

# First appearance of sockeyes at Innesville Dam

- 1899 24th Aug
- 1901 last week in Aug. Continued in vast numbers until last of Oct.
- 1902 5th Aug. Earliest ever known. Ended by 24th Sept.
- 1903 no breeding sockeye were observed in Innesville district
- 1904 " " " " " " " " " "
- 1905 Every spawning area abundantly seeded. Sockeyes reached the dam in great numbers 12th Aug and continued in enormous numbers to the end of that month. First appearance at dam 20th July. Pronounced movement from 9th to 20th Aug. Greatest from 12th to 18th. A great many thousand reached this section this year.
- 1906 Only a few hundred sockeyes reached the dam.
- 1908 First sockeyes observed 13th Aug. Not over 20 per day were observed at any time during season. Practically no run to this section this year.
- 1909 Over 4 million passed through fishway. Run commenced 5th Aug & continued throughout month, heaviest 25th to 29th.
- Storsefly river
- 1893 to 1899 river was crowded with sockeyes every year.
- 1898-99-1900 no sockeyes whatever.
- 1901 about 500.
- 1907 no sockeyes reached Storsefly this season.
- 1912 The number of sockeyes reaching Storsefly river was exceptionally large for an off year.
- 1914 First sockeye was observed at dam on 7th Aug 5 days later than usual. Only a few hundred passed through up to 17th. On 18th 19th 20th 40 per hour was average number passing through fishway. 21st to 25th average was 29. 26th to 29th inclusive average was 12. Only a few observed after 29th. Run this year was one of the poorest since 1903 fishway was built in 1903.

Should be  
on Innesville  
page

## Seton Lake sockeye run

Prior to 1901 salmon were observed every year in such numbers that their dead bodies - after spawning - were offensive to the neighborhood.

- 1901 Fish arrived in Aug. In October every spawning area was crowded and the air was fetid from those that died.
- 1902 Poorest run ever known to that time. Sockeyes arrived the last week in July and first week in Aug. Many thousands then but none in Sept & few in Oct. Yearling migration of 1900 spawn were observed in 1902 and were from  $3\frac{1}{4}$  to  $4\frac{1}{2}$  inches long.
- 1903 The Total run to this district was 971 sockeyes all of which the hatchery took. Observation of migration of fry showed it commenced in Jan'y, fry averaging  $1\frac{1}{4}$ " long. They remained in Lake Creek until Sept of April their numbers growing gradually less. A few were seen in May; none in June. Yearling migration,  $2\frac{1}{2}$  to  $3$ " long, began in April was greatest in first two weeks of May and continued until June. For many nights thousands and thousands passed out. These were from the 1901 egg deposit. Temperature observations at Ripton showed  $46^{\circ}$  Apr  $45^{\circ}$  May  $51^{\circ}$  June  $54^{\circ}$  July. Only a few hundred fish were found; about the same number as in 1903. Fish made their appearance last week in July & first week in Aug.
- 1904 Sockeyes began arriving 28th July continuing until the end of Sept. Over 200,000 passed into the hatchery retaining ponds of which 90,000 were released to propagate naturally.
- 1905 The run was much larger than any previous year (except 1905) since 1903. The run commenced 25th July until 17th Aug. approximately 15,000 entered Seton Lake males exceeded females 4 to 1. Seton Lake is 18 miles long. Fish were timed going from Lake Creek to Portage Creek. They took  $8\frac{1}{2}$  hours in 1906 &  $10\frac{1}{4}$  hours in 1905 to make the journey.
- 1907 Only 800,000 eggs could be obtained.
- 1908 Run was light. No better than 1907. First sockeye appeared 25th July. Main run over by 15th Aug.

