

NOTES ON GEOGRAPHIC DISTRIBUTION

**Mammalia, Didelphimorphia, Didelphidae, *Chacodelphys formosa* (Shamel, 1930):
Range extension.**

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Chacodelphys formosa (Shamel, 1930) is possibly the smallest species of the Didelphimorphia (head and body length = 68 mm, tail length = 55 mm; see Voss et al. 2004). Its distribution is only known from five localities in the east of the Chaco and Formosa provinces, Argentina (Teta et al. 2006). These five localities cover an area of about 10,000 km² in the South American Humid Chaco eco-region. According to the criteria of the UICN, Teta et al. (2006) suggested that this species must be considered as Vulnerable.

Here we report a new recording locality for *Chacodelphys formosa* resulting from the analysis

of a Barn Owl (*Tyto alba*; Tytonidae, Strigiformes) pellet sample. Owl pellets were collected in 1991 from a human building in Estancia Santa Inés (department of Posadas, province of Misiones; 27°31' S, 55°52' W; 95 m; Figure 1). Osseous remains were identified by comparison with reference material housed at the mammal collection of the Centro Nacional Patagónico, Puerto Madryn, Argentina, and literature (Voss et al. 2004; 2005). The examined specimens are preserved in the *Colección de material de egagrópilas y afines "Elio Massoia"* of the Centro Nacional Patagónico (under the number CNP-E 187-1).

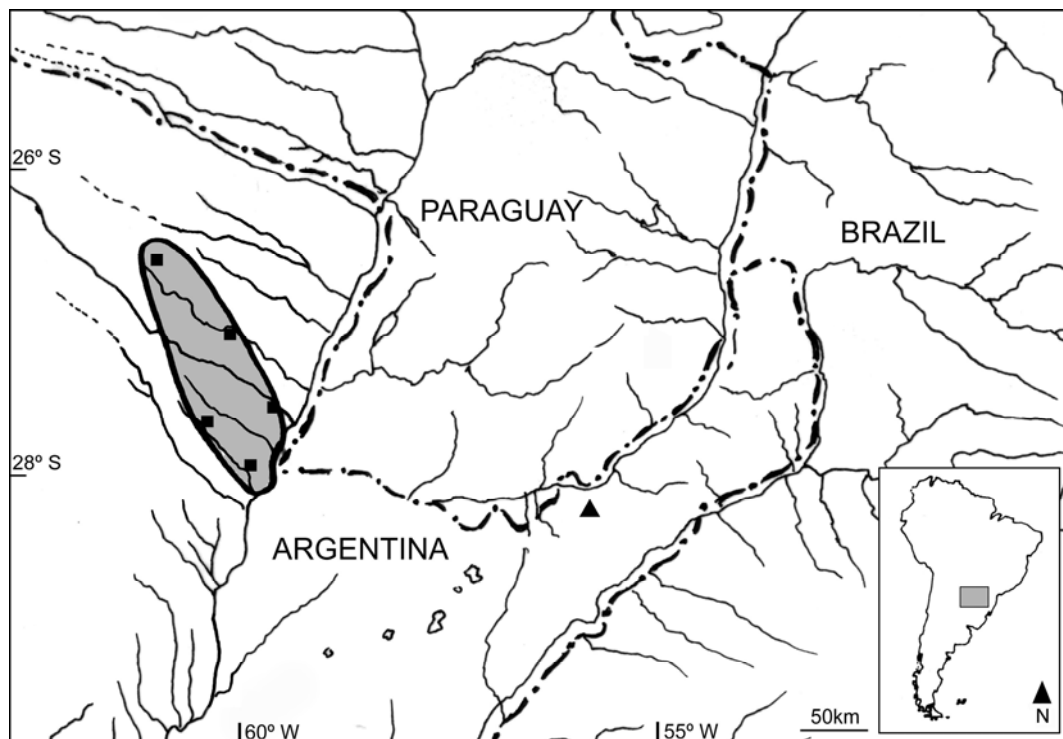


Figure 1. New record locality (indicated with a triangle) for *Chacodelphys formosa* in the province of Misiones, Argentina. Previous record localities are indicated with squares and enclosed in the gray area.

