

Filling gaps on the distribution of *Rhinoclemmys punctularia* (Daudin, 1801) (Testudines: Geoemydidae) in the state of Maranhão, Brazil

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ABSTRACT: We present a new record of the spot-legged turtle (*Rhinoclemmys punctularia*) for the state of Maranhão, Brazil. This record fills a gap of 600 km between the easternmost record of the species (municipality of Timon, state of Maranhão) and Ananás (state of Tocantins). In addition, the present study reports the occurrence of *R. punctularia* in a physiognomy of Cerrado.

The genus *Rhinoclemmys* currently consists of nine species of semi-aquatic turtles, *R. annulata* (Gray, 1860), *R. areolata* (Duméril, Bibron & Duméril, 1851), *R. diademata* (Mertens, 1954), *R. funerea* (Cope, 1876), *R. melanosterna* (Gray, 1861), *R. nasuta* (Boulenger, 1902), *R. pulcherrima* (Gray, 1855), *R. punctularia* (Daudin, 1801) and *R. rubida* (Cope, 1870) (Uetz *et al.* 2012). *Rhinoclemmys punctularia*, popularly known as *perema*, lives inside or around rivers or lakes, and has small orange spots on the dorsal surface of the head (Gans 1980; Ernst and Barbour 1989).

The known range of this species is concentrated in the southwest of Venezuela, near the Colombia border, in the lower Orinoco river, at the eastern border of Venezuela, extending to Trinidad and Tobago, Suriname, Guyana, and reaching the north of Brazil (Pritchard and Trebbau 1984a; Ernst and Barbour 1989; Iverson 1992; Ouboter *et al.* 2007; Rueda-Almonacid *et al.* 2007; Watling and Ngadino 2007). In Brazil, it occurs in Amazônia, Amapá, Pará, Roraima, Tocantins, and Maranhão states (Pritchard and Trebbau 1984a; Schneider *et al.* 2009a,b; Ávila-Pires *et al.* 2010; Dornas *et al.* 2011; Silva *et al.* 2011).

On 19 February 2012 around 9:00 pm, two adults of *R. punctularia* were recorded (Figure 1) during anuran surveys at Fazenda São Bernardo (7°21'34" S, 45°32'08" W, 270 m) municipality of Sambaíba, state of Maranhão, northeast of Brazil. The turtles were found in a temporary swamp, near a *vereda*, located in the Parnaíba river basin. The specimens were manually captured, photographed and released, and the pictures were used to confirm identification following Rueda-Almonacid *et al.* (2007). Collecting permits were authorized by Instituto Chico Mendes de Conservação da Biodiversidade – ICMBio (ICMBio/RAN n° 32873-2).

The present record fills a gap of 600 km between the

easternmost record of the species (municipality of Timon, state of Maranhão) and Ananás (state of Tocantins) (Figure 2). Although most of the distribution extent of *R. punctularia* falls in the Amazonian phytogeographic domain, we corroborate the suggestion of Dornas *et al.* (2011), who predicted that this turtle might occur in transitional areas between Amazon and Cerrado phytogeographic domains. Although Silva *et al.* (2011) had already recorded *R. punctularia* in a savannah woodland region (Cerradão), the region studied herein is located (state of Maranhão) in a complex transition zone among Amazon, Cerrado, and Caatinga areas (see easternmost point occurrence record in Figure 2). The present study reports the occurrence of *R. punctularia* in a physiognomy of Cerrado, but further studies are needed to generalize if *R. punctularia* is flexible regarding habitat occupancy, or if this supposedly forest-dwelling species occurs in Cerrado regions close to the edge of the Amazon phytogeographic domain.



FIGURE 1. Adult specimen of *Rhinoclemmys punctularia* registered in the municipality of Sambaíba, Maranhão state. Photo: Fabrício H. Oda.

