

PALEOENVIRONMENTS AND TAPHONOMIC CONSIDERATIONS OF THE OCHO HERMANOS LOCALITY (LATE CRETACEOUS), CHUBUT*

Jorge F. R. RODRÍGUEZ

Translated by Matthew C. Lamanna
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The Ocho Hermanos locality is located about 50 km northwest of the town of Sarmiento (Chubut Province). From levels of the Bajo Barreal Formation (Late Cretaceous) an interesting fauna has been obtained, currently in study, that includes dinosaurs, turtles, crocodiles and possible fish scales. On the basis of a lithofacies analysis (Rodríguez, 1992), it is interpreted that the rocks were deposited by a system of ephemeral currents-muddy plains (floodplains), with an important pyroclastic contribution. Toward the upper part of the Miembro Inferior sandstones generated by unconfined and channelized ephemeral currents predominate, interpreted as the progradation of the system. Of the 245 m of the profile of the unit, the great majority of the fossil bones come from the highest 25 m of the Miembro Inferior (142 m), associated with the “arensicas verdes”. In this way, the fauna described for Ocho Hermanos was developed in a system dominated by sheetlike and channeled ephemeral currents of high regime, alternating with times of scarce sedimentation with development of paleosols and floodplains. It is postulated that the remains are associated with the green sandstones due to their genesis, that allowed the rapid burial of the materials. The scarcity of remains in the lower and middle part of the Miembro Inferior and Miembro Superior could be due to the low velocity of sedimentation and the abundance of paleosols, although adverse paleoecological conditions are not discounted.

* Original citation: Rodríguez, J. F. R. 1993. Paleoambientes y consideraciones tafonomicas del Yacimiento Ocho Hermanos (Cretácico Tardío), Chubut. *Ameghiniana* 30(3):337.