Geophysical Research Abstracts
Vol. 13, EGU2011-13478, 2011
EGU General Assembly 2011

Palaeoenvironments and climate during the Late Glacial and Early Holocene in Sandy Flanders (NW Belgium): the high-resolution multiproxy record of the Moervaart palaeolake

Mona Court-Picon and the UGent GOA Team

Ghent University, Department of Geology en Soil Science, Research Unit Palaeontolgy, Ghent, Belgium (mona.courtpicon@ugent.be, +32(0).264.46.08)

During the last three decades intense archaeological prospection has taken place in the region of Sandy Flanders (Belgium), which is now one of the most intensively surveyed areas of NW Europe. This has led to the production of archaeological distribution maps, which show a distinct pattern regarding the temporal and spatial distribution of these archaeological sites. Some areas with a presumed high ecological value seem to have been attractive settlement locations in Prehistory. Habitations however seem to have 'moved' in time, and the same areas became completely 'empty' during Protohistory and even the Roman Period.
During the Late Glacial and Holocene the landscape in the Belgian area of Sandy Flanders was subjected to major changes due to climatic fluctuations, and besides human factors, environmental conditions may have influenced settlement conditions throughout time and played a role in this change in site location and the occupational history of the region.
In this light an inter-disciplinary project 'Prehistoric settlement and land-use systems in Sandy Flanders (NW Belgium): a diachronic and geoarchaeological approach' (GOA project, UGent), involving archaeology, geography, palaeoecology, sedimentology and geophysical survey, has been undertaken. The study of both 'empty' and densely inhabited areas is ongoing and aims at analyzing the settlement dynamics of the area of Sandy Flanders in terms of environmental potentials. Likewise, we seek to investigate the reasons why some areas, which were inhabited in previous periods, were apparently not attractive anymore from the Metal Ages onwards. Indeed, to determine the suitability of a certain land type for a certain activity, it is necessary to understand the different types of land use, the soil characteristics and the environment at different time intervals.
We present here the first results of the palaeoecological (mainly palynology and NPPs, but also plant macroremains, charcoal, diatoms, ostracods, molluscs, beetles and Chironomideae) and sedimentological (water content, LOI, magnetic susceptibility, gamma-density) approaches, which have been undertaken on the site of the Moervaart Depressie, a shallow but large palaeolake first densely inhabited and then deserted. They provide new insights in the palaeolandscape evolution of this area during the Late Glacial and the early Holocene, and may allow us to evaluate in detail how and to which degree this evolution determined the pre- and protohistoric occupation and exploitation within Sandy Flanders. Furthermore, significant emphasis is placed on the impact of prehistoric populations on both local and regional landscapes.