

Biodiversity Report

Creek Chub LM_34_F23—*Semotilus atromaculatus*

Collected 10/5/23 at headwater stream in Little Mulberry Park, Gwinnett County, Georgia, USA

Shannon Diversity Index $H' = 1.47378$

Written by Elizabeth Doss



Taxonomy

Kingdom: Animalia

Class: Actinopterygii

Family: Cyprinidae

Genus: *Semotilus*

Species: *S. atromaculatus*

Morphology

Distinguished by small dark spot at base of tail fin and large dark spot at base of dorsal fin. Head is short and broad with a large terminal mouth. Dorsal side is olive with a dark midline stripe; ventral side is silvery-white. They have 8-9 dorsal fin rays, 7-9 anal fin rays, 13-18 pectoral fin

rays, and 8 pelvic fin rays. Spawning males have breeding tubercles and are bright red and green. (Simon, 2011)

Ecology

Creek chubs require running water with sufficient gravel substrate for spawning. They thrive in smaller streams, as larger ones contain chub-predating bass. Sexually mature males dig nests in gravel which they defend against rival males while allowing females to enter and lay eggs. Males and females do not provide parental care.

Their diet consists primarily of insects, smaller fish, and crayfish. They are highly adaptable in disturbed environments, where they dominate, and may serve as an indicator of stream quality. (Becker, 1983; Copes, 1978; Jordan, et al., 2013; Moschenko, 1972)

Conservation Status

LC – Least Concern

Creek chubs are abundant across all of eastern North America in a variety of habitats, including human-disturbed ones. Their ability to adapt to different watersheds and low requirements for stream size mean this trend will likely continue.

DNA Sequence (COX1)

>LM34_F23

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