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Analytic summary

ZURITA, A. E. & TOMASSINI, R. (2006): Revisión de un Hoplophorini poco conocido, *"Sclerocalyptus" lineatus* Ameghino (Mammalia, Xenarthra, Glyptodontidae) de edad montehermosense (Mioceno tardío-Plioceno temprano) de la Argentina. **[Revision of a poorly known Hoplophorini, *"Sclerocalyptus" lineatus* Ameghino (Mammalia, Xenarthra, Glyptodontidae) from the Montehermosan (Late Miocene-Early Pliocene) of Argentina].** *Stud. Geol. Salmant.*, **42**: pp. 11-20, 3 figs., 33 referencias bibliográficas. Salamanca.

ABSTRACT: *"Sclerocalyptus" lineatus* Ameghino is a species coming from the Montehermosan (Late Miocene-Early Pliocene) of Monte Hermoso (Buenos Aires province, Argentina). Until now this taxa was only known by the holotype. The finding of new remains (specially a dorsal carapace well preserved and some skull fragments) which comes from the Montehermosan of the Farola Monte Hermoso locality (Buenos Aires province, Argentina) has permitted to improve the anatomical knowledge of this species of Hoplophorini. In this way, the evidence suggests (as noted by C. Ameghino) that this taxa belongs to the tertiary genus *Eosclerocalyptus* C. Ameghino.

Key words: *"Sclerocalyptus" lineatus*, Montehermosan, Pampean area, Argentina, *Eosclerocalyptus*.

BAKKALI, S. (2006): Using a shading method to optimize anomalies in a Moroccan phosphate deposit. **[Optimización de anomalías en un depósito de fosfatos de Marruecos mediante el método del sombreado].** *Stud. Geol. Salmant.*, **42**: pp. 21-32, 8 figs., 10 referencias bibliográficas. Salamanca.

ABSTRACT: Shading is a powerful tool for the enhancement of edges in all kind of images. Given the azimuth and elevation of an illumination source we can calculate the reflectance from the different surfaces provided by the data, helping its interpretation. Shading has become a standard tool in the interpretation of geophysical potential field data. In the Oulad Abdoun phosphate basin, the presence of sterile hardpan (caliche) –so-called "disturbances"– are hard to detect during the geophysical exploration surveys and their presence interfere with the phosphate extraction. The resistivity of the sterile hardpan is above 200 Ωm in contrast to the 80 to 150 Ωm for the phosphate-rich mineralization. In this paper a Schlumberger resistivity survey over an area of 50 hectares is presented. Based in the resistivity data and after direct geological evidence, we conclude that the geological models were successfully obtained from the analysis of the shaded maps of the "disturbances". A new field procedure was tested to map the extension and edges of the "disturbances" anomalies. As a result, the phosphate reserves were improved and better constrained.

Key words: Geophysical survey, anomalies, phosphate, sunshading, Morocco.

CUESTA RUIZ-COLMENARES, M. Á. & MERINO-TOMÉ, Ó. (2006): Bolaños de Campos, nuevo yacimiento de rinocerontes del Mioceno de la cuenca del Duero (provincia de Valladolid, Castilla y León, España). **[Bolaños de Campos, new rhinoceros bed from the Miocene Duero basin (Valladolid, Castilla y León, Spain)].** *Stud. Geol. Salmant.*, **42**: pp. 33-48, 4 figs., 30 referencias bibliográficas. Salamanca.

ABSTRACT: We present in this work a new mammal bed from the Miocene Duero basin. The bed is placed in Bolaños de Campos (Valladolid province, Castilla y León, Spain) in which a rhinoceros fossil rest has been found. The bed is located in a thin conglomerate-sandstone layer within the so called Tierra de Campos unit (mid Aragonian-early Vallesian).

We describe a jaw fragment of *Lartetotherium sansaniense* (Rhinocerotidae, Perissodactyla, Mammalia) belonging to a young individual. The presence of this species actually corresponds with the upper Aragonian age (MN 7/8) formerly attributted to the Tierra de Campos unit where the mammal bed is located.

Key words: *Lartetotherium sansaniense*, Rhinocerotidae, Miocene, Aragonian, Duero basin, Valladolid, Castilla y León, Spain.

