

**Preliminary data on existence of *Zootoca vivipara* ssp. *pannonica* (Lac & Kluch, 1968) in
Croatia**

**Preliminarni podatci o postojanju *Zootoca vivipara* ssp. *pannonica* (Lac & Kluch, 1968)
u Hrvatskoj**

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Figure 1. *Zootoca vivipara* ssp. *pannonica* from Spačva.

Slika 1. *Zootoca vivipara* ssp. *pannonica* iz Spačve.

Zootoca vivipara (VON JACQUIN, 1787) is known to appear in different mountain areas in North - Western Croatia (RADOVANOVIĆ, 1951; DELY & BÖHME, 1984; AGASYAN et al., 2009). It is usually found in colder and humid mountain habitats from 700 to 1700 m a.s.l. These populations all belong to the subspecies *Z. v. vivipara* (VON JACQUIN, 1787) and *Z. v. carniolica* MAYER, BÖHME, TIEDEMANN & BISCHOFF, 2000 (HEULIN et al., 2000; GUILLAUME et al., 2006). In Europe, *Z. v. pannonica* is known to appear in lowland grasslands, marshes and semi-steppe in Hungary and Austria (DELY & BÖHME, 1984; AGASYAN et al., 2009). Until now mountain Papuk was the most Eastern locality in Croatia (RADOVANOVIĆ, 1951, BOGDANOVIĆ, 2008, BARIŠIĆ & BOGDANOVIĆ, 2011) but existence of the lowland *Z. v. pannonica* was never recorded. Authors bring new data that this taxa was recorded from 2009 till 2011 in several sites in Slavonia: Spačva, surroundings of Osijek, Vinkovci and Slavonski Brod town. Primary habitats were lowland (80 – 120 m a.s.l.), partly flooded grasslands and forests. Complete data will be published after further research in a separate publication. IUCN category for *Zootoca vivipara pannonica* is Vulnerable B1+2bcd, C2a (ver 2.3) (AGASYAN et al., 2009).

REFERENCES

- AGASYAN, A., AVCI, A., TUNIYEV, B., CRNOBRNJA ISAILOVIC, J., LYMBERAKIS, P., ANDRÉN, DAN COGALNICEANU, C., WILKINSON, J., ANANJEVA, N., ÜZÜM, N., ORLOV, N., PODLOUCKY, R., TUNIYEV, S., KAYA, U., BÖHME, W., NETTMANN, H.K., CRNOBRNJA ISAILOVIC, J., JOGER, U., CHEYLAN, M., PÉREZ-MELLADO, V., BORCZYK, B., STERIJOVSKI, B., WESTERSTRÖM, A. & SCHMIDT, B. (2009): *Zootoca vivipara*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.1. <www.iucnredlist.org>. Downloaded on 10th July 2011.
- BARIŠIĆ, F. & BOGDANOVIĆ, T. (2011): Gmazovi (Reptilia) Parka Prirode Papuk. HYLÁ, Vol 2011., No 1., 42-74.

BOGDANOVIĆ T. (2008): Inventarizacija i valorizacija faune vodozemaca (Amphibia) i gmazova (Reptilia) Parka prirode Papuk, stručna studija, JU PP Papuk, Velika.

DELY, O.G. & BÖHME, W. (1984): *Lacerta vivipara* - Waldeidechse. In: Böhme, W. (ed.), Handbuch der Reptilien und Amphibien Europas, Band 2/I., Echsen II (Lacerta). Aula-Verlag Wiesbaden, pp. 362-393.

DŽUKIĆ, G. & KALEZIĆ, M. (2004); The biodiversity of amphibians and reptiles in the Balkan Peninsula in: Balkan biodiversity. Papers from the ESF Exploratory Workshop on Balkan biodiversity - Koper, September 2001. Griffiths, H.; Krystufek, B.; Griffiths, J. (eds.) Guillaume, C.P., Heulin, B., Pavlinov, I.Y., Semenov, D.V., Bea, A., Vogrin, N. & Surget-Groba, Y. (2006): Morphological variations in the common lizard, *Lacerta (Zootoca) vivipara*. Russian Journal of Herpetology 13:1-10.

HEULIN, B., GUILLAUME, C.-P., VOGRIN, N., SURGET-GROBA, Y. & TADIĆ, Z. (2000): Further evidence of the existence of oviparous populations of *Lacerta (Zootoca) vivipara* in the NW of the Balkan Peninsula. Comptes Rendus de l'Académie des Sciences de Paris, Sciences de la vie 323: 461-468.

RADOVANOVIĆ, M. (1951): Vodozemci i gmizavci naše zemlje. Naučna knjiga, Beograd.

