

FROM THE DAILY COLONIST, JULY 1.

B. C. FISHERIES.

Inspector McNabb's Annual Report to the Marine Department for the Year 1894.

Reasons for the Annual Salmon Run on the Fraser Becoming More Uniform.

The annual report of Hon. John Costigan, minister of marine and fisheries, contains as appendices the reports of Inspector McNabb on the fisheries of the province as well as that upon the Fraser river hatchery. They are dated New Westminster, December 31, 1894, and are as follows:

FISHERIES OF BRITISH COLUMBIA.

Although the catch of salmon shows a considerable falling off, when compared with the exceptional catch of 1893, it is nevertheless much greater than that of any other year in the history of the industry in British Columbia.

Salmon fishing continues to be the most important of the fishing industries of the province, and it is gratifying to note that the rivers—especially the Fraser—show no signs of depletion, or of being overfished, being in this respect among the great salmon rivers of the Pacific Coast, if not of the world. It is also interesting to note that the very great difference between the catches of different years, on the Fraser, which formerly existed, appears to be becoming less marked than formerly. The difference in the catch of salmon is not, in my opinion, to be accounted for by any eccentricity in the habits of the salmon, but in a great measure to unfavorable conditions in the creeks during the spawning time,—four years previous to the short runs,—such as heavy frosts which bring down, and deposit great quantities of mud and debris, and frequently change the position of the gravel deposits in which the ova had been deposited; thus causing its destruction. Another cause of very great loss, and almost as difficult to overcome as are adverse natural causes, are the methods employed by the Indians in catching salmon in the creeks for their winter food by erecting weirs, which prevent the fish from reaching their spawning grounds. As this is a matter of very great importance as careful supervision and perfect protection as possible has been given to the more accessible creeks, and this, together with the valuable aid of the hatchery, is, in my opinion, gradually equalizing the annual "runs" of salmon in the Fraser river.

The following table shows the value of salmon caught for five years in British Columbia: 1890, \$1,989,599; 1891, \$1,517,080; 1892, \$1,489,860; 1893, \$2,916,990; 1894, \$2,362,714.

Very extensive preparations were made at Point Roberts last spring for catching salmon in traps, and as there is no doubt but that all the salmon caught there are Fraser river fish, a good deal of alarm was felt by the Fraser river fishermen regarding the effect it might have upon the industry. The shortage in the pack there, however, as compared with that of 1893, was in exact proportion to that of the Fraser river for the same years. Halibut fishing, which has heretofore been carried on in a desultory manner, unprofitable to all concerned, has, since the establishment upon a firm basis and is being conducted in a vigorous and systematic manner, and gives promise of becoming an industry of great value to the province and profitable to its promoters. The shortness of the fishing season has hitherto been a bar to the greater prosperity of the fishermen of the country, which the prosecution of the sea fisheries will do much towards removing by affording them employment during the winter months.

On the aggregate of the aggregate of the products of the fisheries shows an increase of \$53,921 over last year. The catch of fur seals by Canadian vessels was the largest on record, and demonstrates the adaptability of the regulations to the requirements of our people.

The capital invested in the fisheries and fishery materials, including the fur seal fleet, and outfit of boats, etc., shows a large increase over that of last year.

Considerable activity has been caused in the sturgeon fishing industry on the Fraser river by an increased demand and better prices than formerly for these fish in Eastern markets. So far net fishing for sturgeon in the Fraser river has not been successful. The fishery protection service was, on the whole, satisfactory during the season, but in addition to the launch Claymore, a larger and more powerful boat will be required for service on the Fraser river next season, in order to prevent violation of the law in the river and illegal fishing and poaching outside.

I have to report the death of Guardian C. D. Grant, an old officer of the department. Capt. Grant had charge of the patrol launch Claymore on the Fraser river from the late March to the late July, and of the steamer Frangeline from the late July to the 30th of August. He was active in the discharge of his duties, and reported a number of violations for which fines were imposed.

Skeena River.—Guardian Wm. Roxburgh reports that the pack of salmon was below the average on this river; that violations of the regulations were not very frequent, and that the pack was not very large.

Rivers Inlet.—Guardian Adamson reports that the season's operations in his district were very successful, and a good pack of salmon was secured by all the canneries, and the regulations well observed.

Nas River.—Guardian Spain reports that salmon were scarce in the Nas, but two canneries were operated, and their packs were small.

