

of haddock and some cod as we were sure to find potatoes by pulling up the tops and digging where we had planted the seed in the spring. But after two or three years of using the troll-lines, leaving the fish to die on the hook at the bottom, a man might as well stay at home and fish for haddock in the well—he would catch just as many; but the trollers at that time, I remember, claimed that the steamboats drove the fish out of our Reach.

I have faith that you can help us out of our present trouble, and restore, in a measure, the supply of cod and haddock along our coast. Please inform me what steps are necessary to procure a number of young fish for Eggmoggin Reach, in Hancock County, Maine. Haddock were the fish that mostly frequented that place. Can young haddock be procured from your hatchery at Wood's Holl, Mass.?

BROOKLIN, ME., *February 27, 1886.*

REPLY OF PROFESSOR BAIRD.

I have read with much interest your letter relating to the abundance and disappearance of fish in Penobscot Bay. It is a very difficult matter to say positively what has been the most potent of the many causes for the disappearance of fish from their accustomed haunts. I think, however, I can answer with some certainty that it is within our power, by means of artificial propagation, to restock waters and re-establish such fish as cod and haddock in localities where they formerly abounded. From the experiments which have already been made, it can be asserted with considerable confidence that a school of cod may be established in any given locality by constant deposits of fish produced by artificial means.

I trust that, in the course of time, we shall be enabled to extend the work now being carried on at Wood's Holl and Gloucester, all along the coast of the Northeastern States.

WASHINGTON, D. C., *March 2, 1886.*

22.—NOTES ON THE FISHERIES OF PENSACOLA, FLA.

By SILAS STEARNS.

The fishing business of Pensacola has been more extensive during the year 1885 than at any time before. The first of the year found an unusually large fleet of well equipped vessels at work in the red-snapper fishery. One schooner of the fleet was a Portland, Me., mackerel catcher, with a crew of sixteen men, and several others were recent purchases from New England, with large Yankee crews. The outfit of all the vessels had been improved, and it can justly be said that no better equipped fishing fleet existed anywhere. The most competent skippers that could be found were employed, and under their direction some methods new to

this section, such as trawling, were thoroughly tested and found to be of no advantage.

The weather throughout the winter was unusually bad, as there was a succession of hard blows. The Northern fishermen complained that our weather was nearly as severe as that of their own coast, and that the short, choppy seas of the Gulf were more troublesome than the long, regular roll of the Atlantic. The large schooner from Portland did not appear to have any advantage over the smaller home vessels, and she did not land as many fish as some of them did. Several of the latter made good fares all winter; but the majority of the fleet, especially the small well-smacks, did not make any money.

The larger part of the fish caught came from comparatively a slightly fished ground, about 215 miles southeasterly from Pensacola. The older grounds, from Pensacola to Cape San Blas, did not yield any good fishing. The necessity of going so far for fish increased their cost and made them of less value on account of their being so much longer kept in the vessels. Instead of taking one week, the trips were lengthened to two weeks, which makes quite a difference to the outfitters, who pay the wages of the crews. It is an open question whether the fish have been driven from the adjacent grounds by severe weather or have been in a degree exhausted. It could hardly have been because of not having suitable bait, for at that time there was a good supply of the several kinds that snappers usually prefer. The explorations of the Albatross, made upon the most noted grounds during the milder weather of spring, would suggest that the fish had gone from the grounds.

In spite of the boisterous season the larger number of vessels brought the catch to a much greater amount than that of any former season. In the latter part of the winter one new fishing firm was established.

The prices paid the fishermen remained at the same figures as before; the selling prices were also kept up. The demand after the 1st of January, when the Western lakes were frozen, was moderately good, but showed a falling off from the year before. At the end of the lenten season the red-snapper fleet was reduced from twenty to twelve vessels, the majority of the Northern men going home. The run of shore fish was delayed about a month by the unusually cold weather; and when it did take place almost every point had been fully supplied from either Cedar Key or Tampa.

Spanish mackerel came on the coast in great numbers, exceeding anything known for many years; but there was little demand for them, and no good profit was realized on those sold. Pompanos were not so plentiful as usual, and were not in much demand, as Cedar Key had a large run much earlier in the season. Bluefish came during the last of April, after the mackerel and pompanos, and in no great abundance.

During the summer about a dozen snapper fishing vessels were run with small crews and with orders to bring in limited quantities. The

demand was very light. Fish seemed to be abundant, although not so much so as in former seasons.

During the early fall they were brought in in such quantities as to glut the market. It was expected that the demand in the interior would be very good, but such hopes were not realized. The comparative failure of the staple crops throughout the South, and the general stagnation of business everywhere, made the disposal of fish very difficult.

There was a very large run of bluefish on the coast for several weeks in the fall, and the larger ones of 2 and 2½ pounds weight found ready sale, while the smaller ones were salted for snapper bait. Other shore fish were not abundant.

When the red-snapper fishing was at its best a fleet of 8 large schooners appeared from the North to take part in it. The outlook for them was so discouraging that they were at first inclined to return, and one of them did go to Savannah; but upon getting offers for their fish at a low figure they decided to remain. The result shows that they would have done better to go, or not to come in the first place, as they have done so little that they are still in debt for their outfits at home, and some still owe for their outfits of ice and bait here. Directly after their arrival the weather became so severe that they could not fish or remain at sea, and after it became milder they could not find fish. Nearly every vessel in the fleet failed to pay her bills, and the owners are glad in case no serious damage was done to the vessel. It is a curious fact that nearly every one of the large schooners sustained damage of some sort, while the home fleet of smaller craft endured much hard usage unscathed. The trouble at this date is not so much from bad weather as because there seems to be no body of fish on any of the grounds, even on the far-off ones, so successfully resorted to last winter. Occasionally a vessel finds a little spot where she secures a moderate fare, but such occurrences are uncommon.

The buying price of snappers has remained stationary, while the selling price, even in times of the greatest scarcity, has been extremely low (in fact, hardly above cost), on account of unreasonable competition among the dealers. The demand is good throughout the West and North, the South buying but a small proportion.

The shore fisheries of Cedar Key during the past year have been fairly successful, although the dealers there, as everywhere else, found but a light demand. The spring season's business was unusually good at Cedar Key and Tampa; the fall business was rather poor.

Salted mullets found slow sale everywhere, and almost everybody handling them has been obliged to hold over a considerable quantity. The Key West fisheries of all kinds have not been profitable, and outside of the sponge fishery there has been but little activity.

The shore fisheries on the Louisiana coast have about maintained their usual importance.