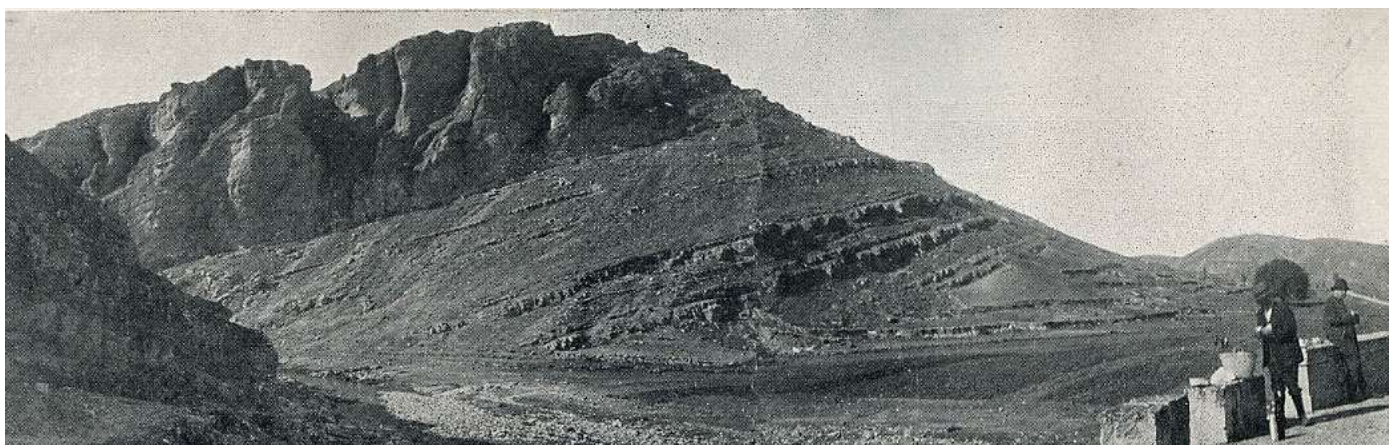




V CONGRESO DEL CRETÁCICO DE ESPAÑA

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GEOLOGY AND STRATIGRAPHY OF THE NEW BARREMIAN VERTEBRATE SITES IN THE BETETA GORGES (CUENCA, SPAIN)

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The “Weald” facies in the province of Cuenca are composed by conglomerates, sandstones, shales, mudstones, limestones and lignites (Ramírez & Meléndez, 1972) frequently containing vertebrate remains characterised by their variety and quality of preservation. Well-known sites, such as Las Hoyas, Uña and Buenache de la Sierra, are among these outcrops. The general geological context of three new fossiliferous deposits that have been discovered recently in the “Weald” facies of the Beteta Gorges (Prieto et al., 2013; Ruiz-Galván et al., 2013) is presented here. Two of them are located in the surroundings of the town of Puente de Vadillos (Vadillos-1 and Vadillos-2). The third one is situated to the north and it has been named El Tobar, its nearest locality. From a lithological point of view, a similar basic sequence is observed in these three sites, consisting of brown and grey mudstones that change to red clays to the top, but with minor differences at each outcrop. The sequence in Vadillos-1 displays calcarenites and limestones interbedded with oncologic sandy banks to the top of the grey clays levels. The sequence in Vadillos-2 shows greater development of carbonate intervals, best evidenced by the presence of a level of sandy limestones in the grey mudstones. In El Tobar, this sequence overlies the lacustrine limestones of La Huérguina Formation, and shows numerous sandy banks in its upper part. The fossiliferous intervals of these three new sites belong to the Arenas y Arcillas del Collado Formation, and correspond to fluvial-lacustrine deposits. Their more carbonated (Vadillos-2) or more sandy (El Tobar) nature depends on their proximity to the distributary channels. The paleontological content of these three sites is very diverse, containing charophytes, ostracods, fishes, turtles, crocodiles and dinosaurs, among others. Considering the stratigraphic position of the sites and the paleontological record referred to in previous papers (Lapparent et al., 1969, see Ruiz-Omeñaca & Canudo, 2003), they are preliminarily assigned to the Barremian.

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