Fraser River.—Guardian McNeish, who had charge of the patrol launch Claymore during the months of July and August, reports that a number of violations of the regulations were weekly close and of the pack in his district, all of which were reported, and complaints lodged as directed with Captain Fitzgibbon, M. J., and that, in his opinion, where a large number of boats, manned by men of all nationalities, are engaged in fishing, many of whom have no respect for the law, and are only restrained from violating it through fear of being caught in the act, that a larger and more speedy boat than the launch "Claymore" is required for patrolling, considering that there is more than sixty miles of river to patrol.

FRASER RIVER HATCHERY.

SIR,—I have the honor to report a very successful season's operations in connection with the Fraser river fish hatchery.

On the 5th of March and April there were distributed, as the result of the season's operations, 6,800,000 live young sockeye (Nerka) salmon, viz: in Harrison

river, 4,000,000; Pitt lake, 1,800,000; Stave river, 500,000.

On the 4th of March I received a consignment of two million whitefish eggs from the Solihik hatchery, per C.P.R. As soon as possible I had the glass incubators placed in position and the eggs transferred to them from the trays. The eggs arrived in good condition considering the length of the journey. They were hatched with but little loss, and on the 17th of April I sent 1,200,000 estimated fry to Long lake, Okanagan, in charge of the caretaker of the hatchery, and the remainder, estimated at 300,000, to the Quatnam lake.

On the 21st September I sent men with the necessary materials to Morris creek, Harrison river, to build a trap and make the necessary preparations for capturing parent salmon and collecting ova. On the 2nd of October the first lot of ova, 1,344,000, was received at the hatchery, and also the 448,000, on the 11th, 1,024,000, on the 16th, 2,144,000, on the 20th, 848,000, and on the 25th, the last lot of 944,000, making a total of 6,752,000 ova, all of the sockeye variety. The parent fish were all captured in a trap constructed of pickets 4 feet long, 1 1/2 inches wide, and spaced 1 1/2 inches between the pickets; the trap was 2 feet square having a V shaped entrance. Adjoining the upper end of this trap a pound or trap of similar size and construction was built.

The salmon entered the trap several days before they were fully ripened, and in order to give them more room, and also to facilitate handling them for stripping, the males were lifted in dip-nets and transferred to the pound. Gill-nets were used formerly for capturing the parent fish, but I have since dispensed with them altogether, and in my opinion the ova is in better condition, and hatches with a smaller percentage of loss when obtained from fish which have entered the trap of their own accord, and there is no loss of parent fish which is unavoidable when they are netted in gill or drift-nets. The number of female salmon was 2,220; they gave an average of 3,500 ova each; for fertilizing the ova I used a solution of 1,200 to 1,400 males. The parent fish—male and female—when liberated appeared to be but little affected by the operation and confinement in the pounds. The eggs in the hatchery are in a good condition; the number of dead eggs are less than in any previous season in my experience at this hatchery.

Owing to the hatchery being situated more than seventy miles from where most of the fry are liberated, necessitating their being towed in scows against the current of the Fraser river, a distance of sixty miles by steamboat to the mouth of the Harrison river, and then by rowboat for the last miles up that river, considerable loss is met with, more no doubt than would be the case were the hatchery situated above the rapids of the Harrison river.

The hatchery premises and plant are undergoing decay. This fact, together with the somewhat unfavorable situation of the premises, have influenced me to keep the expenditure for repairs down to the lowest figure possible. I am, however, doubtful whether it will be politic to continue this for another season, as in my opinion unless a hatchery is built a large expenditure will be necessary to render the present one safe for future seasons' operations.

(Sd.) JOHN MCNAB.

THE CITY.

JAMES BERTONER, entomologist of the Dominion Agricultural Experiment Station, Ottawa, will address the Fruit Growers and Dairy-men's Association at Agassiz on July 26.

AFTER regular service in the Metropolitan Methodist church last evening six Japanese converts of the mission at 140 Johnson street were baptised by Rev. Mr. Cleaver.

SEVE TINGLEY has just arrived down from Ashcroft, and reports the mining outlook in Cariboo as exceedingly promising. The last clean-up of the Horroly and Cariboo mines are considered most satisfactory.

Whittier is doing considerable work on Williams Creek, which has hitherto been a great and growing impediment to the mining development of old Cariboo.

SABBATH school anniversary services were conducted in the Victoria West Methodist church yesterday. Rev. J. P. Hicks, the pastor of the church, officiated in the morning and at 2:30 p.m. Rev. Solomon Cleaver addressed the children, while in the evening Rev. D. D. Birks occupied the pulpit. A special feature of the services was the singing of the children, which was particularly good.

At the First Presbyterian church yesterday morning Rev. Dr. Campbell preached the annual sermon to the congregation of the Sunday school. There was a large gathering of the little ones occupying the centre seats in the church. A sermon appropriate to the occasion was preached and the music was of a special character. At the Sunday school picnic at Goldstream, which takes place today, were distributed, and a large attendance is expected.