Seton Lake, continued

- 1909 The run was larger than 1905 but not equal to 1901. Fish first observed 10th Aug continuing until 8th Nov. Height of run Sept-Oct when it was very great. Fully 1 million spawned in this section this year.
- 1911 The entire run of sockeye was taken in the walls of the hatchery and amounted to but 90 fish, as compared with 20 times that number of yearlings.
- 1912 The run of sockeyes to Seton and Brown lakes section was larger this year than any other off-year of which we have a record. Hatchery secured 11 million sockeye eggs against 800,000 in 1908 and 827,000 in 1904. First sockeye entered hatchery walls at Seton Lake on 25th July and run ended 17th Aug. Second run started 1st Sept and ended 8th Oct.
- 1913 The run was small, less than 30,000 reached Seton Lake during the entire season. First salmon observed on 13th Aug, less than 2,000 arrived by end of Sept, most came in Oct. Run ended in Nov. The natural spawning beds remained unseeded as the hatchery secure entire eggs from the sockeye that reached this section.
- 1914 First sockeye reached Seton Lake on 10th Aug. Less than 100 taken in walls that month. Approximately 400 arrived in Sept-Oct and these spawned naturally. Hatchery secured but 200,000 eggs against 2,177,000 in 1910.
- 1915 Not to exceed 200 sockeye reached Seton Lake this year and these came late in Sept & early Oct. There was no later run. All were permitted to spawn naturally. 1 million eggs were obtained from Birtleshead and the resultant fry are to be retained in ponds until May 1916 and then released on the shoals at the head of Seton Lake. No humpbacks reached Seton Lake this year while up to 1913 countless numbers reached this section every alternating year. 6 million eggs however were obtained from Squamish & hatched out in Seton Lake hatchery (?).

Zulesnelle, continued

- 1911 a few fish were in evidence between 10th & 30th Aug. 29th Aug to 3rd Sept slight increase. no fish were seen after 15th Sept. Watchman at dam (Winkley) who has lived at the dam since its construction, reported that the run of sockeyes was the lightest in his experience of 30 years.
- 1912 First sockeyes made their appearance on 30th July. The run ceased on 30th Aug. Between 5th & 15th Sept. another small run entered. Winkley reported: - In my opinion the number of sockeyes which came up Zulesnelle River and entered the lake this year was much larger than in any year, other than the big year runs, since the dam was finished in 1898. It has been a good year.
- 1913 First sockeyes noticed at dam on 5th Aug. Run over by 7th Sept. Only 552,000 estimated for Total Run.
- 1914 (all notes on Horsefly page)
- 1915 The number of salmon which reached Zulesnelle Lake this season was the smallest yet recorded. First sockeyes were observed at dam on 10th Aug (2 weeks later than usual) Run ceased 3rd Sept. Less than 3000 passed through into Zulesnelle Lake during this period.
- 1916 The sockeye run to Zulesnelle Lake was very small; the smallest recorded there during the past 14 years. First sockeye reached dam on 24th Aug. Estimated that no more than 600 passed through dam this year.
- 1917 First sockeyes made their appearance 14th Aug. 14 days later than in 1913 and on the corresponding date in 1909. Heaviest run between 20th & 29th Aug. Run ceased 15th Sept. Only 26,000 entered the lake this year.
- 1918 Less than 50 sockeyes were seen passing through the dam at Zulesnelle Lake.
- 1919 Watchman at the dam could only find 3 sockeyes passing through for the entire season.
- 1920 Less than 500 sockeyes passed through dam this year. First sockeye observed 2nd Sept, last 17th Sept.

Seton Lake continued

- 1916 The run of sockeye and other Salmon to this section was the smallest ever recorded there. Not to exceed 100 Salmon reached there during the season. These spawned naturally. No fish appeared in July or Aug. 2 million eggs from Birkenhead were received by Seton Lake hatchery and will be released in their fry stage.
- 1917 Not to exceed 200 sockeyes reached Seton Lake this year. The fish spawned naturally. The hatchery was not operated this season. There was no run of pinkies this fall despite the fact that 6 million eggs from Squamish were secured in 1915 and were said to have been liberated as free swimming & strong fish as fry.
- 1918 Not to exceed 100 sockeyes entered Seton Anderson lake section. Hatchery did not operate.
- 1919 There was no run in Aug or Sept. Late Oct & early Nov a few hundred sockeyes entered Seton Lake & spawned naturally. Hatchery remained closed this season.
- 1920 Watchman stationed at Seton Lake reports no sockeye or but few other salmon spawned in this section this year. Hatchery not operated.

