First record of the weatherfish *Misgurnus fossilis* (Linnaeus, 1758) from the Adriatic Sea catchment area in Bosnia and Herzegovina

GORAN ŠUKALO, DEJAN DIMITROVIĆ & DRAGOJLA GOLUB

University of Banja Luka, Faculty of Natural Sciences and Mathematics, Department of Biology and Department of Ecology and Environment Protection, Mladena Stojanovića 2, 78000 Banja Luka, Republic of Srpska, Bosnia and Herzegovina, e-mail: goran.sukalo@pmf.unibl.org

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The weatherfish *Misgurnus fossilis* (Linnaeus, 1758) is the only species from genus *Misgurnus* in Bosnia and Herzegovina (Sofradžija 2009). According to recent literature data (Tutman et al. 2017) representatives of this species in Bosnia and Herzegovina inhabit only inland waters in Danube catchment area, precisely Sava river basin (Figure 1, a). We gave the first record of this species in Adriatic Sea catchment area in Bosnia and Herzegovina.

Individuals of weatherfish (11 specimens) were caught in small pond with mud bottom at locality Srednja Voda (43.30168°N, 18.11728°E) in the Nevesinje municipality (SE Bosnia and Herzegovina) by hand-made funnel traps for newts hunting (Figure 1, b-e). The funnel traps were placed in pond in the afternoon of April 29, 2018 and checked early in the morning next day.

Specimens were released except one adult male that was fixed in 96% ethanol, determined in the laboratory using appropriate literature (Vuković 1977; Kottelat & Freyhof 2007) and kept in a collection of Faculty of Natural Sciences and Mathematics, University of Banja Luka. The mass and length of that specimen was measured and it was found that the results (body mass: 20.8 g; standard body length: 157 mm; total body length: 181 mm) fit into the known range (Vuković 1977; Bogut et al. 2006; Sofradžija 2009).

Since the weatherfish natural has a wide European distribution, excluded Adriatic Sea catchment (Kottelat & Freyhof 2007), introduction cannot be neglected and the findings of this species in Adriatic Sea catchment area in Bosnia and Herzegovina is expected, especially if it is known that this species inhabits also some isolated localities in the Adriatic Sea drainages in Croatia (Mrakovčić et al. 2008). Intentional or unintentional introduction with economically important fish species is the probable explanation of finding *Misgurnus fossilis* far away from the natural distribution area of this species (Šanda et al. 2008). In this sense, there is a possibility that weatherfish has been introduced with economically important fish species in artificial lake Alagovac, 400 m from this site, and after that individuals probably could migrate to this pond during spring floods. According to Piria et al. (2018) fish introductions represent a serious threat for stability of native freshwater ecosystems and biodiversity, especially in areas with high biodiversity and endemism, such as the many water bodies in the Balkans. However, more than 20 alien freshwater fish species were introduced in Bosnia and Herzegovina since the beginning of the 20th century (Piria et al. 2018; Čolić et al. 2018).
Figure 1. Distribution map of *Misgurnus fossilis* in Danube catchment area according literature records (blue spots) and new field record (red spot) in Adriatic Sea catchment area (shaded area) in Bosnia and Herzegovina (a); small pond at locality Srednja Voda (b); field work (c, d); specimen of *Misgurnus fossilis* (e)

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**References**


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