MR. R. M. PALMER, inspector of fruit pests, who returned on Saturday from a trip of inspection to Nanaimo and vicinity, reports that the "leaf roller caterpillar" has done a good deal of damage to the orchards. Fruit does not look quite as well as in the lower part of the island, but the yield will be fair. Mr. Palmer saw finer gooseberries there than in any other part of the province, and thinks that the utter absence of mildew on even the big English gooseberries is perhaps due to sulphur in the air from the proximity to the large coal mines. Mr. Robbins, of the Vancouver Coal Co., has discovered a big tract of land owned by the company and sold to the miners in five acre blocks. This has resulted in a great many fruit trees being planted and good results.

A SMALL assembly on the water front yesterday evening watched with interest the working of a marine bicyclist, owned by one of the proprietors of the London bakery on Government street. It is the only marine bicycle in Victoria, but its uncommonness is by no means due to its complexity of build or ungainliness. It is very simply constructed, its movement easy and comparatively fast. The rider sits on a saddle over an enclosed paddle-wheel, probably three feet in diameter and some four or five inches wide, propelling himself by air-tight pistons probably of leather, which are either side of the wheel. These pistons are in the shape of boats, only much more pointed and smaller. Rudders are attached to each, and are manipulated simultaneously by a small crank near the hands. The apparatus is easily carried.

Great Faith in It.

DEAR SIR,—I have used Dr. Fowler's Extract of Wild Strawberry for nine years, when required, and think it is the best remedy to be had for all kinds of Summer Complaints. It has been tried in our family to cure many Summer Complaints we have given it to our children. MRS. FRANK STEPHENS, Chatham, Ont.

THE WORLD OF SPORT.

Barker Establishes a New Provincial Record—The Albions Successful at Nanaimo.

Dominion Day Sports at the Terminal City—Preparations Advancing for the Great Regatta.