Harrison - continued

- 1916 The run to Harrison lake and its tributaries was poor. Less eggs were secured here this season than in any recent year. Morris Creek & Harrison Rapids afforded less eggs than last year but more than equalled 1915.
- 1917 The run of sockeye this year to Harrison Lake and its tributaries was apparently the smallest ever recorded there.
- 1918 The number of sockeyes that entered Harrison lake was less than 4 years ago. The hatchery output was 1,873,000 and in addition 15 to 20 million eggs from Alaska was cared for at Harrison hatchery and the resultant fry liberated in the lake water and/or in the river at the outlet of the lake.
- 1919 The Sockeye run to this section was larger than in any year since 1915. The stream at Harrison Hatchery contributes 4 m eggs to the <sup>total</sup> egg take, this stream is an artificial one & no sockeyes have ever propagated therein, but more eggs were obtained from it this season than from any one natural tributary of the lake.
- 1920 There were less sockeyes in this section than in any recent year. Hatchery secured 5 m egg against 7 m in 1919.

|              |      |                         |    |                 |                       |
|--------------|------|-------------------------|----|-----------------|-----------------------|
| Morris Creek | 80%  | Harrison Hatchery creek | 8% | Pied Lake       | presumably 5 years to |
| Silver Creek | 100% |                         |    | "               | 5 " "                 |
| Authe Lake   |      |                         |    | practically all | 4 " "                 |
| Butterhead   | 75%  |                         |    | -               | " 4 " "               |
| Chilcotin    | 100% |                         |    | -               | " 4 " "               |
| Insel        | 100% |                         |    | -               | " 4 " "               |

- Shuswap sockeye run
- 1901 Granite Creek hatchery secured 10 million eggs from Scotch Creek. An unlimited quantity was obtainable there
- 1902 There was a considerable run to Scotch Creek - Lymnoux river this year. Run came in August.
- down left  
p. 258-1902 Eagle river had a considerable run. August run Spallumcheen river Salmon river only frequented by sockeye in the years of the "big" runs  
Granite Creek hatchery not located near sockeye spawning streams (65 miles from Scotch Creek)  
after 1901 eggs used were obtained from Harris Creek Harrison Lake
- 1903 Observation of migration at Lytton showed fry  $1\frac{2}{3}$ " yearlings 3" migration extended from 1st Apr to 13th July  
Fry migrants more numerous than fingerlings  
Thompson migrants at their maximum in April & one month earlier than Fraser fish  
Only a few hundred fish were found
- 1904 Run was greater than in 1901  
Run much better than in 1902-1903-1904 Hatchery secured 6  $\frac{1}{2}$  million eggs between 22nd Aug & 7th Sept. First sockeye observed in June & early July.
- 1905 Run very poor. Only 400,000 eggs obtained by the hatchery
- 1906 " " " " 500,000 " " " "
- 1907 " was as great as in 1905. Heaviest in Aug & Sept and great in Oct.
- 1908 The run was an absolute failure. Not 100 sockeye were obtained by the hatchery there
- 1909 No sockeye were caught at any of the spawn collecting stations in this section this year. Practically no sockeye have reached this section in any of the off years since 1901. Indians only had 37 sockeye in their smokeframes, of which 16 were 3 year old fish. Less than 40 sockeye were observed in the pools in Adams river.
- 1910 The early run was insignificant compared to the great runs of 1901-5 & 9. The later run did not even approximate the late runs of 1905 & 9. Few sockeye entered Adams Lake throughout the entire season, probably less than 5,000. Little River, where the late run spawn had apparently as many fish as in 1905 & 9. Run to Eagle river not as large as in 1912 & only 10% of
- 1909

At Rivers Inlet in 1904 the greatest number of migrants were fry  $1\frac{3}{8}$ " long. Yearlings were  $2\frac{1}{4}$  to 3" while some 5 to 6 inches were observed. Dyke net was operated from 13th Apr to 1st July. Movement greatest from 22nd May to 16th June but began before net was installed and was still pronounced after net was lifted.

1907 Run to Stuart Lake & Chileo Lake poorest ever reported  
Said to be 1901

1908 Run to Stuart, Fraser & Chileo lakes better than for several preceding "off" years. First sockeyes at Stuart Lake were observed 12th Aug. Run was plentiful for several days commencing 17th Aug. No sockeyes in Fraser Lake in 1906 or 1907.

