

British Columbia Fisheries' Report for 1916

Review of Important Commercial and Scientific Document Issued by the Provincial Fisheries Department, Victoria.

The report of the Provincial Fisheries Department for the year 1916 has just been issued by the King's Printer. As usual it is a valuable publication, containing many special papers, including "The Regulation of the Pacific Halibut Fishery," the "Egg Production of the Halibut," a "Contribution to the Life History of the Pacific Herring," and "The Life of the Pacific Oyster-Cultivation," besides reports from the fishing and spawning grounds of the principal streams of the Province.

The report proper deals extensively with the salmon fishery of the Fraser River District. It reviews the history of salmon fishing in that district,—which includes the waters of both the Province and the State of Washington through which the sockeye seeking the Fraser is captured,—and traces the decline in the catch in the last years and the reasons for it, in such clear and forceable language as to command the attention of the authorities on both sides of the international boundary line. It is an able presentation of the case.

The value of the fishery products of the Province for the year ending March 31st, 1916, is shown to have totaled \$14,538,320, or 40.54 per cent. of the fishery products of the Dominion, which totaled \$35,860,708. As in recent years this Province again lead the Provinces of the Dominion in the value of its fishery products. British Columbia exceeded Nova Scotia by \$5,371,469.00, and exceeded the total combined fishery products of all the other provinces of the Dominion by \$2,432,783.00.

Notwithstanding the fact that the fisheries of the Province show an increase in value of \$3,023,234 over that of the previous year, the quantity of the leading species of fish caught was notably less. The gain in value is due to an increase in the price received for the catch.

Of the fish marketed, salmon produced \$10,726,818; herring, \$1,009,708; halibut, \$1,972,000; cod, \$300,049; oysters and clams, \$98,130. The list of species marketed included twenty-one varieties.

The salmon pack for the calendar year 1916 totaled 995,065 cases, as against 1,133,331 cases in 1915. The pack of 1916 is valued at \$10,726,818, as against \$8,018,835 in 1915, a decrease of 139,316 cases and an increase in value of \$2,707,983.

The salmon pack in the Fraser River District, which includes the catch from the waters of the Fraser River, Gulf of Georgia and Juan de Fuca Strait in the Province and the channels in the State of Washington leading to the Fraser River, in 1916 was the smallest ever recorded there, notwithstanding a notable increase in the pack of chum salmon, a species but little used in former years. The total catch of sockeye salmon in the entire District produced a pack of only 110,476 cases. Of that amount, Provincial canners packed but 32,146 cases, or 30 per cent., and the canners in the State of Washington 78,478 cases, or 70 per cent.

The report gives a tabulation of the pack of sockeye salmon caught in the Fraser River District, in British Columbia and the State of Washington for the past eight years, which affords a comprehensive basis for an understanding of conditions in both Provincial and State waters of that district. It displays the vast difference in the catch in the big and the lean years for the entire district, as well as the great difference in the proportion of the catch in the State and Provincial waters, and also a decline in the run in the lean years. The pack for the years given includes the last two big years (1909 & 1913) and the last six lean years, (1910, 1911, 1912, and 1914, 1915, and 1916). Together they constitute the last two four-year cycles of the run to the Fraser. The grand total for the eight years is 5,775,397 cases. Of which 1,939,488 cases, or 33.9 per cent. were packed in the Province and 3,815,909 cases or 66.0 per cent. in Washington. In every recent year, except that of 1915, the catch of sockeye in the State waters of the District has exceeded the catch in Provincial waters. The pack in the State in the two big years exceeded the pack from Provincial waters by 2,671,003 cases, or more than 100 per cent. The pack in the State in 1909 exceeded the combined pack in Provincial waters of the last two big years (1909 and 1913). The sockeye pack in the State in the six lean years exceeded the pack in Provincial waters in those years by 1,038,745 cases, or 157 per cent. The decline in the catch in the lean years is pronounced. The catch in Provincial waters in 1916 was 91,733 cases less than that of the previous fourth year, a decline of close to three hundred per cent. The pack in the State in 1916 was 105,420 cases, or 42.4 per cent. less than in the previous fourth year.

