	.....	73,853
1868	2,505	12,537	164	1,423	6[illegible]	210	15,988	60,023	3,500	5,100	2,000	1,153,147	26,231	9,441	7,126	.....	114,650
1869	11,415	72,497	4,640	33,411	3,300	7,750	7,512	22,410	14,200	8,520	1,800	1,496,791	35,719	11,679	9,668	.....	191,775
1870	12,125	70,900	8,830	52,400	4,140	9,910	4,245	10,600	13,500	8,425	2,950	1,733,922	43,978	12,568	8,808	.....	208,031
1871	7,450	31,950	7,130	35,200	1,978	3,956	7,900	20,637	11,500	6,900	3,200	1,437,851	33,244	9,294	8,006	.....	143,093
1872	8,100	50,250	3,600	16,500	.....	.....	6,550	20,400	12,400	7,680	1,400	1,602,009	48,883	15,733	14,153	.....	159,266
1873	14,356	65,600	403,850	67,500	130	575	6,770	18,810	5,700	3,400	2,050	2,329,525	69,755	12,890	9,492	1,175	238,357
1874	12,480	159,881	20,170	104,360	380	172	10,145	26,657	.....	.....	.....	2,001,775	64,762	1,120	650	1,560	358,042
1875	12,664	59,072	6,024	49,120	933	2,538	5,240	14,500	.....	.....	1,700	1,888,868	56,531	12,886	8,103	1,895	193,459
1876	15,710	55,115	15,29[illegible]	60,024	1,235	3,040	6,136	16,895	.....	.....	900	2,389,067	48,224	6,540	3,608	2,017	190,980
1877	8,425	38,366	3,450	14,575	.....	.....	2,602	4,723	.....	.....	9,135	3,423,758	59,485	6,938	3,996	5,190	135,470
1878	25,049	79,256	7,900	17,700	1,056	1,656	4,892	9,856	6,600	2,970	80	3,785,815	44,167	5,900	2,725	770	159,180
1879	16,891	58,093	13,100	31,475	1,100	1,400	5,039	10,573	.....	.....	16,055	3,592,531	44,264	6,420	1,614	1,736	165,210

THE OYSTER INDUSTRY.—Mr. Ernest Ingersoll reports as follows concerning the oyster industry of this district:

"A few miles up from the mouth of the river Piscataqua, and the harbor of the city of Portsmouth, N. H., an extensive bay reaches southward from the river into the lowlands. It is divided into two portions: first, Little Bay, nearest the river, and second, Great Bay, with which the former is connected by Furber's Straits, where Durham River comes in. A portion of Great Bay, on the eastern side, is also known as Greenland Bay; and two rivers flow into it (the Exeter and Lamprey), besides a multitude of trout-brooks. This interior basin is perhaps 10 miles long and 5 to 7 wide, but the shores are very irregular. It is so shallow that a large portion of the shores are left as dry flats at every low tide, yet there are channels deep enough to allow large vessels to go up to New Market and Exeter, when the water is favorable. This spot was renowned among the Indians for the oysters living there, and considerable shell-heaps attest the constant use made of the bivalves. Whatever might have been its resources a century or half a century ago, it is certain that within more recent times the locality was forgotten, or at least made no account of, as oyster-ground, by the large population that inhabited the shores. It was therefore looked upon almost as an original discovery when, in 1874, the explorations of the Coast Survey, which was sounding and mapping out the channels, showed that there were oyster-beds still flourishing at many points from one end of the bay to the other; that is, in Great Bay, for none, to my knowledge, have ever been found in the outer Little Bay. There were no tools proper for the gathering of oysters in the neighborhood, and very little was done at first to make the knowledge gained available. There lived in New Market, however, an old Chesapeake oysterman by the name of Albert Tibbetts, who sent to Providence for oyster-tongs, procured boats, and began raking in earnest. Others imitated his example, and the following year witnessed great activity. For several months, I was told, there were probably a dozen boats, with two or three men in each boat,

