

Further notes on the reproduction of *Hydrops caesurus* (Serpentes: Colubridae) from Corrientes, Argentina

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Hydrops caesurus Scrocchi, Ferreira, Giraudo, Ávila and Motte 2005 is a mainly aquatic xenodontinae occurring in areas of the Paraná and Plata River basins, from Pantanal in Mato Grosso do Sul, Brazil, through Paraguay and Paraná rivers (Scrocchi et al., 2005). In Argentina, the species is only known from two localities: Bella Vista and San Miguel, both in the Corrientes province (Williams and Couturier, 1984; Álvarez et al., 2003). Its natural history is poorly known. The only information is referred to one clutch of nine eggs found on the bank of Carambola stream (Álvarez et al., 2003). This note reports further observations on clutch size and hatching time of *H. caesurus*.

On 15 November 2008 in Puerto Tala, Isla Apipé Grande, Corrientes province, Argentina (27° 33' S, 56° 48' W, datum: WGS84; elev. 65 m) we found a clutch composed of 12 elliptic eggs with coriaceous shell. They were buried into the border of the embankment of a rural road that crosses a marsh (Figure 1 a,b). The measurements of three eggs were 26.4, 26.3 and 25.6 mm length, and 17.8, 17.3 and 17.6 mm width, respectively. An egg examined at this moment contained an embryo in stage 26 according to stages of normal development of *Thamnophis sirtalis* (Zehr, 1962). It measured 40.7 mm body length (from the snout to the tail tip).

The eggs were maintained under laboratory conditions to environmental temperature. Four eggs were examined on 2, 15 and 22 December 2008 and 1 January 2009. They had embryos in stage 30, 34, 36 and 37, respectively. The

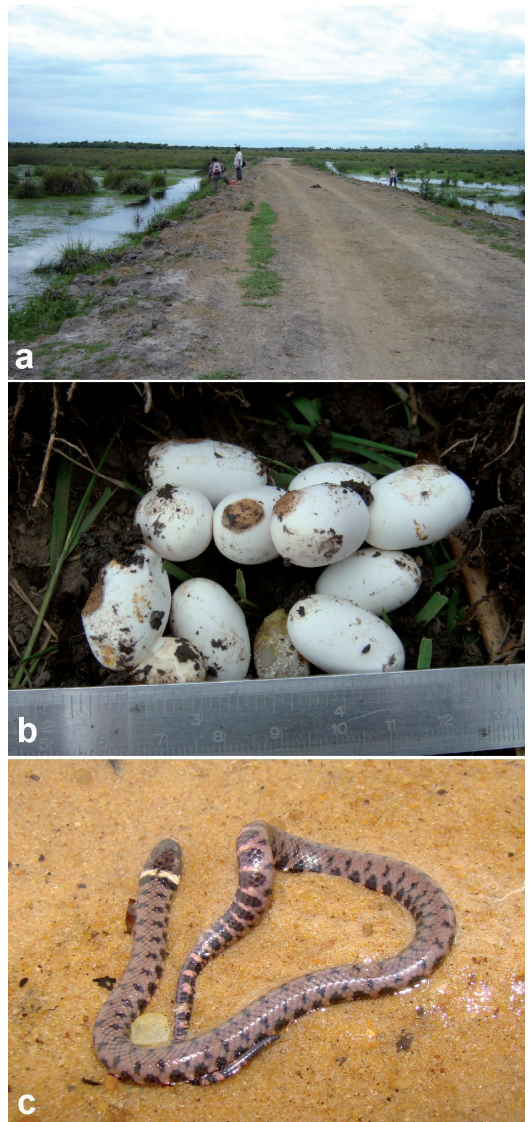


Figure 1. Site of clutch (a), clutch with 12 eggs (b) and juvenile (c) of *Hydrops caesurus* from Isla Apipé Grande (Corrientes, Argentina)

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first juvenile hatched on 5 January 2009 (17.2 mm body length) and the second specimen hatched the following day. The other eggs were unviable.

The lepidosis and color pattern of these juveniles were similar to the specimen described by Scrocchi *et al.* (2005) (Figure 1c). The first skin shedding was observed on two juveniles on 18 January 2010.

The embryos and juveniles are housed at the herpetological collection of the Universidad Nacional del Nordeste-Corrientes (UNNEC 11436, 10402-10403).

The clutch mentioned by Álvarez *et al.* (2003) and the one reported in the present note were collected about 1 meter far from the water, in relatively high places. They were found in November and December, when the level of the river is generally low (Neiff and Giraud, 2006). This would avoid that the eggs get lost during the floods and that the juveniles hatch when the river begins to grow, increasing the food readiness and favoring their dispersion. Therefore, they reproduce in a similar way to other oviparous snakes of the Middle Paraná River (Giraud, Arzamendia and López, 2007; López *et al.*, 2009).

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