KARL, H.-V.; GRÖNING, E.; BRAUCKMANN, C. & KNÖTSCHKE, N. (2006): Revision of the genus *Enaliosuchus* Koken, 1883 (Archosauromorpha: Metriorhynchidae) from the Early Cretaceous of Northwestern Germany. **[Revisión del género *Enaliosuchus* Koken, 1883 (Archosauromorpha: Metriorhynchidae) del Cretácico Inferior del NW de Alemania].** *Stud. Geol. Salmant.*, **42**: pp. 49-59, 2 pls., 10 referencias bibliográficas. Salamanca.

ABSTRACT: The type material of *Enaliosuchus schroederi* Kuhn, 1936 from the lower Early Cretaceous (lower Early Valanginian) of the former clay pit of Sachsenhagen (SSW of the "Steinhuder Meer", Lower Saxony, northwestern Germany) is revised in detail for the first time under modern aspects. It consists of a skull (without the tip of the snout) with lower jaw and the anterior three cervical vertebrae which were still attached to the skull during the collecting process. The main conclusion of this study is that the whole older materials of *Enaliosuchus* cannot be determined more precisely than as *Metriorhynchus* sp. (in open nomenclature). For a more detailed systematic classification, a revision and anatomical analysis of all hitherto known skulls of *Metriorhynchus* in both, occipital and palatinal views would be necessary.

Key words: Lower Cretaceous, northwestern Germany, Archosauromorpha, Crocodylia, Metriorhynchidae, *Metriorhynchus* sp., synonymy, *Enaliosuchus macrospondylus*, *Enaliosuchus schroederi*, character analysis, revision.

KARL, H.-V. & TICHY, G. (2006): On the stratigraphic youngest occurrence (Lower Keuper) of *Nothosaurus* (Diapsida: Sauropterygia) in Thuringia. **[Sobre los más jóvenes restos de *Nothosaurus* (Diapsida: Sauropterygia) del Keuper de Turingia (Alemania)].** *Stud. Geol. Salmant.*, **42**: pp. 61-66, 3 figs., 11 referencias bibliográficas. Salamanca.

ABSTRACT: A boulder from the Grenzdolomit (Lower Keuper: ku2) was dug out in the area of the Drosselberg near Erfurt. Besides *Costatoria goldfussi*, which occurs in abundance, remains of *Nothosaurus* is reported as the stratigraphic youngest find from Thuringia.

Key words: Diapsida, *Nothosaurus*, systematics, stratigraphics, Keuperian, Triassic, Thuringia, Germany.

AGNOLIN, F. (2006): Notas sobre el registro de Accipitridae (Aves, Accipitriformes) fósiles argentinos. **[Notes on the fossil record of Argentinian Accipitridae (Aves, Accipitriformes)].** *Stud. Geol. Salmant.*, **42**: pp. 67-80, 4 figs., 5 pls., 26 referencias bibliográficas. Salamanca.

ABSTRACT: In this note the fossil record of the Argentinian Accipitridae is reviewed. The living genus *Geranoaetus* ir reported from the Upper Miocene of Catamarca province, constituting the oldest record for the genus in South America. The living species *G. melanoleucus* is reported for the first time in the Pleistocene of Argentina. The extinct Miocene genus *Thegornis* is here considered to be monotypic, being composed only by the species *T. debilis*. The other species originally included within that taxon is here removed to the living genus *Buteo*, as *B. musculosus*. The Mid-Oligocene Patagonian genera *Cruschedula* and *Climacarthrus* are considered as valid genera of the subfamilies Buteoninae and Accipitrinae, respectively. A large and isolated Accipitrid pedal ungual phalanx is reported from the Lower-Mid Eocene of Chubut province, constituting the oldest accipitrid record of South America. Additionaly, several fragmentary pedal remains are reported from different Miocene Patagonian localities, suggesting that Accipitrids were present, and were probably abundant in South America since Lower Eocene times.

Key words: Accipitridae, Argentina, Buteoninae, Quaternary, Tertiary.

AGNOLIN, F. (2006): Dos nuevos Anatidae (Aves, Anseriformes) del Pleistoceno inferior-medio de Argentina. **[Two new Anatidae (Aves, Anseriformes) from the Lower-Mid Pleistocene of Argentina].** *Stud. Geol. Salmant.*, **42**: pp. 81-95, 5 figs., 39 referencias bibliográficas. Salamanca.

