

ENDEMIC SOUTH AMERICAN UNGULATE (MAMMALIA) FOSSILS FROM THE LAGUNA DEL LAJA REGION, ANDEAN MAIN RANGE, CENTRAL CHILE

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A recently discovered, stratigraphically superposed series of early-late Miocene fossil mammal assemblages from the Andean Main Range of Chile near Laguna del Laja (~37.5° S, 71° W) sheds light on the poorly known extra-Patagonian history of South America's early mammals. The Cura-Mallín and overlying Trapa-Trapa formations at Laguna del Laja, from which several hundred specimens were recovered, are well constrained stratigraphically and radioisotopically with high precision ⁴⁰Ar/³⁹Ar ages (Flynn et al. 2008, Gans et al. in progress), providing a robust temporal framework for the fossiliferous units spanning ~20-9 Ma. Previous analyses of the Laguna del Laja rodents have suggested an increasingly high degree of endemism through this section (Flynn et al. 2008). Herein we provide the first detailed account of ungulates recovered from the Cura-Mallín Formation at Laguna del Laja; these range in age from ~20-15 Ma. Specimens assignable to *Protypotherium* Ameghino 1885, *Astrapothericulus* Ameghino 1902, and *Pachyrukhos* Ameghino 1885, together with their radioisotopic ages, suggest superposed Colhuehuapian, Santacrucian, Friasian?, and Colloncuran South American land Mammal "Ages" (SALMAs). In addition, three new genera are present, adding to the degree of endemism already observed in the rodent faunas from Laguna del Laja. Two of these new taxa belong to the Interatheriinae (sensu Hitz et al. 2000), and the other to the Hegetotheriinae Ameghino 1894. Given the geographic proximity of coeval faunas, the high level of endemism over multiple SALMAs at Laguna del Laja relative to Argentine assemblages is thought to reflect sampling of a regionally distinct and isolated paleoenvironment, potentially related to uplift of the central Chilean Andes in this area.

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