First distribution record for the large whip snake (*Dolichophis caspius* Gmelin, 1789) in the county of Teleorman (Islaz, Romania)

Tiberiu Constantin SAHLEAN*, Lotus Elena MEŞTER and Nicolai CRĂCIUN

University of Bucharest, Faculty of Biology, Independenței Blvd., no. 91-95, sector 5, 050095, Bucharest.

* Corresponding author, T.C. Sahlean, E-mail: tiberiu.sahlean@gmail.com

Abstract: The large whip snake (*Dolichophis caspius*, 1789) is a rather common presence in Dobrudja, Romania, but has scarcely been documented from the rest of the country, mostly from south-western and south-eastern Romania, while in the central region data about its presence is almost completely lacking. The present paper describes the first encounter for the species in the country of Teleorman, near the locality of Islaz.

Keywords: *Dolichophius caspius,* new record, distribution, Teleorman, Romania.

Until recent years, the distribution and composition of Romanian herpetofauna was based mostly on data published by Fuhn and Fuhn & Vancea more than half a century ago (1960, 1961) in the monographs regarding the amphibians and reptiles of Romania.

Not surprisingly, increased interest in the last few years regarding these groups, combined with thorough investigations, have led to the discovery of new localities in which species had not been previously reported or were considered extinct (e.g.: Strugariu & Gherghel 2007, Gherghel & Strugariu 2007, Strugariu et al. 2009a,b, Covaciu-Marcov & David 2010).

Dolichophis caspius (Gmelin, 1789) has a distribution range that comprises a part of Europe from Hungary, along the Danube river, across the southern Romania, Moldavia, southern Ukraine and Crimea to the Rostov region, the northern foot-hills of the Great Caucasus and the region of the Volga River up to 50° in the north (Ananjeva et al. 2006). In Romania, the large whip snake is present at its northern distribution range (Szczerbak 1997) and is a rather common sight in Dubrudja (e.g.: Covaciu-Marcov et al. 2006, Strugariu et al. 2008b), preferring warm, sunny forest edges, areas with bushes, rocky slopes or ruins (Fuhn & Vancea 1961, Iftime 2005).

In recent years, there have been some new records regarding the presence of the species in the southern part of the country: southern Moldavia (Galati County) (Strugariu & Gherghel 2007, 2008a), Caraş-Severin (Iftime 2003, 2005a, Covaciu-Marcov et al. 2005, Sahlean et al. 2008), Mehedinți (Covaciu-Marcov et al. 2009), Dolj (Lazăr et al. 2005), Ialomița (Iftime & Iftime 2007) and Olt (Covaciu-Marcov & David 2010). Still, the distribution of the species in the southern part of Romania except Dobrudja is poorly known, apparently being very rare and highly threatened (Covaciu-Marcov & David

2010). One possible explanation for this situation is that the areas mostly frequented by herpetologists are what we consider "hot-spots", namely areas with high diversity of amphibian and reptile species and large populations (e.g.: the south-western part of the country featuring a sub-Mediterranean climate and Dobrudja).

Vol. 4, No.2, Pp.: 181-183

Article No.: 041206

From a conservation point of view, according to the European legislation, the large whip snake is a species of community interest in need of strict protection (Habitats Directive 92/43/EEC) and in Romania it is protected by OUG 57/2007, being listed in Annex 4A. Also, the Romanian Red Data Book of Vertebrates lists the species as vulnerable (VU) (Iftime 2005b).

The current paper presents 1 new locality for the large whip snake, located at its southernmost distribuion range for Romania.

On the 27th of May 2010 during a routine investigaion on the Olt river, near the confluence with the Danube (Fig.1), we found and captured one large male D. caspius (TL = 170cm) (Fig.2). The time of the capture was approximately 1:30 P.M. The coordinates for the area are 43°42'45.43"N and 24°46'16.64"E, being located in the vicinity of Islaz, Teleorman County (Fig.1). The habitat where the specimen was found is the steep sandbank of the Danube river, with sand martin (Riparia riparia) nests, and typical steppe vegetation (Festuca sp., Stipa sp., Glacium corniculatum) (Fig.3). Also ruins of previous bank reinforcements against water erosion were present in the habitat, along with occasional shrubs (Crataegus monogyna). The habitat is located no more than 500m from the last houses of Islaz village, with a southern exposure, at an altitude of 28m.

