

New fossil vertebrates from the López de Bertodano Formation (Maastrichtian), of the Seymour Island (=Marambio), Antarctica

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The Seymour (=Marambio) Island, James Ross Archipelago is one of the richest vertebrate bearing locality of Antarctica. Most of the fossil vertebrates there registered become from several Cretaceous levels of the López de Bertodano Formation (Maastrichtian 65,5-68,7 Ma). This formation could be divided in to two informal units: 2-6 (*Rotularia* Units), deposited in a shallow delta/estuary influenced environment and 7-10 (molluscan Units), deposited in shelf environment. During the past forty years paleontological prospection supported by the Instituto Antártico Argentino (IAA) have provided several fossil remains including marine vertebrates and birds. Here we report the results of the last 2017 Antarctic fieldtrip, which provides new material of chondrichthyans (chimaeras and sharks; units 7, 8, 9), actinopterygians (unit 9), mosasaurs (units 7, 8, 9) plesiosaurs, and birds (units 8, 9). Among plesiosaur, remains of long necked non-aristonectine elasmosaurid were collected. The specimen preserves a sub articulated but incomplete postcranium and part of the cranium and mandible. The mandibular symphysis is extremely short comprising only two/three alveoli. This new plesiosaur material indicates a higher diversity of non aristonectine elasmosaurids than that known for Late Cretaceous marine environments in these latitudes.