

REPORT ON THE SALMON MEETING AT BANGOR, ME.
August 9, 1939

by
W. C. Herrington and G. A. Hounsefell

Acting on instructions from Commissioner Jackson, we attended the salmon meeting at Bangor, Me., on August 9. The Bureau was also represented by Mr. Milton C. James, Assistant Chief of the Division of Propagation. The meeting was presided over by Representative Brewster of Maine and included representatives of the various sportsmen's clubs of Eastern Maine and Aroostook County, and of the Maine Departments of Sea and Shore Fisheries and Inland Fisheries and Game.

It soon developed that the sportsmen's clubs were primarily interested in developing ways and means for obtaining Atlantic salmon fry and fingerlings for planting in the various rivers in which they were interested. Due to the fact that it is no longer possible to obtain salmon eggs from Canada as was done from 1928 to 1937, it now is necessary to locate some other source if plantings are to be recontinued. Apparently it was believed that none of the streams have sufficiently large natural runs to provide for maintenance or restoration of the stock without the help of artificial propagation.

From a study of available data concerning the Atlantic salmon problems and possibilities in Maine, we are convinced that it should be possible to rebuild self-perpetuating salmon stocks in many of the rivers, granted the requisite cooperation of all interested parties, and providing conditions in the rivers are as good as is reported. Judging by the size of the rivers and extent of the spawning grounds, it should be possible

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through careful study and adequate regulation, to develop runs of a magnitude far beyond that visualized by ^{most of} the sports fishermen,--runs which will be of great commercial importance to the New England States as well as providing extensive recreation for the sports fishermen. However, such runs cannot be developed purely through a hatchery and restocking program, for experience indicates that although hatcheries can be of great value in providing material for restocking depleted streams and overfished areas, they provide no adequate substitute for natural propagation and cannot form the basis for salmon runs of large magnitude. Consequently, we are drawing up a tentative program covering the steps which we believe necessary in any serious attempt to rehabilitate the New England salmon fisheries. In general, this program is based on the methods which the Bureau of Fisheries has developed and used so successfully in restoring and maintaining the Alaskan salmon runs.

In our opinion, it would be unwise and short-sighted for the Bureau to become involved in any extensive restocking activities unless the above program or a similar one be adopted by interested parties to accompany the restocking work. Such a program is required to show what, if any, streams are suitable for maintaining salmon runs, to observe the effect of stocking operations, to determine the size of run and number of spawning fish required to make full use of the salmon-producing capacity of each river and to provide an adequate spawning escapement for natural spawning.

We understand that Maine has certain funds available for use in constructing a salmon hatchery should that be desirable. Although experience indicates that extensive salmon hatching operations by themselves are not usually justifiable, there can be no doubt but that such work plays an

essential part in any restoration program such as that mentioned above. Furthermore, where salmon runs are in danger of destruction due to temporary blocking of the rivers or spawning areas, artificial propagation may also serve to maintain at least part of the run until favorable conditions for natural spawning have been restored. In the absence of a more extensive personal study of the situation, we are not in a position to state that additional hatchery facilities are required for the above purposes, at least unless the Orland hatchery is unavailable or does not have sufficient capacity for this work. Judging by the opinions expressed at the Bangor meeting, construction of a salmon hatchery is most desirable. However, we wish to reiterate that such expenditures may prove of little value unless a broader program of restoration is also adopted.

REPORT ON THE INSPECTION TRIP TO AROOSTOOK RIVER, ME.
August 10, 1939

by
W. C. Herrington

On the day following the Bangor meeting, I accompanied Mr. Brewster to the Aroostook River to inspect the dam and fish ladder on the Canadian side of the International boundary. Mr. Carl Crane, Chief Engineer of the Maine Department of Inland Fisheries, kindly guided me on this inspection. Apparently, it is the consensus of opinion among the Aroostook fishermen that the fish ladder on this dam is not satisfactory and that efforts to restore the salmon run will prove unavailing until suitable changes have been made in the ladder.

Judging by the conditions prevailing at the time of our visit (medium high water), the fish ladder satisfies the principal requirements of a successful ladder and as far as could be determined without having fish in the river, it should function satisfactorily. Failure to observe salmon in the river above the dam apparently results from the lack of any noticeable salmon run in the river during the last few years. The dam was constructed in 1919 and the ladder in its present form was built about five years ago. Up to the last few years a few fish have been occasionally reported at the power house tail race below the dam.

On the evening of August 10, I attended the meeting of the Fort Fairfield Rotary, Lions, and Frontier Fish and Game Clubs, and on the basis of the above observations suggested that the Fish Ladder should not be condemned and a more expensive installation insisted on, until more definite evidence was available. I further suggested that if and when salmon should again appear in the river at the power house tail race below the dam (they appear here several days before reaching the dam) or in the river below the

dam, a trap be placed at the outlet of the fish ladder above the dam to obtain positive evidence as to whether the ladder was effective. Mr. Crane has arranged to carry out the test during this fall, should any salmon appear in the river.