



The Bouleuterion (council house) of the metropolis Aphrodisias in the Roman province of Caria. © M. Oral

Summary

The *Handbook of Freshwater Fishes of West Asia* is a thorough, open-access guide written by four international experts. The book offers a readily accessible and detailed overview of the highly diverse freshwater fishes of the region, which extends from the Turkish Bosphorus and the southern Caucasus through the Levant, Iran, and the Arabian Peninsula. The book documents all 632 species of freshwater fish in the region, including 597 native species, 467 of which are endemic and 35 non-native species. What is fascinating is that 41 % of the species have been described since the year 2000.

This handbook goes far beyond a simple species catalogue. Built on about 20 years of dedicated research and exploration, it is packed with data, complete with illustrations of each species and detailed maps showing their distribution by site records and hydrobasin scale. It also provides key information on each species' conservation status. The IUCN Red List assesses 583 species. Of these, 12 are classified as extinct, while 238 are considered threatened (CR, EN, or VU).

In addition to species portraits, the book provides practical advice for anyone interested in studying freshwater fishes. This includes identification methods based on visible morphological characters and discussions of potential challenges related to taxonomic uncertainties and evolving species concepts. The book also draws attention to

the critical role of extensive fieldwork, such as photographing fish, collecting DNA samples, and handling specimens ethically.

The authors address the many complex aspects of taxonomy and species classification. They formulate numerous research questions and recognise ever-evolving context of species concepts. They also underline the significant conservation challenges posed by human-induced threats such as water abstraction, dam construction, pollution, climate change, and the introduction of non-native species.

Despite these threats, the handbook highlights the resilience of West Asia's freshwater fish biodiversity. While many ecosystems are under immense pressure, the survival of most native species offers hope for future conservation efforts. The book emphasises that these ecosystems will be further burdened by the increasing demand for water in this globally water-scarce region, driven by human population growth and economic development. Ultimately, the *Handbook of Freshwater Fishes of West Asia* aims to inspire regional and international audiences by portraying the beauty and diversity of the freshwater fishes of the region. It serves as an essential tool for raising awareness of the critical importance of freshwater ecosystems, which are often overlooked in conservation programmes, and provides valuable documentation for conservationists, researchers, and enthusiasts alike.