Short communication

The occurrence of the mouse opossum *Marmosops ocellatus* (Marsupialia, Didelphidae) in western Brazil

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Receipt of Ms. 25.4.2005
Acceptance of Ms. 6.4.2006

Key words: *Marmosops ocellatus*, Brazil, distribution limit

The aim of this report is to furnish a new record on the south-eastern distributional limits of a small marsupial, *Marmosops ocellatus* (formerly *M. dorothea*), in mid-western Brazil and update its geographic distribution in this country. The new locality where the species was registered is the Urucum mountains, in the vicinity of the Santa Cruz hill (coordinates: 19°12’S, 57°34’W), Corumbá municipality, Mato Grosso do Sul state (MS), central-western Brazil (Fig. 1). Urucum is covered mainly by semideciduous forests (IBGE 1992; Pott et al. 2000), and is near the Paraguay River, at its right margin. The species was trapped in pitfalls (108 l) at three different mountainous altitudes (200, 500 and 800 m), during monthly surveys during 2001 and 2002 (July–June). During these surveys, 15 individuals of *M. ocellatus* were trapped in the study site, one at 200 m, seven at 500 m and seven at 800 m. Seven individuals were males and eight were females. Their body mass averaged 38.3 g for adult males (range: 31.0–51.0; *N* = 4) and 26.2 g for adult females (range: 23.0–30.0; *N* = 5), revealing an apparent sexual dimorphism. The specimens were deposited in the Museu de Zoologia da Universidade de São Paulo (MZUSP 32877) and in the Mammal Collection of the Federal University of Santa Maria (UFSM 268, 293, and 294) as voucher specimens.

*Marmosops ocellatus* is a didelphid species occurring in central and north-eastern Bolivia, from the base of the Andes to the dry forests of the Brazilian frontier. It appears to favour dense vines as habitats (Anderson 1997; Emmons 1997; Eisenberg and Redford 1999; Voss et al. 2004). Since the species is restricted to woodlands, the Urucum Mountains at western Brazil fulfil the habitat requirements of the species, the region being covered by dry, seasonal forests (point 1, Fig. 1). Connection of this newly surveyed population with other populations in Bolivia is probable, but as yet there is no data for this supposition. An evidence, however, is the concomitant report of *M. ocellatus* (cited as *M. dorothea*) in a region about 140 km northward in Brazil, also in the municipality of Corumbá, in the Amolar mountain complex (Rossi et al. 2003). In this locality, the species was trapped in semideciduous forests with savannah-like vegetation in the proximities (Carmignotto 2004), similarities to the Urucum mountain foothills.

Distributional data of small mammals for eastern Bolivia (Anderson 1997; Voss et al. 2004) and mid-western Brazil (Musser et al. 1998; Eisenberg and Redford 1999; Carmignotto 2004) are sparse and rare. They
show vast empty regions without surveys, particularly for *Marmosops* species. Emmons (1997) suggested that western Brazil is the eastern limit of *M. ocellatus* distribution, but apparently without a collection base in the country. Such absence of collection for this region was confirmed by Eisenberg and Redford (1999) and Voss et al. (2004) in their recent revisions. Voss et al. (2004) indicated the Noel Kempff National Park in north-eastern Bolivia as the closest locality to the Brazilian border with known records of *M. ocellatus*. The first known record of *Marmosops ocellatus* in Brazil is that of Rossi et al. (2003) in the Amolar mountains. Today, there are still large areas in the region between the base of the Andes and western Brazil where little is known about small mammal distribution. Considering the three registers in Brazil (points 1, 2 and 3, Fig. 1), this report extends the range of *M. ocellatus* to 220 and 500 km east- and southward regarding the two closest previously known records in Bolivia. Its southern-most locality previously known was in south-eastern Bolivia (Santa Cruz, Tita locality) at 18°25'S and
Therefore, this report extends the distributional area 90 km southward from the previous south-most limit. The eastern-most locality (Santa Cruz, Aserradero Potons, 17°05' S and 59°34' W) is extended to about 215 km eastward from the previous limit (Anderson 1997; Voss et al. 2004) (Fig. 1). This report also furnishes the extreme oriental distributional limits of *M. ocellatus* since the Urucum and Amolar mountains are bordered by the Paraguay river in the east, serving most probably as a geographic barrier for this species. Hence, the same geographic attributes that define the southeastern range limits of *M. ocellatus* are thought to influence the murid rodent *Oryzomys nitidus* distributional limits in western Brazil (see Musser et al. 1998), with both species occupying more forested biomes. Moreover, a vast flood plain, the Pantanal, is located east of the Paraguay river, which is thought to be an inhospitable, more open biome (Ab’Sáber 1988) to *M. ocellatus* based on its habitat characteristics (Emmons 1997). All surveys and revisions for the Pantanal contain no records of any *Marmosops* species (Vieira 1955; Alho et al. 1987; Fonseca et al. 1996; Rodrigues et al. 2002; Carmignotto 2004), possibly due to the stronger forest requirements of the species, which could be extended for the genus (Mustrangi and Patton 1997; Fernandez and Pires 2005). If the Paraguay River is the oriental limit of *M. ocellatus* distribution, perhaps differences in habitat type west (mostly chacoan and forested) and east (mostly marshland and savannahs) of the river margins are the explanations for the actual small mammalian species distributions in the region (sensu Myers 1982). On the other hand, the riverine hypothesis (see Patton et al. 1994) would place the Paraguay River as a barrier for small mammal dispersal, but this could not explain why a number of small mammalian species occurs on both sides of the river (Cáceres and Carmignotto unpublished data).

**Acknowledgements**

We are grateful to UFMS, UEMS, CNPq/MCT, PROBIO/MMA and FUNDECT-MS government in Brazil for support for this study. Thanks also to MCR-Rio Tinto for logistic support, and to C. M. de Carvalho, R. Ávila, A. T. de Britto and V. B. de Souza for help in the field.

**References**


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