

Freshwater fishes of the Anatolian Midwestern Black Sea basin

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The freshwater fish diversity of the Anatolian Midwestern Black Sea basin is studied. Twenty-seven species belonging to 18 genera and 9 families were recorded. The most representative families are Leuciscidae with eight species (30 %), followed by Cyprinidae with six species (22 %). The sub-basins sampled are clustered in three well-distinguished groups (Coastal Streams, Filyos and Kızılırmak) based on the similarity estimation of the species composition. The highest species richness was recorded in Kızılırmak River drainage, likely due to its greater size and higher habitat diversity. An updated set of fish occurrence data has been documented, resulting in new ranges of distribution and new records of species, accompanied by short comments.

Introduction

Anatolia hosts a remarkably diverse freshwater fish fauna but the majority of its freshwater habitats face high anthropogenic pressure (e.g. water abstraction, dam construction, pollution) causing a growing challenge for preventing dramatic changes in the ecosystem health and integrity (Şekercioğlu et al., 2011; Smith et al., 2014). However, these changes are often poorly known and observations are based on occasional field surveys. Therefore, governmental agencies and environmental non-governmental organizations need to monitor species distributions in order to detect changes over time so that they can manage and sustain species and ecosystems. Data on species distributions are the key to understand

the extent and scale of biodiversity change due to threats present in the area (Pereira et al., 2013; Jetz et al., 2019). Monitoring of species distributions is supported mainly by raw data, such as inventories and, therefore, an increasing attention has been recently paid to the importance of using fish occurrence data as indicators for assessing the biological and ecological integrity of freshwaters and their catchments (Simon & Evans, 2017; Radinger et al., 2019). In this context, the use of outdated, poor or incorrect datasets of fish inventories often leads to weak models and predictions and can reduce the effectiveness of biodiversity monitoring.

In Turkey, streams and rivers draining to the Black Sea have been frequently exposed to flow alteration and habitat fragmentation by hydro-

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