

XXVI.—REPORT OF EGGS SHIPPED TO AND RECEIVED FROM
FOREIGN COUNTRIES AT THE COLD SPRING HARBOR, NEW
YORK, STATION DURING THE SEASON OF 1886-'87.

By FRED MATHER.

SHIPPED TO GERMANY.

(A) SUNFISH (*Eupomotis aureus*).—Some time in the summer of 1886, I shipped to Max von dem Borne, of Berneuchen, 125 sunfish about 1 inch in length. The fish were captured from the mill-pond of Mr. Townsend Jones at Cold Spring Harbor and sent to Mr. Blackford in Fulton Market for shipment. The wisdom of introducing these fish in Germany was rather questionable, but after repeatedly warning Von dem Borne of their predatory character and that their only value was as an aquarium fish, he still wished them. No report of their arrival has been received.

(B) WHITE PERCH (*Roccus [Morone] americanus*).—Three shipments of fish from 5 to 6 inches long were made to von dem Borne as follows: October 9, 1886, 36 fish were sent in six cans by steamer *Aller*, but they died on the fifth day out. On December 22, 16 fish in four cans, per steamer *Werra*, which arrived in Germany in a frozen condition, all dead. On March 1, 1887, 16 fish of the same size as those sent before were shipped in four cans, but only 3 of them reached von dem Borne alive. These fish were taken from the mill-pond at Cold Spring Harbor by permission of Mr. Townsend Jones.

(C) ROCK BASS (*Ambloplites rupestris*).—On March 1, 1887, there were sent to Herr von dem Borne 25 rock bass of about an inch in length. They were put in one can and 20 of them reached him alive. These fish came from New River, Virginia, and were forwarded by order of Col. M. McDonald from the Wytheville Station.

(D) BROOK PIKE (*Esox americanus*).—On December 22, 1886, I sent von dem Borne 14 brook pike per steamer *Werra*, at the same time that one shipment of white perch mentioned above was made. The fish were all dead on arrival. The only thing that survived in the cans were some very small *cyprinidae* put in as food for the pike. The fish were furnished by Mr. M. B. Hill, superintendent of the New York hatchery at Clayton.

SHIPPED TO FRANCE.

(A) LAND-LOCKED SALMON (*Salmo salar*, var. *sebago*).—On April 1, 1887, there was packed and shipped to Mr. M. D. Hallay, vice-president,

of the Fish Commission of the Lower Seine, Gonzerville, France, one case containing 25,000 eggs of the land-locked salmon, per steamer *La Bretagne*. These eggs came some days before from Grand Lake Stream, Maine, and were in good condition for the voyage. No word has been received from them, but from the appended letter of Mr. Louis De Bibian, agent General Transatlantic Company, dated New York, April 2, 1887, and relating to their care on shipboard, there is every reason to believe they will get to their destination in safety:

"Your telegram of 31st March and letter of April 1 at hand. The case reached me this morning and goes on *La Bretagne*, sailing to-day, in care of an officer whom I have given instructions in reference to keeping the box cool and adding ice thereto. I have sent the case to our agent's care in Havre and written him to reship by express on arrival there."

RECEIVED FROM SCOTLAND.

(A) LOCH-LEVEN TROUT (*Salmo levinensis*).—On January 14, 1887, there were received from Sir James Gibson Maitland, Bart., proprietor of the Howietoun Fishery, Stirling, Scotland, three cases of eggs of the Loch-leven trout, per steam-ship *Bothnia*. The cases contained 16,000 each, or 48,000 in all. The eggs on the upper trays were in good condition, but the lower trays in all the boxes contained only dead eggs, owing to the wet condition of the moss and a rise in the temperature. The eggs were all clean and entirely free from fungus, and had they been iced on the ship and the temperature kept down they would have arrived in splendid condition, for those which contained dead embryos had not been dead long and merely showed the white line in the egg. We took out 20,300 dead ones, and the loss since that time has been trifling. The fry from the good eggs are as strong and healthy as any fish ever hatched here. The packing at Howietoun is most excellently done.

RECEIVED FROM GERMANY.

(A) SAIBLING (*Salvelinus salvelinus*).—On February 9, 1887, there were received from Herr Max von dem Borne, proprietor of the fish-cultural establishment at Berneuchen, one case containing 20,000 Saibling eggs, from which there were taken 8,000 dead. In reply to an order to send one-fourth of the eggs to Col. E. B. Hodge, commissioner of fisheries of New Hampshire, 3,000 were repacked and shipped to the hatchery at Plymouth, N. H. He reported their arrival in good condition. On March 9 another case of Saibling eggs was received from Herr von dem Borne, containing 20,000, of which 5,500 were dead. Through a misunderstanding these were mixed with an installment of brown trout eggs received the same day from Germany, and the 14,500 good eggs were distributed with the brown trout to the hatcheries at Corry, Pa.; Wytbeville, Va.; Northville, Mich.; and Cold Spring Harbor, N. Y.

On the same date there were received 20,000 eggs of the Saibling from Herr von Behr, president of the Deutsche Fischerei-Verein, from which we removed 5,000 dead and sent the remainder to Mr. F. N. Clark, Northville, Mich., who reported their arrival in good order.

(B) BROWN TROUT (*Salmo fario*).—On March 4, 1887, there was received from Herr von dem Borne, per steamer *Elbe*, one case containing 8,000 brown trout eggs, which arrived in very good condition, very few being dead; and, in accordance with orders, they were kept at Cold Spring Harbor. On March 22 there were received from von dem Borne 50,000 brown trout eggs, in two cases. They were in very bad condition, many being hatched. On the first day 30,000 dead were removed. These eggs not being fit to send out were placed in the troughs to hatch, the prospect of getting any good fish at all from them being very small. At the present time there are about 3,000 fry which are two weeks old and looking well. Probably six hours more in the package would have ruined them.

On March 9 there were received from Herr von Behr, of the Deutsche Fischerei Verein, per steamer *Werra*, one case containing 50,000 eggs of the brown trout, which were in excellent condition, although 13,000 from the lower trays were dead. These eggs were sent out as follows:

E. B. Hodge, Plymouth, N. H.	5,000
Central Hatching Station, at Washington, D. C.	5,000
F. N. Clark, Northville, Mich.	20,000
Pennsylvania Hatchery, Corry, Pa.	10,000
Wytheville, Va., Hatchery	10,000

The above figures include the 14,500 saibling, which, as already explained, had been mixed with them. All except Colonel Hodge got a portion of them.

This station has received on account of the New York Fish Commission the following eggs shipped to Commissioner E. G. Blackford: twenty thousand eggs of the grayling (*Thymallus vexillifer* Ag.), of which only 300 eggs were good, and 10,000 eggs of the brown trout from Herr von Behr, which came in excellent condition.

COLD SPRING HARBOR, N. Y., April 8, 1887.