Threatened fishes of the world: *Chirostoma aculeatum* Barbour, 1973 (Atherinopsidae)

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**Abstract** *Chirostoma aculeatum* is a rare silverside found only in central Mexico. Its conservation status is considered in addition to providing information regarding its ecology, life history, and distribution.

**Keywords** Atherinopsidae · Chirostoma · Mesa Central · Mexico · Silversides

Common names: Scowling silverside, charal cuchillo (Nelson et al. 2004). Conservation status: Listed as Endangered by American Fisheries Society and vulnerable by Lyons et al. (1998). Identification: *Chirostoma aculeatum* is characterized by a slender body and an elongated, pointed snout (max SL 109 mm; Barbour 1973). It can be distinguished from other species of *Chirostoma* by a gap in the bite when the mouth is closed and un-crowded predorsal scales (Barbour 1973; Miller 2005). Distribution: The lower and middle Rio Lerma and its tributaries in central Mexico, however most available records are from in the Rio Turbio, a tributary to the Rio Lerma. There are also unconfirmed reports from the mouth of the Rio Lerma in Lake Chapala. Abundance: Absent in the lower Rio Lerma basin but still present as of 1993 in the middle part of the basin (Soto-Galera et al. 1998). However, in January 2004–2006 visits were made to historical localities of *C. aculeatum* and no specimens were found. Habitat and ecology: *Chirostoma aculeatum* occurs in rivers, lakes and small streams. Reproduction: Nothing is known. Threats: Habitat degradation is the primary cause of decline given its restricted range. The Rio Lerma basin has been subjected to intensive irrigation, disposal of untreated...
waste-water, industrial use, and human consumption (Lyons et al. 1998; Soto-Galera et al. 1999; Mercado-Silva et al. 2006). In recent years much of the Rio Turbio has been reduced to a series of small stagnant pools in a mostly dry river bed, and the few flowing reaches have very poor water quality. Conservation action: None. Conservation recommendation: An extensive survey should be conducted to determine the current abundance of remaining C. aculeatum (if any remain). The protection and improvement of habitat quantity and quality would likely be the most beneficial pro-active solutions in restoring C. aculeatum populations.

References


