

New distribution data for *Podocnemis erythrocephala* (Spix) with remarks on some other turtle taxa (Reptilia: Chelonia: Pelomedusidae)

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Hoogmoed, M.S., & T.C.S. de Avila-Pires: New distribution data for *Podocnemis erythrocephala* (Spix) with remarks on some other turtle taxa (Reptilia: Chelonia: Pelomedusidae).

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Key words: *Podocnemis erythrocephala*; *P. unifilis*; *P. expansa*; *Peltocephalus dumeriliana*; Rio Nhamundá; Amazonia; Brazil; zoogeography.

During fieldwork in the Lago de Faro, the lower reaches of the Rio Nhamundá, on the border of the Brazilian states of Pará and Amazonas, several species of pelomedusid turtles were observed. *Podocnemis erythrocephala* and *P. unifilis* occur in the area and breed there; *P. expansa* seems to be absent or at least very rare, though it does occur nearby in the Rio Trombetas. A single specimen of *Peltocephalus dumeriliana* was collected opposite the Ilha dos Maicós in a small igarapé emptying in the Rio Trombetas. It is concluded that the distribution area of *Podocnemis erythrocephala* is more extensive than recently thought.

Durante trabalho de campo no Lago de Faro, próximo à foz do Rio Nhamundá, no limite dos estados brasileiros do Pará e Amazonas, diversas espécies de quelônios da Família Pelomedusidae foram observadas. *Podocnemis erythrocephala* e *P. unifilis* ocorrem e reproduzem-se na área; *P. expansa* parece estar ausente, ou pelo menos ser bastante rara, embora ocorra não muito longe daí, no Rio Trombetas. Um único espécime de *Peltocephalus dumeriliana* foi coletado num pequeno igarapé que deságua no Rio Trombetas, oposto à Ilha dos Maicós. Conclui-se que a área de distribuição de *Podocnemis erythrocephala* é mais extensa do que recentemente suposto.

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Introduction

During recent fieldwork (grants CNPq 403186/88.9 to O.R. da Cunha, 403095/88-3 to T.C.S. Avila Pires, expedition permit CNPq EX-15/88) in the Rio Nhamundá area, on the border of the states of Pará and Amazonas, we observed several representatives of the family Pelomedusidae. The Rio Nhamundá is a northern tributary of the Amazon, east of the Rio Negro and south of the Trombetas, that in its lower reaches widens into a broad lake-like expansion, the so-called Lago de Faro. Due to its weak current it cannot enter the Amazon itself, but empties into the Trombetas near its mouth with the Amazon. The Lago de Faro in the dry season has wide sandy beaches, which during the rainy season completely disappear. The water of the lake is clear, with a slight brownish touch, but it certainly cannot be called black water, like that of the Rio Negro. The surrounding area consists of low, bauxite-capped hills with an altitude of about 80 m. Tributaries entering the lake have a very wide mouth (fig. 1). Examples are the Cabeceira Urucuxi, C. Aibi and C. Arijó. Partly the lake is bordered by varzea forest that is inundated during the greater part of the year. Where hills descend steeply to the beaches varzea forest is absent and terra firme forest directly borders on the lake. Large areas have been turned into pastures for cattle. There are several villages and isolated habitations in the area.

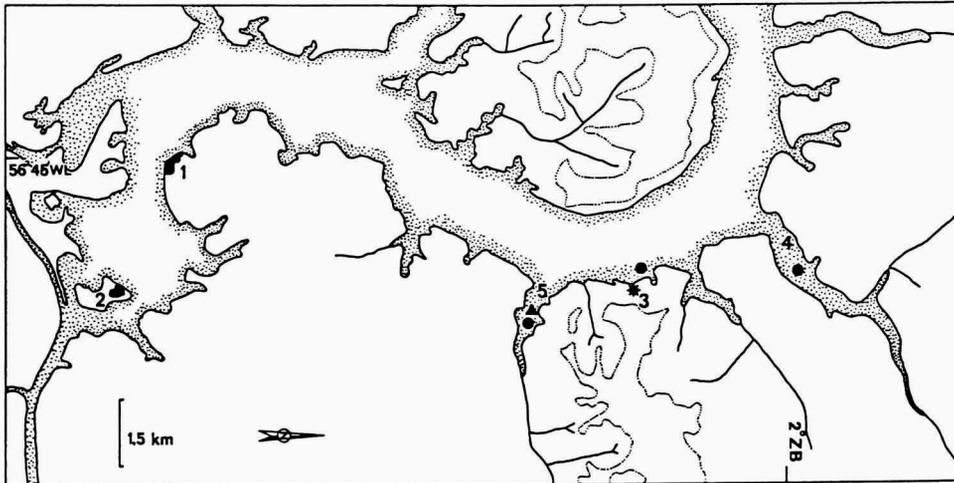


Fig. 1. Map of the lower Rio Nhamundá. 1. Faro, 2. Nhamundá, 3. Sitio Céu Estrelado, 4. Cabeceira Urucuxi, 5. Cabeceira Arijó. The dotted line indicates the margin of plateaus at about 80 m. Dots: *Podocnemis erythrocephala*; triangle: *P. unifilis*. The arrow points to the North.

