

First record of the bushy-tailed opossum, *Glironia venusta*, Thomas, 1912, (Didelphimorphia) from Manaus, Amazonas, Brazil

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ABSTRACT

A new record of a very rarely observed mammal, the bushy-tailed opossum, *Glironia venusta* (Didelphimorphia), was obtained for the Adolpho Ducke Forest Reserve, Manaus, Amazonas state, Brazil. Only 17 other records existed of this species, most from the 1980s. There were only three previous records of the species from Brazil (in the states of Pará, Amazonas and Rondônia). This new record supports the notion that *G. venusta* is a locally rare species throughout its range, but widely distributed in Brazilian Amazonia.

KEYWORDS: Amazon, Bushy-tailed opossum, Didelphidae, Didelphimorphia, *Glironia venusta*.

Primeiro registro de *Glironia venusta*, Thomas, 1912 (Didelphimorphia) em Manaus, Amazonas, Brazil

RESUMO

Um indivíduo de *Glironia venusta* (Didelphimorphia), foi observado na Reserva Florestal Adolpho Ducke, Manaus, Amazonas, Brasil. Existem apenas 17 outros registros publicados desta espécie de marsupial, a maioria da década de 80. No Brasil, *G. venusta* havia sido registrada em três outras localidades, no Pará, Amazonas e Rondônia. Com este registro em uma das áreas mais intensivamente estudadas na Amazônia, ganha reforço a noção de que *G. venusta* é uma espécie rara localmente, mas de ampla distribuição na Amazônia brasileira.

PALAVRAS-CHAVE: Amazonas, Didelphidae, Didelphimorphia, *Glironia venusta*.

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On 21 July 2004, at 19:38 solar time, a bushy-tailed opossum, *G. venusta*, was observed in the Adolpho Ducke Forest Reserve (RFAD; 02°55' S, 59°59' W), a Terra-firme rainforest reserve located on the outskirts of the city of Manaus (Amazonas state, Brazil). Individuals of this species have been recorded only at 17 other localities, with records from Bolivia, Peru, Ecuador and Brazil (Marshall 1978; Brown 2004; Díaz & Willig, 2004). Previous records of the species in Brazil were made at (1) the mouth of the Mapuera river, Cachoeira Porteira village, Pará state (Da Silva & Langguth, 1989); (2) the upper Urucu River, Amazonas state (unpublished record of Ferreira da Silva in 1989, Tarifa and Anderson 1997); and (3) Espigão do Oeste, Rondonia state (Bernardé & Rocha, 2003). The present record was made in undisturbed forest, at an altitude of 86 m.a.s.l., approximately 15 km from the margin of the Amazonas river and approximately 3 km from the nearest area of human impact.

The bushy-tailed opossum was seen by two of us simultaneously during a nocturnal transect survey of vertebrates in the RFAD. Walking speed was approximately 1 km/hour, observation equipment included bird binoculars, halogen headlamps and portable halogen spotlights.

The animal was observed during 20 minutes in vines hanging from a large tree, at approximately 15 m height. Head-body length was estimated as 15-20 cm (visual estimation), and tail length was similar to head-body length. Dorsal coloration was uniform, from brownish to grey, but the head was paler with a broad black stripe from the nose through the eye and to the crown of the head. The tail had the same color as the body, and appeared to be furred to the tip. The tail tip had a paler tone, but we were not able to distinguish whether it was a color change in the fur or if the very tip of the tail had no fur.

Although lacking a collected specimen or a photograph we argue that this observation is a reliable record, because of the unmistakable morphological and behavioural traits that characterize *G. venusta*. No other New World marsupial species has an almost fully furred tail except the black-shouldered opossum, *Caluromysops irrupta*, which, is larger and grey with large black patches across the shoulders (Emmons & Feer, 1997), and probably not present in the RFAD (Díaz & Willig, 2004). No other New World marsupial has similar facial stripes (Emmons & Feer, 1997). The animal we observed also behaved differently from other opossums seen in the area during our nocturnal surveys (common opossum, *Didelphis marsupialis*, and common grey four-eyed opossum, *Philander opossum*), which normally remained still once spotted. In accordance with the observations of Emmons & Feer (1997) for bushy-tailed opossums, the animal we observed moved rapidly and nervously among vines, climbing up and down the tree, with short stops during which it kept looking at

us. Sometimes it hid from our lights on the opposite side of the tree, reappearing again after a few seconds. Downward movements were headfirst, not using the tail. It did not remain still for long, but did not try to run away from us. The opossum stayed on the same tree until we left.

The RFAD belongs to the National Institute for Research in the Amazon (INPA) and is one of the most studied Amazonian rainforest sites since the 1960s. However, until 2000, all research in the reserve was restricted to approximately 20% of its 10000 ha area. In 2000 a trail system in the form of a 64m² 1x1-km-grid was installed by the "Programa de Pesquisas Ecológicas de Longa Duração" (PELD), which opened up the whole area for research. Since then, the "Programa de Pesquisa em Biodiversidade" (PPBio) has supported extensive research, and several new species have been registered, including amphibians, palms, understory plants, harpy eagles, and lizards (Costa *et al.*, 2005; Kinupp & Magnusson, 2005; Pinto, 2006; Mosquera *et al.*, 2006; Menin *et al.*, 2007, 2006). It is noteworthy, however, that a relatively large tree-dwelling vertebrate like the bushy-tailed opossum went unnoticed until now. The RFAD is in close contact with urban areas of Manaus and, in at least two other records in Brazil and Peru (Da Silva & Langguth, 1989; Díaz & Willig, 2004), this species was found in or close to human impacted areas, suggesting that it does not avoid proximity to human settlements.

These results support the notion that *G. venusta* is a locally rare species throughout its range. The present location lies roughly between two of the previous ones in Brazil (upper Urucu river and mouth of the Mapuera river), confirming the presence of the species in central Amazonia.

ACKNOWLEDGMENTS

Fieldwork was supported by CSIC/CNPq (CSIC project # 2004BR0009 and CNPq project # 690065/02-8) and INPA/PPI #1-3650. The PELD program is supported by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and the PPBio program by the Ministry of Science and Technology (MCT). We thank specially Ana Píriz and Marta Sánchez for help in the field. Research in Brazil was authorized by CNPq/CMC 042/03 – Portaria MCT n° 282/04.

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Recebido em 23/11/2007

Aceito em 07/05/2008

