

**119.—REPORT UPON THE SHAD AND HERRING FISHERIES OF THE POTOMAC RIVER FOR 1884.**

**By GWYNN HARRIS.**

[From a letter to Col. M. McDonald.]

**SHAD.**

Number of shad landed and inspected in Washington.....	231, 111
Number of shad landed at Alexandria, Va.....	74, 000
Number of shad landed at Georgetown.....	670
Number of shad shipped by steamer Corcoran*.....	19, 000
Number of shad shipped to Baltimore by steamer Sue.....	9, 200
Number of shad sold on the different shores and from trap-nets.....	13, 500
<b>Total number.....</b>	<b>347, 481</b>

**HERRING.**

Number of herring landed and inspected in Washington.....	5, 640, 812
Number of herring landed at Alexandria, Va.....	2, 998, 000
Number of herring landed at Georgetown.....	200, 000
Number of herring shipped to Baltimore by steamer Sue.....	58, 000
Number of herring sold on the different shores and from trap-nets.....	1, 400, 000
<b>Total number.....</b>	<b>10, 296, 812</b>

The first herring of the season was caught February 18th. The first shad was taken on March 3d.

The herring product shows an increase of 1,307,551 on the catch of 1883, while the shad figures indicate a decrease of 32,335 as compared with the figures of 1883. (See page 13 of present volume.)

**120.—A NEW METHOD OF PROTECTING THE EGGS OF CARP AND REARING THE YOUNG.**

**By L. T. WHEELER.**

[From a letter to Prof. S. F. Baird.]

I have now had three years and a half experience in the raising and hatching of German carp, and it may be that my experiments may be worth something to others, particularly in the South.

All still-water ponds should be as deep as possible so as to prevent stagnation and to insure a certain supply of water when the rainfall is alone to be depended upon.

As it is next to impossible to keep out native fish, I had to resort to partially artificial means to hatch and protect carp. I have adopted the following plan with eminent success:

About the 1st of May, having first procured a quantity of long sea-moss, I tie it in small bunches and lay it in shallow water near the bank,

\*These figures were taken from the account furnished by the clerk of the steamer.

attaching it safely to the bank where it will have as good an exposure to the sun as possible; carp will not spawn in the shade. By the 5th of May in this latitude (32°) the carp will begin to spawn. They may be seen in great numbers, fluttering near the banks in shallow water, and they will be sure to find the moss and to deposit innumerable eggs upon it; the eggs will adhere to the moss from three to four days and then drop off. To protect the eggs and the young from the ravages of other fishes I constructed boxes 10 feet long and 5 wide. The gunnels or side pieces are 1 by 12 with a good water-tight bottom. The ends of these boxes are made of wire cloth sufficiently fine to prevent the escape of the smallest carp and to admit a constant flow of fresh water. The bottoms are covered an inch deep with pure sand. When placed in the water they sink until the water stands from 6 to 8 inches deep in them. As soon as I discover the eggs on the moss I gather up the moss and lay it in these boxes, putting weight enough on to keep it barely under the water. In eight or ten days, according to the temperature of the water, the young will be seen. It is best to anchor these boxes in the middle of the pond, where they will be subjected to the action of the wind and waves and have as fair an exposure to sun as possible. After the young are two or three weeks old they should be protected from the midday sun. It is wonderful how many can be hatched in a box of the size given. As the growth increases they should be divided and kept until they are large enough to take care of themselves, which will be in two or three months, if there are game fish in the pond. I commence feeding when a month old by sprinkling corn-meal in the boxes, but not enough to leave a residuum.

Carp do not spawn in this climate until they are two years old, and at three they spawn enormously. They begin by the 5th of May and run from three to five days only. I had only one that was as late as the 25th this year. I did not observe it spawning but one day, though I watched it closely day and night. I placed all the spawn of this one in a box by themselves; yesterday I bailed the water out of this box, straining through a wire sieve; it is simply wonderful how many young there are—too many to count. I am now selling the young, having sold to one man 1,000 at \$15 per hundred, and have demand for every one that I can hatch.

I have given the cultivation of the carp the closest attention, endeavoring to find out the most simple way to hatch and protect them, and one that any farmer could understand and adopt without requiring much time or attention. I have been eminently successful, and there is no reason why others should not be. My oldest carp are now three and a half years old and I expect to exhibit one at the fair in New Orleans that will weigh thirty pounds.

- CORSICANA, TEX., *July 1, 1884.*