-- THE URGENT NEED FOR EXTENDING ARTIFICIAL PROPAGATION --

As far as we can ascertain there is in the whole world not one instance where, under natural conditions, any specie of land or sea animal has preserved its original numbers unimpaired once mankind has been added to the list of those agencies which prey upon such specie. Man's entry into the field seems invariably to spell extirmination of the species pursued, unless he offsets his depredations by guarding them from other enemies, or maintaining the supply by means of artificial production.

This is amply proven by the practical extirmination of the buffalo, the wild turkey, wild pigeon, and wild duck, which once were so prolific on this continent, and by the extirmination the world over of the wild progenitors of many races of domestic animals which man makes use of today. In no form of animal life has this destruction been more noticeable than with our fishes, as witness the depleted oyster beds of the Atlantic, the lobster fisheries, the shad fisheries, and the trout fisheries of numberless streams all over the continent.

The salmon fisheries of the Pacific are no exception to this universal law. The early runs to the Sacramento and Columbia Rivers were destroyed and have never been even partially restored. The Fraser sockeye fishery losses are too well known to need more than passing reference. These three are the ones which have been exploited for the longest period but in other sections signs are not wanting to show that ultimately similar conditions will prevail.

In Alaska only during recent years have the effects of overfishing become apparent. The pack in Behring Sea is principally of the Sockeye species of salmon and 60% of the total pack of Alaska Sockeye are taken from these waters. The largest pack obtained there was in 1918 and 1919 had only about 45% of a normal pack. In 1920, the take amounted to about 80% of the banner year. Surely these figures warrant one in believing that the effect of overfishing in Behring Sea is already apparent.

In South-eastern Alaska the humpback and other lower grade species predominate. These salmon, owing to their frequenting smaller streams are more noticeable. Not 15 years ago steamers stopped purposely at Ketchican to permit tourists to observe the squirming mass of dog salmon pushing each other out of the water in their efforts to force a passage up the stream. Today the run of dog salmon to this stream is practically extirminated. In 1915 the run of humpback to Hidden Inlet furnished from one seine sufficient fish to fill 38,000 cases of canned salmon. Today the cannery at that point has a total pack of 12,000 cases, obtained from numerous traps and seines, situated along the coast for 75 miles or more on either side of the canning plant. Hidden Inlet itself has not produced any appreciable portion of the small pack which the cannery this season secured. These are but isolated examples of the general condition. The main story is told by the fact that there is more fishing gear employed today than ever before and yet the 1919 pack of cheaper fish in S.E. Alaska was but 79 % of their banner year, and 1920 will show a still smaller percentage.

In most sections of British Columbia a decrease in our fishery resources is not yet apparent, because the government has better guarded this great national asset. It is but folly however to shut our eyes to what is happening in our neighbour's territory, or to say that we are exempt from a similar fate. Just as surely as other regions have suffered we will likewise suffer in due time, unless the government takes immediate steps to see that adequate artificial propagation goes hand in hand with the present open fishing.

The open fishing of 1920 has increased the number of gill nets in District No. 2 by approximately 25%. The increase in the number of seines fished varies according to locality, but in many places where formerly but one seine was employed, six or seven operated this year. There is no question but that both fishermen and canners benefitted greatly this season by means of these larger operations. Next year, and for a few years to come they doubtless will do equally as well. But what about the permanency of the industry? Under the present open policy will there be any salmon fisheries in 10 years time? The results shown in other places answers these questions negatively, and we have not the shadow of a reason for thinking our fate will be otherwise than our competitors, if, like them, we enlarge our efforts of extirmination while doing nothing to maintain the supply.

Most of the scientific and laymen observers of the salmon fisheries, and many hatchery operators, look askance at our present methods of artificial propagation. In no instances has releasing salmon in their fry stage - as is done in our British Columbia hatcheries - been proved to have shown beneficial results. The evidence obtainable is all to the contrary. On the other hand the reports concerning the propagation work with salmon held until they become fingerlings, although but yet in an experimental stage, shows results that far surpass anything expected of the older methods.

In accepting the responsibility for permitting open fishing, the government necessarily had to accept responsibility for maintaining the supply. To any one conversant with the matter it is apparent that both responsibilities must be assumed simultaneously. Each harvest must furnish its own share of seed if another crop is to result in its due cycle. This fact has been urged on the departmental officials, but although open fishing has prevailed not one step has been taken to keep up by artificial propagation the many streams along the coast which open fishing has been depleting.

Promises were given by the departmental officials that on certain streams a commencement would be made this year at conserving the fish through artificial propagation and the employment of rearing ponds. But the run of fish has passed and nothing has been done. Doubtless the failure to act was through no fault of the departmental officials. Possibly funds were not made available for carrying out their promises. But it will be too late to build up these streams when a supply of eggs is no longer obtainable, and the responsibility for seeing this does not happen is solely and entirely on the government.

Nothing short of artificial propagation is of any use. It has been proposed to close down certain areas early in the fall, but such a proposition is dictated only by ignorance of the salmon and its habits. It has been proven that each stream and tributary carries its own individual runs of fish and that these runs do not enter fresh water at the same date. Generally the fish ascending the river the greatest distance would be the first to enter, and none of this run would remain near salt water during the closing days of the season. A closed season at the end of August would therefore not benefit these early fish. A weekly closed season is essentially to enable a part of every run to ascend to their particular spawning areas, and outside of this natural propagation we must look to the hatcheries to maintain the supply.

Doubtless the government is satisfied with the results of this season's open fishing policy. The fishermen and canners who participated in the operations can also have no present complaint, since most of them did as well, or better, than they would have done under the old system. But neither fisherman, canner, nor the general public will be satisfied if the government's present policy results in the extirmination of our salmon fisheries in the next ten or twenty years. It is the government's duty to see that this disaster does not befall us. While open fishing continues the only safeguard at present discernible is the immediate employment of artificial propagation, and retaining the young fish in rearing ponds, in every locality in British Columbia in which open fishing continues to be permitted.