

*Sockeye Salmon Industry—Mr. Barber*

On page 6, referring to the Vancouver Island area, the memorandum states:

When the hatchery was established, a considerable area had to be covered in order to secure the required supply of eggs. The fry, up to the last two years, have been liberated directly from the hatchery into the lake. The result has been that now large quantities of returning spawning fish come practically to the hatchery door and are obtained by seining on the lake shore. The greater part of the run of fish to this whole area in many recent years have spawned at this place.

From the foregoing it will be seen that the take of eggs now is from a run built up entirely by the hatchery operations and after the full toll has been taken from it by the commercial fishermen.

The New Westminster hatchery is referred to on page 9 as follows:

In 1916 sockeye fry were taken from the New Westminster hatchery and liberated in tributaries of Kawkawa lake. The stocking continued each year for four years. A good run of fish is now returning to that particular lake each year. Previous to this stocking, no sockeye were known to frequent these streams.

How ill advised are suggestions that hatcheries are responsible for the depletion of the Fraser will be realized from the foregoing. On the other hand it may be pertinently asked what the runs would have been in view of the notoriously excessive fishing that has been going on, due to international conditions, if the hatcheries had not been operating.

The following general observations are made:

It has been suggested that hatcheries are only useful for replenishing streams that have been depleted. If this argument is accepted and it is granted that the hatcheries will replenish a depleted stream, it must also be granted that they will maintain an established run equally as well.

There are numerous streams in British Columbia in which a good run of sockeye at one time occurred and which through over-fishing is almost extinct. Artificial means are the only way by which these streams can be replenished and a commercial run reestablished. The existing hatcheries can only look after a portion of these streams and if they are again to be productive the fish cultural service must not only be maintained but must be largely extended.

And again:

Against the present condition of barrenness of these once productive areas where there has been only natural reproduction, the splendid condition of the lower Fraser, where natural reproduction has been assisted by artificial means, is strong evidence of the efficacy of hatcheries. The run to Pitt lake, where there is a small hatchery, is more than holding its own and the run to the Pemberton district has steadily improved since the hatchery was established there.

And then further along:

With the experience in British Columbia and Alaska there can be no doubt that the sockeye runs will not maintain themselves [Mr. Barber.]

against commercial fishing unless fishing operations are so restricted as to imperil the success of the industry and that some assistance must be given nature and this can only be by means of artificial propagation.

It would be interesting to know just what knowledge is possessed by those whose evidence before the British Columbia fisheries commission has not been favourable to fish culture and the extent to which they have personally examined into and studied the conditions that prevail on the spawning grounds and in a sockeye stream, as against those that obtain in a hatchery during the period of incubation.

It is admitted by the sportsmen of the province and the numerous angling associations that hatchery operations with game fish have been eminently successful, and in this connection the introduction of Atlantic salmon at Cowichan lake, eastern speckled trout in the Kootenay district and black bass in Christina lake and Vancouver Island points are excellent examples. If such operations are successful with these varieties of fish why should they not be equally successful with sockeye?

Mr. DUNNING: What is the date of the report?

Mr. BARBER: It is a memorandum based on the interim report of the commission which sat in 1922. The concluding words of the memorandum are as follows:

One argument which is very eloquent is the fact that for hundreds of years hatchery operations have been carried on in some of the oldest countries of the world, and they are sufficiently satisfied with results to continue such operations.

Although the federal government of the United States does not administer and does not derive any revenue from the fisheries, except in Alaska, it operates a large and comprehensive fish cultural service entirely at its own expense, and which extends to nearly every state in the union.

In conclusion it is pointed out that the arguments against hatcheries are all presumptive. On such basis it may fairly be asked why—in view of the fact that the foregoing are points of definite knowledge—hatcheries are not the most effective and economical means known for maintaining our anadromous and inland fisheries.

That is the memorandum prepared by the Department of Fisheries. We have the example of Harrison lake, where 2,500,000 sockeye were planted in 1920. In 1927, when they were due to return, 12,000,000 eggs were taken from a point where there had never been any sockeye salmon. Surely this is evidence that the hatcheries have helped the Canadian runs. I have here a copy of the report of the Minister of Fisheries in which the superintendent of Cultus lake hatchery on page 12 states that in recent years not only have the runs increased, but the size of the salmon has also increased.

We have had on the coast for a number of years a fish that is not only recognized as