The representatives of Victoria's two gun clubs worthily upheld the supremacy of the Capital in the Cambie street traps, Vancouver, on Monday, and returned home last evening with many honors fresh upon their brows. The light was excellent and the shooters as well as the general public are enthusiastic over the good sport provided. In the team race the Union club six-man team won with a score of 120, made up as follows: J. C. 2nd, 12, 8, 13, 15, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213, 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 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825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853, 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885, 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917, 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949, 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981, 983, 985, 987, 989, 991, 993, 995, 997, 999, 1001, 1003, 1005, 1007, 1009, 1011, 1013, 1015, 1017, 1019, 1021, 1023, 1025, 1027, 1029, 1031, 1033, 1035, 1037, 1039, 1041, 1043, 1045, 1047, 1049, 1051, 1053, 1055, 1057, 1059, 1061, 1063, 1065, 1067, 1069, 1071, 1073, 1075, 1077, 1079, 1081, 1083, 1085, 1087, 1089, 1091, 1093, 1095, 1097, 1099, 1101, 1103, 1105, 1107, 1109, 1111, 1113, 1115, 1117, 1119, 1121, 1123, 1125, 1127, 1129, 1131, 1133, 1135, 1137, 1139, 1141, 1143, 1145, 1147, 1149, 1151, 1153, 1155, 1157, 1159, 1161, 1163, 1165, 1167, 1169, 1171, 1173, 1175, 1177, 1179, 1181, 1183, 1185, 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1519, 1521, 1523, 1525, 1527, 1529, 1531, 1533, 1535, 1537, 1539, 1541, 1543, 1545, 1547, 1549, 1551, 1553, 1555, 1557, 1559, 1561, 1563, 1565, 1567, 1569, 1571, 1573, 1575, 1577, 1579, 1581, 1583, 1585, 1587, 1589, 1591, 1593, 1595, 1597, 1599, 1601, 1603, 1605, 1607, 1609, 1611, 1613, 1615, 1617, 1619, 1621, 1623, 1625, 1627, 1629, 1631, 1633, 1635, 1637, 1639, 1641, 1643, 1645, 1647, 1649, 1651, 1653, 1655, 1657, 1659, 1661, 1663, 1665, 1667, 1669, 1671, 1673, 1675, 1677, 1679, 1681, 1683, 1685, 1687, 1689, 1691, 1693, 1695, 1697, 1699, 1701, 1703, 1705, 1707, 1709, 1711, 1713, 1715, 1717, 1719, 1721, 1723, 1725, 1727, 1729, 1731, 1733, 1735, 1737, 1739, 1741, 1743, 1745, 1747, 1749, 1751, 1753, 1755, 1757, 1759, 1761, 1763, 1765, 1767, 1769, 1771, 1773, 1775, 1777, 1779, 1781, 1783, 1785, 1787, 1789, 1791, 1793, 1795, 1797, 1799, 1801, 1803, 1805, 1807, 1809, 1811, 1813, 1815, 1817, 1819, 1821, 1823, 1825, 1827, 1829, 1831, 1833, 1835, 1837, 1839, 1841, 1843, 1845, 1847, 1849, 1851, 1853, 1855, 1857, 1859, 1861, 1863, 1865, 1867, 1869, 1871, 1873, 1875, 1877, 1879, 1881, 1883, 1885, 1887, 1889, 1891, 1893, 1895, 1897, 1899, 1901, 1903, 1905, 1907, 1909, 1911, 1913, 1915, 1917, 1919, 1921, 1923, 1925, 1927, 1929, 1931, 1933, 1935, 1937, 1939, 1941, 1943, 1945, 1947, 1949, 1951, 1953, 1955, 1957, 1959, 1961, 1963, 1965, 1967, 1969, 1971, 1973, 1975, 1977, 1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2023, 2025, 2027, 2029, 2031, 2033, 2035, 2037, 2039, 2041, 2043, 2045, 2047, 2049, 2051, 2053, 2055, 2057, 2059, 2061, 2063, 2065, 2067, 2069, 2071, 2073, 2075, 2077, 2079, 2081, 2083, 2085, 2087, 2089, 2091, 2093, 2095, 2097, 2099, 2101, 2103, 2105, 2107, 2109, 2111, 2113, 2115, 2117, 2119, 2121, 2123, 2125, 2127, 2129, 2131, 2133, 2135, 2137, 2139, 2141, 2143, 2145, 2147, 2149, 2151, 2153, 2155, 2157, 2159, 2161, 2163, 2165, 2167, 2169, 2171, 2173, 2175, 2177, 2179, 2181, 2183, 2185, 2187, 2189, 2191, 2193, 2195, 2197, 2199, 2201, 2203, 2205, 2207, 2209, 2211, 2213, 2215, 2217, 2219, 2221, 2223, 2225, 2227, 2229, 2231, 2233, 2235, 2237, 2239, 2241, 2243, 2245, 2247, 2249, 2251, 2253, 2255, 2257, 2259, 2261, 2263, 2265, 2267, 2269, 2271, 2273, 2275, 2277, 2279, 2281, 2283, 2285, 2287, 2289, 2291, 2293, 2295, 2297, 2299, 2301, 2303, 2305, 2307, 2309, 2311, 2313, 2315, 2317, 2319, 2321, 2323, 2325, 2327, 2329, 2331, 2333, 2335, 2337, 2339, 2341, 2343, 2345, 2347, 2349, 2351, 2353, 2355, 2357, 2359, 2361, 2363, 2365, 2367, 2369, 2371, 2373, 2375, 2377, 2379, 2381, 2383, 2385, 2387, 2389, 2391, 2393, 2395, 2397, 2399, 2401, 2403, 2405, 2407, 2409, 2411, 2413, 2415, 2417, 2419, 2421, 2423, 2425, 2427, 2429, 2431, 2433, 2435, 2437, 2439, 2441, 2443, 2445, 2447, 2449, 2451, 2453, 2455, 2457, 2459, 2461, 2463, 2465, 2467, 2469, 2471, 2473, 2475, 2477, 2479, 2481, 2483, 2485, 2487, 2489, 2491, 2493, 2495, 2497, 2499, 2501, 2503, 2505, 2507, 2509, 2511, 2513, 2515, 2517, 2519, 2521, 2523, 2525, 2527, 2529, 2531, 2533, 2535, 2537, 2539, 2541, 2543, 2545, 2547, 2549, 2551, 2553, 2555, 2557, 2559, 2561, 2563, 2565, 2567, 2569, 2571, 2573, 2575, 2577, 2579, 2581, 2583, 2585, 2587, 2589, 2591, 2593, 2595, 2597, 2599, 2601, 2603, 2605, 2607, 2609, 2611, 2613, 2615, 2617, 2619, 2621, 2623, 2625, 2627, 2629, 2631, 2633, 2635, 2637, 2639, 2641, 2643, 2645, 2647, 2649, 2651, 2653, 2655, 2657, 2659, 2661, 2663, 2665, 2667, 2669, 2671, 2673, 2675, 2677, 2679, 2681, 2683, 2685, 2687, 2689, 2691, 2693, 2695, 2697, 2699, 2701, 2703, 2705, 2707, 2709, 2711, 2713, 2715, 2717, 2719, 2721, 2723, 2725