

101.—ABILITY OF CARP TO ENDURE MUDDY, SLIMY, AND STAGNANT WATER.***By C. M. WHITE.**

I received from the United States Fish Commission, Washington, D. C., twenty German carp during the month of February, 1883. The fish were from $1\frac{1}{2}$ to 2 inches long, and having been unavoidably detained in making a permanent pond, I made a temporary dam across the stream, above where I intended to make my permanent dam. I put the fish in that temporary pond. A few days before the permanent dam was finished a heavy rain caused an overflow, and, as I then thought, carried off all my fish into a large stream into which the smaller stream emptied just below the dam. The stream upon which was the dam being a wet-weather stream (one that went dry during the summer), I arranged to supply water to the pond by pipes from my mill-race. Thinking the carp had been washed out, I completed the dam, but did not conduct the water there; this was during the latter part of April, 1883. Thus matters stood. The water in the stream ceased to run. A green scum formed thickly over the stagnant water, and instead of a fish-pond I had a first-class frog-pond. A dry summer following, the water in this temporary pond got so low that some twelve or fifteen hogs running into the adjoining field made it a place for wallowing daily in the soft mud. The pond became veritably a mud-puddle, some five or six yards long and one to three yards wide. The hogs continued to wallow and the water to lessen, until it got so shallow that my father, being at the pond or mud-puddle, one Sunday morning, saw what he thought was the back-fin of a fish above the muck. We at once investigated, and by the use of a perforated tin took from this mess, to our great astonishment, six German carp. The largest was 14 inches long, as thick as a man's wrist, and as wide as the palm of the hand. The others were about 10 inches long and proportionally heavy. I put them in fresh water until I could fix the pipes to conduct water from the race to the pond, but unfortunately the largest carp died, I think from a fall in leaping from the bucket and falling on the hard ground. The five lived, and I have them now in my pond well supplied with fresh water from the mill-race. At the time these fish were taken from the "hog-wallow" there had been no fresh water entering it in any way for six weeks, nor had any food whatever been given the fish. Now my carp are as lively as kittens, and keep the water well stirred up in nosing around.

WARRENTON, VA., *October 13, 1883.*

* This statement, being considered extraordinary, was sworn to before R. H. Downman, clerk of Fauquier county court, who also vouches for Mr. White.—C. W. S.