The individual was hiding in a sand martin nest at the time of the capture with only the middle part of the body visible. The snake was captured, photographed 182 Săhlean, T.C. et al.

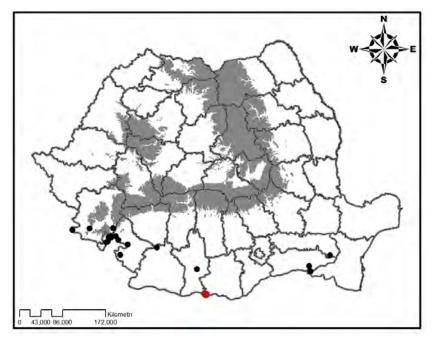


Figure 1. Distribution of *Dolichophis caspius* in Southern Romania, except Dobrudja, according to recent herpetological records. [Black dot (●): Previous recorded localities (Covaciu-Marcov et al. 2009, Covaciu-Marcov & David 2010, Lazăr et al. 2005, Iftime 2003, Iftime & Iftime 2007, Sahlean et al. 2008, Strugariu & Gherghel 2007, 2008); Red dot (●): New locality record: Islaz, Teleorman]



Figure 2. Male large whip snake (*Dolichophis caspius*) specimen from Islaz, Teleorman (Romania).



Figure 3. Large whip snake habitat overview in the vicinity of Islaz (Teleorman).

and released afterwards.

To the best of our knowledge, there are no known records for the large whip snake in the county of Teleorman and only one recent record for the species east of the Olt River, in its middle section, but in the district of Olt (Covaciu-Marcov & David 2010).

Covaciu-Marcov & David (2010) have suggested that the distribution range of *D. caspius* is continuous along the Danube River and stretches north to the low areas of

the main rivers. The new finding further reinforces this statement and the authors herein adhere to it, but at the same time stress the need for further investigations in the southern parts of Romania, an area mostly overlooked in recent herpetological research.

The large whip snake is often a victim of road mortality (Covaciu-Marcov & David 2010) or direct persecution (Sahlean et al. 2008, Covaciu-Marcov et al. 2010) and a good perspective on its distribution range

can lead to more efficient management plans and conservation actions. Also, taking into account the likely probability that the species has a continuous distribution range along the Danube River (Covaciu-Marcov & David 2010), further precautions should be taken as to not degrade its specific habitats, possibly leading to a connection loss between western and eastern populations.

Acknowledgments. The authors would like to thank Smaranda Mihăilescu (CMN) for making the field activity possible and Iulian Gherghel and other anonymous reviewers for valuable comments on previous drafts of the manuscript.

References

- Ananjeva, N.B., Orlov, N.L., Khalikov, R.G., Darevsky, I.S., Ryabov, S.A., Barabanov, A.V. (2006): The Reptiles of Northern Eurasia: Taxonomic Diversity, Distribution, Conservation Status. Pensoft Publishers, Sofia.
- Covaciu-Marcov, S.D., Sas, I., Cicort-Lucaciu, A.S., Peter, I., Bogdan, H.V. (2005): Notes upon the herpetofauna of the county of Caraş-Severin, Romania. Revue Roumaine de Biologie, Serie de Biologie Animale 49 (1-2): 47-56.
- Covaciu-Marcov, S.D., Ghira, I., Cicort-Lucaciu, A.S., Sas, I., Strugariu, A., Bogdan, H.V. (2006): Contributions to the knowledge regarding the geographic distribution of the herpetofauna of Dobrudja, Romania. North-Western Journal of Zoology 2 (2): 88-125.
- Covaciu-Marcov, S.D., Cicort-Lucaciu, A.S., Gaceu, O., Sas, I., Ferenți, S., Bogdan, H.V. (2009): The herpetofauna of the southwestern part of Mehedinți County, Romania. North-Western Journal of Zoology 5 (1): 142-164.
- Covaciu-Marcov, S.D., David, A. (2010): Dolichophis caspius (Serpentes: Colubridae) in Romania: New distribution records from the northern limit of its range. Turkish Journal of Zoology 34: 119-121.
- Fuhn, I. (1960): Amphibia. In: Fauna R.P.R., vol. XIV, fasc. I. Editura Academiei R.P.R., Bucharest. [in Romanian]
- Fuhn, I.E., Vancea, Ş. (1961): Reptilia. In: Fauna R.P.R., vol. XIV, fasc. I. Editura Academiei R.P.R., Bucharest. [in Romanian]
- Gherghel, I., Strugariu, A. (2007): Eremias arguta deserti (Reptilia: Lacertidae) is not extinct from Romanian Moldavia. North-Western Journal of Zoology 3 (2): 115-120.
- Iftime, A. (2003): New data on the amphibians and reptiles from the Cheile Nerei-Beuşniţa National Park (Romania). Travaux du Museum National d'Histoire Naturelle "Grigore Antipa" 45:
- Iftime, A. (2005a): New observations on the herpetofauna from Domogled-Valea Cernei National Park and Portile de Fier

