

by the 1913 blockade. The remnant of that run cannot withstand the drain made upon it in 1917. It is already so small that it must hereafter be classed with the runs in the small years. And like the runs in the small years it will be completely wiped out if present conditions shall continue.

The runs of sockeye to the Fraser system in the small years are no longer of commercial importance. Dr. Gilbert, in his article entitled "The Sockeye Run on the Fraser River,"* says:—

"The history of the Fraser River sockeye runs show unmistakably that the three small years of each four-year cycle were overfished early in the history of the industry. During the early years, when fishing was confined to the regions about the mouth of the river and drift-nets alone were employed, no evidence exists of overfishing. The last cycle in which these conditions obtained was 1894-96. During each of the small years of that cycle (1894, 1895, and 1896) there were packed approximately 350,000 cases on the Fraser River and about 60,000 cases in Puget Sound. During each of those years, therefore, about 5,000,000 sockeye were taken from the spawning run and used for commercial purposes. It should have been considered at that time an open question whether enough salmon to keep the runs going had been permitted to escape to the spawning-grounds. Apparently, however, a third of a million cases a year could be safely spared, for the following cycle shows no decrease. If from the beginning the pack had been limited to a third of a million cases for each small year, apparently the runs would still have continued in their primitive abundance.

"During the following period of four years (1897, 1898, 1899, and 1900) the traps on Puget Sound became an important matter. While the British Columbia pack shows little or no reduction, it was met by a pack on Puget Sound which nearly equalled it. The total captures during the three off-years of this cycle nearly doubled those of the preceding years and exacted an average toll of about 10,000,000 fish from the spawning run of those years. The total pack of the three small years of this cycle was over 2,000,000 cases.

"The result was quickly apparent. If 5,000,000 fish could be safely spared, this figure nevertheless must have been near the upper limit of safety, for when 10,000,000 fish were abstracted the small years of the following cycle showed such a marked decline as to indicate that we had far overstepped the line of safety. It was then during the cycle

* British Columbia Fisheries Report, 1917, pages 113-14.