
Contribution of palaeoenvironmental studies to the socio-economic context of mining at the Neolithic flint mine of Spiennes.

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Résumé

The archaeological excavations conducted during the last 23 years on the Neolithic Flint mines of Spiennes (Mons, Belgium) offered the opportunity to undertake palaeoenvironmental research. The abundant data collected through palynology, anthracology, carpology and archaeozoology allowed not only to reconstruct the past landscapes but also to better understand human-environment relationships.

At the time Neolithic mining took place in Spiennes (4 200-2 200 cal BC) the plateaus of the Mons basin were densely wooded with linden forests rich in hazel trees. At the local scale anthracological, palynological and malacological analyses showed a semi-wooded environment with shrubs and trees growing in open areas. Such spectra indicate recolonisation by pioneer vegetation after clearings in the surroundings of the shafts while mining activities occurred at the site.

Palaeoenvironmental studies contribute also to document the status of the communities involved in mining. Studies of the faunal remains discovered in the backfilling of shafts attest the presence of perinatal domestic animals, which suggests onsite animal husbandry. This assumption is further supported by the pollen data which record plant types from grazed meadows and quite high proportions of spores typical of fungi growing on animal dung. Crop cultivation on the plateau is also attested by the findings of seeds and pollen of cereals, but also pollen of crop weeds and other taxa associated with harvest.

There is converging evidence of the presence of human settlements in the direct vicinity of the mines and the involvement of these local communities in the extraction activity. Accordingly, and in the light of the material evidence of a mining tradition already exposed for this major site, the palaeo-environmental data support the hypothesis of controlled access to the extraction site by local populations.

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