

June 26th, 1935.

Dr. Frederick A. Davidson,
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Dear Sir:-

The June issue of Pacific Fisherman contains an article concerning the Fraser River - Puget Sound Sockeye fishery and states the study now being carried out is under your auspices.

My connection with the Pacific Coast salmon fisheries extends farther back and covered a wider range than perhaps anyone else now living. I was intimately acquainted with most of the pioneers of this industry not only those of British Columbia, but also of California, Oregon, Washington and Alaska. As a consequence much of my knowledge of the conditions that prevailed in the early history of this fishery is first-hand information learned from my own observations or conversations with the earliest operators.

In the article referred to above it is stated "The cycle containing 1931 took a pronounced drop between 1899 and 1903 that is not explained but might be due to the blocking of Quesnel Lake by a dam."

The real history of the falling off in the run of this cycle is as follows:-

Prior to the introduction of trap fishing on Puget Sound there were two distinct sockeye runs to the Fraser River watershed; the earlier of which apparently proceeded to Upper Fraser tributaries, the later to the lower Fraser spawning areas. The first run entered the river in July; the second in the month of August.

1899 was the last year in which the big July run occurred, and while it was a heavy run on Puget Sound it never reached Fraser River. Apparently the Sound traps had totally intercepted the entire run and the disappearance of these July sockeyes is probably attributable to over-fishing.

The August run of 1899 was extremely heavy; fully up to those experienced in "big" years, and both Puget Sound and Fraser River canners had more fish than they could handle. The number of sockeye that successfully passed

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the fishing area, and entered the Harrison Lake tributaries, was unusually large, and, in the opinion of those familiar with conditions there, had never been exceeded; thus there should be no thought of over-fishing having been responsible for the decline noted in 1903.

This August run reached the Harrison Lake watershed in September. That year there were extraordinarily early and heavy fall freshets and all streams overflowed their banks. Settlers and visitors there all agreed these streams were practically a solid mass of sockeye salmon, and if the presence of fish on the spawning beds would alone guarantee a good run that of 1903 might have broken all records.

These same observers again visited those spawning beds in November, after the freshets had subsided and the streams had shrunk within their normal boundaries. At that time the banks on both sides were buried beneath a knee-deep mass of rotten sockeye eggs, high and dry above the water level, the stench from which permeated the air for miles. Practically the entire spawning was lost in this area that year and the decrease in pack from 993,000 cases in 1899 to 372,000 in 1903 was largely attributable to this natural cause.

The article in June Pacific Fisherman also stated: "The cycle ending in 1930 declined but slightly until 1914". Again this is an error: the cycle of 1930 contained 1,886 the year of the greatest failure in the history of this or any other sockeye fishing area.

In 1882 there were no traps nor any sockeye fishing on Puget Sound. Fraser River fished 500 gill nets and these were the only impediments to the free passage of sockeye salmon. Twelve canneries operated on the river that year; the run was extraordinarily heavy for an "off" year - fully up to previous "big" years; and the canners, who had prepared for 175,000 cases, filled all their tins long before the run and were compelled to close as no further supplies were obtainable. For days afterwards the run continued as heavy as when packing ceased and there was no doubt the spawning areas were abundantly seeded.

In 1886 there were still no traps nor sockeye fishing on Puget Sound and the 12 Fraser River canneries, counting on a repetition of 1882 conditions, prepared for a pack of 200,000 cases. The fishing season lasted from May to November and so strenuously did the canners strive to fill their tins that fish

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that had travelled as far inland as Yale were brought back by river steamers and canned. Yet the total pack secured was only 36,500 cases, a failure unequalled in the annals of any sockeye area.

In 1890, despite the inadequate seeding of spawning areas in 1886, the pack secured was approximately 360,000 cases of sockeye salmon; thus demonstrating that recovery can be looked for even from exceptional disasters, and that over fishing alone cannot be blamed for the fluctuations that have occurred.

Should the information I possess be of any use to your investigation I will be happy to hear from you. My studies have convinced me that overfishing has been blamed to an excessive degree for the decline in our salmon fisheries. I am an advocate of more attention being devoted to protecting the young fish in spawning areas and the elimination of their natural enemies. If these protective measures are taken I am satisfied the supply will meet all reasonable demands of commercial enterprise, and that an industry, now suffering from depletion through ignoring natural laws, can quickly be built up to an even greater extent than was its volume before commercial fishing began. It will be a pleasure to assist if my knowledge can help to attain this end.

Yours faithfully,

HD/S