

Re: fish mortality
Rep. 12

INSTITUTE FOR FISHERIES RESEARCH
UNIVERSITY MUSEUMS
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

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Report No. 12

Report on lot of fish received from Mr. Otto Rohn,
collected on the shore of Twin Lake,
Manchester Township, Washtenaw County.

Lot of fish consisted of:

1 Golden Shiner	150 mm.
1 Large Mouth Black Bass	155 mm.
1 " " " "	150 mm.
1 " " " "	85 mm.
6 Blue gills	68 mm. to 135 mm.
1 Rock Bass	182 mm.

Outside appearance of all fish was normal, as far as could be determined from the dead specimens, except that a patch of scales was missing from one side of the Golden Shiner. These scales were apparently removed after death. Gills were in a poor state of preservation in all specimens.

Due to the state of putrefaction only a few of the fish were fit for a more or less complete examination. The report on the examination of the mouth, viscera and flesh is as follows:

1. Large Mouth Black Bass 150 mm.

Judging from the state of preservation of the viscera and comparison of the relative state of preservation of the gills with those of the other specimens, an

abnormal amount of disintegration has taken place in the gills. Fish somewhat emaciated. Stomach empty. Liver contained numerous small (as compared with the next specimen) larval tapeworms. Several large, adult tapeworms were found in the intestinal ceca which filled their respective ceca completely. Acanthocephala were common in the intestine. Mesenteries riddled by degenerating cysts (numerous) and several large larval tapeworms. Flesh and mouth cavity normal.

2. Large Mouth Black Bass 85 mm.

47 large larval cestodes, which had literally riddled the organ, were taken from the liver. These larval cestodes were also numerous in mesenteries. A single large adult Acanthocephala was found in the mesentery (no doubt a result of post-mortem migration) and three were found in the intestinal ceca. Several acanthocephala were present in the intestine. Flesh and mouth cavity normal.

3. Blue gill 135 mm.

Fish very fat, stomach full. Viscera negative except for one acanthocephala in one of the intestinal ceca. Flesh and mouth cavity normal.

Conclusion

Physical and biological conditions of lake are not known .

The possibilities of assigning a cause of death as being due to internal factors in cases where fish are recovered when found dead are very poor.

There is no cause for death from internal factors in these fish, but there is reason to believe that there may be a weakened condition which coupled with adverse environmental conditions may prove fatal.

Judging from the variety of fish affected and the difference in the degree of parasitization there is no reason to believe that it is an epidemic due to a disease producing organism.

The sudden rise in temperature, no doubt, has affected the fish directly, or indirectly by changing the environment.

This report was prepared by Fish Pathologist Wendell H. Krull. It was unfortunately mislaid temporarily, and is being submitted to Mr. Rohn and to the Department of Conservation on June 14.

Carl L. Hubbs
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Director