

208 NOTES ON THE SCOTCH HERRING FISHERIES.**By T. F. ROBERTSON CARR.**

[From a letter to Capt. J. W. Collins.]

The herring fishing is now in full swing; there never before were known such takes. Fancy 4,000 crans of herrings thrown into Frazerburg bay. The prices were very low this last week, in fact will not pay the wear and tear of gear. One thing that is operating very imperiously against the fishing is that a great many fishermen in the north use a very small meshed net. They go 35 to 50 miles off to meet the shoals, and in most cases tow in. This is at the beginning of the season. The fish are then too oily, not fit to cure for the continental market, and, in short, they are perfect rubbish. The English markets have been packed with this stuff, selling at 12 for a penny. Now, when the fine, large, matured herring go into the market, the buyers object to giving a decent price for them. They have got up a cholera scare, so, for these two reasons, fishermen and all concerned in the herring business are having a hard time of it.

BERWICK-ON-TWEED, ENGLAND, *August 11, 1884.***209.—PORPOISE-FISHING AT CAPE MAY, NEW JERSEY.****By FREDERICK W. TRUE.***Curator of Mammals, U. S. National Museum.*

Having received an invitation from the officers of the Cape May Porpoise Oil and Fishing Company to inspect their operations, I visited the locality in middle of the present month. My assistant and myself received all possible courtesy during our visit, and I would here renew the thanks which I offered verbally to the president of the above-named company.

The species of porpoise captured is known to science as *Tursiops tursio*, and although, so far as I could ascertain, our fishermen have no common name for it, it may, at least for the present, be designated in English as the Bottle-nose dolphin. It reaches a length of 10 or 11 feet when full-grown. The color of the back and pectoral and dorsal fins is a gray of greatest or less depth, while the belly is pure white. The beak is rather short and stout, and there are forty-four or forty-six teeth in each jaw. The species is one of the commonest in the North Atlantic, occurring both on our coasts and those of Europe in great abundance.

The company was organized early in the present year principally by gentlemen of Cape May City. Although the capital invested is con-

siderable there have been large drains upon it for apparatus for experiments, some of which have not led to satisfactory results. The fishery was commenced with two steamers, but it was found upon trial that the nets could be better managed by the use of one steamer and several small boats. The tug-boat now employed is of fair size, but is considered to have too much wood-work above deck, which prevents the nets being properly stowed. The tug is accompanied by two yawls and a surf-boat. The crew consists of about twelve men. Two kinds of nets have been experimented with, one having wings and a very long, narrow pot (thus somewhat resembling in form a fyke-net), the other being a simple net of stout twine with large meshes. The latter net is the one at present in use. With it is employed another net having fine meshes.

The method of the fishery is a simple one, and consists merely in patrolling the shore with the steamer and surrounding by means of the nets any school which is met with near land. The coarse-meshed net is paid out around the school somewhat in the manner adopted in the menhaden fishery, and the fine-meshed net is then run around inside the first. The use of this second net is to entangle and drown the porpoises as well as to prevent their breaking through the coarser net. The ends of both nets are brought to land, and the hauling-in is done from the beach.

In the haul which I witnessed a school of about twenty-five porpoises was surrounded, but unfortunately three of them, in their efforts to escape, rolled up the nets at the bottom and allowed the rest to escape. The bottle-nose dolphin does not attempt to jump over the net as the "puffing pig" (*Phocæna communis*) does, but seeks to escape by diving beneath or breaking through it. The company has thus far captured over two hundred specimens.

The products obtained are oil, hides, meat, and fertilizer. All portions of the body are utilized. I was informed that the blubber seemed to be growing thicker at this season. The hide and blubber are removed together. The skin is then laid on an inclined currier's board and the blubber shaved off and dropped into a tub below. The oil is extracted by heating the blubber in large boilers. Experiments have also been made in cold-pressing. The dressed hides are sent to Newark, N. J., to be tanned, and the flesh finds a market in Philadelphia. The bones and other refuse go to form a fertilizer.

The energy with which the fishery is prosecuted merits success. There are many difficulties presented by a new enterprize of this character, which are not encountered in long-established industries.

There is a crude porpoise fishery at Hatteras which has been in existence many years. It is my intention to visit the locality during the coming fall, for I suspect that the species of porpoise captured is entirely distinct from that taken at Cape May.

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