More fish taken by Indians at Port George this year in one night than total catch in 1906. First catch was on 6th Aug. Fish were very scarce there in 1903 & 1904. At Bear River, tributary of Sulphur Fork of Fraser 700 miles from Salt water sockeyes first observed about 15th Aug & several thousand spawned above upper Bear Lake. Run to Chileo Lake largest since 1901 (except 1905). No sockeyes observed in 1906 & 1907. Thousands upon thousands passed up this year and beds must have been fairly well seeded.

1909 Run to Chileo Lake began 15th Aug ending 27th. Second run began 7th Sept ending in Oct. Both equally large. Run equalled 1905.

1911 Reports from Stuart - Fraser Lakes section disclose that the run of sockeye was the lightest in the history of the district. The run to Chileo Lake district, which began about 1st Aug., was small. The run was considered inferior to that of 1907, the poorest previous year. Indians did not get enough salmon for their own use and claim it was the poorest run of sockeye that ever occurred. Reports from the Indians at North George indicate that the Indians caught fewer sockeyes than ever before.

Stuart-Praser lakes continued

1912

HBCo at Praser Lake Port George report very few sockeye reached this section this year

"It is noticeable that as far back as we have records very few salmon have sought this section except in the years of the big run.

"The records of Simon Praser and his successors on the HBCo service in this section show that only one year in four could they obtain a sufficient supply from the Praser and Stuart Lake section

HBCo Praser Lake agent reports this year (1912) the first sockeye were caught 25th July; last about the end of Aug. The run this year has been the smallest since 1909.

1913

HBCo at Stuart Lake report run at the best only 1/2 of that of former big years. Very few sockeye reached here.

HBCo at Praser Lake reported the run for a big year was a failure; the first failure for a big year recorded there, not 50% of former big years. First sockeye observed on 8th Aug. & run lasted only 16 or 18 days.

Stuart Lake hatchery officials report first sockeye observed there 1st Aug.

Bear Lake on South Fork of Praser the run was not equal in number to the runs of recent big years.

1914

HBCo Stuart Lake reports first sockeye caught on 9th Aug. Run lasted but a few days and was so small Indians consumed all they caught. On 15th or 16th Sept a slightly better run appeared, lasting about one week. Indians caught averaged about 12 to family which for 30 families made season's catch about 500. Only 1500 sockeye estimated to have reached Stuart Lake this year.

HBCo Praser Lake report first fish appeared 20th Aug. Indians caught about 350 to mid September with about 40 more late in Oct. The run was the poorest for many years and only few reached the spawning bed as the Indians had the lake well netted.

1915

HBCo Stuart Lake report hardly any salmon there this season not so secured by the Indians

## Shuswap continued

- 1914 The run to this section was light although the number which reached the lower end of Adams river during latter part of season was above the average for an off year. Very few were permitted to spawn as the Indians captured upwards of 2,000. Very few were observed at the mouth of Adams lake & very few in any other tributary of Shuswap Lake.
- 1915 Few salmon of any species were found in this section this year. None were seen at Adams lake or river. No humpbacks were found in the Thompson or Nicola rivers this year although up to 1913 they spawned there in vast numbers. The hatchery at Granite Creek was abandoned and dismantled because in the last 5 years a sufficient number of salmon has not reached this section to warrant its operation.
- 1916 The number reaching this section was so small the Indians were unable to take them in sufficient numbers to dry any. Sockeyes in any number were not observed in any tributary of Shuswap Lake this year.
- 1917 The number so small the Indians could not secure any for drying. Repeated inspection of the district failed to disclose any salmon. No pinks have been observed here since 1911. The runs of all species to this section appear more nearly exterminated than in Inverel or Chulco sections.
- 1918 Less than 100 sockeyes were found in any of the tributaries of Shuswap Lake.
- 1919 Only 9 sockeyes were known to have been taken by Indians and the government officials, and an examination of all the spawning areas failed to show evidence of many having arrived there.
- 1920 The run of sockeyes to this section was much better than for many years, but total quantity not considered sufficient to produce results of importance. Small numbers however were found in some of the streams where none have been reported for ~~many~~ <sup>a number of</sup> years.

