

36.—REPORT ON THE SHAD WORK OF THE STEAMER HALCYON DURING THE SEASON OF 1887.

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[Abstract.]

During the period of the shad operations of the steamer Halcyon, which commenced on May 2 and ended on the 20th of the same month, 4,750,000 fry were obtained from the U. S. Fish Commission steamer Fish Hawk, and from Battery Station, and planted; and 8,629,000 eggs were secured through the agency of gillers. The spawning, which was all done at night, was continued until the end of the season.

On May 11 the steamer Fish Hawk transferred to the Halcyon 1,250,000 young shad, which, on that date, were planted in the Sassafras River.

The Halcyon then proceeded to Beaver Dam, on the Susquehanna, the nearest point where successful spawning could be carried on, but arrived too late to accomplish anything in that line.

All the eggs obtained were kept fresh and in good order by means of hatching cones and pumps on the vessel, until it was practicable to transfer them to Battery Station.

The following table shows the number of eggs and fry obtained, and how disposed of:

Record of shad operations by steamer Halcyon, on Chesapeake Bay and tributaries, for the season of 1887.

Date.	Place.	Eggs taken.	Fry received and deposited.	Time of deposit.	Place of deposit.
1887.					
May 2	Main channel, Susquehanna River.	270,000			
3	do.	153,000			
4	Red Bank, Susquehanna River.	37,500			
5	Odonton channel, Susquehanna River.	721,500			
6	Red Bank, Susquehanna River.	438,000			
7	do.	68,000			
9	Beaver Dam, Susquehanna River.	1,733,000			
10	do.	2,469,000			
11			*1,250,000	May 11	Sassafras River. Bohemia River. Elk River.
12	Battery Haul, Susquehanna River.	658,000	{ †1,100,000	May 12	
			{ †1,000,000	May 12	
13	Penny Shoals, Susquehanna River.	126,000			
14	do.	207,000			
15	do.	578,000			
16	Osborn's Haul, Susquehanna River.	460,000			
17	Beaver Dam, Susquehanna River.	315,000			
18	Main channel, Susquehanna River.	130,000			
19	Sandy Beach, Susquehanna River.	82,000	{ †400,000	} May 19	Chester River.
20	Beaver Dam, Susquehanna River.	227,000	{ *1,000,000		
	Total	8,629,000	4,750,000		

* Received from steamer Fish Hawk.

† Received from Battery Station.