

of 1897-1900 that the first serious damage was done to the sockeye run of the Fraser River. By doubling the pack of the three small years, not only was the surplus fully taken, but the necessary spawning reserve was seriously encroached on, with the result that in the small years of the following cycle (1902, 1903, and 1904), in spite of the increased amount of gear employed, the pack was cut in half, while the spawning-beds at the same time were but sparsely seeded.

"The inevitable and disastrous trend of events should have been evident to the dullest. But the parties in interest refused to hold their hands and proceeded with the slaughter of the spawning remnant. The result was quickly apparent. In 1902, 1903, and 1904 the total sockeye-pack of the Fraser (river system) was cut to 1,200,000 cases, and in succeeding years it has suffered still further reduction. The pack of the three small years never again equalled 1,000,000 cases. In 1906-8 it was 750,000 cases, 1910-12, 880,000 cases; in 1914-16, 796,000. And with each year the amount of gear employed has increased by leaps and bounds. The small years of the present cycle may be expected to register a smaller total than any which have gone before."

The total catch of sockeye in the Fraser River system in the past two small years of the present cycle demonstrates the correctness of Dr. Gilbert's forecast. The catch of 1918 produced a pack of but 70,420 cases, as against 534,434 cases in the preceding fourth year; and the catch in 1919 gave a pack of but 84,063 cases, as against 155,714 cases in 1915.

The evidence of the decline in the runs of sockeye in the Fraser River system is overwhelming. The runs in all years have already become so depleted that it is evident that under existing conditions the sockeye will be exterminated within a short period.

(6.) The Fraser River basin has an area of 90,903 square miles. It contains sixteen great lakes that have a total area of 2,351 square miles. No other river on the Pacific Coast drains so extensive an area of lake water adapted to the propagation and rearing of sockeye. In the past it has produced greater runs of sockeye than any other river because this great spawning area was abundantly seeded every fourth year. It has been shown that sockeye spawn in streams tributary to lakes and on the shoals of lakes, and that their young remain in the lake-waters for a year or more after hatching and then migrate to the sea. Knowing that the sockeye were bred in the watershed of the Fraser, we therefore know that the great runs of sockeye