

to the consumer; (3) which is the most destructive; (4) which is most calculated to exhaust the supply?

There are only about 2 miles of frontage here where pound-nets can be set, on account of the form of the lake bottom. Just along here for the 2 miles it is a sand and mud bottom, and the only place where pound stakes can be driven. The rest of the shore from here to Silver Creek, in New York, and from here to Fairport, in Ohio, is rocky bottom, and pound-nets cannot be set. Thus we have a rocky shore for a distance of almost 200 miles, with only a small space of sand and mud at this place.

ERIE, PA., *March 27, 1885.*

107.—RE STOCKING THE MERRIMAC RIVER WITH LAMPREY EELS.

By GEORGE W. RIDDLE.

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

Amoskeag Falls on the Merrimac River was once the great fishing-place of New Hampshire. It was here Passacanaway and his tribe of Indians lived and had their noted fishing-place, more than one hundred and twenty-five years ago; the waters teemed with salmon, shad, and lamprey eels. About forty years ago a high dam was built on the Merrimac River at Lawrence, Mass., 40 miles below here and some 25 miles from the mouth of the Merrimac River, which enters the Atlantic Ocean at Newburyport, Mass.

Since the building of the Lawrence dam (30 feet in height) fish and eels have become extinct, as they could not reach the spawning beds. Fishways have been built ten years or more, but no eels and but few salmon have come up the river. Four years ago I took from the Lawrence fishway some 200 lampreys, placed them in barrels, and transported them by rail above Amoskeag Falls. The result is that this year thousands of full-grown eels have put in an appearance and have gone up through the fishway.

They have ascended the river to the hatching house at Plymouth, 150 miles from the mouth of the river. Thousands of them have been seen at Amoskeag Falls in this city on their way to the spawning bed. As they have once more reached their spawning beds, I have no doubt that the return is a permanent one.

It is a great satisfaction to the fish commissioners to know that they have succeeded in restocking this river (which turns more machinery than any other river in the world, it is said) with lamprey eels, and it gives our people much encouragement to go on in the great work of restocking the large water-area of this state.

MANCHESTER, N. H., *June 19, 1885.*