

Changing *Macrhybopsis aestivalis* (speckled chub) to *Macrhybopsis hystoma* (shoal chub) in the Long-Term Resource Monitoring fish species list.

John West and Dave Herzog

Big Rivers Science Unit

Missouri Department of Conservation

Since the origin of the Long-Term Resource Monitoring (LTRM) element of the Upper Mississippi River Restoration Program (UMRRP), *Macrhybopsis* chub species have been captured in the upper Mississippi River system [(UMRS)([Long Term Resource Monitoring - \(LTRM\) \(usgs.gov\)](#)]. The species in the UMRS that was referred to as *Macrhybopsis aestivalis* (speckled chub), has recently changed to *Macrhybopsis hystoma* (shoal chub). Eisenhour (2004) examined morphometry, meristics, pigmentation, and tuberculation of the *M. aestivalis* complex on their range west of the Mississippi River. A taxonomic revision was presented with redescrptions of four species and distribution from the previous species (Eisenhour 2004). What was *M. aestivalis*, in the UMRS, is now *M. hystoma*: occurring in the Mississippi River basin from east Ohio to southern Minnesota and Nebraska south to Louisiana (Page and Burr 2011). *M. aestivalis* is described in the Rio Grande basin in Texas, New Mexico, and Mexico (Page and Burr 2011). Both species are similar except *M. aestivalis* has round eyes and black spots on back and side (Page and Burr 2011).

LTRM 2014 Fisheries procedures manual followed American Fisheries Society standard naming convention (Nelson et. al., 2004). During preparation of the LTRM 2014 manual, the [Common and Scientific Names of Fishes from the United States, Canada, and Mexico, 7th edition | American Fisheries Society](#) was published. The updated version (7<sup>th</sup> ed) includes the name changes of all fishes since 2004 (6<sup>th</sup> ed) with comment for *M. aestivalis* to *M. hystoma* in the Mississippi River basin referenced above.

**Reference:**

Eisenhour, D. J. Systematics, Variation, and Speciation of the *Macrhybopsis aestivalis* Complex West of the Mississippi River. Bulletin of the Alabama Museum of Natural History, Number 23:9-47

[Long Term Resource Monitoring - \(LTRM\) \(usgs.gov\)](#)

Page, L.M. and B.M. Burr, 2011. A field guide to freshwater fishes of North America north of Mexico. Boston : Houghton Mifflin Harcourt, 663p.

Ratcliff, E. N., E. J. Gittinger, T. M. O'Hara, and B. S. Ickes. 2014. Long Term Resource Monitoring Program Procedures: Fish Monitoring, 2nd edition. A Program Report submitted to the U.S. Army Corps of Engineers' Upper Mississippi River Restoration-Environmental Management Program. June 2014. Program Report LTRMP 2014-P001. 88 pp. including Appendixes A–G.

**Resolution:**

A global correction to the Level 1, 2, 3, and life history databases was initiated and completed in April of 2022. All instances of Speckled Chub in our historical records, data recording applications, data serving applications, and auxiliary databases have been replaced with Shoal Chub (SHCB). From here forward,

observations of Speckled Chubs, as historically observed and encoded, should be recorded as Shoal Chub given recent developments in the systematics and distributions of these two species. – *Brian S. Ickes (Fish Component PI) and Ben Schlifer (UMRR/LTRM data manager)*.