

The Bleeding Shiner, *Luxilus zonatus*, in Illinois (Cyprinidae)

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ABSTRACT

The bleeding shiner, *Luxilus zonatus* (Agassiz in Putnam, 1863), occurs in northeastern Arkansas and much of southern Missouri, including tributaries of the lower Missouri River and tributaries of the Mississippi River from its confluence with the Missouri River to the northern edge of the Missouri Bootheel (Pflieger, 1997; Robison and Buchanan, 1988). Smith (1979) did not report *L. zonatus* from Illinois nor was it found in the Big Muddy River drainage based on collections through 1992 (Burr and Warren, 1993).

On 7 July 1999, one of us (TMH) collected a 34.0 mm SL (42.3 mm TL) cyprinid in Kinkaid Creek directly below the Kinkaid Lake spillway in Jackson County, Illinois (Big Muddy River drainage) using a seine. The cyprinid was identified as *Luxilus zonatus* based on several characteristics, including red-orange pigment in the dorsal and caudal fins, a prominent mid-lateral stripe with a narrow stripe above it, a broad, dark, mid-dorsal stripe, a black bar extending ventrally from the mid-lateral stripe towards the pectoral fin base (on the body just behind the opercle), and 42 lateral-line scales. The specimen was cataloged in the Southern Illinois University at Carbondale Fluid Vertebrate Collection (SIUC 35820).

Bleeding shiners typically inhabit clear, gravel-bottomed streams and rivers (Pflieger, 1997). The streambed of Kinkaid Creek is mud predominantly; however, some patches of gravel and cobble substrates are present in Kinkaid Creek, and a small tributary downstream of the spillway is clear with a rocky substratum. We sampled the Kinkaid Creek site and the tributary on 8 July 1999 but did not capture any additional specimens.

The single specimen of *Luxilus zonatus* could have reached Illinois waters naturally because of the proximity of Illinois to the native range of the species, or the minnow could have been a bait-bucket introduction.

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LITERATURE CITED

- Burr, B.M. and M.L. Warren, Jr. 1993. Fishes of the Big Muddy River drainage with emphasis on historical changes, pp. 186-209 in L.W. Hesse, C.B. Stalnaker, N.G. Benson, and J.R. Zuboy (editors). Proceedings of the Symposium on Restoration Planning for the Rivers of the Mississippi River Ecosystem. Natl. Biol. Surv. Biol. Rep. 19.
- Pflieger, W.L. 1997. The fishes of Missouri (rev. ed.). Missouri Department of Conservation, Jefferson City. 372 pp.
- Robison, H.W. and T.M. Buchanan. 1988. Fishes of Arkansas. The University of Arkansas Press, Fayetteville. 536 pp.
- Smith, P.W. 1979. The fishes of Illinois. University of Illinois Press, Urbana. 314 pp.