

MOVEMENTS AND CATCH OF MACKEREL.**By S. J. MARTIN.**

[Letter to Prof. S. F. Baird.]

This year I have watched closely the movements of mackerel and made frequent inquiry about them of the fishermen as they daily arrive from their trips. It seems to be a very general opinion among the most experienced masters of the mackerel vessels that mackerel very seldom school in deep water; that is, in water over fifty fathoms in depth. They are rarely taken in water fifty fathoms deep, but so far this year they have been most abundant in from thirty to forty-five fathoms. About the 12th of June they were taken together with shad in Boston Bay in shoal water, but in no great abundance. Captain Melanson, in schooner *Crest of the Wave*, got 28 barrels of mackerel on the above date off Highland Light, and with the mackerel he took 8 barrels of shad. These were caught in 35 fathoms of water. Other vessels caught more or less of these mackerel as they moved eastward. They appeared to move quite close inshore until they reached the vicinity of Portland, about the 20th of June, when they disappeared. Since that date no quantity has been taken within 15 miles of the coast and but few within 40 miles. Trap-fishing for mackerel, as well as drag-net fishing, has been very unprofitable. This is very different from last year and the year before, when the trappers and netters made a good year's work, and the harbors were full of mackerel from the middle of June until late in July. The market boats last year found plenty of mackerel throughout July in Boston Bay, so that they could make short trips; but this year they have been obliged to go farther to the eastward, getting fare from Cash's to the head of the Bay of Fundy. Where last year these vessels could make three trips a week they now seldom make more than one or two. More fresh mackerel have been taken to Portland this year than usual, that port being very much nearer the fishing grounds than Boston or Gloucester. In Portland these fresh fish are sold by the pound from the vessel, while in Boston and other ports they are sold by count.

The main body of the mackerel does not appear to have come inshore, but, coming from the southward, they have crossed South Channel, and have been very abundant on George's Banks, being seen by the cod fishermen in great schools, both in the northwest and southeast parts of the Banks, ever since the middle of June, in water from 35 to 50 fathoms deep. The fish that were schooling on the southeast part of George's seem to have struck across towards the Nova Scotia shore, where they were taken in abundance by the trap-fishermen at Barrington, Yarmouth, and other places. None of these have been taken by the trappers since about the 8th of July. Where they have gone to is a mystery to the fishermen. They were big fish, about two-thirds large, as is

shown by some bought of the Nova Scotia trappers by two Gloucester vessels, the Joseph Story and J. J. Clark, that purchased about 300 barrels each and sold them in Gloucester about the 20th of June. Many of the fishermen think that these mackerel have gone up across the Gulf of Saint Lawrence, by Saint Paul's Island, towards the Labrador coast. It seems certain that they have not gone to the vicinity of Prince Edward Island, for none of any amount have yet been taken there, and very few taken at Magdalen Islands, and those of poor quality.

To return to George's, the mackerel seen on the northwest part of the bank moved toward Cashe's Bank, and from there to the eastward as far as Grand Manan. One trip, by schooner J. W. Campbell, was taken last week about 10 miles southwest of Grand Manan. This school did not go inshore on the coast of Maine, but kept at least 20 miles off, being taken 20 miles off Monhegan and Matinicus, and from 20 to 30 miles off Mount Desert Rock. Two vessels arrived about July 1, with trips taken on Seal Island ground, about 25 miles W. S. W. from Seal Island, Nova Scotia.

In moving from George's to the eastward they did not school in the deeper water between the banks, but only showed themselves when they reached Cashe's Bank in from 40 to 50 fathoms. Vessels fishing on Cashe's find that the mackerel show up every two or three days, and it is a general opinion that each lot is a different school coming from towards George's. The fish are still moving to the eastward, and it is impossible to tell where they will "bid up." I shall watch their movements with much interest.

The quality of mackerel thus far has been poorer than usual. Last year at this time half were No. 2's, but this year there are not more than one-third 2's. They are long enough, but not fat enough, and the fishermen think the leanness is owing to a scarcity of food. Earlier in the season some food was found in the fish, but now scarcely any is seen in them.

As the fish have been so far off-shore, I have not had much opportunity to observe their condition as regards spawning, but from what I can learn of the fishermen, they are spawning later this year than usual.

The mackerel fleet is very large, 140 sail from Gloucester alone, against about 120 last year, and at other ports there is also an increase in the number of vessels. The catch up to this time is much larger than at the same date last year, and bids fair to exceed any previous year. The price is higher than last year, and the business is now very prosperous. Nine sail of vessels, with 3,000 barrels of mackerel, arrived here this morning, and the fish were all sold before noon at \$5.75 per barrel as they run, including the barrel. Barrels are in great demand, and sell readily at \$1.15 each, and likely to increase in price. The first of the season they sold at 65 cents apiece. Five thousand arrived yesterday from Bangor by vessel.

GLoucester, MASS., July 18, 1882.