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Institute for Fisheries Research  
Morton L. Livingston

**INSTITUTE FOR FISHERIES RESEARCH** H. I. Peterson  
DIVISION OF FISHERIES R. S. Marks  
**MICHIGAN DEPARTMENT OF CONSERVATION**  
COOPERATING WITH THE  
**UNIVERSITY OF MICHIGAN**

**ALBERT S. HAZZARD, PH.D.**  
DIRECTOR

ADDRESS  
UNIVERSITY MUSEUMS ANNEX  
ANN ARBOR, MICHIGAN

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AN UNUSUALLY HEAVY INFECTION OF CLINOSTOMUM MARGINATUM  
ON A NORTHERN BLACK BULLHEAD

by

Morton L. Livingston

A fish identified as a northern black bullhead (Ameiurus m. melas) by Mr. W. F. Carbine of the Institute for Fisheries Research was presented to the writer for study by Mr. Carbine. The fish was taken from Spring Lake (T 23 N, R 3 and 4 E, Sec. 1 and 12), Ogemaw County, Michigan, on October 11, 1944. It had a total length of 6.3 inches and was heavily infested with cysts of Clinostomum marginatum, or "yellow grub," a trematode parasite commonly found on fishes of this region. The main sites of infection were the epithelial layers of the body at the bases of the fins, mouth cavity, orbits, and the areas surrounding the mouth. A few cysts were found scattered over the body under the skin. There appeared to be no involvement of muscular tissue and no flukes were found in the viscera of peritoneal cavity.

A complete count of these parasites resulted in a total of 2,197 cysts which were distributed as follows:

fins.....1,325  
skin, general.....215  
mouth and head.....656

The total volume of the cysts was about 7 ccs. and the volume of the bullhead was about 60 ccs., so on this basis the parasites composed about 11% of the total volume of the fish. Other than the large masses of cysts the fish appeared to be in good condition and no other parasites were observed. Mr. J. M. Edney of the Zoology Department of the University of Michigan, who kindly confirmed the writer's identification of this trematode, stated that he believed the main way in which such an infection could harm the host would be to grow in such large masses in the mouth cavity as to prevent the fish from swallowing food. The amount of cysts in the mouth cavity of the subject bullhead indicated that such a condition would have prevailed before too long a period of time.

INSTITUTE FOR FISHERIES RESEARCH

Morton L. Livingston  
Research Technician A

Report approved by A. S. Hazzard

Report typed by E. F. Livingston

W.C. C. H. H. A.  
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MICHIGAN

