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The aquatic molluscs (Mollusca: Gastropoda and Bivalvia) of Vrachanski Balkan Nature Park

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Abstract. Till now 13 species of aquatic molluscs are known to inhabit the park area: 11 species of snails and 2 species of clams. Even included in the list the species of *Grossuana* and *Radix balthica* has to be studied anatomically for sure identification. Nine species are of conservation statute classified as "Least Concern" or "Vulnerable", and four does not have any statute. Three stygobiotic snail species are local endemics.

Key words: freshwater, molluscs, karstic area, Bulgaria.

Introduction

History of research

First data on the freshwater molluscs of Vrachanska Planina Mountains area was provided by Wagner (1927) describing two new stygobiotic snail species found as empty shells at Temnata Dupka Cave near Lakatnik.

Angelov (1959, 1972) described another two species from Petrenski Spring:

Urbański (1960) re-sampled the Temnata Dupka Cave for stygobiotic snails, and found the species described previously by Wagner.

Radoman (1983) reported on findings of *Grossuana serbica* Radoman, 1973 from this part of Stara Planina Mts.

Beron (1994) reported the freshwater clam *Pisidium personatum* Malm, 1855 from the Temnata Dupka Cave.

Further research provided data on molluscs of the nearby Iskar River but not from the mountain area (Russev *et al.*, 1994; Russev et al. 1998).

In his synopsis Angelov (2000) considered *P. bureschi copiosus* as junior synonym of *P. bureschi*.

Hubenov (2007, unpublished report) made a synopsis of the malacofauna of the area, and reported some new findings of freshwater molluscs.

Georgiev (2011) re-sampled the Temnata Dupka Cave for stygobiotic snails again, and among previously reported species, found also shells of *Belgrandiella pussila*. The author assigned *Paladilhiopsis bureschi* to the genus *Bythiospeum* Bourguignat, 1882.

Material and Methods

A synopsis and a critical overview of the literature concerning the freshwater molluscs of the park area were made.

The Vrachanski Balkan was visited two times during 2012 and 2014 for terrain survey. The collected shell material was deposited in the collections of the author and the

Regional Natural History Museum – Plovdiv.

The nomenclature follows Glöer & Meier-Brook (2003). Conservation statute was considered according Cuttelod *et al.* (2011).

Results and Discussion

Original data represented very few mollusc finds: *Ancylus fluviatilis* was find at Petrenski Izvor but *Belgrandiella pussila* was not collected even after intensive sieving of the spring deposits. The species *Bythiospeum bureschi* and *Belgrandiella hessei* were re-sampled during two visits of Temnata Dupka Cave but never found as live specimens. No any stygobiotic snails were found at Kalna Matnitsa Cave but material of *Grossuana* sp. was collected from the outer spring some years ago by Nikolay Simov and provided to the author for study.

Till now 13 species of aquatic molluscs are known to inhabit the park area: 11 species of snails and 2 species of clams (Table 1). Even included in the list the species of *Grossuana* and *Radix balthica* has to be studied anatomically for sure identification. Possibly the *Bythinella* species is new to science and also has to be investigated. Cave malacofauna could provide some other new species inhabiting the subterranean waters.

Table 1. Aquatic molluscs known to inhabit the area of the park. Legend: LC – Least concern, VU – Vulnerable.

Species	Locality	Author	IUCN
Gastropoda			
Valvata piscinalis (Müller, 1774)	Small rivers near Gara Lakatnik Vill.; above Vratsa town	Hubenov (2007)	LC
Holandriana holandrii (C. Pfeiffer, 1828)	Small rivers above Vratsa	Hubenov (2007)	LC
Bythinella sp.	"Ledenika" complex	Hubenov (2007)	
Belgrandiella hessei Wagner, 1927	Temnata Dupka Cave	Wagner (1927); Urbański (1960)	VU
Belgrandiella pussilla Angelov, 1959	Petrenski Izvor; Temnata Dupka Cave	Angelov (1959); Georgiev (2011)	VU
Bythiospeum bureschi (Wagner, 1927)	Temnata Dupka Cave	Wagner (1927); Urbański (1960); Georgiev (2011)	VU
Grossuana sp. (?)	Spring at "Ledenika" complex; outer stream of Kalna Matnitsa Cave	Hubenov (2007); present publication	
Radix balthica (Linnaeus, 1758) (?)	Everywhere up to 2500 m a.s.l.	Hubenov (2007)	LC
Radix labiata (Rossmässler, 1835)	Everywhere up to 2500 m a.s.l.	Hubenov (2007)	LC
Galba truncatula (Müller, 1774)	Everywhere up to 2500 m a.s.l.	Hubenov (2007)	
Ancylus fluviatilis Müller, 1774	Many localities up to 2300 m a.s.l.; Petrenski Izvor at Petrenska River	Hubenov (2007); present publication	
Bivalvia			
Pisidium casertanum (Poli, 1791)	One of the commonest species at the mountains, springs and caves	Hubenov (2007)	LC
Pisidium personatum Malm, 1855	Temnata Dupka Cave	Beron (1994); Hubenov (2007)	LC

Nine species are of conservation statute classified as “Least Concern” or “Vulnerable”, and four does not have any statute. The three stygobiotic snail species are local endemics.

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Сладководните мекотели на Природен парк Врачански Балкан

ДИЛЯН ГЕОРГИЕВ

(Резюме)

Известни са общо 13 сладководни вида мекотели от територията на парка: 11 вида охлюви и 2 вида миди. Два вида (*Grossuana* sp. и *Radix balthica*) са под въпрос поради липса на анатомични изследвания, а един вид (*Bythinella* sp.), вероятно е нов за науката. Девет от видовете са с корсервационен статут в IUCN категория "Least Concern" или "Vulnerable".