raking every day, the average take being about five bushels to the man. They used not only tongs and rakes, but used also dredges. In the winter, also, they would cut long holes in the ice, and dredge the beds by horse-power, stripping them completely. It was seen that this rash and wholesale destruction would speedily exterminate the mollusks, and laws were passed by the State forbidding the use of the dredge under all circumstances, making the months of June, July, and August 'close time,' and forbidding fishing through the ice at any time. The last regulation was the greatest help of all, for the ice-rakers would not throw back the *débris* of dead shells, but pile it on the ice, where the hundreds of young oysters attached to it would freeze to death. But these beneficent restrictions came too late, and the business of oystering has steadily declined, until now only two or three boats keep up a desultory search for profitable beds, and a bushel and a half a day is considered good work for each man. Only seven or eight persons were engaged during the summer of 1879, and these not all of their time. All unite in ascribing the decline of the industry to over-raking of the beds, and feel disposed to pray for a law forbidding any raking whatever during several years, in order to give the oysters a chance to recuperate their depleted ranks. The beds, as I have said, are all in Great Bay. They occupy the channels at various points, and are each of considerable extent. There are perhaps a dozen well-known localities or clusters of beds. These are mainly situated in Greenland Bay, near Nannie's Island, along the Stratham Channel, up Exeter River to some distance beyond the bridge of the Concord Railroad, in the Little Channel near by, and up Lamprey and Durham Rivers. The chief raking now is done off Nannie's Island. The average of the water on the beds is hardly more than 10 feet deep, and it is pretty fresh. The tide-way, as a rule, is strong, and the bottom tough, clayey mud. The oysters are very large. I heard of specimens 15 inches long, and those of 9 and 10 are common. One man told me of a single specimen procured in 1877 which weighed 3 pounds 1 ounce in the shell, the fleshy part alone weighing 1 pound 1 ounce. These large ones, however, all have the appearance of extreme age, and are heavy, rough, sponge-eaten, and generally dead, though the ligament still holds the two valves of the shell together. In taste, this oyster is flat and rather insipid, which is laid to the too great freshness of the water. It takes a large quantity of them to 'open' a gallon of solid meat, a bushel not yielding more than two to two and a half quarts. As a consequence, there has not been a very great demand for them, though all that can be got now are readily disposed of. Formerly the price was $1 a bushel in New Market, where they were chiefly bought; but in 1879, 80 cents was the price. No culture of these or of imported oysters has ever been tried here, and the chances are against success."

In New Hampshire there are three wholesale oyster dealers; and the business of those dealers, together with the oyster business in other parts of the State, is summed up by Mr. Ingersoll as follows:

Number of wholesale dealers		3
Number of men fishing in summer for natives		6
Number of vessels and sail-boats engaged		5
Value of same		$300
Number of restaurant servants		6
Annual earnings of same		$2,500
Total number of persons supported		25
Annual sales of—		
I. Native oysters	bushels	1,000
Value of same		$800
II. Chesapeake "plants"	bushels	7,000
Value of same		$7,000
III. Fancy stock	bushels	800
Value of same		$1,000
IV. Value of Norfolk "opened stock"		$1,000
Total value of oysters sold annually		$9,800

PRESENT EXTENT OF THE FISHERIES.—The various fisheries engaged in by the New Hampshire fishing fleet of twenty-three vessels are for the capture of cod and other ground fish on the Grand and Western Banks and the New England coast, and the mackerel fishery in the Gulf of Maine. These vessels with their gear and outfit, including boats and nets, are valued at about $107,000. In the shore fisheries for alewives, herring, cod, and other species, and lobsters and clams, there are employed one hundred and seventeen boats, valued, with their nets, traps, and other gear, at $12,600. The capital in wharves, buildings, and other shore property, and the active cash capital, amounts to $89,800, making the total capital invested in the fisheries of the State $209,465. The total number of persons employed is four hundred and fourteen and the value of the products in first hands is $176,684.

STATISTICS OF THE FISHERIES OF NEW HAMPSHIRE FOR 1880.—The following statements show in detail the extent of the fisheries in this State:

Summary statement of persons employed and capital invested.

