

Institute for Fisheries Research
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DECEASED BASS FROM LOON LAKE, IOSCO COUNTY

By Carl L. Hubbs

Mr. Westerman brought to Ann Arbor on February 11, one adult of the largemouth black bass from Loon Lake, Iosco County, with the annotation that it appeared under a hole under a spear house, acting sick and sluggish, and showing bulgy eyes. It was taken by a spear and delivered to District Warden, C. O. Martin. Other bass were reported to be in the same condition. An examination and report on this bass was requested by Mr. Westerman.

This bass was given a careful examination in the parasitology laboratory of the University, and it was found to be notably free of parasites, or any other indication of decease. No parasites were found in any of the internal organs, in the muscles, on the skin, on the gills, or in the eyes. The absence of eye parasites is particularly isgnificant, in the view of the fact that this and other bass of the lake showed pop-eyes. There are two causes of this condition, one parasitic worms and the other, abnormal gas content of the water. Since there were no parasites, we must assume that the condition was caused by gas conditions. It is probable that the water of the lake under the ice has become super-saturated with some inert gas, perhaps nitrogen, and that the fish in the lake are suffering ill effects from this cause. This disease, often called the gas-bubble disease, often leads to death. If a large number of the fish in Loon Lake

show the pop-eyed condition accompanied by sluggishness, a serious mortality may result. The cutting of a considerable number of additional holes in the ice would release much of the excess gas dissolved in the water.

"Notes on the dissolved content of water in its effect upon fishes" are given by M. C. Marsh in Bulletin of the United States Bureau of Fisheries, vol. 28, pp. 891-906, Document no. 688, 1910.

Signed by Carl L. Hubbs, Director