

BRIEF NOTE

FIRST RECORD OF *CHAETONOTUS HEIDERI* (GASTROTRICHA: CHAETONOTIDAE) IN NORTH AMERICA¹

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OHIO J. SCI. 81(2): 95, 1981

Brunson (1959) stated that "although (freshwater) gastrotrichs are worldwide in their distribution, cosmopolitanism of individual species is not yet an established fact." To my knowledge, this is the first North American record of a freshwater gastrotrich species originally described from another continent.

Chaetonotus heideri was found in early October 1977 by scanning, under a Wild dissecting microscope, rinsings from *Myriophyllum* collected in near-shore shallows of Dow Lake, Athens Co., Ohio (39° 21' N, 82° 2' W). Drawings were made from live animals immobilized in methyl cellulose using a camera lucida, phase contrast, and Nomarski optics.

Brehm (1917) described *Chaetonotus heideri* from numerous specimens collected from a deep pool filled with *Sphagnum* and *Utricularia* on the Franzenbader Moor, Austria. He contrasted the new species with *C. chuni*. Both species are notable for the way in which the dorsal spination abruptly stops, leaving a posterior "rump" region nearly devoid of spines (fig. 1, Voigt 1902).

A thorough search of the literature revealed no subsequent mention of *C. heideri*. In Dow Lake, *C. heideri* represented a minor component of an Aufwuchs community rich in protozoans and rotifers, but was by far the most common gastrotrich species. Other gastrotrichs present were *Stylochaeta sp.*, *Polymerurus sp.*, and *Chaetonotus spp.* Two winter col-

lections yielded a depauperate meiofauna with no gastrotrichs. A collection in late spring yielded *C. heideri* in very low densities, suggesting a seasonal cycle in density similar to that reported for *C. chuni* (Voigt 1904).

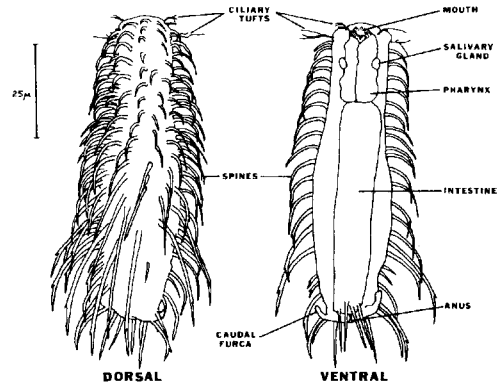


FIGURE 1. *Chaetonotus heideri*: large juvenile¹ drawn from life. Caudal furca is strongly curved. Not shown are scales from which spines take their origins and ventral ciliary tracts.

In the original description of *C. heideri*, Brehm's drawing showed 3 pairs of caudal spines arising from the ventral side. The Ohio specimens, however, have only 2 pairs (fig. 2). This distinction could represent a true difference between Austrian and Ohioan populations, but it is more likely that Brehm misinterpreted one of the pairs of dorsal spines extending past the body terminus (fig. 1) as arising from the ventral side. The Ohio specimens fit Brehm's description in all other particulars.

Complete measurements (in micrometers) were taken on one live adult: total

¹Manuscript received 30 August 1979 and in revised form 4 January 1980 (#79-47).

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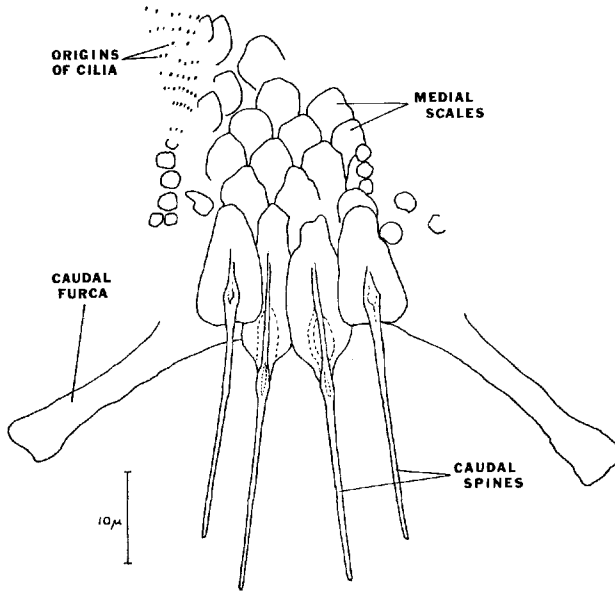


FIGURE 2. *Chaetonotus heideri*: ventral terminus of a large adult, showing 4 caudal spines.

length 178, head width 45, greatest body width 62, caudal furca length 30, caudal spine length 39, mouth width 11.2, anterior pharynx width 17.5, middle pharynx width 16.2, posterior pharynx width 20.0, pharynx length 55, intestine length 132.

Acknowledgments. Thanks are extended to Dr. William D. Hummon for confirming the identification, to Mr. Ned Walker for helpful discussion, and to Dr. Gerald E. Svendsen, Dr. Bruce C. Coull, and 2 anonymous reviewers for critically reading the manuscript.

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