



7th ESENIAS Workshop with Scientific Conference

*Networking and Regional Cooperation
Towards Invasive Alien Species Prevention
and Management in Europe*

28–30 March 2017
SOFIA, BULGARIA

Book of Abstracts

Sofia, Bulgaria
2017

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Bulgarian Academy of Sciences**

**East and South European Network for Invasive
Alien Species (ESENIAS)**

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Networking and Regional Cooperation Towards Invasive Alien Species Prevention and Management in Europe

Book of Abstracts

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Influence of the diel period and different sampling methods on catch of gobiids at four locations in the inshore part of the Danube River

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Some recent data show that five gobiid species have spread outside their native range and expanded their distribution area in Serbia along the rivers Danube, Tisza, Sava, and Velika Morava. These are: monkey goby *Neogobius fluviatilis*, racer goby *Neogobius gymnotrachelus*, bighead goby *Neogobius kessleri*, round goby *Neogobius melanostomus*, and tubenose goby *Proterorhinus semilunaris*.

The aim of this study was to compare the efficiency of two different methods for fish sampling, as well as to assess influence of the diel period on catch of gobiids in the Serbian stretch of the Danube River. During October 2012 and September 2013, the sampling was performed by electrofishing and beach seining in four riverside locations of the Danube River, as follows: at Novi Sad (river km 1257), Belgrade (river km 1173), Tekija (river km 956), and Prahovo (river km 862), with the water depth being of up to 120 cm. At each location, the sampling was performed at 17:30, 18:30, 19:30 and 20:30.

A total of 551 gobies were caught. The highest number of specimens (238) was registered at Tekija, followed by the sites at Belgrade (192) and Prahovo (109), and only 12 specimens caught at Novi Sad. The catch of the round goby and monkey goby was more efficient by beach seining than by electrofishing, while the catch of the tubenose goby was more efficient by electrofishing. Both methods had similar efficiency in terms of the catch of the bighead goby and racer goby. The species diversity and the number of caught specimens were the highest at 18:30. All five species were recorded at the sites of Belgrade, Tekija and Prahovo, while only the monkey goby and racer goby were caught at Novi Sad. The methods used in this study showed good efficiency in catch of gobiids, especially at dusk. Despite the difficulty in using these methods in certain habitats, we assume that they could be highly relevant in the regular monitoring of gobiids along the inshore parts of the rivers.

Key words: Invasive fish, allochthonous, five gobiid species, distribution area.



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