

# STVDIA GEOLOGICA SALMANTICENSIA

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### Analytic summary

AGNOLIN, F. L. (2008): Reconsideration on the systematic position of *Loncornis erectus* Ameghino, 1899 (Mammalia; non Aves). *Stud. Geol. Salmant.*, **44 (1)**: pp. 9-12, 1 fig., 13 bibliographical references. Salamanca.

**ABSTRACT:** In this note the holotype of the genus and species *Loncornis erectus*, coming from the Oligocene Deseado Formation of the Deseado River, Santa Cruz province, Argentina is revised. The holotypical specimen has been considered as a distal extreme of a right femur and is here reinterpreted as the proximal portion of a left mammalian humerus. The absence of diagnostic features in the holotype of *Loncornis erectus* allows us to consider this taxon as a *nomen dubium*.

Key words: Oligocene, Argentina, *Loncornis erectus*.

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PASCUAL ARRIBAS, C.; HERNÁNDEZ MEDRANO, N.; LATORRE MACARRÓN, P. & SANZ PÉREZ, E. (2008): Study of a sauropod trackway of Las Cuestas I tracksite (Santa Cruz de Yanguas, Soria, Spain): taxonomic implications. *Stud. Geol. Salmant.*, **44 (1)**: pp. 13-40, 12 figs., 1 table, 72 bibliographical references. Salamanca.

**ABSTRACT:** The tracksite of Las Cuestas I (Santa Cruz de Yanguas, Soria), in the Huérteles Alloformation (Camereros Basin) has almost 600 dinosaur tracks, mostly grouped in 51 trackways: theropods, ornithopods and mainly sauropods. LCU-I-37 is emphasized among the latest ones for having 28 manus-pes sets sauropod footprints with digit marks and besides some of their natural casts have been found with tracks of their feet as well as their hands, with magnificent replica of their nails.

The study of the footprints and natural casts reveals: tracks of feet with impressions of 3 decreasing nails I to III, going towards outside the track, and with two semicircular marks corresponding to the callosities of digits IV and V; and those horseshoe handed ones, with a very reduced mark of digit I. It is also deduced that it is a typical track of medium gauge, in the lower limit of those of narrow gauge. The index of heteropody is intermediate (IH of 1: 3).

According to their non concordant characteristics with the main ichnogenus of sauropods, they may probably belong to a new ichnogenus, similar to *Parabrontopodus*, suitable of clade Macronaria no Titanosauriformes.

Key words: Sauropods, Berriasian, Huérteles Alloformation, Cameros Basin, Spain.

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KARL, H.-V. & MÜLLER, A. (2008): New fossil reptil material (Reptilia: Chelonii, Crocodylia) from the Lower Oligocene of Borken (Central Germany: Hesse). *Stud. Geol. Salmant.*, **44** (1): pp. 41-58, 6 figs., 4 pls., 14 bibliographical references. Salamanca.

**ABSTRACT:** The fossil turtles and crocodiles from the marine Early Oligocene of the Borken basin are described and compared with related species of the same stratigraphical age. Additionally, an overview is given on the history of research, the palaeogeographic and stratigraphic situation as well as on the relationships of the species mentioned. Beside the known representatives of the Trionychidae, Carettochelyidae, Testudinoidea and *Diplocynodon* are described.

Key words: Testudines, Cryptodira, *Rafetoides austriacus* (Peters, 1858), *Allaeochelys parayrei* Noulet, 1867, Testudinoidea gen. et spec. indet., Crocodylia, *Diplocynodon* cf. *bantonensis*, Early Oligocene, Malanienton, Hessian basin, Hesse, Central Germany.

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TWIDALE, C. R. & BOURNE, J. A. (2008): Neglected geomorphological concepts: some canons revisited, reviewed and revived. *Stud. Geol. Salmant.*, **44** (1): pp. 59-90, 18 figs., 161 bibliographical references. Salamanca.

**ABSTRACT:** Though the Davisian triad of structure, process and time provides useful guidelines for landscape analysis, it is now an oversimplification. Concepts involving stress and strain (and particularly the formation of lineaments and conjugate shears), reinforcement, underprinting and deferral, etching (two-stage development), unequal activity and referral, positive aspects of weathering, survival of very old surfaces and rivers, and long lineages, which imply multistage origins, are not accorded the attention they merit. On the other hand, climatic control tends to be overemphasized. Structural effects, etching, and river work are azonal. Only climatic extremes find clear expression in the landscape.

Key words: Azonality, deferral, etching, lineage, lineament, referral, reinforcement, underprinting, unequal activity.

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RICO-GARCÍA, A. (2008): Pliocene pectinids from the Vejer Basin (Cádiz, SW Spain). *Stud. Geol. Salmant.*, **44** (1): pp. 91-140, 12 figs., 3 tables, 124 bibliographical references. Salamanca.

**ABSTRACT:** This study has been carried out in pectinids (Bivalvia, Mollusca) of pliocene sediments from Vejer de la Frontera Basin (Cádiz, SW Spain). The main results of this research has been the taxonomic determination of 8 genders and 13 species, rising previous pectinids information in this zone. The appearance of *M. pesfelis*, *F. flexuosus*, *P. excisum*, *P. jacobaeus* y *P. maximus* allows us to determine for this sediments a Pliocene age, as microfauna to. Thus, the occurrence of *M. latissima*, *P. benedictus* y *P. excisum* make possible to reduce upper chronostratigraphic range to near 3,0 Ma. The main pectinids assemblages and their taphonomic signature can be understood as a shallow detritic environmental under the storm influence, as a beach-dune systems and sub-tidal environments, with develop of bars and channels.

Key words: Pectinidae, Bivalvia, Pliocene, Vejer Basin, Cádiz, SW Spain.

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