

NOTE ON THE OCCURRENCE OF *Leuceruthrus micropteri* (TREMATODA, AZYGIIDAE) IN BASS, *Micropterus* SPP., FROM THE TENNESSEE RIVER

Authors: HUBERT, WAYNE A., and WARNER, MARK C.

Source: Journal of Wildlife Diseases, 11(1) : 38-39

Published By: Wildlife Disease Association

URL: <https://doi.org/10.7589/0090-3558-11.1.38>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

NOTE ON THE OCCURRENCE OF *Leuceruthrus micropteri* (TREMATODA, AZYGIIDAE) IN BASS, *Micropterus* SPP., FROM THE TENNESSEE RIVER

WAYNE A. HUBERT and MARK C. WARNER, Division of Forestry, Fisheries, and Wildlife Development, Tennessee Valley Authority, Muscle Shoals, Alabama, U.S.A.

Leuceruthrus micropteri (Marshall and Gilbert, 1905) has been identified in stomachs of smallmouth bass (*Micropterus dolomieu*) and largemouth bass (*Micropterus salmoides*) from Pickwick Reservoir, an impoundment of the Tennessee River.

In 1973, a study of smallmouth and largemouth bass in Pickwick Reservoir was initiated by the Tennessee Valley Authority. Pickwick Reservoir is a 17,300 ha mainstream impoundment bordering on Alabama, Mississippi, and Tennessee. As part of the study, stomach samples were collected from the bass and analyzed for food contents. *Leuceruthrus micropteri* was discovered during the food habits analysis.

Stomachs from 127 smallmouth bass and 99 largemouth bass were collected and preserved in 1973. In conjunction with the food habits study, *L. micropteri* were identified and enumerated as they occurred.

The prevalence of infection was 24.4% in the smallmouth bass and 36.4% in the largemouth bass. The mean number of *L. micropteri* per infected stomach was 1.87 (range 1 to 6) for smallmouth

bass and 2.72 (range 1 to 9) for largemouth bass. No difference in the prevalence of infection was noted for the different sexes or size classes. No evidence of pathogenicity was observed; however no experimental studies on this aspect have been done.

Leuceruthrus micropteri (Marshall and Gilbert, 1905) is primarily a parasite of the upper digestive tract in black bass. Several reports have listed its occurrence in largemouth bass, smallmouth bass and spotted bass (*M. punctulatus*). The parasite has also been found in bowfin (*Amia calva*) white bass (*Morone chrysops*), rock bass (*Ambloplites rupestris*), and black bullhead (*Ictalurus melas*).

Past distribution records are limited to the midwestern United States. *Leuceruthrus micropteri* has been found in Wisconsin,^{4,6,7} Minnesota,⁵ Arkansas,³ Indiana,⁴ Ohio,¹ and Lake Erie.² Unpublished records of its occurrence in Alabama, Georgia, and Tennessee have been made by workers at Auburn University (W. A. Rogers, personal communication). This is the first record of its occurrence in the southeastern United States. It is suspected that *L. micropteri* may have a much wider range than the records show.

LITERATURE CITED

1. BANGHAM, R. V. 1963. Parasites of the spotted bass, *Micropterus pseudopalmitis* Hubbs, and a summary of parasites of smallmouth and largemouth bass from Ohio streams. Trans. Am. Fish. Soc., 63: 220-228.
2. BANGHAM, R. V. and G. W. HUNTER, III. 1939. Studies on fish parasites of Lake Erie. Distribution studies. Zoologica, New York Zool. Soc., 24: 385-448.

3. BECKER, D. A., R. G. HEARD and P. D. HOLMES. 1966. A pre-impoundment survey of the Helminth and Copepod parasites of *Microp-terus* spp. of Beaver Reservoir in Northwestern Arkansas. Trans. Am. Fish. Soc., 95: 23-24.
4. GOLDBERGER, J. 1911. Some known and three new endoparasitic trematodes from American freshwater fishes. Bull (71), Hyg. Lab., U.S. Publ. Health and Mar.-Hoop. Serv., Jan.: 7-35.
5. HOFFMAN, G. L. 1967. *Parasites of North American Freshwater Fishes*. University of California Press. Berkeley (page 130).
6. MARSHALL, W. S. and N. C. GILBERT. 1905. Notes on the food and parasites of some freshwater fishes from the lakes at Madison, Wisconsin. Rep. U.S. Bur. Fish. (1904): 513-522.
7. PEARSE, A. S. 1924. Observations on parasitic worms from Wisconsin fishes. Trans. Wisc. Acad. Sci., Arts and Litt., 21: 147-160.

Received for publication 28 June 1974