ABSTRACT: The aim of the present paper is to describe a new genus and species of a fossil tadornine anatid and a new species of the genus *Anas*, both coming from the Lower-Mid Pleistocene Miramar Formation of Buenos Aires province, Argentina. The new tadornine genus is very different from other Tadorninae, being reminiscent in some features to the extinct South American Pleistocene *Nannonetta*. The new and divergent species of the genus *Anas* is represented by a single carpometacarpus, indicating a medium sized taxon, probably related to the *A. georgica-A. bahamensis* group. Additionally, a brief review of the Pleistocene Argentinian anatid record is made, and new fossil Pleistocene materials are described.

Key words: Anatidae, Pleistocene, Buenos Aires, Argentina.

ALONSO SANTIAGO, L.; ALONSO ANDRÉS, L. & JIMÉNEZ FUENTES, E. (2006): Análisis de varios casos de zoopaleopatología del Eoceno medio de Zamora (España). **[Analysis of several cases of zoopalaeopathology from the Middle Eocene in Zamora (Spain)].** *Stud. Geol. Salmant.*, **42**: pp. 97-112, 13 figs., 15 referencias bibliográficas. Salamanca.

ABSTRACT: The present study describes a series of injuries and pathological anomalies, detected in the fossile fauna of the Middle Eocen of Corrales del Vino (Zamora, Spain) including traumatic, infectious and congenital assumptions. Case nº 1 includes a description of a big size osteitis located in the diaphisis of a femur of *Iberosuchus macrodon*. In case nº 2 a clear malformation in the osteal sutures of a pigal plate of *Allaeochelys jimenezi* is described. Case nº 3 describes five plates from the chest and the back of *Neochelys* sp. with bites and erosions attributed to a crocodile attack. In case nº 4 a right almost complete collarbone of *?Iberosuchus* is exposed with evident marks of depredation. In case nº 5 two fishbones of *Vixperca corrochani* with a couple of callus caused by fractures is presented.

Case nº 6 shows the marks of a possible piogenic osteitis of bacterial origin which appears on the surface of the internal face of a metatarsian of Lophiodontidae.

Key words: Zoopalaleopathology, Chelonia, Carettochelyidae *(Allaeochelys)*, Pelomedusidae *(Neochelys)*, Crocodylia *(Asiatosuchus)*, Pisces *(Vixperca)*, Lophiodontidae, predation, traumatic injury, Middle Eocene, Zamora, Spain.

LEÑERO BOHÓRQUEZ, R.; RUIZ MUÑOZ, F.; GONZÁLEZ-REGALADO MONTERO, M. L. & ABAD, M. (2006): Derecho y Patrimonio Paleontológico (I): Patrimonio Histórico vs Patrimonio Paleontológico. **[Law and Palaeontological Heritage (I): Historical Heritage vs Palaeontological Heritage].** *Stud. Geol. Salmant.*, **42**: pp. 113-127, 2 tablas, 9 referencias bibliográficas. Salamanca.

ABSTRACT: This paper analyzes the legal protection of the Palaeontological Heritage in the Spanish Historical Heritage Law (Act 16/1985) and the subsequent regional laws. From this framework, proposals to improve future laws concerning this subject are suggested.

Key words: Spanish law, Palaeontological Heritage.

RUIZ MUÑOZ, F.; GONZÁLEZ-REGALADO MONTERO, M. L. & ABAD, M. (2006): Derecho y Patrimonio Paleontológico (II): Regulación jurídica y ámbito competencial profesional en Andalucía. Una propuesta de actuación para el Neógeno de la provincia de Huelva (SO de España). **[Law and Palaeontological Heritage (II): Legal control and professional ambit in Andalusia. A preliminary proposal for the Neogene palaeontological record of the Huelva province, SW Spain].** *Stud. Geol. Salmant.*, **42**: pp. 129-137, 2 figs., 22 referencias bibliográficas. Salamanca.

ABSTRACT: This paper analyse the legal situation of the Palaeontological Heritage in Andalusia and the professional ambit derived from different regional laws and acts. A preliminary proposal of protection is made in relation to the Neogene palaeontological record of the Huelva province, according to the Act 168/203 and different experiences realized in several Spanish regions.

Key words: Regional laws, Palaeontological Heritage, protection, Andalusia.
