

Range Extension, Identification and Habitat of Occidental Gerbil *Gerbillus occiduus*

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Range

Occidental Gerbil *Gerbillus occiduus* is a medium-sized gerbil species (Muridae: Gerbillinae) endemic to Morocco and Western Sahara. The type specimen was taken at Aoreora, on the Atlantic coast, approximately 80km WSW of Guelmim on 16-17 January 1971 (Lay 1975), at which time it was only known from this locality. More recently a specimen was captured near Tarfaya (Aulagnier & Thévenot 1986), just north of the Morocco-Western Sahara border extending its known range some 230km to the southwest with the same authors proposing a distribution extending from Aoreora south to the Saqui-al-Hamra at Layoune, 90km south of Tarfaya. Further work in 2008 (Ndiaya *et al.* 2012) extended its known range even further with specimens captured at Boujdour (250km south of Tarfaya) and Dakhla, a further 300km south of Boujdour (as well as consolidating its known sites at Aoreora, Tarfaya and El Ouatia/Tantan Plage). This species was also caught near Tantan in 1999 (Aniskin *et al.* 2006).

In January 2013 we captured an individual at 28° 58.943N 10° 33.974W (at 38 metres above sea level), 30 kilometres northeast of Aoreora (5km northeast of the river-mouth at Plage Blanche). This represents a range extension of 30 kilometres and takes the species known northernmost limit up to the southern edge of where the Anti-Atlas mountains meet the Atlantic ocean. This is likely to represent the actual northernmost limit of its range as suggested also by Lay (1975), as these mountains represent unsuitable habitat for this species as well as forming a considerable natural barrier to dispersal in this location.

Identification

In its current range Occidental Gerbil is only likely to be confused with Tarabul's Gerbil (*Gerbillus tarabuli*). Tarabul's Gerbil is currently considered to be a senior synonym of *Gerbillus riggenbachi* Thomas 1903, described from a site situated on the Tropic of Cancer in the Oued Ad Deheb (southern part of Western Sahara). However, the identification of Occidental Gerbil from Dakhla in 2008, raises the possibility that Occidental Gerbil is in fact a junior synonym of *Gerbillus riggenbachi* (Ndiaye *et al.* 2012) and not related to Tarabul's Gerbil.

Positive in-hand identification of Occidental Gerbil is possible by closely observing the following pelage features (Figure 1):

- Dark-tipped ears (Tarabul's Gerbil shows pigmented ears without dark tips)
- No white spot present behind the ears (Tarabul's Gerbil shows a white spot in this position)

Features shared by both Occidental Gerbil and Tarabul's Gerbil include tawny dorsal and white ventral fur with a clear demarcation between, long tail and hairy foot soles.

Habitat Requirements and Discussion

The habitat in which we observed this species comprised large expanses of compact sand and reg desert with occasional patches of soft, loose sand forming mounds where *Suaeda* bushes grew and

under which this species excavates its burrow system.

Further survey work is required in Western Sahara south of Dakhla and potentially into

Mauritania to establish the true status of this species as suitable habitat is likely to be present along the Atlantic coast in these locations.



Figure 1. Occidental Gerbil 5km northeast of Plage Blanche, 18th January 2013 (photo Daniel Brown)

References

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