## Two new findings of dicephalic snakes from Croatia

## Dve novi najdbi dvoglavih primerkov kač na Hrvaškem

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Dicephalism in snakes is a condition when a snake has two more-or-less joined heads, with or without a short neck. Although relatively rarely observed in the wild, there have been hundreds of observations reported from different parts of the world over many centuries (Wallach 2007). In Croatia, the first known occurrence of this condition was the case of a dicephalic Balkan whip snake (Hierophis gemonensis (Laurenti, 1768)), a 20 cm long juvenile, found on 19.6.1930 between Zamet and Kastav near Rijeka by Josip Vidović (Hirtz 1937a). The snake died several days after capture, probably due to injuries while being »tortured with a stick« by children who found it [original: »...ali ona je za nekoliko dana poginula, očito zbog povreda, jer su je djeca mučila šibom.«]. The second record for the country was a juvenile Aesculapian snake (Zamenis longissimus (Laurenti, 1768)), found on 28.9.2002 near Zlatna Greda in the surroundings of Monjoroš Hunting Lodge by Siniša Urbanović (Barišić 2002). It survived in captivity until the first half of March 2003 (Anonymous 2003).

Here we report on two new observations of dicephalic snakes in Croatia. A dicephalic juvenile grass snake (*Natrix natrix* (Linnaeus, 1758)) was found on 29.9.2016 near Kravarsko (south of Velika Gorica; N: 45.584138, E: 16.043756) by a local homeowner, who contacted the second author. The snake was a juvenile, about 25 cm in total length. It survived for a year and a half in captivity, during which it grew to about 50 cm in total length. It ate fish and used both heads during feeding (Fig. 1). The most recent finding of a dicephalic snake is a juvenile smooth snake (*Coronella austriaca*)

Laurenti, 1768) found on 31.8.2022 in Sisak, on the parking lot of ABS Sisak d.o.o. (within the Sisak Ironworks, N: 45.452435, E: 16.392525) by Lucija Odobašić (Fig. 1). The snake was found and photographed *in situ* and was not caught. The finder posted the photo on the »Sisački Forum« Facebook group on the same day [https://www.facebook.com/groups/SisackiForum/ permalink/2139939209512306/]. The sex of the individual could not be determined from the photo. Dicephalic snakes rarely survive for long in the wild (see Wallach 2007 for a brief overview), and in combination with the industrial nature of the location where this specimen was found, there are poor chances of its survival and reaching adulthood.

Dicephaly has already been known for grass snakes, but to the author's knowledge this is the first finding of a dicephalic grass snake in the region. Dicephalic smooth snakes are known in the region, e.g. from Bosnia and Herzegovina (Hirtz 1935) and Slovenia (Hirtz 1937b), but to the author's knowledge this is the first observation from Croatia.

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Figure 1. Left: Dicephalic grass snake (*Natrix natrix*), found on 29.09.2016 in Kravarsko (photo: Tomislav Šarić). Right: Dicephalic smooth snake (*Coronella austriaca*) found on 31.08.2022 on the ABS Sisak d.o.o. parking lot in Sisak (photo: Lucija Odobašić).

Slika 1. Levo: Dvoglava belouška (*Natrix natrix*), najdena 29.09.2016 v Kravarskem (foto: Tomislav Šarić). Desno: Smokulja (*Coronella austriaca*), najdena 31.08.2022 na parkirišču ABS Sisak d.o.o. v Sisku (foto: Lucija Odobašić).