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INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE
UNIVERSITY OF MICHIGAN



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October 16, 1946

REPORT NO. 1075

EXAMINATION OF SMALLMOUTH BASS FINGERLINGS FROM LYDELL HATCHERY

September 26, 1946

by

Leonard N. Allison

In an attempt to rear parent smallmouth bass brood stock free of infection by the bass tapeworm, a group of bass were reared in pond No. 21, which is supplied with water taken from Mill and Strawberry Creeks above the hatchery so that possible infection from hatchery bass parasitized with adult bass tapeworms would not occur. Both Mill and Strawberry Creeks are small streams and were considered to be too small to harbor large bass that might carry the bass tapeworm. In November, 1945, bass from this pond were transferred to pond 10A (x) for use as parent stock in 1946. At this time, specimens were sent to the Institute for examination. Mr. E. Cooper and Pawlick made the examination and reported a 58 percent infection with the plerocercoid larvae (Report No. 1024). As was stated in Report No. 1024, the infection undoubtedly was carried into the pond by the water supply.

In order to use the parent stock to rear young bass with a minimum chance of infection, Dr. Hazzard suggested permitting the parent bass to spawn in pond 10A (x) and to remove the parents to another pond before the fry had begun to feed. Mr. Lydell followed Dr. Hazzard's suggestions. The young bass reached the fry stage by June 14, 1946, and the parent fish

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transferred to another pond. On September 26, 1946, fourteen fingerlings from pond 10A (x) were examined for the bass tapeworm and were found to be negative. Fish from this pond will be examined for bass tapeworm again in early 1947.

It appears that the bass tapeworm is carried into the hatchery ponds by the water from Mill and Strawberry Creeks, which are both small streams originating in lakes several miles from the hatchery. If the problem of eradicating the bass tapeworm from Lydell Hatchery is to be continued, both streams should be completely checked for presence of bass that might harbor adult tapeworms. This might be accomplished by the use of the electric shocker, although not without considerable effort. If no such bass are found the origin of the present infection could have been from bass that lived in the stream for only a short time, possibly coming from the lakes above, or from infected copepods carried downstream from the lakes.

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by Leonard N. Allison

Report approved by A. S. Hazzard

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