

BARBEL ANOMALY IN NOTURUS FLAVUS RAFINESQUE

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The stonecat, *Noturus flavus* Rafinesque, is a widely distributed madtom throughout the Mississippi - Missouri, Mohawk and Hudson River systems, and in the Great Lakes - Saint Lawrence River drainage (Scott and Crossman, 1973). It tends to prefer a

habitat of riffles or rapids of moderate to large rivers and is commonly associated with rocky substrate and moderate gradient (Taylor, 1969).

Ten specimens of *N. flavus* were collected by the authors on 17 September 1975 from Big River (Meramec River drainage) along Route W, 1.8 kilometers north of Hoene Spring, Missouri. One

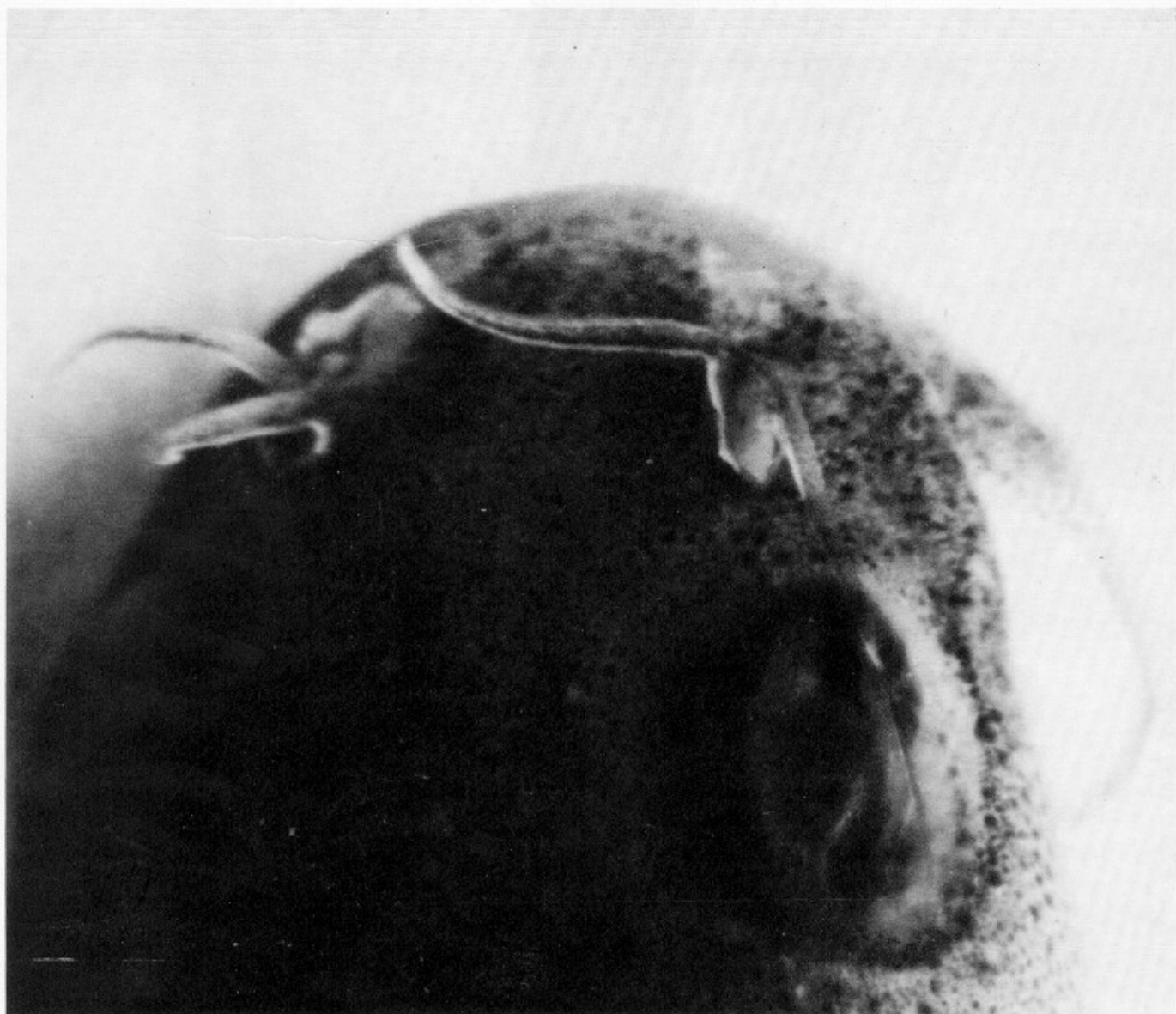


Figure 1. Barbel anatomy in *Noturus flavus* Rafinesque, from Big River, Missouri.

juvenile specimen (35 mm SL) possessed a pair of nasal barbels at each posterior nares (Figure 1). Barbels of the left nares were completely separated and occupied lateral positions to the nares itself. The right barbel was forked at its base giving the appearance of two barbels. The base was situated just anterior to the right nares in normal position. The specimen is deposited in the Fish Museum, Appalachian Environmental Laboratory, University of Maryland (AEL 39). Some 21 other collections in the Big River drainage did not yield other *N. flavus* with a similar anomaly.

A review of Dawson's bibliography (1964, 1966, 1971), Taylor (1969) and other literature revealed only one instance of teratism in the genus *Noturus*: Holder and Ramsey (1972) reported albinism in *Noturus gyrinus*. Dawson (1966) noted that Neill (1950) had reported on a specimen of *Ictalurus punctatus* with a forked barbel. Dawson (1964, 1966, 1971) and Hambrick, Bryson, and Hocutt (1974) discussed barbeled anomalies in families other than Ictaluridae.

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