Notes on the species

Podocnemis erythrocephala (Spix)

Mittermeier & Wilson (1974) solved the nomenclatural confusion that had been surrounding this taxon of the genus *Podocnemis*, by carefully studying literature, type-material and preserved specimens in museums. They reached the conclusion that the distribution of the species which should properly be called *P. erythrocephala* (Spix) (Mittermeier & Wilson, 1974; Hoogmoed & Gruber, 1983; Pritchard & Trebbau, 1984) was nearly entirely restricted to the Rio Negro system, though they listed a number of outlying localities like 'Tefé' and 'Santarém', based on preserved material as possible places where the species might occur, and a number of other localities from where specimens had been reported but were not likely to occur. Pritchard & Trebbau (1984), on the basis of their own data interpreted Mittermeier & Wilson's (1974) data even more restrictively and stated that the species only occurred in the Rio Negro system, and that it probably entered the Brazo Cassiquiare, thus reaching the upper Rio Orinoco, an assumption corroborated by specimens in the Vienna Museum, collected by Natterer. Pritchard & Trebbau (1984) discarded localities like Cayenne and Belém altogether and in our opinion rightfully so.

During our stay in Sitio Céu Estrelado, 15 km N. of Faro on the Pará bank of the Rio Nhamundá we learned from conversation with persons living in the area that a podocnemid turtle with red spots on the head, locally known as calaluma, occurred there and laid its eggs on the beaches. Soon afterwards we received some individuals of *P. erythrocephala*. One specimen was a recently hatched juvenile (straight carapace length 38.6 mm) that still had its egg-tooth when brought in (December 15, 1988), but soon after lost it. This hatchling constitutes positive proof that this species not only

occurs here, but is well established and breeding. Other specimens of different sizes were found swimming in the lake and brought to us. Most of them were juveniles (straight carapace lengths 63.2, 65, 67.6 mm), one an adult male (straight carapace length 145.8 mm). Despite its small size this turtle is eaten by the local population. One specimen (MPEG/CC 161 straight carapace length 173 mm) was obtained one day after it had been eaten and the shell is quite intact. Another specimen (RMNH 24174, straight carapace length 199 mm) was reconstructed from bone fragments picked up from a kitchen-midden behind some houses, and unfortunately is not complete: most vertebrae, some marginals, part of a costal and the entire plastron are missing. The bony shells are relatively thin.

All material seen by us came from a small area around Sitio Céu Estrelado, extending north to Cabeceira Urucuxi and south to Cabeceira Arijó. This does by no means imply that the species would be restricted to that area, it just reflects the limited extent of our excursions and stay (November 30 - December 5, December 12-15, 1988) there.

As the Rio Nhamundá is at least 350 km E. of the Rio Negro, the specimens here reported extend the known range of this species considerably to the east, and diminish the gap between the confirmed distribution and the 'outlying' locality Santarém to about 200 km. Thus, the distribution area of *P. erythrocephala*, which by Wermuth & Mertens (1961, 1977) was given as northern South America (Venezuela, Guyanas and N. Brazil: Amazon area), but narrowed down to: Rio Negro area in Brazil and Venezuela and possibly part of the Amazon valley, by Mittermeier & Wilson (1974) and Pritchard & Trebbau (1984) appears to be larger than recently stated, but certainly is not as extensive as supposed before that time. E.g. the species certainly does not occur in the Guianas, as is implied by the name (*P. cayennensis*) under which it was known till recently.

Podocnemis unifilis Troschel

Of this species, locally known as tracajá, only a single juvenile was observed, held in captivity by settlers at Cabeceira Arijó. This species is known to occur in the entire Amazon basin and in part of the Orinoco basin (Pritchard & Trebbau, 1984), so its occurrence in the Rio Nhamundá is no surprise.

Podocnemis expansa (Schweigger)

This species only has a slightly smaller distribution than *P. unifilis*, and supposedly occurs in the entire Amazon basin (Pritchard & Trebbau, 1984) including the Rio Nhamundá area. During our stay we did not observe any evidence of the presence of this species here, and local inhabitants informed us it did not occur in the area. Although the species used to be abundant throughout Amazonia, it has locally been depleted or exterminated due to intensive hunting for food and oil (Mittermeier, 1978; Pritchard & Trebbau, 1984) and that may be the case in the Rio Nhamundá.

Peltocephalus dumeriliana (Schweigger)

Our stay at the Rio Nhamundá was interrupted for a visit of one week (December 5-12) to the Acampamento Cruz Alta, located 6 km S. of the Rio Trombetas. Personnel living on the south bank of the river on December 3, 1988 had collected a male cabeçuda (carapace length 423 mm, head width 83 mm) in the small igarapé, opposite Ilha dos Maicós, where the animal was in the mud bordering the creek, not in the creek itself. Pritchard & Trebbau (1984) already reported this species for the Rio Trombetas, from Lago Jacaré, and from Oriximiná, so the record does not come as a surprise.

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