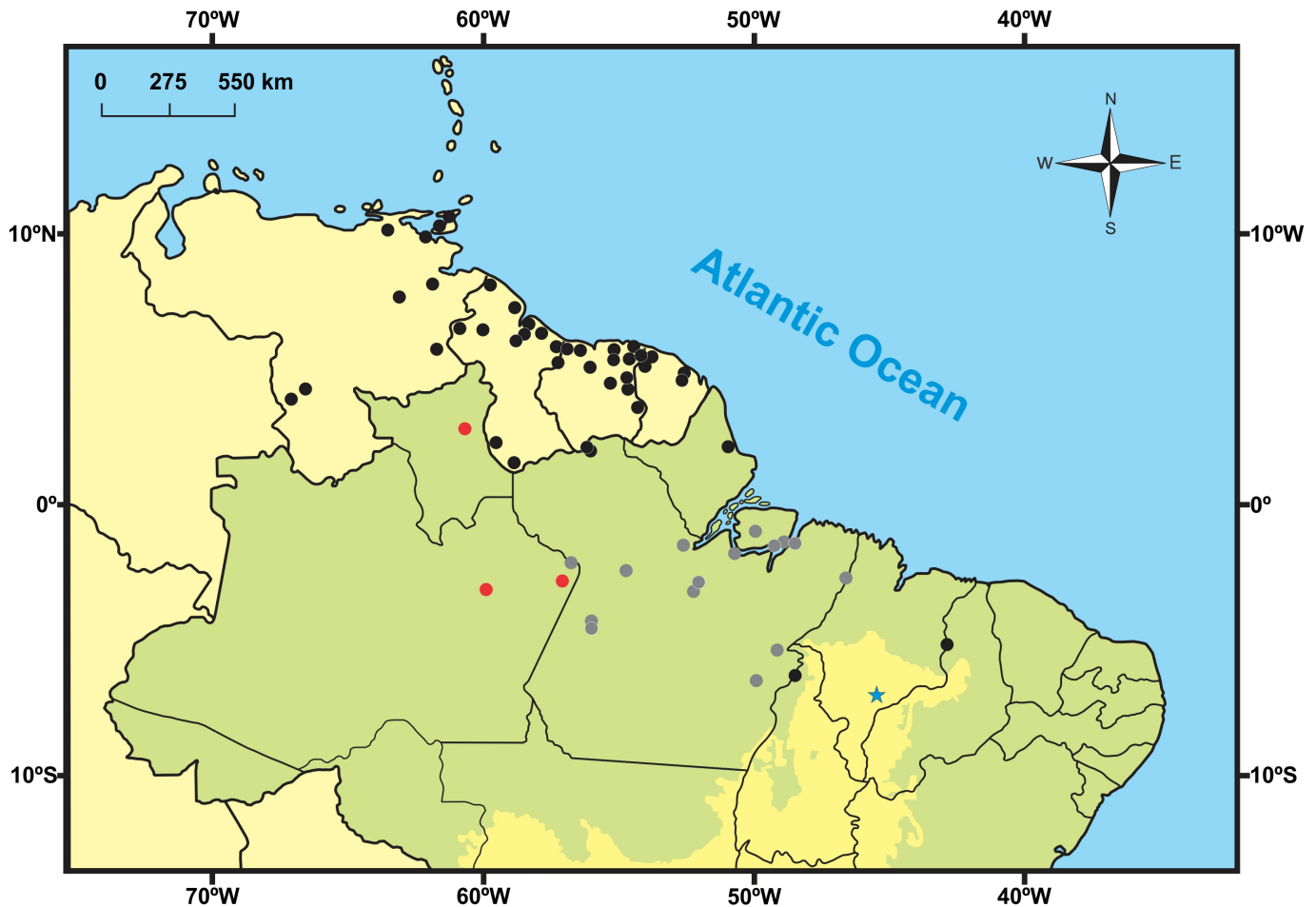


FIGURE 2. Distribution map of *Rhinoclemmys punctularia* in South America (modified from Silva et al. 2011). Black circles represent literature records: Pritchard and Trebbau 1984b; Schneider et al. 2009b; Ávila-Pires et al. 2010; Dornas et al. 2011. Gray circles and Red circles represent records compiled by Silva et al. (2011) for specimens deposited at the Museu Paraense Emílio Goeldi (MPEG) and the Instituto Nacional de Pesquisas da Amazonia (INPA) collection, respectively. Blue star represents the new record (municipality of Sambaíba, state of Maranhão). Cerrado phytogeographic domain in yellow (Brazil).

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