- Natural Park (Romania). Travaux du Museum National d'Histoire Naturelle "Grigore Antipa" 48: 327-337.
- Iftime, A. (2005b): Amphibians. Reptiles. In: Botnariuc & Tatole (eds.) The Romanian Red Data Book of Vertebrates. Editura Academiei Române, Bucharest. [in Romanian].
- Iftime, A., Iftime, O. (2007): Some records of the herpetofauna of the Danube floodplain in the Balta Ialomiţei area (Romania). Travaux du Museum National d'Histoire Naturelle "Grigore Antipa" 50: 273-281.
- Lazăr, V., Covaciu-Marcov, S.D., Sas, I., Pusta, C., Kovacs, E.H. (2005): The herpetofauna in the district of Dolj (Romania). Analele Științifice ale Universității "Al. I. Cuza" Iași, sectiunea Biologie Animală 51: 169-178.
- Sahlean, T.C., Strugariu, A., Zamfirescu, S.R., Pavel, A., Puscasu, C. M., Gherghel, I. (2008): A herpetological hotspot in peril: Anthropogenic impact upon the amphibian and reptile populations from the Baile Herculane tourist resort, Romania. Herpetologica Romanica 2: 37-46.
- Strugariu, A., Gherghel, I. (2007): New record on the occurrence of Dolichophis caspius (Reptilia: Colubridae) in Romanian Moldavia. North-Western Journal of Zoology 3 (1): 57-61;
- Strugariu, A., Gherghel, I. (2008a): A preliminary report on the composition and distribution of the herpetofauna in the Lower Prut River Basin (Romania). North-Western Journal of Zoology 4 (S1): S49-S69.
- Strugariu, A., Sos, T., Gherghel, I., Ghira, I., Sahlean, T.C., Puşcaşu, C.M., Huţuleac-Volosciuc, M.V. (2008b): Distribution and current status of the herpetofauna from the Northern Măcin Mountains area (Tulcea county, Romania). Analele Ştiinţifice ale Universităţii "Al. I. Cuza" Iaşi, sectiunea Biologie Animală 54: 191-206.
- Strugariu, A., Gherghel, I., Nicoară, A., Huţuleac-Volosciuc, M.V., Moraru, V., Mizeruş, A. (2009a): A rapid survey of the herpetological fauna from Vaslui County (Romania) with the first record of the slow-worm (*Anguis fragilis*) in the region. Herpetologica Romanica 3: 25-30.
- Strugariu, A., Zamfirescu, Ş.R., Gherghel, I. (2009b): First record of the adder (*Vipera berus berus*) in Argeş County (Southern Romania). Biharean Biologist 3 (2): 163-166.
- Szczerbak, N. (1997): Coluber caspius Gmelin, 1789. pp. 328-329. In: Gasc, J.P. (ed), Atlas of Amphibians and Reptiles in Europe Museum National D'Histoire Naturelle, Paris.
- *** OUG 57/2007. Ordonanța de urgență nr. 57 din 20 iunie 2007 privind regimul ariilor naturale protejate, conservarea habitatelor naturale a florei și faunei sălbatice. Monitorul Ofifcial a Romaniei 442: 1-32. [in Romanian]
- *** Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive).

Submitted: 11 June 2010 / Accepted: 22 September 2010

Published Online: 04 October 2010