

Taxonomic, biogeographic, and taphonomic reassessment of a large extinct species of paca from the Quaternary of Brazil

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The taxonomy of extinct species of *Cuniculus* (Caviomorpha, Rodentia, Mammalia) is confusing and poorly studied. Here we provide a taxonomic review of extinct cuniculids, and discuss the taxonomic, biogeographic, taphonomic and chronologic aspects of new remains of an extinct large cuniculid from Brazilian Quaternary Gruta Cuvieri cave deposits. Our taxonomic review suggests that *Cuniculus rugiceps* (Lund, 1837) is the valid taxon to include all available occurrences of extinct cuniculids. The most evident features of this taxon are its larger size and the stronger and more densely distributed rugosities on the skull external surface when compared to the extant species. At present, the distribution of *C. rugiceps* is restricted to the tropical region of Brazil. Regarding the new remains, taphonomic analysis of the specimens from Cuvieri Cave suggests our sample is represented by at least seven individuals that accumulated within the cave deposit by pitfall entrapment. The biostratigraphy of the specimens was characterized by prolonged surface exposure inside the pit with fragmentation and displacement caused mostly by falling and subsequent trampling by individuals of the same and/or other species. The stratigraphically controlled excavations and chronological data allowed the establishment of a Late Pleistocene minimum age for these specimens.

Key words: Mammalia, Rodentia, Caviomorpha, Cuniculidae, cave environments, karst, Pleistocene, Lagoa Santa.

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