

June 19, 1935

MORTALITY OF BLUEGILLS AND OTHER FISHES IN LAKE CHEMUNG, LIVINGSTON COUNTY

On June 18, 1935, the Institute received information regarding mortality of fishes in Lake Chemung from Fred McNamara. Mr. McNamara, a former student of Prof. T. L. Hankinson, has been studying this lake for some months. He reports a rather heavy mortality, first seen on June 14 and increasing to the evening of June 18. Bluegills were chiefly affected, showing up on the average of 1 per 10 feet of shoreline. Some black crappies and some bullheads were also killed.

Four adult bullheads were picked up freshly dead. Of these two were sent fresh by mail, two were preserved in formalin and then brought in by Mr. McNamara. All the fish were received in good condition for study.

All four bluegills showed unmistakable signs of a deadly gill infection presumably of bacterial nature for only one external worm parasite and no protozoans were found. The gills were highly inflamed, choked with mucus and over considerable areas were eaten away to the skeletal supports of the filaments. This gill disease was obviously the cause of the death.

It is not possible to determine with certainty the exact identity of this disease, but it likely is the one described by Dr. H. S. Davis of the U. S. Bureau of Fisheries, Vol. 38, pp. 262-280, figs.).

While it is possible, according to Davis, to treat this disease successfully with copper sulphate in hatchery ponds, it is obviously impossible to do this in an open lake. There is nothing to suggest in the way of control measures. Some of the bluegills will no doubt prove immune to the attacks, and will serve to

replenish the lake in case a really serious loss results.

The fish studied had definitely not been killed by dynamiting.

Mortality of fishes, particularly of bluegills, seems to be especially prevalent at the present time in Michigan lakes.

INSTITUTE FOR FISHERIES RESEARCH

Carl L. Hubbs
Director