

Family Atherinidae

Old world silversides

A family of euryhaline fishes, comprising mostly small to medium-sized species, with approximately 14 genera and 70 species found throughout the world's tropical and temperate seas. Many species are confined to freshwater, often entering brackish waters or coastal rivers. Atherinid schools are often very abundant in estuarine ecosystems. They are characterised by a silvery, elongate, compressed body, two widely separated dorsals, a large eye, and a long snout with a terminal mouth. Atherinids can be distinguished from superficially similar Mugilidae (mullets) by a laterally compressed head (vs. dorso-ventrally flattened), no of scales on the top of the head (vs. presence), and 7–10½ rays in the first dorsal (vs. 4). The diversity of *Atherina* in the Mediterranean basin has been significantly underestimated, with *A. boyeri* being restricted to the western Mediterranean. *Atherina caspia*

and *A. pontica* are simultaneous subjective synonyms, and the first reviser [apparently Kessler, 1874: 108] gave precedence to *A. pontica* over *A. caspia*. Consequently, the populations in the Mediterranean from Greece to the east, including the Black Sea and Caspian basins, are now identified as *A. pontica*. However, several species might be included in this region. Further unidentified *Atherina* have been discovered in the Orontes, Lake Köyceğiz (Aegean Sea), and potentially in other freshwater habitats. Here, we present only one species that has been reported to enter freshwater habitats in West Asia. Nevertheless, the taxonomy of *Atherina* remains poorly resolved, with the possibility that several synonyms represent valid species. As the freshwater species of the genus await revision, we maintain all records under the name *A. pontica*. **Further reading.** Kessler 1874 (description); Whitehead et al. 1986 (diagnosis; in part); Kottelat 1997 (nomenclature).



Brackish Lake Köyceğiz in southwestern Türkiye is the habitat of *Atherina* sp., *Knipowitschia byblisia* and *K. caunosi*.



Atherina pontica; Lake Sinoe, Romania; ~60 mm SL.



Atherina sp.; Lake Köyceğiz, Türkiye; ~70 mm SL.

Atherina pontica

Common name. Eastern sand smelt.

Diagnosis. Only species in family in freshwaters in West Asia. Size up to about 85 mm SL.

Distribution. Western Greece east to Caspian basin. Introduced in several lakes and reservoirs in Anatolia and probably elsewhere.

Habitat. Lower parts of rivers, estuaries, coastal lakes, and the sea. Freshwater populations prefer still or slow-flowing waters. Pelagic in lakes and sea.

Biology. Gregarious. Usually lives 1–3 years, rarely up to 4. Spawns at 1–2 years in spring and early summer. Fractional spawners. Eggs with long hairy appendages attached to filamentous algae, deposited at 2–6 m depth, perhaps shallower in rivers. Larvae pelagic but often form shoals near shore. In lakes and estuaries, feeding mainly on small planktonic invertebrates, often on benthos in rivers.

Conservation status. LC.

Further reading. Whitehead et al. 1986 (diagnosis; in part); Economou et al. 1994 (larvae); Kottelat 1997 (nomenclature); Daoulas et al. 1997 (larvae); Leonardos & Sinis 2000 (biology); Leonardos 2001 (ecology); Miller 2003 (biology); Gençoğlu et al. 2017 (feeding).

