Endemic Freshwater Fish Diversity of Turkey under the threats of climate change and anthropogenic disturbances

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Abstract

Turkey's high biodiversity is associated with climate, geographical factors and geological processes. Turkish aquatic ecosystems represent an important biodiversity hotspot for freshwater fish fauna. The diversity of Turkey's endemic inland fish is displayed in multiple dimensions, with a great variety of morphologies, behaviors, evolutionary links, life histories, and ecosystem functions. According to the last reported data, more than 380 freshwater fish species occur in Turkey being about half of them species strictly endemic to the country. Despite this, native fish communities in Turkey, particularly those in lentic environments, have been drastically changed in recent decades, and these species are now threatened by a variety of human activities, in addition to the worldwide concern of climatic change. Thus, the aim of this study is to evaluate the endemic fish species under the threats of climate change and anthropogenic disturbances.

Keywords: freshwater, ecosystems, global warming, drought, biodiversity