Lillooet - continued

- 1915 The sockeye run this year was larger than in any recent off year and compared favourably with that of 1913. First appearance 19<sup>th</sup> Aug, somewhat later than usual. 25 million eggs secured against 12½ million 4 years ago.
- 1916 The run to this district was extraordinarily heavy. 27 million eggs were secured by the hatchery and the natural spawning beds more abundantly seeded than even in the big years. Sufficient surplus could have been secured to stock every hatchery in B.C. to its utmost capacity.
- 1917 The run this year was very much less than in any previous year of record and the collection of eggs the smallest yet made at the hatchery. Only 5,270,000 sockeye eggs obtained compared to 15 million in 1914 or 25 million in each of 1915 & 1916.
- 1918 The run to this section was less than 4 years ago. The egg collection at B. hatchery was 12 million against 15 million in 1914.
- 1919 ~~The~~ unquestionably there was a larger run to B. river than in any recent year <sup>since 1902</sup>. Hatchery secured 30 million against 12 m in 1918, 5 m in 1917, 26 m in 1916 or 25 m in 1915. The fish came early & ran late.
- ~~1920~~
- 1920 The sockeye run to B. river this season was greater than in any year since observations have been recorded. Conditions this year were most satisfactory. The run to these waters has not declined, on the contrary there is evidence that it has increased. Hatchery secured 26 m and the natural spawning beds were abundantly seeded. Run began early Sept.

Stuart Draser continued

1916 HBC's Stuart Lake reported Sockeye run to that section was, as in recent years, very small. Indians at Stuart Lake did not catch over 100 salmon.

1920 The run to the Nechako river, which drains Stuart & Draser lakes was not sufficiently large to be important but a few sockeye were reported from some minor streams where their presence has not been recorded in recent years.

More were reported to have reached the Bear Lake station than for some years.

Lillooet-Birkenhead sockeye run

- 1902 While this year was reported the poorest known to that time the ~~run was considered~~ satisfactory by Indians secured one third of their usual quantities they report "there is always a run in Aug & Sept occasionally as late as Oct."
- 1905 <sup>Some notes</sup> The great bulk of the early runs entering Harrison Lake pass through to the Lillooet-Birkenhead district
- 1906 As in each of the last 5 years there was a large run of sockeye to Birkenhead this year
- 1907 Fish run poorest for past 6 years. Not 1 sockeye this season for every 10 seen in 1906.
- 1908 Run greater than last year but not so many as 1904
- 1909 Run very much less than in 1901 and 1905 and perhaps less than in 1902 & 1903
- 1911 The run of sockeyes was poorer than in 1907. The hatchery secured but 12,500,000 eggs against 27 million in 1907. "The fact should be emphasized that there was no natural spawning in this area this year"
- 1912 The run of sockeyes this year equalled if not exceeded, the run of 1908. Run was first noted the latter part of July, and was at its height on 15th Aug. Hatchery was not started in 1904 but the run that year was large. Mr. Graham, the hatchery superintendent thinks the run this year was greater than it was 4 years ago. Hatchery secured 25 million sockeye eggs, receiving most of the ova so that there appear to have been little natural spawning.
- 1913 The run to Lillooet Lake was smaller than in any big year since the hatchery was established there. Egg take was 2 million less than in 1909. First sockeyes observed 15th Aug. Height of run between 20th & 28th Sept. Finished 6th Oct.
- 1914 a greater number reached Lillooet Lake this season than 4 years ago. The hatchery egg take was 15,200,000 against 7 million for 1910

## Harrison sockeye run

### Silver Creek

The sockeyes of this creek are early run fish.

1902 2 1/2 million eggs taken & sent to Bon accord. There were considerable numbers noted in Aug & Sept.

1906 Run was equal to average of 1902-3 & 4

1907 " " noticeably less than 1906

1908 " " not as good as usual

1909 " " very poor; practically a failure

1911 3 million eggs were obtained from the creek at the hatchery and only 2 million from Morris Creek. The other creeks which in the past have been the hatcheries chief reliance were barren of fish.

Morris Creek Harrison Rapids Sockeyes are later run fish than Silver Creek. No early sockeyes go in Morris. Tom. Hatchery has taken eggs in Morris Creek every year since 1885 (except 1900 when hatchery did not operate) All Bon accord egg take at 1901 was from Morris Creek.

