Macrofaunal remains from the Cuzoul de Gramat (Lot, France) during the Late Mesolithic: archaeozoological preliminary results

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Résumé

The objective of this communication is to present the preliminary results of the archaeozoological study of the predominate large mammals (wild boar, red deer, roe deer and aurochs) exploited by the hunter-gatherers of the Cuzoul de Gramat during the Late Mesolithic period (between 6.000 and 5.200 cal BC). The pooling of data on carcass exploitation, acquisition strategies and the prey slaughtering season, combined with data from other archaeological records, allowed a first draft model of the site's occupation and function outlined. Comparisons with other relatively contemporary sites in the Quercy area, for which we have hypotheses of functionality and occupation season, have contributed to the development of a model of hunter-gatherer mobility for the Late Mesolithic. The archaeozoological study of the faunal remains from the Cuzoul de Gramat has been performed on three main sectors and some structures, though is incomplete as the quantity of remains to be treated is considerable. Therefore, the results presented are not fully representative of the hunting activities and the exploitation of animal resources. In order to meet the set objectives, two complementary methods of archaeozoological analysis were applied to bone and dental remains: the standard archaeozoology method and the dental cementum analysis. The first method considers all the bone and dental remains and searches for: determination to species and if not to an ungulate body size category, identification of the element and anatomical portion, lateralization, and age. Indeterminate remains are assigned to the type of bone tissue. Eruption ages and degree of tooth wear were used to attribute slaughter ages of game animals. When epiphyses were conserved, an age according to the degree of epiphysation supplemented the information obtained from the teeth. The classical quantitative units in archaeozoological study were used including the total number of remains, number of identified specimens taxonomically and anatomically (NISPt and NISPa), and the minimum number of elements and of individuals (MNE and MNI). In order to assess the impact of biological agents consequences (carnivorous and anthropogenic) and post-depositional processes on the composition and state of conservation of the faunal deposit, the origin and type of breakage as well as the surface modifications of the bones and their origin were investigated. The rate of chewing and ingestion by carnivores was compared to the quantity of fragments with butchery traces (striae and percussion impact). The burnt bones were classified according

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to their heating color. To infer the seasons of death of the hunted prey and, more broadly, the times of occupation of the Cuzoul de Gramat during the Late Mesolithic, the teeth of wild boar, red deer and roe deer were used. Seasonal information from eruption dates and degree of occlusal wear surfaces of the teeth is accurate for the youngest cervids due to a single, short yearly birthing period. However, this method is not sufficient for wild boar because of the spread of births throughout the year and the possibility of two annual litters. Being dominant in the diet of the Late Mesolithic hunter-gatherers of the Cuzoul de Gramat, it seemed appropriate to view the question of the seasonality of hunting of wild boar and adults individuals through the prism of cementum analysis. All of the teeth from the Late Mesolithic stratigraphic layers were selected from all sectors. A dental MNI (MNId) was applied based on the eruption sequence and the degree of occlusal wear surfaces of the teeth. Only adult individuals were considered, as the greater accumulation of cementum increment made them easier to observe. One tooth per individual was selected depending upon the state of preservation of the roots. The teeth roots that were fragmented or showed traces of heating, dissolution, root marks, cracking, digestion, manganese, pathologies, or marking references on all the roots were not considered since these alterations may strongly degrade the conservation of the cementum bands. Thus, the corpus comprises twenty-eight premolars and molars, corresponding to eleven individuals for wild boar, ten for red deer and seven for roe deer. Forty-one slides were taken from this sample and sixty-four Regions of Interest were analyzed.