XXXIV.—REPORT OF SALMON-HATCHING OPERATIONS IN 1878, AT THE CLACKAMAS HATCHERY.

BY W. F. HUBBARD.

CLACKAMAS HATCHERY, OREGON, February 4, 1879.

To Professor SPENCER F. BAIRD,

United States Fish Commissioner:

I beg to report to you as follows: The first spawn of last season was taken September 5, 1878, when we took the spawn from one female salmon, the first one we had caught that was ripe. The next was taken September 7, when we took two females. In spawning the fish, sometimes one male would answer for one female; but we almost always used two, and sometimes three. When fishing, we always caught more males than females.

September 9 took the spawn from 4 females.

September 10 took the spawn from 5 females.

September 11 took the spawn from 7 females.

September 13 took the spawn from 12 females.

September 14 took the spawn from 23 females.

September 15 took the spawn from 22 females.

September 16 took the spawn from 19 females.

September 17 took the spawn from 32 females.

September 18 took the spawn from 27 females. September 19 took the spawn from 38 females.

September 20 took the spawn from 36 females.

September 21 took the spawn from 43 females.

September 22 took the spawn from 35 females.

September 23 took the spawn from 32 females.

September 24 took the spawn from 20 females.

September 25 took the spawn from 27 females.

September 26 took the spawn from 31 females.

September 27 took the spawn from 24 females.

September 28 took the spawn from 21 females.

September 29 the river began to rise, caused by heavy rains, and we were not able to do any fishing, although we took the spawn from four fish which we had in pens built for the purpose of keeping the fish.

September 30 we took the spawn from three fish from the pens.

The river was still rising, and on the night of the 30th it washed away the rack, allowing all the fish that were below to go up the river. After that the river stayed high for two or three days, and when it got low enough for us to fish again all the fish were gone.

The number of eggs taken was 2,081,000.

The number of females spawned was 478.

There were more than twice as many males caught as there were females.

November 7 the dam which supplies the hatching-house with water broke, and we were obliged to take the eggs and young fish out of the house. The company has two flat-boats here, and we fastened them together and made a place between them for the eggs and fish. On the same day we turned into the river 300,000 young fish.

December 9 the river began rising again, and the current was so strong that it killed a good many of the fish, and we saw something must be done or we would lose them all. By this time we had had a good deal of rain, and all the small streams were full of water and we were able to turn the water from one of them, which has plenty of water in the winter, but is nearly dry in the summer, into the hatching-house, and once more the fish were put back into the house; at this time the eggs were nearly all hatched.

December 24 Captain Ainsworth took 3,000 young salmon, which were placed in a land-locked lake in Washington Territory.

December 26 600,000 young fish were turned into the river and Cleer Creek, a stream which runs into the Clackamas below the hatchery.

December 27 150,000 young fish were turned into the river at different points.

January 2, 1879, the last of the young fish were out, 150,000, which were also put in the Clackamas at different points up and down the river.

The total number of fish turned out is estimated at 1,203,000.

The large number of eggs and fish lost is attributed to having to move them from the hatching-house to the river and back, and also to the high-water while they were in the river, which killed a great many,

At the time the rack went out there were a great many fish below it and had it remained two or three weeks longer, we should probably have taken another million of eggs.

W. F. HUBBARD,

Assistant Superintendent.

Respectfully forwarded.

J. G. MEGLER, Secretary O. & W. F. P. Co.