1912 Run to Harrison Lake, Morris Creek and Cultus Lake was very much less than in 1904 & 1908. In fact was the smallest on record. Only 2 million eggs for the hatchery, of which but 500,000 came from Morris Creek. Up to 1908 10 to 20 million eggs were annually taken from Morris Creek since then the egg take has steadily declined.

1913 In 1909 for the first time fry were planted in Morris Creek & this year the run to Morris Creek was larger than 4 years ago although less than in 1901 & 1905. In 1905 16 million eggs taken there against 1 million in 1909 & 2,400,000 this year.

1914 The number of sockeyes entering the stream of Harrison Lake proper was apparently less than 4 years ago.

1915 The number of sockeyes entering the tributaries of Harrison Lake this season was greater than in recent off years. The number of eggs collected at the stations on the lake proper exceeded and at Morris Creek exceeded that of 1911.

Main Fraser river

1911

at North Bend and Gale and Hope the Indians experienced the poorest run in their knowledge. The fish on their drying frames did not average 50 per family as against 300 per family in the poorest previous year 1907.

"It is certain that never in the past has the number of sockeye salmon reaching the upper Fraser fallen to so low a number as it did this year."

1915

Sockeye run to Cultus Lake far exceeded all previous records. Sockeyes first appeared 15th Sept; great bulk between 15th Oct & 30th Nov. 30 million eggs secured by hatchery of which 7 million retained at Cultus Lake & remainder transferred to Harrison hatchery. Over 20 thousand sockeyes spawned naturally.

Pitt Lake. Sockeye eggs were taken here in considerable quantities for the first time this season. All previous efforts failed because sockeye had not appeared in sufficient numbers. First sockeyes were observed in Aug but not in large numbers until Sept. Of the egg take 1 million were retained at Pitt Lake and remainder taken to Harrison. In addition many sockeyes spawned naturally.

1916

The run to Cultus Lake was far larger than 4 years ago but much smaller than last year. Bulk of eggs were taken in Nov & Dec.

There was a considerable run to Pitt Lake. Run came early and upwards of 3 million <sup>eggs</sup> were collected.

1917

The run to Cultus Lake was in the main satisfactory

1918

Cultus Lake hatchery secured 3,120,000 eggs and

Pitt " " " 3,672,000 "

1919

Cultus " " " 10,500,000 "

Pitt " " " 3,868,000 "

1920

Cultus " " " 1,200,000 " run light

Pitt " " " 4,360,000 "

Chilco Chilcotein continued

1912

The number of sockeye salmon which reached the Chilcotein-Chilco section this year was measurably larger than in any off year since 1901. They were greatly in excess of those that reached this section in 1908. They were very few sockeyes in this section in 1904. The Indians below Hanceville captured upwards of 6000 commencing 3rd Aug. They report that the run was one of the best off year runs in many years.

1913

The run to Chilco lake did not equal the runs of 1905 & 1909 and was apparently not much greater than in 1912. Run commenced 1st Aug. at its height ~~between 15th & 17th~~ <sup>on the 20th</sup> & ceased on 28th.

1914

Fewer sockeye reached this section this year than during any other of which we have a record. It was the first season in the recollection of Indians when not sufficient sockeye could be taken for <sup>use in a</sup> fresh fish use and none were available for smoking. First fish were observed on 7th Aug & ~~largest netted catch for many~~ <sup>most caught by a net in any</sup> one day was 40.

1915

Number reaching this section this year too small to attract attention. None were dried by the Indians who did not catch enough to furnish food for their daily consumption while assembled at their fishing stations. The spawning beds of Chilco lake were unseeded this year.

1916

The run this year was little better than last year, about the smallest in recollection of the Indians who only captured about 1,000 as compared to 15,000 in 1912. First sockeyes observed 17th Aug.

1917

The number of sockeyes entering Chilcotein river was far less than in 1913. First appearance 9th Aug. Somewhat later than usual. Run ceased 5th Sept. Indians smoked approximately 15,000 as against 75,000 in 1913. Run was little, if any, better than it was in the off year 1912.

1918

The Indians caught less than 500 sockeyes for the entire season.

1919

Only a small run reached this section this season.

1920

Sockeyes were observed for at least 2 weeks in Aug. Indian reported that more sockeye reached Chilco lake this year than in any recent low year.