FAUNA AND PALAEOECOLOGY OF GRAN DOLINA-TD6 (SIERRA DE ATAPUERCA, SPAIN)

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The Sierra de Atapuerca is a low limestone range situated in central northern Spain, 15 Km east of Burgos city. Several karst cavities in the range are filled with Pleistocene sediments. Gran Dolina, one of these deposits, contains over 18 m of sediments, which can be divided into 11 lithostratigraphic levels named TD1-TD11, from bottom to top. A paleomagnetic reversal has been detected within the TD7 level of Gran Dolina (Parés & Pérez González, 1995) indicating a late Early Pleistocene age for for TD1 to TD6 levels, and a Middle Pleistocene age for the upper levels. TD6 includes the Aurora stratum, where several stone tools and Homo antecessor remains were found (Carbonell *et al*., 1995). The ungulate fauna from TD6 includes *Stephanorhinus etruscus*, a stenonine *Equus*, *Sus scrofa*, *Dama dama vallonetensis*, *Cervus elaphus*, *Megaloceros* and *sp*, *Bison sp*. This fauna is in agreement with a late early Pleistocene Age for this level. The microfauna from TDW4 and TDW4b is characteristic of the Biharian (Cuenca *et al*., 1995).

The paleoecology of the lower levels of Gran Dolina has been studied using ecological diversity analysis (Andrews *et al*., 1979). A data set of 92 recent mammalian faunas is used for comparison. The 5 assemblages studied (TDW4, TDW4b, TD6inf, TD6Au and TD8) share some characteristics that set them apart from all the recent communities analysed, namely a high proportion of large herbivores combined with the absence of arboreal and climbing mammals, and a low number of small carnivores. The abundance of large herbivores and the absence of arboreal mammals are considered unique features of the Pleistocene communities. The community structure of TD6inf, TD6Au, and TD8 resembles that of the recent European forest communities, however TDW4 and TDW4b have a community structure different from any recent community from the holartic region.

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