A comparative analysis of reproductive traits in viviparous and oviparous populations of *Zootoca vivipara* (Von Jacquin, 1787)

Baškiera, Senka¹; Jelić, Dušan¹

¹Croatian Institute for Biodiversity, Croatian herpetological society – Hyla, Croatia

Viviparous lizard, *Zootoca vivipara* (Von Jacquin, 1787), is the only lacertid lizard which is known to have two modes of reproduction. We studied two populations of viviparous lizard: one high mountain population from Mountain Vlašić, Bosnia and Herzegovina and another from lowlands in Spačva, Croatia. Viviparous females from Vlašić (BIH) were collected on grassland on 1800 to 1900 m a.s.l. and are considered to be *Zootoca vivipara vivipara* (Von Jacquin, 1787), while oviparous females, collected in floodplain forests of Spačva (80 to 90 m a.s.l.; CRO) are considered to be *Zootoca vivipara pannonica* (Lac & Kluch, 1968). Our main goals were to collect data on reproductive traits of newly discovered oviparous population of viviparous lizard in Spačva, Croatia and comparison to nominal viviparous population. A comparative analysis of reproductive traits (e.g. clutch size, female body size, hatchling body size) of two subspecies were made and most significant difference was in egg incubation period. In oviparous population egg incubation period was 19 to 22 days, while comparatively in viviparous population it lasted only about 30 minutes. Total body length was larger in viviparous females, as expected, as well as the clutch size in oviparous females. Some of the reproductive traits did not result in expected correlation, possibly due to small sample size.

senka.bx@gmail.com