

First record of the Smooth Snake (*Coronella austriaca* Laurentus, 1768) in Botoșani County (Romania)

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Abstract. The smooth snake is a rare species in eastern Romania (the historical region of Moldavia). In september 2007, an adult smooth snake was found near the Stâncă-Costești reservoir, Botoșani County. This is the first ever record of this snake species in Botoșani County and also represents the north-easternmost record for this species in Romania.

Key words: *Coronella austriaca*, first record, Botoșani county, Romania.

The smooth snake (*Coronella austriaca* Laurentus 1768) is a widespread snake species, being present in most of Europe (from the Atlantic to the Ural Mountains), Asia Minor and northern Iran. It is absent only from Ireland, Scotland, southern Iberia, northern Russia and northern Scandinavia (Fuhn & Vancea 1961, Fuhn 1969, Gasc et al 1997, Iftime 2005 a). In Romania, *Coronella austriaca* has been reported from most of the geographical regions (Fuhn & Vancea 1961, Iftime 2005 a). However, most recent herpetofaunal papers recorded the smooth snake in few localions from the studied areas (e.g. Iftime 2005 b, Covaciu-Marcov et al 2006 a, b, Sos 2007). *C. austriaca* is found in a large variety of habitats: forest skirts, rare forests, meadows, rocky areas, etc. (Fuhn & Vancea 1961, Iftime 2005 a, Strugariu et al 2008). In eastern Romania (the historical region of Moldavia), the smooth snake has been recorded in very few locations from Galați, Vaslui, Iași, Suceava, Neamț and Bacău counties (Fig. 1) (Fuhn & Vancea 1961, Ionescu et al 1968, Ghiurcă et al 2005, 2006, Covaciu-Marcov et al 2006 c, Strugariu et al 2006 a, b, 2007, 2008). Thus, the smooth snake remained unreported from two other counties from Moldavia: Vrancea and Botoșani.

On the 13th of september 2007, at 15.36 h., an adult female *Coronella austriaca* (SVL = 48 cm.) (Fig. 2) was found and captured during a trip to the eastern part of Botoșani county. The specimen was found moving through the grass, near the „Stâncă Costești” reservoir on the Prut river (the border with the Republic of Moldova). The geographic coordinates for the area are 47°55'57.55" N;

27°08'10.04" E and the altitue is aproximatly 120 m a.s.l. The nearest populated locality from the area is Ripiceni. The habitat was mainly comprised of mesophilious herbicious vegetation together with scatered bushes (e.g. *Prunus spinosus*, *Rosa canina*) and small trees (*Salix* sp., *Populus* sp.) present at the water's edge. Sympatric reptiles species were *Lacerta viridis* and *Natrix natrix*. The captured snake appeared to be very thin, a probable indicator of the fact that the snake had given birth in the past days or weeks. Therefore, it is probable that the area is inhabited by a breeding population of smooth snakes.

The smooth snake has never been previously recorded in Botoșani County, in spite of several recent herpetofaunal studies conducted in the area (Covaciu-Marcov et al 2003, 2006 c, 2008) and despite the fact that other species of reptiles and amphibians, such as *Vipera ursinii* and *Rana arvalis*, which are generally considered much rarer than the smooth snake, on a national level, have been recorded in the area (Krecsak et al 2003, Sas et al 2008). The present record for the species in the region represents the north-easternmost location for the species' distribution in Romania. It is probable that the species was once in connection, or still is, with populations from Iași county to the south. Even if the location is closer to the Republic of Moldova and relatively close to Ukraine and Suceava county (Romania) it is unlikely that the population is connected with the ones from those areas due to the presence of the Prut and Siret rivers between them, which represent biogeographical boundries.

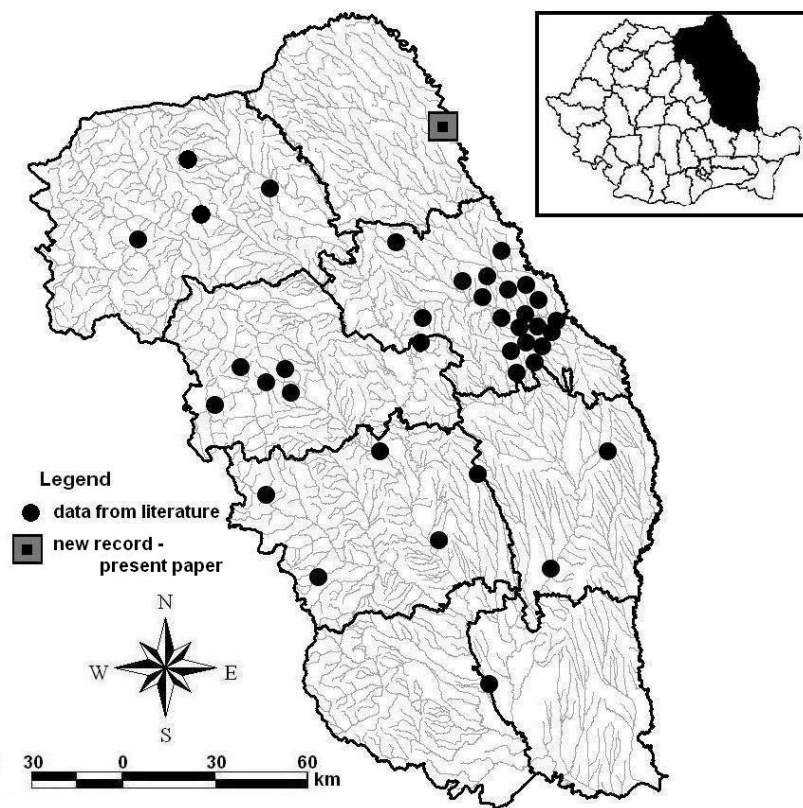


Figure no.1 Distribution of *C. austriaca* in Romanian Moldavia (original map).



Figure no.2 Adult female *C. austriaca* recorded from Botoșani County (photo by An. Butnaru.).

As previously stated, the smooth snake is a rare species in the whole of Moldavia. In Suceava, Neamț, Bacău, Galați and Vaslui counties it was recorded in very few and dispersed localities (Fuhn & Vancea 1961, Ghiurcă et al 2005, 2006, Covaciu-Marcov et al 2006 c, Strugariu et al 2006 a, b, 2007). It appears that, from all the regions of Moldavia, *Coronella austriaca* is most common and widely distributed in Iași county, where it was recorded in a relatively large number of locations and in a large variety of habitats (Strugariu et al 2008).

On a national level, the species is considered to be vulnerable in the Romanian Red Data Book of Vertebrates (Iftime 2005 a). The main reason for the species' demise are habitat destruction and deterioration (caused mainly by deforesting, buildings, expanding agricultural fields and grazing), road traffic and direct persecution (Iftime 2001, 2005 a, Strugariu et al 2007, 2008). *C. austriaca* is a strictly protected species since 1993 (Bern Convention) and, according to the current legislature, is a species of community interest which requires strict protection (O.G. 57 / 2007). The Stânca-Costești reservoir, at the shore of which the smooth snake was found, has been declared an Important Bird Area (IBA) with a surface of 5 900 Ha (Badarau et al 2004). Taking into consideration the status of the smooth snake on a national level in Romania and the fact that the newly recorded locality is the only locality in Botoșani county where the species has been identified, we consider that the presence of the species in the area is an extra argument in favor of preserving the natural habitats in the region.

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**** Ordonanța de urgență nr. 57 din 20 iunie 2007 privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice. Publicat în Monitorul Oficial nr. 442 din data de 29 iunie 2007, București.