It has been demonstrated in previous reports of the Department, and in the findings of two international commissions that the sockeye caught in the Fraser District, are predominately four years old, were hatched in the Fraser watershed and when taken were seeking to return to that river to spawn and die. It is therefore manifest that the catch in both the big and lean years are the product of the same spawning beds. The catches in the big years

show the maximum product of the spawning beds,—the harvest that may be reaped four years after the beds have been abundantly seeded. The catches in the lean years show the minimum product of the spawning beds and are the natural result of a failure to seed these same beds abundantly.

If the beds were as abundantly seeded in the lean years as they are in the big years, they would produce as abundantly.

Since the beds were abundantly seeded in 1909,—a big year,—the catch in that year represented that proportion of the total run that was in excess of the number necessary to stock all the beds. The catch of 1913 was the products of the abundant seeding in 1909,—the natural result of that abundant seeding. Notwithstanding the fact that the catch in 1913 was very much greater than in any former year, investigation disclosed that a sufficient number of the fish escaped capture and passed above the fishing limits that year to have stocked all the beds as abundantly as in 1909.

"The catches of 1909 and 1913, great as they were, were not made at the expense of the capital stock—of the foundation of the run. The catches made in 1909 and 1913 disclose the vast numbers that may be safely taken from every year's run when the beds are abundantly seeded. The catches in the lean years are growing less, because they are made at the expense of the fish necessary to seed the beds. They are an overdraft on the runs of the future. The runs can neither be maintained nor built up under such conditions.

"If, for a period of lean years all the fish which return from the sea were permitted to reach the spawning beds and there to spawn, the runs in those years would eventually reach the proportions of a big year. It is simply a matter of conserving the brood stock—of seeding the spawning beds."

"The salmon industry does not depend upon the monies invested in canneries, boats and gear. It depends upon the number of salmon which escape capture and successfully spawn. The fish that escape are the stock in trade. If the catch is not confined to that proportion of the total number of fish in the run that is in excess of the numbers necessary to seed the beds, it is made at the expense of the capital stock of the industry."

For the past fourteen years the reports of the Provincial Fisheries Department have called attention to the conditions on the Fraser River spawning beds, which forecasted the depletion of the runs in the lean years. That not enough fish reached those beds to maintain subsequent runs.

The history of the fishing in the Fraser River District for the past fourteen years is a record of depletion—a record of excessive fishing in the lean years. A record of the failure on the part of the authorities of the State of Washington to realize the necessity of conserving a great fishery, notwithstanding the convincing evidence submitted to them, by agents of their own creation, that disaster was impending to one of their industries.

The Canadian authorities, on the other hand, by their presentments and acts, evinced in unmistakable manner, their willingness to deal squarely and adequately with conditions that foretold depletion, and to join with the State of Washington or the United States Government, in legislation to prevent it.

Throughout the negotiations between Canadian and the State of Washington authorities the former has urged the passage of restrictive measures for both Provincial and State waters. Following the investigation in 1905 of a joint commission representing the Dominion of Canada and the Governor of the State of Washington, the former approved the unanimous findings of that body and passed as recommended, an Order in Council which suspended all sockeye fishing in the Canadian waters of the Fraser River District during the years 1906 and 1908, conditional upon the legislature of the State of Washington passing an Act suspending all sockeye fishing in their waters of that district in both 1906 and 1908. The legislature of the State refused passage to such an Act, whereupon the Dominion Act was recalled.

In 1908 Great Britain and the United States "Recognizing the desirability of uniform and effective measures for the protection, preservation and propagation of food fishes in waters contiguous to the Dominion of Canada and the United States," concluded a convention for that purpose and appointed an International Commission, consisting of one person named by each Government, to investigate conditions for the protection and preservation of food fishes. That commission agreed upon a uniform system for the protection, preservation, and propagation of the salmon in the Fraser River District. The Canadian Government promptly approved of the finding and announced its willingness to adopt for her waters the regulations provided. The Senate of the United States, after years of delay, refused approval and the convention was terminated. Canada's record on this vital question is clear and unmistakable. She has been and still is desirous of maintaining and building up the runs of the salmon to the Fraser. The record of the State of Washington is one of inaction. Until such time as the authorities of the State of Washington indicate by their enactments, their willingness to meet the issue there is no