

EASTPORT, ME. OCTOBER 29, 1893.

Conversation with W. J. Fisher.

About 4/5 of the weirs in the region about Eastport are built to take herring on the ebb tide. The remainder take their herring on the flood tide, a drop being used to close the entrance, and being hauled up in place as soon as the tide is full. Knows of only 1 weir at Grand Manan built to take fish on the flood tide. In the weirs built to take fish on ebb tide, the herring will go out on the next flood tide unless a drop is used to prevent them.

Weirs will become foul in the course of time, and ballasted weirs will do so more quickly than those with driven stakes. This depends also upon the locality. But it generally takes a number of years before this results, perhaps 25 years. They full of the lower stationary or sluggish animals, kelp, and foul smelling mud, and the course fish will enter them to feed. The tide in many places has little or no effect to clear them out. Herring avoid such weirs, and they no longer

pay to fish. If the weir is taken down, the bottom round about cleaned, and a new weir built the herring will come back to it again. Most weirs, however, do not live long in precisely the same spot, although the same general locality may be used for them for a long term of years. They are destroyed by general wear and tear, and by storms, and a new weir will be constructed a little apart to avoid the old stakes, etc.

Noises made in the air will not frighten herring, but they are readily frightened by noises transmitted directly to the water, as by stamping on the bottom of the boat, by splashing with an oar, or by disturbing the water in any way, as by throwing in rocks. He was in the habit of turning the direction of the schools of herring by such means on the coast of Labrador and at the Magdalene Islands. (While out in Lubec Narrows at night about this time, I noticed that they resorted to stamping on the bottom of the boat and splashing the oars in the water to frighten the herring to the other part of the weir, where they were about to haul the seine, and they said it was

always effective).

The stakes for the weirs were formerly made mostly of soft wood, such as spruce, which will not last over 3 years. Hard wood is much better than spruce, and now is chiefly employed. White birch with the back on is preferred, and is always used when it can be obtained. It will last 6 to 8 years. Beech and yellow birch will last 4 or 5 years. The ship worm causes much damage to the stakes.

Herring oil and pumice are now made by the following persons in Eastport:

Hiram Blanchard, fertilizer works.

E. A. Holmes, sardine cannery.

H. Blanchard & Son, sardine cannery.

M. A. Parker, " "

Dennis Collins, " "

Morris C. Holmes, " "

Wm. H. Holmes, " "

Charles Capen, " "

J. D. Young, " "

Other parties may also make them at times in Eastport and several engage in their manufacture in Lubec, also Wm. Holmes, in Perry.

Some years ago it used to be quite a business on the adjacent Canadian islands, but none are made there now.

The business of making oil and pumice was profitable during the war, but subsequently died out gradually. He thinks no one has gone into it as a regular business for 15 or 20 years past. Fish are not now caught for this purpose, but they use the refuse from the canneries -- the heads and other parts of the fish which are cut off in preparing the fish for the cans. Also the spoilt fish such as might arrive in poor condition, and the surplus when more fish happen to be received than can be utilized. But the latter is only exceptional on account of the high prices paid for these fish.

It will not pay to catch herring specially for the purpose of making oil and pumice. A factory built specially for this purpose and no other could not afford to pay more than \$1. a hogshead for its herring. A sardine cannery, having its steam going every day, and its utensils and plenty of help about, might be able to pay \$2. per hogshead. During my visit to

Eastport at this time, large herring, suitable for smoking brought the fishermen about \$4. per hogshead, and smaller fish for canning \$9. per hogshead.

Herring have not been so good in flesh this year as usual, and have not yielded so much oil proportionally.

Mr. Hiram Blanchard has a special factory for producing oil and pumice, in Princes Cove, but he buys no fish for it directly from the fishermen. He takes the heads and other refuse from such canneries as do not make a practice of using them themselves.

The method of making the oil and pumice is as follows:

Square boxes are used as presses. The bottom is made of slats, 2 inches or so wide, with interspaces of  $1/2$  to  $3/4$  inch. The herring refuse is heavily salted and thoroughly cooked by fire or steam until it forms a mush-like mass. The boxes are first lined with gunny cloth when the cooked mass is placed in them so as to fill them up. The top is covered with boards in two layers, running lengthwise and cross-wise. A 16 inch hand jack screw is

then applied, and screwed down as hard as can be. Then the man passes to the next box and does the same, and so on to others if there be more. He then goes over them again until all the moisture is pressed out. The boxes stand on a sloping platform, down which the liquid runs. The boxes are 12 to 15 inches high.

After this operation has been completed, there is left in the bottom of the box a cheese about 4 or 5 inches thick, which has to be broken up while hot; otherwise it becomes too hard to handle. It is then pounded down into barrels and the latter headed up. It is now ready for use, nothing being mixed with it here. In this condition it is regarded as one of the best fertilizers and is very extensively used by farmers in this section of the State. Without using salt upon the fish in the beginning, this pumice rapidly decays and becomes filled with maggots. It is not then considered fit for use, although its actual quality may be as good as ever.

The liquid is allowed to stand until the oil rises to the surface, when it is decanted off from the water.

Herring spawn at the southern end of Grand Manan and in Machias Bay from the middle of August to the middle of Sept. These spawning grounds should be protected, but they are not, at least in Machias Bay.

(J. Ferris received 1000 bbls. of herring during Sept. 1893, from Machias Bay and at least the greater number were with ripe spawn until at least the last of Sept. By Oct. 15 no spawn was noticed).

Thinks the herring spawn in St. Andrews Bay in March and April.

At Parsborough and Yellowbelly, N. S. they spawn in May and at St. Mary's Bay, N. S. they spawn in April and May.

Practically all herring taken on the New Brunswick Coast west of Le Preau come to Eastport and Lubec, and they sometimes also send for them as far east as Musquash.

Mr. Fisher thinks that all that is necessary for the preservation of herring is to protect them on the spawning grounds.

There have been years of plenty succeeded by years of scarcity in several successions

since the herring fishing began.

There has been no gill net fishing for herring in this region during the past 4 years. They used to be used up along the New Brunswick shore from Head Harbor, and in St. Andrews Bay. They drove the herring out of the latter bay and they are just returning there again.

They now use gill nets in Machias Bay and all along the Maine coast from Cutler to Portland, except Boothbay where they employ seines.