

SALMON HATCHERIES.

Extent of Operations.

In 1918 the propagation of salmon in Alaska was carried on at *four* fishcultural stations, two of which were operated by the Government and *two* by private interests. The capacity of these hatcheries is approximately *280* ~~293~~,000,000 ~~red~~ salmon eggs, the two government stations being able to take care of 150,000,000.

In 1917 the total collection of red salmon eggs in Alaska was 115,964,000. The number of salmon liberated in Alaskan waters in the season of 1917-1918 was 90,390,200, which was 65,251,800 less than in 1916-1917. The take of red-salmon eggs in 1918 was ^{142,001,000} ~~141,388,100~~ or ^{26,037,000} ~~25,424,100~~ more than in 1917. This increase was due to the fact that considerably larger takes were made at the McDonald Lake (formerly Yes Bay) ~~and~~ ^{and Quadra} Fortmann hatcheries. The collection of eggs at the Afognak station was also approximately 1,500,000 ^{greater} ~~better~~ in the previous year. Operations at the Uganik and Seal Bay substations of Afognak were not carried on in 1918.

Operations of Alaska Hatcheries in 1918.

Stations.	Red or sock-eye salmon eggs taken in 1917.	Red or sock-eye salmon liberated in 1917-18.	Red or sock-eye salmon eggs taken in 1918.
McDonald Lake (Yes Bay)	34,950,000	32,539,200	a 47,300,000
Afognak	b 53,036,000	31,427,000	c 54,681,000
Seal Bay	2,712,000	2,712,000
Fortmann	6,840,000	6,135,000	d 19,620,000
Quadra	13,600,000	12,990,000	20,400,000
Hetta	4,826,000	4,587,000
Uganik			
Total	115,964,000	90,390,200	^{142,001,000} 141,388,100

✓

- a 1,365,000 humpback-salmon eggs were also taken.
- b 18,000,000 eyed eggs transferred to Oregon, Washington, and British Columbia.
- c 8,697,000 humpback-salmon eggs were also taken.
- d 3,660,000 humpback-salmon eggs were also taken.

Hatchery Rebates.

The Federal fishery law of Alaska provides that the catch and pack of salmon by the operators of private hatcheries shall be exempt from all license fees and taxation of every nature at the rate of ten cases of canned salmon to every one thousand red or king salmon fry liberated upon compliance with certain conditions, among which may be mentioned the filing of affidavits with the clerk of the district court of the division of Alaska wherein the hatchery is located and with the Secretary of Commerce, showing the number of red salmon fry released during the fiscal year for which report is made. The following table gives the rebates due to private operators for the fiscal year ending June 30, 1918.

Rebates Credited to Private Salmon Hatcheries during the fiscal year ended June 30, 1918.

Owners.	Location	Red salmon fry liberated.	Rebate due.
Alaska Packers Association . . .	Naha Stream	6,135,000	\$2,454.00
Northwestern Fisheries Co.,	Quadra Lake	12,990,000	5,196.00
Do.	Hetta Lake	4,587,000	1,834.80
Total		23,712,000	\$9,484.80

Hatchery Inspection.

The law provides that all private hatcheries shall be inspected by order

of the Secretary of Commerce and that no rebate certificates shall be issued to the owners of such establishments until the efficiency of the hatcheries has first been approved by the Secretary of Commerce in the manner provided by law. The necessary inspections were made and the character of operations approved.

Hatchery Operations.

McDonald Lake.

The name Yes Bay, as applied to the hatchery on McDonald Lake, was obviously inappropriate as the hatchery was not located on the bay ~~but on the lake~~. It ^{has been} ~~was~~ (therefore decided) that henceforth this station will be known as the McDonald Lake hatchery. In 1917 the egg-collecting season began on September 11 and ended September 26. In that time 34,950,000 red-salmon eggs were collected, out of which number 32,539,200 fry were liberated in McDonald Lake and tributaries. Losses aggregated 2,410,800 eggs and fry, or approximately 6-7/8 per cent.

In 1918 spawning operations began August 29, and ended October 2, and resulted in a collection of 47,300,000 red salmon eggs. A collection of 1,365,000 humpback-salmon eggs was also made.

Afognak.

During the spawning season of 1917 the Afognak station made a collection of 53,036,000 red-salmon eggs, operations beginning July 30 and ending September 11. Of that number, 18,000,000 eyed eggs were distributed among hatcheries in Oregon, Washington, and British Columbia. The remaining 35,036,000 were incubated at the Afognak hatchery. The loss of eggs was 2,221,000 and fry 1,388,000, a total of 3,609,000, or 6-4/5 per cent of the total take. The number of red-salmon fry planted in Letnik Lake and its tributaries was

31,427,000.

The spawning season of 1918 began July 30 and ended October 2, during which period 54,681,000 red-salmon eggs were taken. A collection of 8,697,000 ~~humpback-salmon~~ humpback-salmon eggs was also made.

The substations at Seal Bay and Uganik were not operated in 1918.

FORTMANN.

The Alaska Packers Association owns and operates the ^{Fortmann} hatchery on Heckman Lake, Revillagigedo Island, southeastern Alaska. This hatchery was built in 1901 and is now the largest plant of its kind in Alaska, having a capacity of 110,000,000 salmon eggs. It has been in continuous operation since the date of its construction, a period of more than eighteen years. In that time 643,617,000 red salmon have been liberated therefrom.

Out of the 6,840,000 red-salmon eggs taken in 1917 between September 3 and October 20, there were hatched and planted 6,135,000 fry. The loss was 705,000 or approximately 10-1/3 per cent. A collection of 2,400,000 humpback-salmon eggs was also made in 1917 from which 1,845,000 fry were produced and planted. Between August 28 and November 15, 1918, a total take of 19,620,000 red-salmon eggs was made. Humpback-salmon eggs to the number of 3,660,000 were taken between September 13 and November 15.

QUADRA.

The Northwestern Fisheries Company owns and operates the hatchery located near Quadra in southeastern Alaska. This plant has a capacity of approximately 21,000,000 red-salmon eggs. The taking of eggs in 1917 began August 13 and ended November 3, during which period 13,600,000 were collected. Out of this number there were hatched and planted 12,990,000 red-salmon fry, the total loss being 610,000, or approximately 4 1/2 per cent.

Spawn-taking at this hatchery in 1918 began August 14 and ended September 28. In that time a collection of 20,400,000 red salmon eggs was made.

HETTA.

The Hetta hatchery is also owned and operated by the Northwestern Fisheries Company, and is located on Hetta Lake, in southeastern Alaska. It has a capacity of approximately 12,000,000 red-salmon eggs. In 1917, egg-collecting began August 15 and ended December 14, resulting in a take of 4,826,000 eggs from which 4,587,000 red-salmon fry were hatched and ~~planned~~ liberated. The loss was 239,000, or approximately 4.9 per cent.

This hatchery was closed on June 30, 1918. No eggs were taken during the spawning season of 1918.