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Chacodelphys formosa is easily recognizable among other small murine opossums (e.g. *Cryptonanus*, *Gracilinanus*) on the basis of the following combination of characters (anatomical terminology follows Voss et al. 2004; 2005): maxillopalatine fenestrae very large; palatine fenestrae present but incompletely separated from maxillopalatine openings; maxillary fenestrae very small but bilaterally present near the first and second upper molars; posterolateral foramina small, not extending lingual to fourth upper molars protocones; upper canine without anterior or posterior accessory cusps; second upper premolar distinctly taller than third; anterior cingulum incomplete on third upper molar (Figure 2).

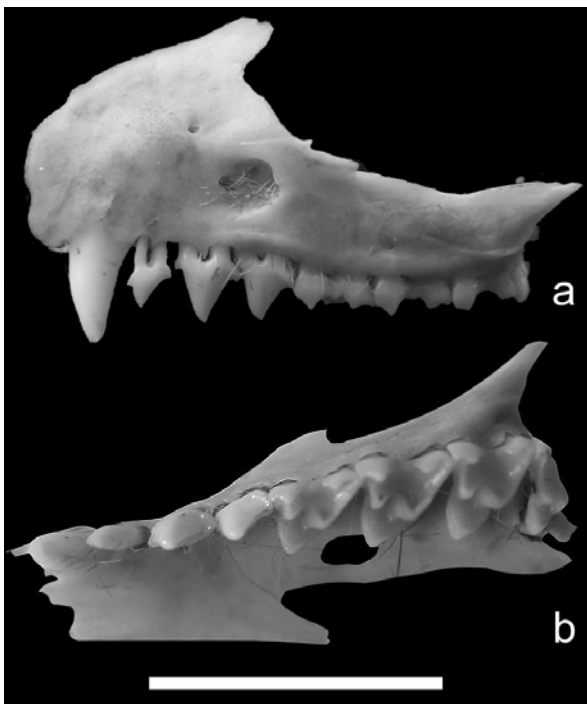


Figure 2. Maxillary bone with incomplete tooth row (a, lateral view; b, ventral view) of *Chacodelphys formosa* from Misiones, Argentina. Scale = 5 mm.

The record of *Chacodelphys formosa* for Estancia Santa Inés enlarges its distributional range by ca. 270 km east (Figure 1). Estancia Santa Inés is included within the floristic district known as Northern Campos, an ecoregion without previous records for the species. This floristic district is developed in a smoothly undulating region with lateritic soils and grasslands dominated by *Aristida pallens*, *Andropogon lateralis*, and *Elionurus muticus* (Soriano et al. 1992). At present, extensive yerba mate and tea plantations, forestation with exotic tree species (*Pinus* and *Eucalyptus*), cattle raising, and indiscriminate burn practices have changed the vegetational composition of this region. Biogeographically, the micromammal assemblages from the Northern Campos represent a mixture between temperate (e.g. *Calomys laucha*, *Oligoryzomys flavescens*, *Oxymycterus rufus*, *Monodelphis dimidiata*) and tropical species (e.g. *Oligoryzomys nigripes*, *Bibimys chacoensis*) (Pardiñas et al. 2005a).

The disjoint range displayed by *Chacodelphys formosa*, with populations in the Humid Chaco west of Paraná-Paraguay rivers and the Northern Campos of southern province of Misiones, coincides with the distributional pattern observed in the sigmodontine rodent *Bibimys chacoensis*. The analysis of several owl pellets samples from the area between the Humid Chaco and southern Misiones – that mostly corresponds to the humid grasslands and wetlands of the Iberá system – fails to detect the presence of *B. chacoensis* or *C. formosa* (Pardiñas et al. 2005b).

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