Persons employed.	Number.	Capital invested.	Amount.
Number of vessel-fishermen	207	Capital in vessels and boats	$106,895
Number of boat-fishermen	169	Capital in nets and traps	12,770
Number of curers, packers, fitters, and factory-hands	38	Capital in wharves, buildings, fixtures, &c	89,800
Total	414	Total	209,465

Detailed statement of capital invested in vessels, boats, nets, and traps.

Vessels and boats.	No.	Tonnage.	Value.	Value of gear and outfit, exclusive of boats and nets.	Total value.	Nets and traps.	No.	Value.
Vessels.						*Nets.*		
In food-fish fishery	23	1,019.05	$51,500	$43,005	$94,505	Gill-nets:		
Boats.						In vessel fisheries	21	$270
In vessel fisheries	117		4,590		4,590	In boat fisheries	125	1,500
In shore fisheries	94		3,190	4,610	7,800	Purse-seines	14	7,700
Total	211		7,780	4,610	12,390	Total	160	9,470
						Traps.		
						Weirs	10	1,500
						Lobster-pots	1,800	1,800
						Total	1,810	3,300

Detailed statement of the quantities and values of the products.

Products specified.	Pounds, fresh.	Pounds, prepared.	Bulk.	Value.
Grand total	10,400,294			$176,684
Fresh fish.				
For food	4,395,134			63,575
For bait and fertilizers	200,000		1,000 barrels	375
Total	4,595,134			63,950
Cured fish.				
Dry fish	2,794,210	1,066,700		33,920
Pickled fish	2,573,350	1,741,400		48,434
Total	5,367,560	2,808,100		82,354

Detailed statement of the quantities and values of the products—Continued.

Products specified.	Pounds, fresh.	Pounds, prepared.	Bulk.	Value.
Shell fish.				
Lobsters	250,000			$7,500
Clams	179,600		17,960 bushels	8,980
Oysters	8,000		1,000 bushels	*a* 6,050
Total	437,600			22,530
Miscellaneous.				
Fish oil			8,900 gallons	6,500
Fish sounds		1,500		1,350
Total				7,850

a Includes $5,250 enhancement in value of southern oysters.

NOTE.—The proportion of different species included in the fresh and cured fish is estimated as follows: Alewives, 425,000 pounds; cod, 5,447,597 pounds; cusk, 38,000 pounds; haddock, 644,347 pounds; hake, 397,500 pounds; halibut, 25,000 pounds; herring, 108,750 pounds; mackerel, 2,573,000 pounds; pollock, 75,500 pounds; swordfish, 20,000 pounds; mixed fish, 208,000 pounds.

B.—PORTSMOUTH AND VICINITY.

52. THE FISHERIES OF PORTSMOUTH AND NEIGHBORING TOWNS.

PRESENT CONDITION OF THE FISHERIES OF PORTSMOUTH.—Although New Hampshire has but one port of entry, yet this one is among the most important on the New England coast and possesses much of interest for its historic connections, as well as for its present commercial importance. It is situated on the Piscataqua River, 3 miles from its outlet into the ocean and 57 miles by rail northeast from Boston. The harbor is easy of access, has water enough at all times for the largest vessels, is well sheltered, and since the earliest settlement of the country has been a favorite harbor of refuge for coasting vessels. The river, which is the boundary between Maine and New Hampshire, has seven fathoms of water as far as 5 miles from its mouth. A swift current prevents its freezing or being blocked. There are numerous islands in the river both above and below the city. The following islands lie between Portsmouth and the river's mouth. Those belonging to New Hampshire are Leache's, Snuff Box, Oliver's or Goat, Shapleigh's or Jenkins's, Pierce's, Four-tree, and Salter's. Those within the limits of Maine are Seavey's, Clark's, Fishing, Pebble's, Gerrish, Cutt's, Moore's, and Fernald's or Navy-yard. At the mouth of the river are Wood, White, Horn, and Little Horn Islands.

Two of the islands below Portsmouth and three wharves at the city are devoted to the fishing industry. There is no direct foreign trade and but a small fleet of vessels compared with past years, yet the fisheries are at present on the increase. The vessels now engaged, though fewer in number than formerly, are of larger size, and with a prosperous season one vessel well equipped with the improved apparatus of capture will secure as large a catch as was once taken by several vessels of small size with the old methods of fishing.

