

A NEW MYLODONTINAE (MAMMALIA, XENARTHRA) FROM THE CAMACHO FORMATION (LATE MIOCENE), URUGUAY

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The xenarthrans of the sloth subfamily Mylodontinae are conspicuous members of South and North American Neogene faunas. They occupied a large latitudinal range from central North America to Tierra del Fuego in the austral extreme of South America (Latorre, 1998). The first undoubted representative of the subfamily is *Glossotheriopsis pascualli*, from the Friasian SALMA (middle Miocene) of Argentina. Beginning in the late Miocene (Huayquerian SALMA) the mylodontines are represented by numerous taxa that exhibit a range of morphological heterogeneity (Esteban, 1988) in contrast to the other subfamilies.

Most of the mylodontine taxa described for the Neogene are based on very poor or fragmentary material making a comprehensive comparative description of the genera within the subfamily difficult. The best and most useful single bone that can be used to characterize mylodontid species is the mandible as it is commonly preserved and contains a complex suite of characters that makes it systematically informative (Perea, 1992). It is for these reasons that the majority of the Neogene sloth taxa are based on mandibular remains as they do allow an adequate morphologic comparison and subsequent phylogenetic conclusions that document the diversity within this subfamily of sloths. In this work we describe a right mandibular ramus originating from the Camacho Formation at Kiyú beach, Department of San José, Uruguay (Fig. 1). While the fossil shows some affinities with Pleistocene genera it also shares characters with older mylodontines as well. On the basis of its distinctive suite of morphological features it can be distinguished from all other known mandibular morphologies within the subfamily, indicating it represents a new genus and species.

The material described here is deposited at the Paleontological Collection of Vertebrates, Facultad de Ciencias, Uruguay (FCDPV).

GEOLOGICAL SETTING, BIOSTRATIGRAPHY AND PALEOENVIRONMENTS

Three lithostratigraphic units can be recognized in the outcrops exposed at Kiyú. From the base to the top of the section these include the Camacho (late Miocene), San José (Pli-Pleistocene), and Libertad (Pleistocene) formations. The San José Formation was described by Francis and Mones (1965) and is also called the Raigón Formation (Goso and Bossi, 1966) in most of the geological literature. The outcrops of the Camacho

Formation at this locality (considered the Kiyú Formation by Francis and Mones, 1965 and the San Pedro Member of Camacho Formation by Perea and Martínez, 2004) represent a facies of a late Miocene transgressive episode. The facies includes oyster patch reefs and ichnofossils (*Ophiomorpha nodosa* and *Thalassinoides* sp.) in a greenish-gray clayey silt (Sprechmann et al., 1998, 2000) and abundant terrestrial mammals (Perea, 2005). The fossil mammal assemblage of the Camacho Formation is represented by taxa of Huayquerian-“Mesopotamian” affinities (Perea et al., 1994; Perea, 2005), including an assemblage zone characterized by *Pseudoplohophorus absolutus* and *Cardiatherium orientalis* and the following associated fauna: *Proeuphractus limpidus*, *Kraglievichia paranense*, *Stromaphoropsis scavinoi*, *Pseudoplohophorus benvenutii*, *P. rebuffoi*, *Berthawyleia gracilis*, *Pronothrotherium mirabilis*, *Pliomorphus ameghinoi*, *Ranculus*, *Anchimys*, *Isostilomys intermedius*, *Lagostomopsis*, *Dinotoxodon paranensis*, *Toxodonttherium*, *Xotodon*, *Scalabrinitherium* and *Saurocetes argentinus*. The presence of a terrestrial fauna (including some partially articulated specimens) intermixed with estuarine and marine ostracods and fish remains, freshwater turtles, and flamingoes is considered to be the result of transport into a paralic environment perhaps including coastal lagoons and flood plain in an estuarine or deltaic system (Ubilla et al., 1990; Perea et al., 1996; Perea, 2005). The new material here described was found embedded in a gray-greenish sandy

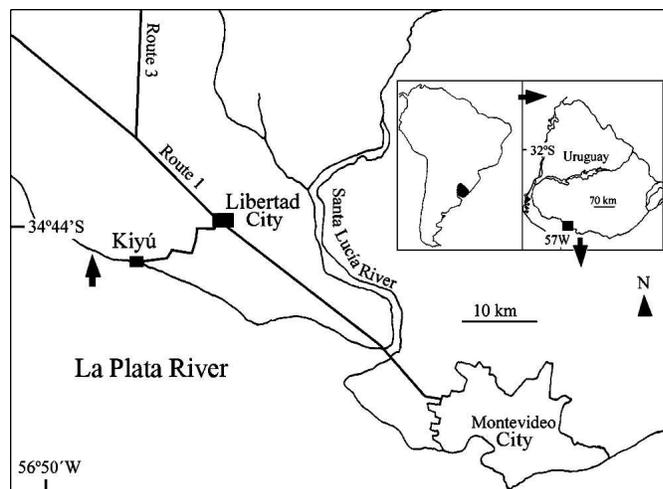


FIGURE 1. Geographic location of *Kiyumylodon lecuonai*, gen. et sp. nov., in Department of San José. The arrow shows the approximate site of collection.

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