

sea, where cold currents also would tend to make it still less uniform, and thus interfere with the generation of the minute food of the oyster. In other words, it would appear that the effect of the French method is to furnish the best conditions for the rapid and constant propagation of an immense amount of microscopic food well adapted to nourish the oyster; that, unlike oysters exposed to a rapid flow of water on a bottom barren of minute life, they grow and quickly attain a saleable condition.

In this country narrow coves and inlets with comparatively shallow water appear to furnish the best conditions for the nutrition and growth of oysters, and according to my own meager experience these are the places where we actually find the minute animal and vegetable life in the greatest abundance; and, as might have been expected, the oysters planted in such situations appear to be in good condition early in the autumn, long before those which are found in deeper, colder, and more active water, where their microscopic food has less chance to multiply.

As to the influence of brackish water in improving the condition of oysters, let me observe here that those who hold to that opinion appear to forget to bear in mind the fact that brackish water beds are often in the case just described. Being in shallow, relatively quiet water, an abundance of food is generated, which is rapidly consumed by the animals, which quickly brings the latter into condition, the brackish state of the water getting the credit of the result.

In my report to Maj. T. B. Ferguson, I stated my belief in the practicability of establishing permanent oyster banks or ridges. During the last summer, in the Cherrystone River, Virginia, I saw my idea practically realized. A heap of shells in the river had been scattered so as to form a low, solid elevation, which was alternately covered and uncovered by the rise and fall of the tide. Upon this spat had caught in such multitudes and grown, until the whole in two years was as completely and solidly covered by living, natural-growth oysters as any natural bank I had ever seen. The desirability of using the poorly-grown stock from natural and artificial banks as "seed" for planting appears reasonable, and could no doubt be made profitable where banks of sufficient extent could be established from which a supply of seed oysters could be obtained.

SMITHSONIAN INSTITUTION,
Washington, April 15, 1882.

NOTES ON THE FISHERIES OF GLOUCESTER, MASSACHUSETTS.

By S. J. MARTIN.

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

The cod net fishing is done for the year. The amount of codfish caught in nets during this winter was 640,000 pounds. If the codfish had been plentiful the catch would have been very large.

There have been 25 boats fishing with nets. The average was 20 nets to a boat. Some of them stopped fishing with nets the first of March.

The majority of the haddock-catchers have stopped fishing for this year. Five of the largest, however, will continue fishing for haddock during the summer. The haddock-catchers have all done well this winter.

I will tell you some of the stocks. Schooner *Mystic* stocked \$17,576.44; schooner *Reporter* stocked \$15,300; schooner *Martha C.* stocked \$12,600. These are the three largest. The average stock of the fleet is \$9,000. The price for haddock has been high all winter. Some of the vessels have been offered \$1.80 per hundred until the 1st of June, for all they could catch. They refused that price. They think they will do better.

The *George's* fleet has done very well. The price for salt fish is high, \$3 a hundred pounds out of the vessels. All the fish the vessels have brought in this spring have been split. No round ones as in former years. The halibut catchers have fetched in some good trips recently. They have made large stocks. The price for halibut, as well as for all kinds of fresh fish, has been good. Halibut sold yesterday at 7 cents per pound; cod, 3 cents per pound; haddock 2 cents per pound. These are high prices for this time of year.

They are catching some herring in the harbor; that will start the small boats.

I am sorry to say there are two more vessels missing—two of the *George's* fleet. They have been gone six weeks. The owners have given them up. The mackerel fishing looks well for the year to come. No old mackerel in the market. All kinds of fishing look well for this year.

GLOUCESTER, MASS., *April 9, 1882.*

I send the amount of fish taken at Gloucester during the month of April:

George's cod (salt fish)	pounds..	2,114,000
George's halibut.....	do....	38,000
Western bank codfish.....	do....	2,128,000
Western bank halibut.....	do....	30,800
Grand bank halibut.....	do....	407,000
Haddock (caught on <i>George's</i>).....	do....	205,000
Haddock (shore).....	do....	183,800
Cod (shore).....	do....	107,100
Imported fish (dried haddock).....	quintals..	197
Imported fish (dried hake).....	do....	96
Herring (frozen).....	number..	200,000
Herring (fresh) caught at Gloucester and sold to the fishermen	barrels..	275

GLOUCESTER, MASS., *May 3, 1882.*