The nearness of Portsmouth to the best fishing grounds and to the great fish-distributing centers of New England, a fine harbor, and the improved facilities for the capture and care of fish, all tend to the favorable development of the business.

The large vessels engage in the Grand Bank, Western Bank, and New England shore cod fisheries and in the mackerel fishery, trawls being mostly used in the former and purse-seines exclusively in the latter fishery. The small wherries used by the boat-fishermen are usually

schooner-rigged, and with a crew of one or two men are employed in trawl and hand-line fishing off the coasts of Maine, New Hampshire, and Massachusetts. This fishing is carried on for about six months of the year, and most of the catch is sold to Portsmouth dealers.

Lobster-pots are set around the ledges at the mouth of the harbor from Kittery, Me., to Odiorne's Point. The lobsters are mostly sold at Portsmouth, and distributed, boiled or alive, through the adjacent towns. A small part of the catch goes to Boston market. A State law prohibiting the capture of small lobsters is well observed, the lobsters being of very good size, though of late years not very abundant. As in other New England fishing ports, the fishermen of Portsmouth are accustomed to save the livers of fish for the manufacture of fish-oil. The firm of Marvin Brothers is engaged in the preparation of crude and medicinal cod-oil, and during the year 1879 produced 150 barrels of the former and 120 barrels of the latter grade of oil.

According to the census report on the oyster industry, by Ernest Ingersoll, published in 1881, "there are only two dealers in Portsmouth who trade in oysters by wholesale and at first hand. They each send a schooner to Virginia in April, the voyage lasting about three weeks, and bring a load of 2,300 to 2,600 bushels each. Nearly the same course is pursued here as in Boston. The captain is given sufficient money to probably fill his vessel, and told to do the best he can with it; but he is not given a rate of freight per bushel, as in Portland, but hired at a given sum, which, in 1878, was $425. This amounts, however, to about the same thing as the 18 cents a bushel paid for freight to Portland and Boston. All these 5,000 bushels of oysters are bedded down on the banks of the river in Portsmouth Harbor, a mile or so below the city, where the ebb-tide leaves them nearly dry. They last through to the middle of October, with the help of a few 'fancy' oysters from New York for the retail-counter. The cost per bushel of these oysters, as delivered in the establishment, varies from 40 to 50 cents, and the average selling price, at wholesale, is 75 cents.

"In the winter no vessels come from Virginia, and all supplies are drawn from Norfolk by steamer to Boston, and thence by rail, or, in emergency, by buying in Boston or Portland. These are almost wholly opened oysters, in barrels and kegs. Not more than 1,000 bushels, all told, are supposed to come into Portsmouth during the winter, in the shell. These cost 50 to 60 cents. Of the others, I could get nothing better than estimates from each dealer, which, added together, give about 45 barrels, or 1,350 gallons, as the combined importation. Perhaps 150 gallons more come from Boston, in emergencies. The whole consumption of Portsmouth, then, seems to cost about as follows:

Oysters in vessels, 5,000 bushels	$2,500
Oysters in shell, otherwise	500
Oysters opened (about)	750
Oysters, fancy and extra (about)	750
	4,500

"The oyster establishments employ 6 men, paid from $6 to $15 per week. In all, 25 persons are supported by the trade. No planting has ever been done at Portsmouth, and even those bedded down in the harbor show little growth of shell or body. To supply Dover, N. H., a few miles above, about 2,000 bushels of Chesapeake oysters are brought up each spring and laid down in Cocheco River, near the town. A proportionate winter supply comes by rail."

The fishing industry of Portsmouth in 1879 employed twenty-four vessels and thirty-five boats. Some 200 men were engaged in fishing, while about 30 men worked ashore in curing and packing the catch. The total capital invested in the business was about $200,000, and the value of the

product in first hands was about $150,000. The catch consisted of bank and shore codfish and other ground fish, mackerel, herring, and shell fish.

