

NEW SPECIMENS FROM THE EARLY MIOCENE CHUCAL FAUNA, NORTHERN CHILE AND A DESCRIPTION OF ITS XENARTHANS

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The late early Miocene Chucal Fauna of the Chilean Altiplano is the northernmost fauna referable to the Santacrucian South American Land Mammal "Age." Located ca. 30° north of classic Patagonian Santacrucian localities, it presents a unique opportunity to examine South American provinciality during this interval. Presently, only the endemic ungulates of Chucal (Notoungulata and Litopterna) have been described in detail. We here describe the xenarthans and discuss other important new specimens recovered during our most recent (2004) field season.

Xenarthans are uncommon at Chucal and include only three cingulates (armored forms); in contrast, cingulates and pilosans (sloths) are speciose and abundant in contemporaneous Patagonian localities. Glyptodontid specimens, almost certainly from the same individual, include a mandible, partial carapace, and articulated limb bones. The species is unique among glyptodontids in having a complex, imbricated anterior mandibular dentition (n1-3) and a carapace with relatively large central figures positioned along the posterior edge of each osteoderm. A dasypodid roughly the size of the diminutive *Prozaedyus* (Euphractini) is represented by several fragmentary specimens. It most closely resembles, but is much smaller than, *Stenotatus* (Eutatini) from Patagonia; its osteoderms bear three distinct longitudinal ridges and a distal row of prominent piliferous pits. Two isolated peltephilid osteoderms do not differ significantly from Patagonian *Peltephilus*. The large proportion of novel cingulates at Chucal (67%) and the apparent absence of sloths suggest a marked regional endemism during the early Miocene.

Specimens collected in 2004 provide abundant additional material of the oldest known chinchilline rodent and document at least three previously unrecorded species: a small rodent (*?Acarechimys*); a tiny caenolestoid (*?pichipiline*) marsupial; and an anuran, the first Tertiary amphibian known from Chile, represented by at least two partial skeletons. The mammal fauna presently includes seven notoungulates, one litoptern, at least four rodents, three cingulates, at least one marsupial, and one tiny indeterminate species.