

## THE DESTRUCTION OF A SCHOOL OF BLUE GILLS. BY THOMAS LARGE.

On August 14, 1896, Mr. A. J. Chapman, while standing on the bridge across the channel between the main lake and the backwater bay of Webster Lake, noticed immense schools of Blue Gills (*Lepomis Pullidus*)—among which were but very few other fish—passing toward the main lake. On the days just preceding this the temperature had risen the highest of any other period of the summer, and Mr. Chapman states that the water-gates of the grist mill at Boston, Ind., a few miles up the Tippecanoe River, had been closed, and caused the water below to fall to a lower level than usual. None of the water of this part of the lake is more than five or six feet in depth, and much of it much shallower. The water became very much heated, and if this is the correct explanation of this movement, these fish can not endure a great change in temperature, hence migrated to the deeper water below. By opening the water-gates, a current being re-established and the lake rising to its usual level, the fish attempted to return to their usual feeding ground, and a large part of them lost their way in the lily-pads and spatterdock which line either side of the narrow, winding channel, and, coming into the shallow water near the shore on the east side, just below the bridge, were killed by the great heat of the water there.

Four days later, when I visited this place and found the dead fish and received the substance of the above explanation from Mr. Chapman, the margin of the lake for about ten rods was thickly covered with dead fish. Among them, as before stated, were very few other fish—one or two bass and a catfish being all that I found. There was a considerable uniformity in size, ranging from three to five or six inches in length. They had been fly-blown, and were almost entirely destroyed, excepting bones, scales and skin, and the road at a distance of a dozen feet was literally covered with maggots. The stench was great.

I have no better explanation to offer than the one given above, but noticed on entering the channel, almost a half mile below, a film on the water, such as one sees where organic matter decays, and noticed an odor different from that near the fish. In the water were masses of decaying bladderwort (*Utricularia vulgaris*), which might have been killed by the heat, and its presence in the water might have caused the migration.