NEW CASTLE, EXETER, NEW MARKET, AND SEABROOK.—New Castle is at the mouth of the Piscataqua River, three miles east of Portsmouth. At the present time, as for more than two hundred and fifty years, the few inhabitants are mostly engaged in fishing, setting their trawls and lobster-pots near home off the coasts of Maine and New Hampshire. Their catch consists mainly of cod, hake, haddock, and lobsters, and is marketed at Portsmouth. With the exception of one small vessel of 22 tons, the fishing is carried on from dories or small wherries of sloop or schooner rig. The fishing is mostly done from April till the latter part of November. The amount of capital invested in the fisheries at this place is about $2,600; the number of men employed is forty-four; and the value of the catch is $10,000.

Exeter is 12 miles and New Market 10 miles from Portsmouth, on the Exeter River. During the months of May and June ten weirs are employed in securing the alewives that come up the Piscataqua into the Exeter River. The average yearly catch is 2,500 barrels, but has fallen short the past two years. In 1879 it was about 2,000 barrels, and was disposed of at Portsmouth. There are forty men employed and $3,000 capital invested in the fisheries at those two towns.

Seabrook is on the road from Portsmouth to Newburyport, about 16 miles from the former and 6 miles from the latter place. This town has been for over seventy-five years the chief place of manufacture for that peculiar class of fishing boat known as the "straight boat," or "Hampton boat." An account of this industry will be found in the chapter on boats and vessels.

C.—THE ISLES OF SHOALS.

53. THE ISLES OF SHOALS AS A FISHING STATION.

DESCRIPTION OF THE ISLANDS AND PRESENT CONDITION OF THE FISHERIES.—The Isles of Shoals is a group of rocky islands, eight in number, situated 9 miles southeast from Portsmouth light-house and 21 miles northeast from Newburyport light. The State line of Maine and New Hampshire passes through the group. On some of the islands not a blade of grass can be seen, while others have little patches of grass here and there. There is not a tree on any of the group and the largest vegetation is a few whortleberry bushes. The principal islands, their respective names and sizes are: Appledore, formerly Hog Island, about 350 acres; Star, 150 acres; Haley's, or Smutty Nose, 100 acres. With but few exceptions, these three islands are the home of the small resident population of the group. The other barren ledges, with here and there the solitary house of a lone fisherman or the light-house keeper, are named Cedar, White, Londonners, Malaga, and Duck Islands.

Quite a good harbor, and the only secure one, opens to the westward, with Smutty Nose Island to the northeast, Star Island to the southwest, and Cedar Island southeast.

These islands were discovered by the famous Capt. John Smith, in 1614, and named after himself the "Smith Isles"; but they did not long retain his name, for in a deed from the Indian sagamores to John Wheelright and others, in 1629, they are called the "Isles of Shoals."

From 1800 to 1880 there has been no record of the number of men engaged, or the extent of the fishing industry. Mr. L. B. Caswell, the leading fish dealer, who was born and has lived here over fifty years, reports that during his recollection quite an extensive business in fish has been

done; much more than at the present time. During 1872, there were 33 boats fishing from Star Island. That year Star and Appledore Islands were sold for hotel purposes, and large summer hotels were built, which are yearly crowded with guests during the summer months, giving the islands a lively appearance. This inroad of tourists has, however, driven the fishermen away from the two leading islands.

"Twenty years ago," wrote Celia Thaxter in 1873, "Star Island cove was charming with its tumble-down fish houses, and ancient cottages with low, shelving roofs, and porches covered with the golden lichen that so loves to embroider old weather-worn wood. Now there is not a vestige of those dilapidated buildings to be seen; almost everything is white and square and new; and they have even cleaned out the cove, and removed the great accumulation of fish-bones which made the beach so curious."

The fisheries of the islands in 1880 were carried on by thirty-five men, who owned a small schooner and twenty small sail or lapstreak boats. The catch consists of ground fish, herring, mackerel, and lobsters. The capital invested amounts to about $2,600, and the value of the products is about $8,000. Most of the fish are sold in Gloucester and Boston, though in the summer season the hotels take a considerable quantity.