

A glance at the above table will suffice to show that the fish fauna of all the streams in the region under consideration is essentially the same. Indeed it appears to me that it would be somewhat hazardous in the present state of our knowledge to say that any fish now known from but one or two of these streams will not yet be found in all.

All the species in the table except *Morone interrupta*, *Minnilus lirus*, *Amiurus marmoratus* and *Amia calva*, have been collected by myself in the State of Mississippi. These species also doubtless occur in that State.

BUTLER UNIVERSITY, *Irrington, Ind., July 26, 1882.*

STRIPED BASS IN PIANKATANK RIVER, VIRGINIA.

By R. HEALY.

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

I see it stated in the New York Herald, under the heading "Sea-fish culture," that the "eggs of the striped bass have been hatched in many instances, but the place where they spawn in numbers sufficient to make it profitable to seek them on their breeding-grounds, has never yet been discovered." If this be true, probably I can give you a clew.

The Piankatank River, upon which I live, is about 65 miles long. About 30 of this is estuary. The remainder is a fresh-water stream, about 25 or 30 feet wide, which makes its way, for 30 miles, through an alluvial country, and for 15 miles of the lower part through a cypress swamp. The water is clear but dark colored, and the stream is 2 or 3 feet deep, with bars of white sand, and deeper holes where the bottom is covered with leaves and fallen wood. Up this stream, as far as I can remember, two kinds of rockfish have been caught; one a large fish with the stripes upon the sides broken; on the other the stripes run from head to tail. The first we know as bass, the other as rockfish. These fish when full of roe are called green-roe rock. They come up the river late in February and in March, and years ago were very abundant. They are becoming scarce in consequence of the high price of fish at the North, and the many devices to catch them, among others that of an old fellow named Norton (since dead), who used to make a coarse wattle across the stream with a large hole in it. At this he would stand with a large hand-net, in the night, and whenever he felt a fish, would raise it quickly and land the fish on shore. All these fish had large green roes—very fine—finer than shad or herring.

A friend of mine told me that one morning Norton brought him three of these fish, and told him he had taken over a dozen during the night, and would have taken more but that an immense fish had broken his net. I have seen them taken in seines, but never with hook and line. Those that bite at hooks have very small roes, yellowish-white, which are called "he-roes." These fish are becoming scarce. Very few large

ones are now caught, and none but large fish have the green roes. I never saw a green-roed rock less than $2\frac{1}{2}$ feet long; some are much larger.

A good many small fish, 2 or 3 inches long, are seen in the summer and in the winter; sometimes thousands are caught at a haul from 10 to 20 inches long. I recollect a haul made about 40 years ago, when 800 of these fish, over 3 feet long, were taken, and I think the largest weighed over 70 pounds. Rockfish could be bought then for less than a cent a pound. Now they are worth 8 cents at the seine.

HARMONY VILLAGE, VA., *January 30, 1882.*

ANSWERS TO QUESTIONS RELATIVE TO CATFISH.

By CHARLES E. HIESTER.

A.—NAME.

1. What is the name by which this fish is known in your neighborhood?—A. The catfish.

B.—DISTRIBUTION.

2. Is it found throughout the year, or only during a certain time; and for what time?—A. They are found in warm days in February, and all through the warm weather; when the water freezes they go into the mud.

C.—ABUNDANCE.

3. If resident, is it more abundant at certain times of the year; and at what times?—A. They are most abundant about May 1.

4. How abundant is it, compared with other fish?—A. At least fifty times more abundant than any other.

5. Has the abundance of the fish diminished or increased within the last ten years?—A. Increased.

6. If diminished or increased, what is the supposed cause?—A. Almost every egg hatches, and the young ones are not relished as food by other fishes on account of their stingers; bass and pike are about the only fish that can eat them.

D.—SIZE.

8.* What is the greatest size to which it attains (both length and weight), and what the average?—A. Fourteen inches length; 1 to $1\frac{3}{4}$ pound. Average, 10 or 11 inches; and average weight, three-fourths of a pound.

9. State the rate of growth per annum, if known; and the size at one, two, three or more years.—A. One year old, 3 inches; two years old, 5 to 6 inches; after that, cannot say.

10. Do the sexes differ in respect to shape, size, rate of growth, &c.?—A. No difference except just before spawning.

* Certain questions in the list were not answered and their omission accounts for the numbers not being consecutive. For full list of questions see Report of the Commissioner, part I, page 3.