
Nature and intensity of the anthropogenic impact in Holocene malacological series from northern France: time and scale

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Résumé

Mollusc shells are some of the most common fossil remains in Quaternary sediments and particularly in calcareous silty sequences of fluvial environments. These faunas are sensitive to minor variation of their habitat because of their minute size, their slow locomotion and their short lifecycle. As a result of this great sensitivity, changes in the composition of malacological associations enable the reconstruction of small-scale environmental changes both in a spatial and temporal sense. In addition to this local value, the development of malacofaunas has also a regional significance. From the synthesis of the malacological data collected over fifteen sites in the Seine basin large floodplains, three main environmental stages have been reconstructed in these lowlands. During the first half of the Holocene, forest environments are prevalent (Seine 1). As early as c.4.6 cal. BC, the first evidence of woodland clearance is observed at some sites (Seine 2) and, from c. 1.5 cal. BC, the lowlands have been largely cleared of trees and are dominated by grassland (Seine 3). Our results pinpoint anthropogenic disturbance as the key factor in the openness of the Holocene landscape. This long-term environmental impact of human societies on the structure of landscapes highlights a continuous use of these lowlands even though the archaeological remains are often tenuous there. The malacological analysis recently led at Passel "Le Vivier", in the same region, challenges this regional model. Actually, the malacological analysis carried out on a sequence located in the direct vicinity of a Neolithic monumental enclosure, highlights the subsistence of deep forest habitats during and after the Neolithic occupation. The construction of the enclosure and its occupation seem to have had a very limited impact on the nearby environment. The very short duration of the archaeological

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settlement that is considered by archaeologists could explain the light environmental impact of human settlements at Passel. All these results obtained in the Paris Basin question the matter of scale in our perception of anthropogenic impact, its nature and intensity.

Mots-Clés: molluscs, palaeoenvironment, Holocene, France