

satisfactory results. Especially is this true of depositing too many kinds together, without reference to the present inhabitants and special conditions of the waters and to the requirements of the new-comers. Many of the early plantings, however, in the waters of Michigan were largely matters of experiment, and need not be repeated.

BATTLE CREEK, MICH., *October 26, 1886.*

123.—NOTES ON THE NEW ENGLAND FISHERIES IN DECEMBER, 1886.

By W. A. WILCOX.

As usual at this season of the year, most of the fishermen and fishing-vessels are either idle or engaged in other callings. The severe losses in December of 1885 and previous years wisely lead to a partial temporary suspension of the fisheries. During the month there were many severe storms and much rough weather, yet accompanied by comparatively few disasters.

A much reduced fleet from Gloucester has continued in the cod fisheries of George's Bank and the fresh-halibut fishery of the more distant fishing-banks.

A number of sail from Gloucester and other ports have also engaged in supplying the large demand for fresh fish. Vessels have also sailed for the Bay of Fundy and Newfoundland for cargoes of frozen herring.

The receipts of salt cod at Gloucester have been mostly from Western Bank, and the amount varies but little from that of the corresponding month of 1885, which was principally from La Have Bank.

The catch of codfish off Cape Ann and particularly in Ipswich Bay has been light, the fish having been late in striking in or near shore; while the fewer vessels and boats engaged, and much rough weather, all combined, accounts for decreased receipts from the shore catch. The schooner Arthur D. Story, the only vessel sent to the Bay of Islands, Newfoundland, for herring, arrived at Gloucester on December 2 with 800 barrels of fish.

Mackerel of large size and fine quality remained in the vicinity of Cape Cod up to the middle of the month, the vessels engaged in this fishery having all hauled up; and the catch was confined to gill-nets, weirs, and traps, which realized over \$50,000 from the late catch of mackerel.

The remaining weirs and traps along the Massachusetts coast were all taken up during the month. Owing to the abundance of bait on the fishing-grounds, the low prices obtained for it, and the scarcity of more valuable fish, their business has not shown much profit.

Squid continued very plentiful on Western Bank and George's Bank up to December 7. Many vessels left port without any bait, depend-

ing on taking it on the fishing-grounds, in which they were successful. During the last few days of the month (weirs and traps being up), for the first time during the season, fresh-fish bait was scarce, but clams were substituted and not much inconvenience was experienced.

Codfish have been unusually abundant on Western Bank during a large part of the season. Schooner Susie Hooper, of Gloucester, one of the last arrivals from there, reached her home port on December 14, having been absent only five weeks, bringing in 105,043 pounds of split cod. The fish were all taken with hand-lines from the vessel. This is reported as one of the largest fares of hand-line-caught salt cod ever landed at Gloucester.

Herring were scarce in the Bay of Fundy up to the very last of the month, when an improved catch was reported.

Halibut receipts at Gloucester vary but little from those of December, 1885, the catch being mostly from the Grand Bank.

December brings to a close a year that opened with storms and disasters, followed by many other dangers and much excitement, low prices and light receipts, the smallest catch of mackerel for over forty years, and with few exceptions, an unprofitable year's work.

Fish landed at Gloucester, Mass., by the fishing-fleet in December, 1886.

From—	Fares.	Codfish.	Halibut.	Haddock.	Pollock.	Hake.	Mackerel.
Landed by Gloucester vessels:		<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Barrels.</i>
Western Bank	49	2,205,000	2,850				
George's Bank	13	281,000	1,100				
Jeffrey's Bank	3				28,000	6,000	
Banquereau	10		151,800				
Grand Bank	17	100,000	414,000				
New England shore	51	160,400		22,000	4,950		
Small shore-boats		92,000			2,350		
Gulf of Saint Lawrence ..	1						40
Total	144	2,838,400	569,750	22,000	35,300	6,000	40
Landed by vessels from other ports	8	42,300			300		
Total, December, 1886 ...	152	2,880,700	569,750	22,000	35,600	6,000	40
Total, December, 1885 ...	244	2,867,300	580,000	91,600	24,150	20,500	

Miscellaneous receipts of dried, smoked, and pickled fish at Gloucester, Mass., in December, 1886.

From—	Mackerel.	Hake.	Herring.	Smoked herring.
Grand Manan, New Brunswick	<i>Barrels.</i> 29	<i>Quintals.</i> 540	<i>Barrels.</i>	<i>Boxes.</i> 3,691
Bay of Islands, Newfoundland			800	
Total	29	540	800	3,691

GLoucester, MASS., December 31, 1886.